

CATALOGUE 2019



INTERNATIONAL **12** SUBSIDIARIES

WORLDWIDE MORE THAN **850** EMPLOYEES

OVER **1000** SPECIAL CLAMPING SOLUTIONS PER YEAR

FOUNDED IN **1951**

INDUSTRY **4.0** DIGITAL FUTURE SOLUTIONS

OVER **40** DESIGN ENGINEERS

SPANNTOP INVENTED IN **1977**

IQ CLAMPING DEVICES WITH INTELLIGENCE

LIGHTWEIGHT CLAMPING DEVICES **CFRP** MADE OF CARBON FIBER

MORE THAN **150** PATENTS

CONTENT

HAINBUCH	4
HAINBUCH profile	5
The HAINBUCH modular system	6
Solutions	10
Industries	10
Machining processes	12
Products	14
Chucks	14
TOPlus mini chuck	18
TOPlus chuck	36
SPANNTOP mini chuck	52
SPANNTOP nova chuck	72
Machine specific chucks	104
Manual chuck TOROK	114
Jaw chuck B-Top	126
Jaw chuck B-Top3	130
Eccentric chuck	140
Mandrels	144
Mandrel MANDO	148
Mandrel MANDO G	182
Mandrel MAXXOS NEW	186
Machine-specific mandrels	198
Stationary clamping devices	200
Manual stationary chuck MANOK	204
Manual stationary chuck MANOK plus	208
Hydraulic stationary chuck HYDROK	218
Mandrel actuating units ms dock / hs dock	228
Adaptation clamping devices	236
MANDO Adapt [mandrel adaptation]	240
Jaw module	286
Face driver / morse taper adaptation	292
Magnet module	300
Test and measuring technology	304
TESTit clamping force measuring device	304
Automation NEW	310
Automated changing of clamping head and workpiece end-stop	312
Intelligent chuck TOPlus IQ	313
Quick change-over systems	314
centroteX / capteX / mandoteX	316
CENTREX pallet system	336
Special solutions	342
Special chucks	344
Special segmented mandrels	349
Special stationary clamping devices	353
Special clamping elements	354
Special test and measuring technology NEW	355
Clamping elements	356
Clamping heads	357
Clamping heads SE	358
Clamping heads RD	366
Clamping heads with special profiles	374
Segmented clamping bushings	376
Segmented clamping bushings RD	378
Segmented clamping bushings SE NEW	384
Jaws	388
Jaws for jaw module	389
Jaws for jaw chucks B-Top and B-Top3	390

Accessories	394
Quick reference overview	396
End-stop system vario part	398
End-stop system vario quick	401
End-stop system vario flex NEW	409
End-stop blanks	411
Front end-stops	417
Chip protection rings	419
hainBOX system for proper storage	422
Changing fixtures	424
Adaptation ring modular system	427
Flanges / drawtube adapters	429
Adapter for air sensing control	433
Insert bushings jaw chuck	435
CENTREX duo	438
Multiple clamping pallets	440
Tandem cylinder / base plate for HYDROK	442
Base plate for TOROK	445
Adaptation sets for MANDO G211	447
Grease	449
Various	451
Equipment for multi spindle	452
Gildemeister	462
INDEX	468
Schütte	477
Tornos	491
Contact & ordering	494
Conditions	494
Order	496
Contact	502
Glossary of clamping technology terms	504

Order Hotline +49 7144.907-333
Quickly ordered, quickly delivered. Just give us a call.

Delivery Hotline +49 7144.907-222
Current status of your order? Simply call.

24h Emergency Hotline +49 7144.907-444
Has there been a crash or another technical emergency? Our experts are there for you 24/7.

You will find our CAD models at the PARTcommunity:
hainbuch.partcommunity.com



Profile



Tradition combined with innovation

Every story starts someplace. Our story begins in a garage in a small town in Southern Germany. Since then we have grown globally, have celebrated great successes, but we have also mastered a challenge or two. With our first invention the »clamping head«, we turned the clamping device market upside down. We develop with a look into the future, but we never forget our roots. This is our story.

We love what we do

Our mission is to be the best clamping device brand worldwide. We want to facilitate and revolutionize clamping technology processes. Everything we do, we do with passion. We are pioneers and trendsetters for modern clamping solutions and problem solvers for particularly tricky clamping situations. And one trophy certainly is ours: World-champion for quick-change set-up systems.

Simple, but ingenious

We are a supplier of high-precision clamping solutions that are superior in terms of durability and accuracy. Our products are easy to handle, process-optimized, and offer a long service life. Whether intelligent chucks with integrated electronics, or clamping devices in CFRP lightweight design, we want to develop products that always achieve top performance.

Key advantages

- HAINBUCH develops, designs and produces clamping devices for workholding on milling, turning, and grinding machines
- Third-generation family owned business
- Founded in 1951
- More than 850 employees worldwide
- 4 German locations
- 12 international subsidiaries [Austria, China, France, Great Britain, Italy, Japan, Mexico, Slovakia, Sweden, Thailand, USA]
- Over 40 agencies worldwide



Sylvia Rall, Gerhard Rall, Hans-Michael Weller and Hildegard Rall [from left]

HAINBUCH

The HAINBUCH modular system

Clamping devices **rotating**



TOPlus chuck

TOPlus mini chuck



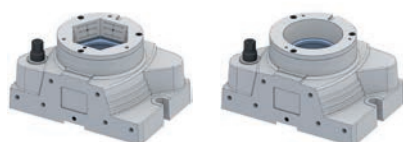
SPANNTOP nova chuck

SPANNTOP mini chuck



TOROK manual chuck

Clamping devices **stationary**

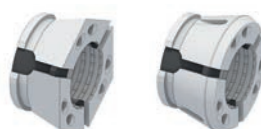


MANOK plus manual stationary chuck



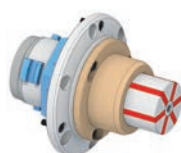
HYDROK hydraulic stationary chuck

Clamping element

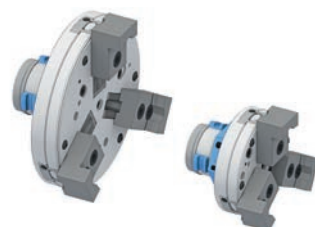


Clamping head –
O.D. clamping

Adaptation clamping devices



MANDO Adapt mandrel –
I.D. clamping



Jaw module size 145 or 215 –
jaw clamping



Face driver
adaptation

Morse taper
adaptation



Magnet module

- Circumferential clamping
- 3 different versions:
for raw material, precise machining,
or for in-house machining
- An abundance of profile clamping
possibilities
- Coolant-resistant, rubber-metal
connection, prevents chips in the chuck
- Clamping range SE Ø 3–100 mm,
Clamping range RD Ø 3–160 mm

- Quick change-over from O.D. to
I.D. clamping without adjusting
due to the CENTREX interface
- Run-out accuracy < 0.005 mm
can be achieved between chuck
taper and mandrel taper
- Clamping range Ø 8–190 mm

- Deadlength 3-jaw clamping
- Can be used rotating [under RPM]
and for stationary applications
- Change-over from clamping head or
mandrel clamping to jaw clamping
in less than 2 minutes

- Incredible flexibility
- Self-centering of the adaptation in the
chuck ≤ 0.003 mm
- Extremely quick change-over without
disassembling the chuck [1 min.]

- End face axial clamping via
neodymium magnet
- High face-run change-over accuracy
- High holding power of 140 N/cm²
- Assembly in 1 minute without alignment
- Low-maintenance because it is resistant
to contamination

Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T211 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]



Change-over to face driver adaptation [approx. 1 min.]



Change-over to magnet module [approx. 30 sec.]



The HAINBUCH modular system

One system, two basic variants, even more possibilities

SE variant [hexagon]

The hexagon TOPlus version offers an additional 25 % increase in holding power relative to the RD variant – due to full-surface contact of the clamping element in the clamping device body.

Additional benefits over the RD variant

- Higher metal removal rates, higher output, lower piece costs
- Vibration dampening effect
- Particularly efficient for difficult machining
- Sealed against contamination from outside – low maintenance, consequently less machine downtime and increased process reliability. Particularly useful for fine-particle non-ferrous metals such as brass or even cast iron. Consequently also particularly well suited for stationary machining.
- Optimal lubrication due to lubricating grooves in the chuck body
- Full through-bore or top face run on the workpiece or front end-stop

**For fast
identification in
the catalogue**



The SE variant is indicated by this symbol [in the header]

RD variant [round]

The well-known SPANNTOP version with round clamping geometry in the chuck body and clamping head offers significantly greater holding power than what is offered by traditional 3-jaw chucks or clamping collets, due to the pull-back effect and circumferential clamping.

Your benefits

- High rigidity
- Precise concentricity
- Fast change-over
- Full through-bore or top face run on the workpiece or front end-stop



The RD variant is indicated by this symbol [in the header]

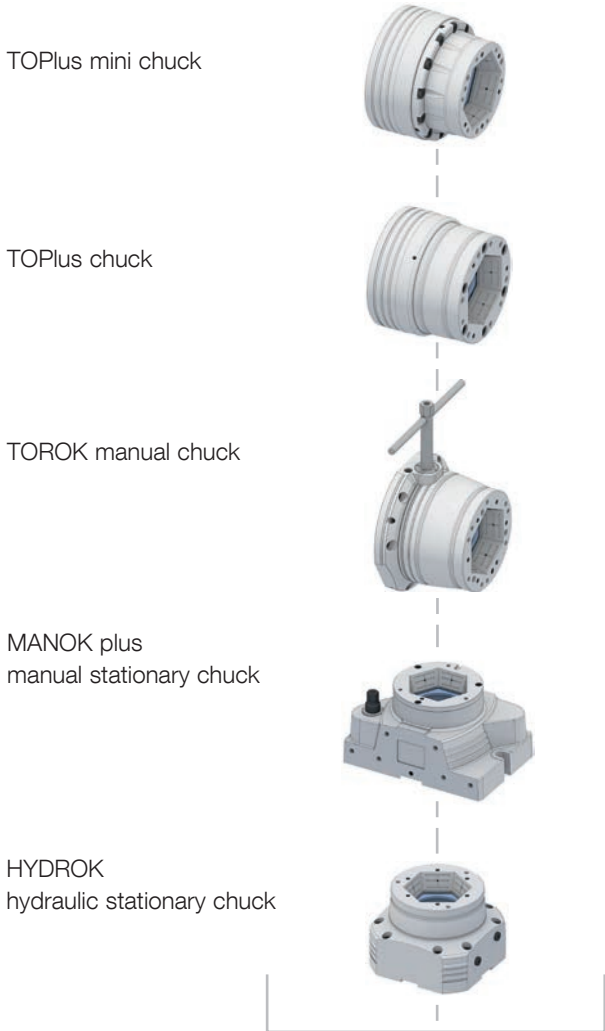
Rotating or stationary – literally all of our clamping devices are available in both variants.

HAINBUCH The HAINBUCH modular system

SE variant [hexagon]



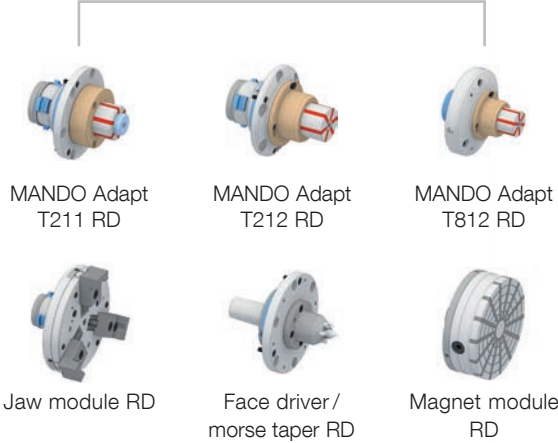
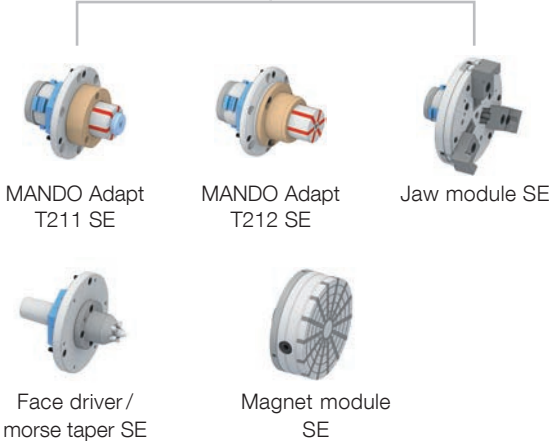
RD variant [round]



Clamping elements



Adaptations



Chucks

Mandrels

Stationary clamping devices

Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

Multi spindles



AUTOMOTIVE

Flexible manufacturing with reliable processes is crucial for success in the automotive industry. Whether for engines, chassis, drive trains or all other components in the automotive industry – HAINBUCH develops and manufactures clamping systems that guarantee economical and process-reliable machining. And thus for many automobile manufacturers and their suppliers, we are the solid partner for optimization of their manufacturing.

Your benefits

- The highest process reliability for small and large-scale production
- Flexibility in manufacturing for different parts and varying lot sizes
- The highest quality of your components, continuously



AEROSPACE

In the aerospace industry the most rigorous requirements are imposed on accuracy, precision, and safety. Every start is a trial of strength for the components and every component is a technical challenge for machinists. And not just because the workpieces are complex and difficult to machine, the materials are also very special from the machining perspective: nickle-based alloys, titanium, and carbon fiber reinforced plastics [CFRP]. Therefore, with our machining and material know-how we are the right partner – after all we were the first with a CFRP clamping system.

Your benefits

- Proven clamping solutions that are already in use at our customers' facilities
- High precision workholding technology for high precision components
- An expert partner in the area of innovative materials, such as CFRP





MEDICAL

Given its high degree of innovation and the rapid pace of development, without a doubt medical technology is one of the most demanding industries. It is not just the high standards for hygiene and the bio-compatible materials that are difficult to machine, it is also the technical requirements imposed on tolerances and roughness values that necessitate extremely complex production processes. And here it is a good thing when there is a clamping device manufacturer like us, with years of experience and many innovative clamping solutions, who can help and advise the industry.

Your benefits

- Already-implemented, first-class clamping solutions for many workpieces and implants, such as hip socket, hip joint, spinal implant or dental screw
- Manufacture workpieces with precise contours and the highest quality
- Sensitive, mark-free and residue-free clamping of ceramic workpieces is just as possible as powerful clamping of titanium

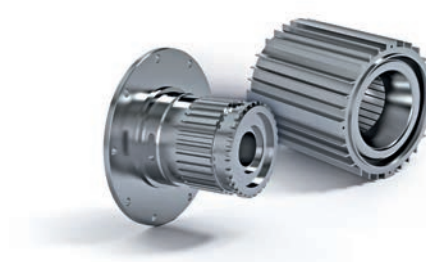


E-MOBILITY

Worldwide the signs point towards e-mobility. And this calls for new thinking from manufacturers and suppliers. The drive train in electric propulsion concepts has significantly fewer mechanically stressed components and fewer rotatory parts than are found in combustion engines. The workpieces to be machined in the electric automobile are smaller and more delicate. In addition, there will be an increase in aluminum and other lightweight materials. Therefore, use of machine tools will require more flexibility in the future, since the process can change fundamentally depending on the propulsion concept.

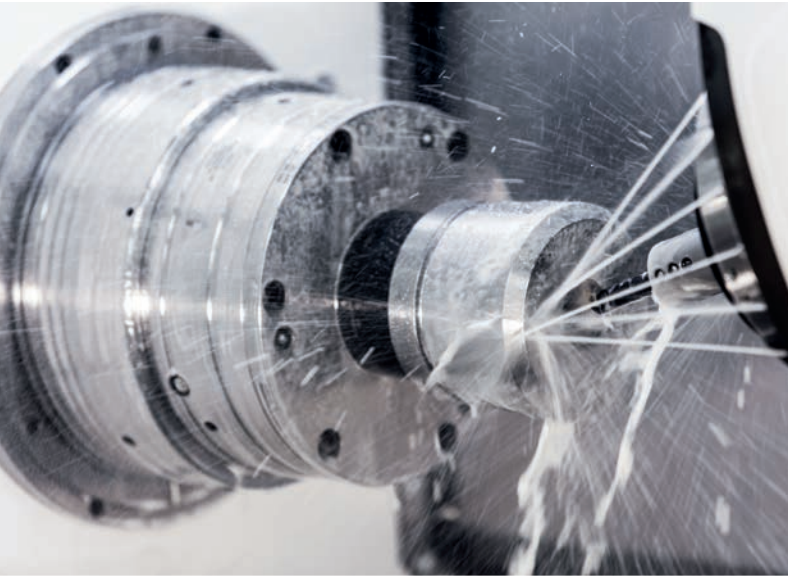
Your benefits

- Flexible clamping concepts for different manufacturing processes
- Clamping solutions for high-precision transmission components, thin-walled sheet metal parts, NF metal or plastic components
- No marks or deformation on soft or thin-walled workpieces



SOLUTIONS

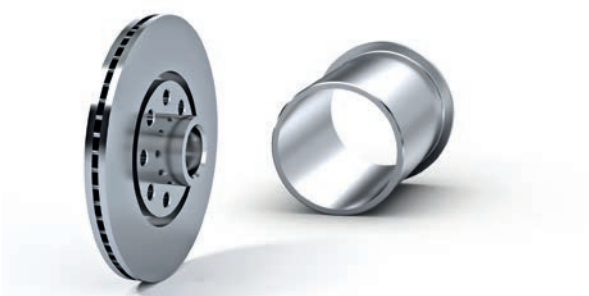
Machining processes



TURNING

Special criteria are in force for selection of the right clamping device for turning. Through the rotation of turned parts, at high speeds in particular, centrifugal forces occur that require secure clamping of the workpieces. HAINBUCH clamping solutions are perfect in this regard. Whether chucks for O.D. clamping or mandrels for I.D. clamping – absolutely reliable clamping and the highest run-out accuracy are guaranteed with HAINBUCH.

- Less inertia loss relative to jaw chuck by clamping within the chuck body
- Change-over from O.D. to I.D. clamping or jaw clamping in the shortest time without accuracy losses
- Circumferential workpiece clamping with the highest run-out accuracy

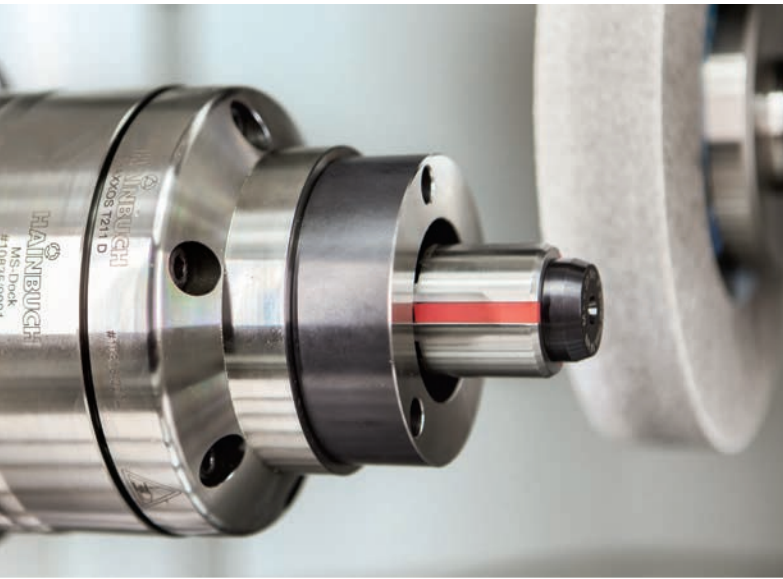


MILLING

Complete high-precision, multi-axis machining of milled parts imposes the most rigorous quality demands on the clamping device. On one hand, due to the immense forces that occur when milling and to avoid vibration, the workpiece must be securely clamped. On the other hand, high accessibility of the workpiece is necessary, i.e. the clamping solution should be as compact as possible.

- High metal removal rates due to higher holding forces as compared to vise or jaw chuck
- Good tool accessibility through a wide variety of chucking possibilities with the HAINBUCH modular system
- Less tool wear through vibration-damped clamping, and unequaled rigidity due to a full-surface contact of the clamping segments





GRINDING

Modern manufacturing that involves grinding requires flexible and in particular high-repeatability clamping devices. In this regard each application imposes different requirements of the clamping technology. To achieve the required accuracy, among other things, it is important that any contamination [e.g. grinding slurry] is prevented from penetrating into the clamping device. Due to the large contact area of the clamping segments, our TOPlus chucks and MAXXOS clamping mandrels are significantly less sensitive to contamination than previous clamping devices.

- Maximum concentricity and axial run-out accuracy
- Lightweight design model [CFRP], thus the spindle load is reduced and there is additional vibration dampening
- A higher surface quality is possible than with jaw or collet chucks
- Protrusion lengths of the workpiece are possible that are longer than is the case with jaw chucks, due to the unique clamping geometry



GEAR CUTTING

The gear cutting industry imposes the highest requirements on the accuracy of clamping devices. The machining of gears is a complex process in which the right technology is essential. In this regard, all integrated components must meet the most rigorous requirements for precision. Consideration of the interference contour plays a major role here. Whether for gear units, drive systems or all other components in this area: We have the right clamping solutions – for small and large-scale production.

- Better tool accessibility thanks to the significantly reduced interference contour
- Workpiece stabilization through axial draw force against the workpiece end-stop
- Process reliability through the possibility of positioning the clamping elements
- Special mandrel for I.D. clamping when gear cutting: MANDO G



Overview

Find what's important fast



Chucks

	TOPlus mini chuck	18
	TOPlus chuck	36
	SPANNTOP mini chuck	52
	SPANNTOP nova chuck	72
	Machine specific chucks	104
	Manual chuck TOROK	114
	Jaw chuck B-Top	126
	Jaw chuck B-Top3	130
	Eccentric chuck	140

PRODUCTS

Chucks

Standard chucks in overview

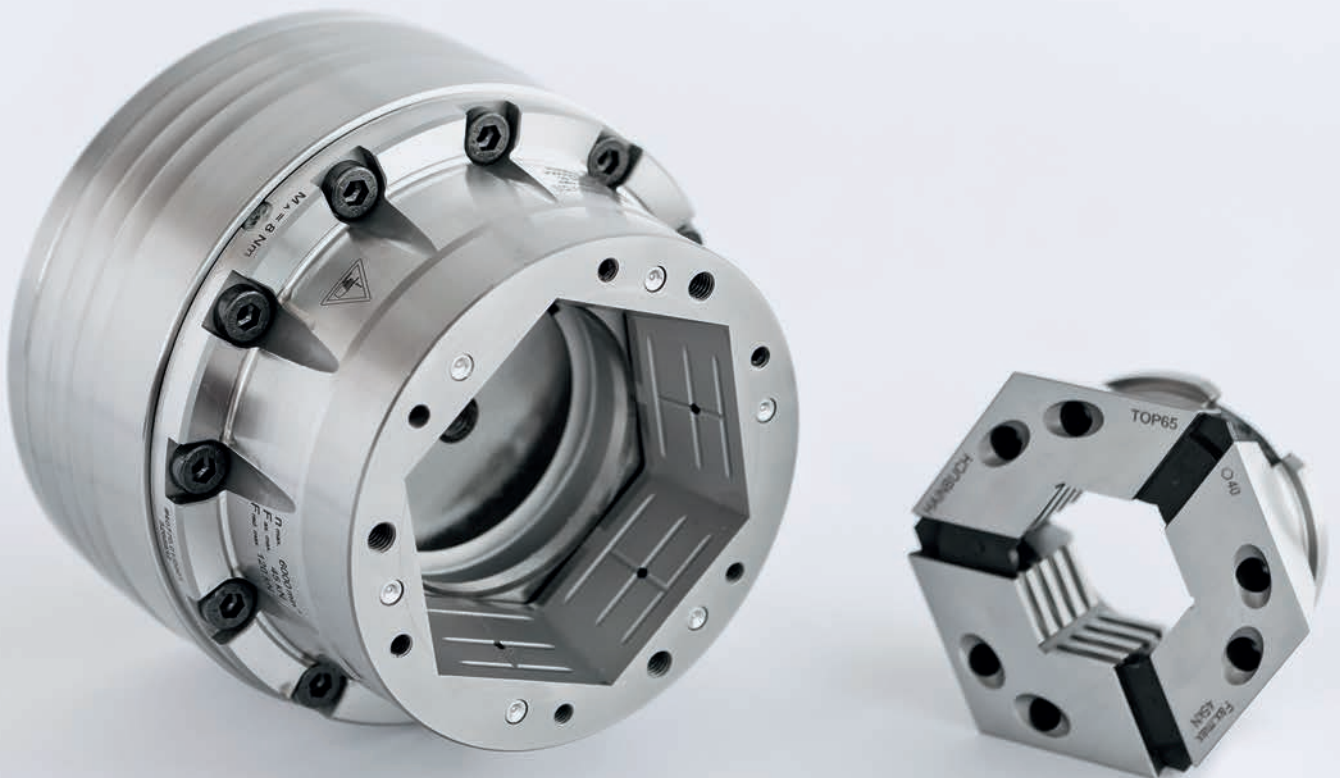
	TOPlus mini	TOPlus	SPANNTOP mini	SPANNTOP nova
				
Description	Chuck with hexagonal clamping geometry and minimal interference contour	Chuck with hexagonal clamping geometry	Chuck with round clamping geometry and minimal interference contour	Chuck with round clamping geometry
Sizes	26, 40, 52, 65, 100	52, 65, 100	32, 42, 52, 65, 80, 100	32, 42, 52, 65, 80, 100, 125, 160
Clamping range of all sizes [mm]	3 – 100	3 – 100	3 – 100	3 – 160
Variant	SE [hexagonal]	SE [hexagonal]	RD [round]	RD [round]
Advantages	■ Adaptation devices possible [modular system] ■ 25 % higher holding power than SPANNTOP ■ Significantly reduced interference contour ■ Improved tool accessibility	■ 25 % higher holding power than SPANNTOP ■ Unequalled rigidity due to full-surface contact of the clamping segments ■ Superior resistance to contamination because of the clamping head geometry ■ Absorbs vibration	■ Adaptation devices possible [modular system] ■ Significantly reduced interference contour ■ Improved tool accessibility ■ Ideal for limited installation space	■ Ideal for customers with existing RD clamping heads ■ Typical features of all HAINBUCH power chucks, such as high holding power, parallel clamping with high accuracy and easy set-up ■ Minimal inertia loss compared to 3-jaw chucks
Clamping elements	 Clamping head SE	 Clamping head SE	 Clamping head RD	 Clamping head RD
Adaptations	 MANDO Adapt T211 SE [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE [Adaptation for jaw clamping]  Face driver SE / morse taper adapter SE [Adaptation for clamping between centers]  Magnet module SE [Adaptation for magnetic clamping]	 MANDO Adapt T211 SE [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE [Adaptation for jaw clamping]  Face driver SE / morse taper adapter SE [Adaptation for clamping between centers]  Magnet module SE [Adaptation for magnetic clamping]	 MANDO Adapt T211 RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 RD [Mandrel-in-clamping-device, without draw bolt]  MANDO Adapt T812 RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module RD [Adaptation for jaw clamping]  Face driver RD / morse taper adapter RD [Adaptation for clamping between centers]  Magnet module RD [Adaptation for magnetic clamping]	 MANDO Adapt T211 RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 RD [Mandrel-in-clamping-device, without draw bolt]  MANDO Adapt T812 RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module RD [Adaptation for jaw clamping]  Face driver RD / morse taper adapter RD [Adaptation for clamping between centers]  Magnet module RD [Adaptation for magnetic clamping]
	 Page 18	 Page 36	 Page 52	 Page 72

Machine specific chucks	TOROK	B-Top	B-Top3	Eccentric chuck
				
Chuck especially for your machine	Manually actuated chuck	3-jaw chuck	3-jaw chuck with CENTREX interface	Eccentric chuck adjustable via c-axis
SE 52, 65, 100 / RD 32, 42, 52, 65, 80, 100	52, 65, 100	165, 215, 260, 315	215	65
3 – 100	3 – 100	12 – 300	12 – 300	3 – 65
SE [hexagonal] / RD [round]	SE [hexagonal] / RD [round]			RD [round]
- Chucks are specially matched to one machine - Typical HAINBUCH features, such as user friendly set-up, full passage, parallel clamping, optimal power conversion, extreme rigidity and superior holding power, as well as minimal wear and tear	- Also available in a CFRP lightweight design - Manual actuation – a clamping cylinder is not required - Sensitive clamping possible - Workpiece stabilization through axial draw force applied against the work-piece end-stop	- Fast jaw change with individual unlocking - Large through-bore with bushing inserts that can be changed from the front - Proven wedge rod mechanism	- Jaw chuck with quick conversion to a segment-ed clamping bushing [I.D. clamping] and a clamping head [O.D. clamping] - Fast jaw change with individual unlocking - Large through-bore with bushing inserts that can be changed from the front - Proven wedge rod mechanism	- Infinite eccentric adjustment via the c-axis - Concentric and eccentric machining in a single clamping set-up - Different eccentric dimensions are possible with the same chuck and clamping head
 Clamping head SE  Clamping head RD	 Clamping head SE  Clamping head RD	 Jaws	 Jaws	 Clamping head RD
	 MANDO Adapt T211 SE/RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE/RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE/RD [Adaptation for jaw clamping]  Face driver / morse taper adapter SE/RD [Adaptation for clamping between centers]  Magnet module SE/RD [Adaptation for magnetic clamping]		 MANDO Adapt [Mandrel-in-jaw-chuck]  SPANNTOP Adapt [End-stop-chuck-in-jaw-chuck]  SPANNTOP Adapt M [Through-bore-chuck-in-jaw-chuck]	
 Page 104	 Page 114	 Page 126	 Page 130	 Page 140



TOPlus mini

Smaller than ever

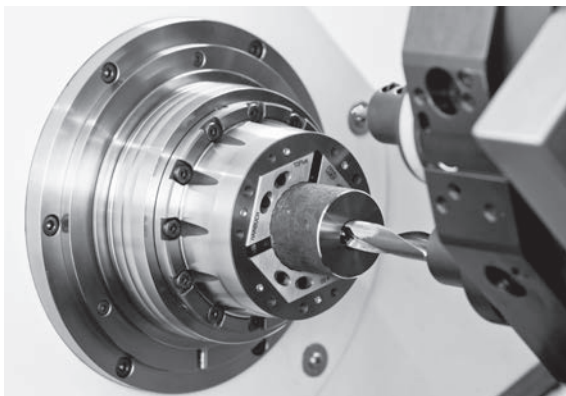




The »mini« series really shines with a mass reduced by as much as 30 %, and a chuck diameter that is reduced by 1/3. This means reduced energy consumption and better tool accessibility. Naturally, adaptation devices can also be used with the TOPlus mini chuck. To maintain the minimal interference contour, the TOPlus mini chuck has its own adaptation devices with a smaller bolt hole circle.

Thanks to the reduced interference contour, it is easier to choose the tool that you need. Now it can also be shorter and more stable – on the main and sub spindles. Particularly in the case of limited installation space and in series operation, the TOPlus mini chuck is ideal: Lower energy consumption, dynamic spindle acceleration, and shorter cycle times reduce the costs per workpiece.

Minimalism that pays off!



Key advantages

- Adaptation devices possible [modular system]
- 25 % higher holding power than SPANNTOP
- Significantly reduced interference contour
- Improved tool accessibility
- Ideal for limited installation space
- Lower mass
- Minimal inertia loss compared to 3-jaw chucks

TOPlus mini pull-back in use



TOPlus mini chuck types

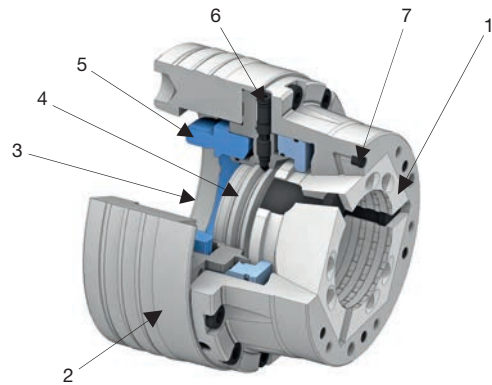
	Pull-back	Deadlength
		
Description	Workpiece clamping with pull-back effect. Chuck with dismountable end-stop plate.	Workpiece clamping without pull-back effect. Chuck with dismountable end-stop plate.
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Workpiece clamping without axial movement of the clamping head ■ Clamps workpieces with a short collar or shoulder ■ Suitable for pick-off without pull-back effect ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed
Clamping elements	 Clamping head SE	 Clamping head SE
Adaptations	 MANDO Adapt T211 SE [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE [Adaptation for jaw clamping]  Face driver SE / morse taper adapter SE [Adaptation for clamping between centers]  Magnet module SE [Adaptation for magnetic clamping]	



TOPlus mini pull-back in detail

Designation

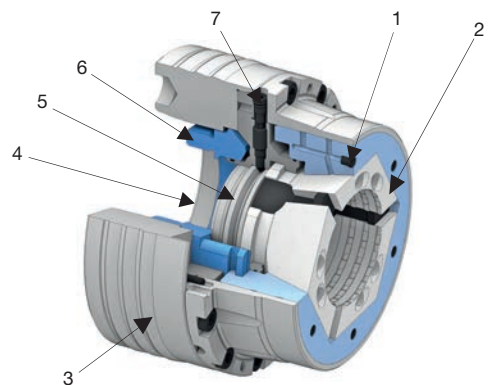
- 1 Vulcanized clamping head with pull-back and hexagonal geometry for optimum chuck sealing and improved clamping force
- 2 Spindle flange
- 3 Chuck through-bore for bar work after disassembling the base end-stop
- 4 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop
- 5 Mounting thread for drawtube connection
- 6 Clamping screw for base end-stop, easy mounting through external actuation
- 7 Grease nipple, optimal holding power due to efficient lubrication



TOPlus mini deadlength in detail

Designation

- 1 Grease nipple, optimal holding power due to efficient lubrication
- 2 Vulcanized standing clamping head with hexagonal geometry for improved chuck seal and greater clamping force
- 3 Spindle flange
- 4 Chuck through-bore for bar work after disassembling the base end-stop
- 5 Fixed base end-stop with central mounting thread for workpiece specific end-stop
- 6 Mounting thread for drawtube connection
- 7 Clamping screw for base end-stop, easy mounting through external actuation



CHUCKS

TOPlus mini chuck



Order overview. TOPlus mini chuck

						Clamping elements and adaptations					
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock	Clamping head SE	MANDO Adapt T211 SE for TOPlus mini	MANDO Adapt T212 SE for TOPlus mini	Jaw module SE	Face driver / morse taper adapter SE for TOPlus mini	Magnet module SE
						Page 358	Page 244	Page 250	Page 286	Page 292	Page 300
26	Pull-back	A2-4	102	10784/0013	✓	✓					
		A2-5		10784/0014	✓						
			125	10784/0015	✓						
	Deadlength	A2-4	99	10787/0010	✓	✓					
			110	10787/0011	✓						
		A2-5	101	10787/0012	✓						
			110	10787/0013	✓						
			130	10787/0014	✓						
40	Pull-back	A2-4	125	10784/0016	✓	✓					
		A2-5	117	10784/0017	✓						
			125	10784/0018	✓						
			143	10784/0019	✓						
		A2-6	124	10784/0020	✓						
			142	10784/0021	✓						
		AP120	106	10784/0022	✓						
			118	10784/0023	✓						
		AP140	106	10784/0047	✓						
	Deadlength	A2-4	123	10787/0015	✓	✓					
		A2-5	115	10787/0016	✓						
			123	10787/0017	✓						
			140	10787/0018	✓						
		A2-6	122	10787/0019	✓						
			139	10787/0020	✓						
52	Pull-back	A2-5	122	10784/0025	✓	✓	✓	✓		✓	✓
			145	10784/0026	✓						
		A2-6	122	10784/0027	✓						
			145	10784/0028	✓						
		A2-8	120	10784/0045	✓						
			145	10784/0046	✓						
		AP110	120	10784/0043	✓						
		AP120	105	10784/0029	✓						
			115	10784/0030	✓						
		AP140	105	10784/0031	✓						
			115	10784/0032	✓						

Detailed technical data follows.

Please note: The TOPlus mini chuck requires its own individual MANDO Adapt, face driver, and morse taper adapter. For the jaw module the ones for TOPlus may be used.

Machine spindle standard DIN ISO 702-1.



CHUCKS

TOPlus mini chuck

Order overview. TOPlus mini chuck

						Clamping elements and adaptations					
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock	 Clamping head SE	 MANDO Adapt T211 SE for TOPlus mini	 MANDO Adapt T212 SE for TOPlus mini	 Jaw module SE	 Face driver / morse taper adapter SE for TOPlus mini	 Magnet module SE
						Page 358	Page 244	Page 250	Page 286	Page 292	Page 300
52	Deadlength	A2-5	122	10787/0024	✓	✓					
			147	10787/0025	✓						
		A2-6	122	10787/0026	✓						
			147	10787/0027	✓						
		A2-8	120	10787/0047	✓						
			100	10787/0044	✓						
		AP110	115	10787/0046	✓						
			105	10787/0028	✓						
		AP120	115	10787/0029	✓						
			107	10787/0030	✓						
		AP140									
65	Pull-back	A2-5	124	10784/0048	✓	✓	✓	✓	✓	✓	✓
			130	10784/0001	✓						
			150	10784/0002	✓						
		A2-6	126	10784/0003	✓						
			130	10784/0004	✓						
			155	10784/0005	✓						
		A2-8	130	10784/0006	✓						
			155	10784/0007	✓						
		AP120	111	10784/0010	✓						
			120	10784/0011	✓						
		AP140	111	10784/0008	✓						
			120	10784/0009	✓						
		AP170	115	10784/0012	✓						
	Deadlength	A2-5	128	10787/0001	✓	✓					
			138	10787/0002	✓						
		A2-6	124	10787/0003	✓						
			138	10787/0004	✓						
			163	10787/0005	✓						
		A2-8	133	10787/0006	✓						
			163	10787/0007	✓						
		AP120	129	10787/0053	✓						
		AP140	138	10787/0008	✓						
		AP170	110	10787/0049	✓						
			128	10787/0009	✓						

Detailed technical data follows.

Please note: The TOPlus mini chuck requires its own individual MANDO Adapt, face driver, and morse taper adapter. For the jaw module the ones for TOPlus may be used.

Machine spindle standard DIN ISO 702-1.

CHUCKS

TOPlus mini chuck



Order overview. TOPlus mini chuck

						Clamping elements and adaptations					
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock						
						Page 358	Page 244	Page 250	Page 286	Page 292	Page 300
100	Pull-back	A2-5	160	10784/0033	✓	✓	✓	✓	✓	✓	✓
		A2-6	164	10784/0034	✓						
		A2-6	170	10784/0035	✓						
		A2-8	162	10784/0036	✓						
		A2-11	180	10784/0037	✓						
				10784/0038	✓						
			195	10784/0039	✓						
		AP170	164	10784/0040	✓						
		AP220	150	10784/0041	✓						
	Deadlength	A2-5	171	10787/0031	✓	✓					
		A2-6	175	10787/0032	✓						
			182	10787/0033	✓						
		A2-8	169	10787/0034	✓						
			192	10787/0035	✓						
			185	10787/0036	✓						
		A2-11	200	10787/0037	✓						
					✓						
		AP140	171	10787/0041	✓						
		AP170	175	10787/0038	✓						
		AP220	162	10787/0039	✓						

Detailed technical data below.

Please note: TOPlus mini chucks require a separate MANDO Adapt, face driver, and morse taper adapter. For the jaw module the same as for the TOPlus chucks can be used.

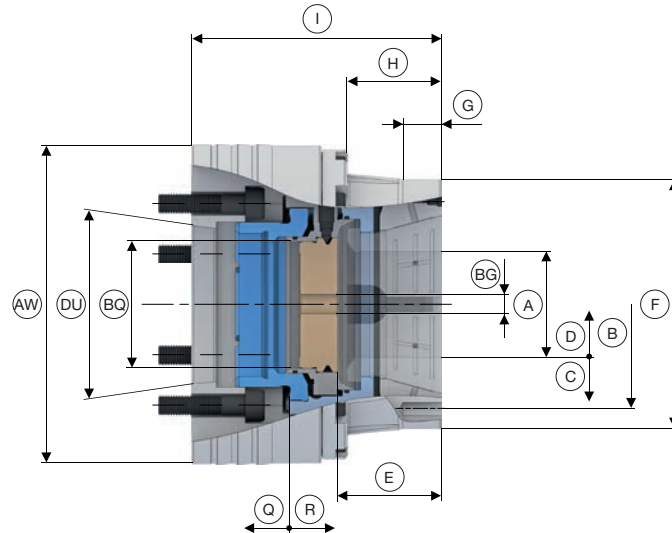
Machine spindle standard DIN ISO 702-1.

Scope of delivery

- Chuck
- Base end-stop
- Socket wrench insert 1/2"



TOPlus mini pull-back size 26. Technical data



Size	26	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	35	
Max. axial drawtube force [pull / push] [kN]	16	
RPM n max. [1/min.]	10000	
Clamping range [mm]	A	3 – 26
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	0,6
Range / recommended workpiece tolerance [mm]	± 0,3	
End-stop depth [mm]	E	33,8
Ø Capacity [mm]	BQ	37
End-stop thread size [M]	BG	8
Location front end-stop	F	Ø 67 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 58 [3 x M6]
Length [mm]	H	43
Reserve stroke axial [mm]	Q	1
Release stroke axial [mm]	R	2

Spindle nose	DU	A2-4	A2-5
Total length [mm]	I	102	125
Outer Ø [mm]	AW	114	128
Weight [kg]		4,9	6,3
In stock		✓	✓
Order no.		10784/0013	10784/0014



Clamping heads

Page 358

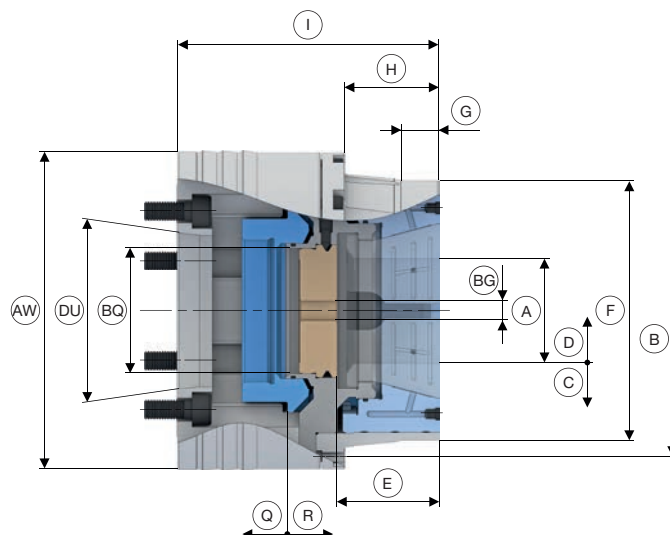


Accessory overview

Page 396



TOPlus mini deadlength size 26. Technical data



Size	26	
Variant	Deadlength	
Run-out ≤ [mm]	0,025	
Max. radial clamping force [kN]	35	
Max. axial compression force [kN]	16	
RPM n max. [1/min.]	10000	
Clamping range [mm]	A	3 – 26
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	0,6
Range / recommended workpiece tolerance [mm]	± 0,3	
End-stop depth [mm]	E	34,5
Ø Capacity [mm]	BQ	27
End-stop thread size [M]	BG	8
Location front end-stop	F	Ø 74 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 88 [3 x M4]
Length [mm]	H	33
Reserve stroke axial [mm]	Q	1
Release stroke axial [mm]	R	2

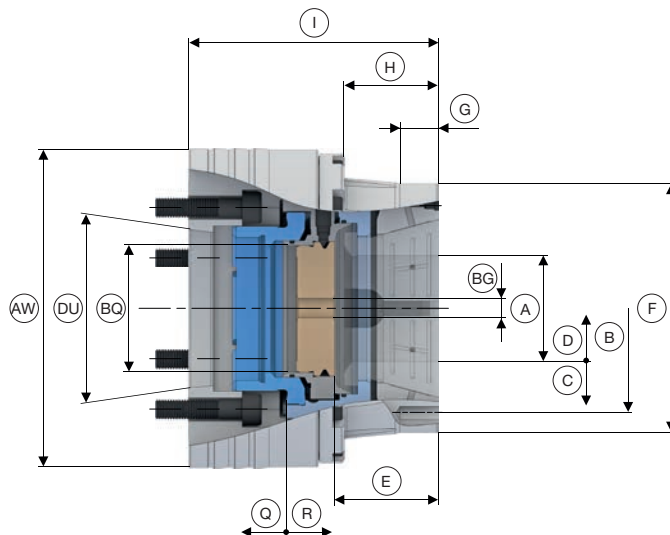
Spindle nose	DU	A2-4		A2-5		
Total length [mm]	I	99	110	101	110	130
Outer Ø [mm]	AW	114		128		
Weight [kg]		5		6		
In stock		✓	✓	✓	✓	✓
Order no.		10787/0010	10787/0011	10787/0012	10787/0013	10787/0014



Clamping heads	Accessory overview
Page 358	Page 396



TOPlus mini pull-back size 40. Technical data



Size	40	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	103	
Max. axial drawtube force [pull / push] [kN]	33	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 40
Release stroke in Ø [mm]	C	0,5
Reserve stroke in Ø [mm]	D	0,8
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	47
Ø Capacity [mm]	BQ	44
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 91 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 105 [3 x M6]
Length [mm]	H	47
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2

Spindle nose	DU	A2-4		A2-5		A2-6	
Total length [mm]	I	125	117	125	143	124	142
Outer Ø [mm]	AW	132		132		163	
Weight [kg]		7,7	7	7	7,5	9,5	10
In stock		✓	✓	✓	✓	✓	✓
Order no.		10784/0016	10784/0017	10784/0018	10784/0019	10784/0020	10784/0021

Spindle nose	DU	AP120		AP140	
Total length [mm]	I	106	118	106	106
Outer Ø [mm]	AW	132		150	
Weight [kg]		6,5		8	
In stock		✓	✓	✓	✓
Order no.		10784/0022	10784/0023	10784/0047	



Clamping heads

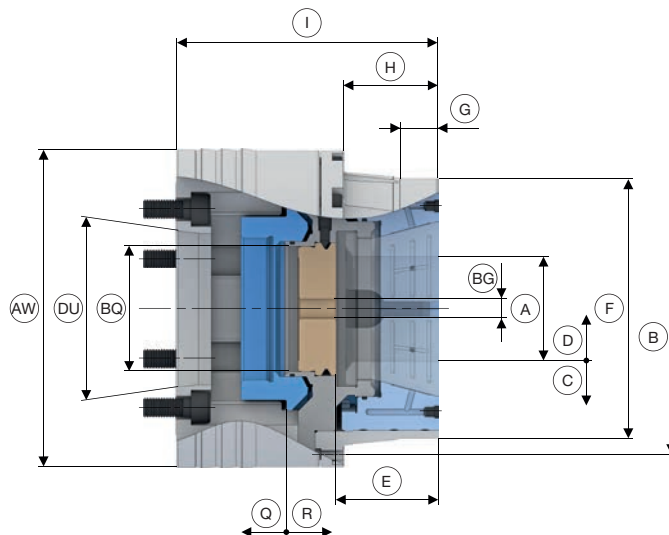
Page 358

Accessory overview

Page 396



TOPlus mini deadlength size 40. Technical data



Size	40	
Variant	Deadlength	
Run-out ≤ [mm]	0,025	
Max. radial clamping force [kN]	103	
Max. axial compression force [kN]	33	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 40
Release stroke in Ø [mm]	C	0,5
Reserve stroke in Ø [mm]	D	0,8
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	47,7
Ø Capacity [mm]	BQ	44
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 99 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 115 [3 x M4]
Length [mm]	H	47
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2

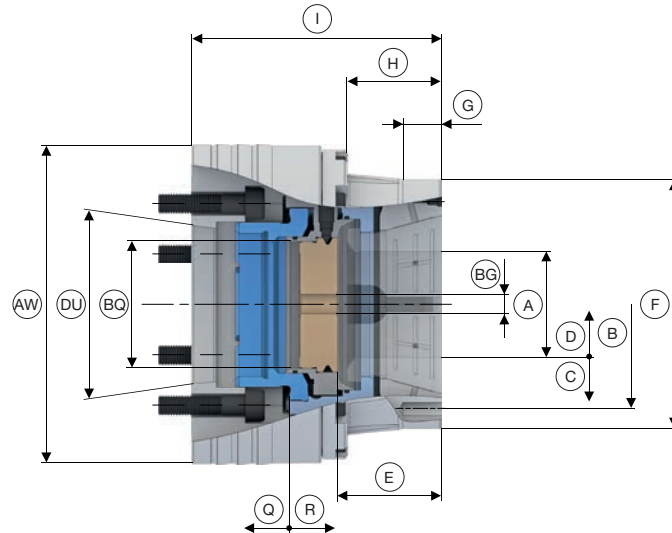
Spindle nose	DU	A2-4	A2-5		A2-6	
Total length [mm]	I	123	115	123	140	122 139
Outer Ø [mm]	AW	134				160
Weight [kg]		8,5		8		9,5
In stock		✓	✓	✓	✓	✓
Order no.		10787/0015	10787/0016	10787/0017	10787/0018	10787/0019 10787/0020



Clamping heads	Accessory overview
Page 358	Page 396



TOPlus mini pull-back size 52. Technical data



Size	52	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	108	
Max. axial drawtube force [pull / push] [kN]	40	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 52
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	46
Ø Capacity [mm]	BQ	53
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 119 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 105 [3 x M8]
Length [mm]	H	42
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

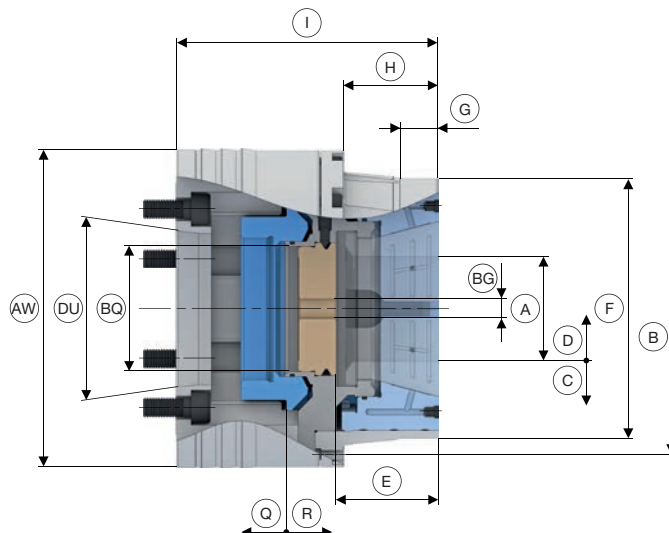
Spindle nose	DU	A2-5		A2-6		A2-8	
Total length [mm]	I	122	145	122	145	120	145
Outer Ø [mm]	AW	149		159		204	
Weight [kg]		10	10,5	11	15,7	16	
In stock		✓	✓	✓	✓	✓	✓
Order no.		10784/0025	10784/0026	10784/0027	10784/0028	10784/0045	10784/0046

Spindle nose	DU	AP110	AP120		AP140	
Total length [mm]	I	120	105	115	105	115
Outer Ø [mm]	AW	149		150		
Weight [kg]		10,7	10	9,5		
In stock		✓	✓	✓	✓	✓
Order no.		10784/0043	10784/0029	10784/0030	10784/0031	10784/0032

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus mini deadlength size 52. Technical data



Size	52	
Variant	Deadlength	
Run-out ≤ [mm]	0,025	
Max. radial clamping force [kN]	108	
Max. axial compression force [kN]	40	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 52
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	45,8
Ø Capacity [mm]	BQ	53
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 119 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 136 [3 x M6]
Length [mm]	H	44
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

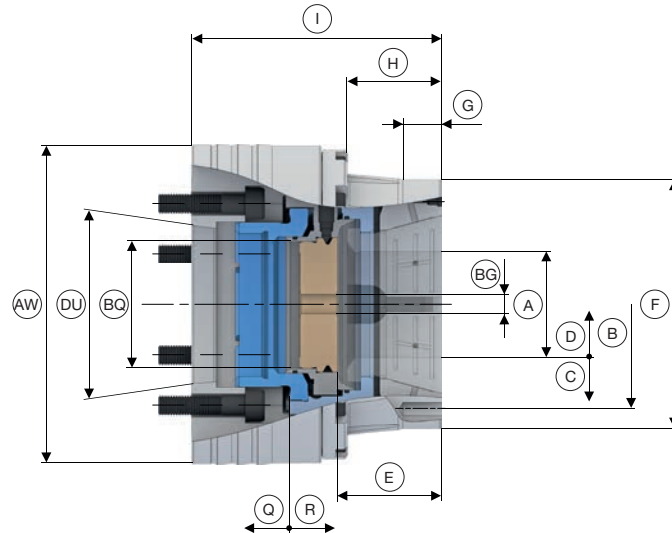
Spindle nose	DU	A2-5		A2-6		A2-8
Total length [mm]	I	122	147	122	147	120
Outer Ø [mm]	AW	149		163		202
Weight [kg]		10	10,5	11	11,3	15,4
In stock		✓	✓	✓	✓	✓
Order no.		10787/0024	10787/0025	10787/0026	10787/0027	10787/0047

Spindle nose	DU	AP110		AP120		AP140
Total length [mm]	I	100	115	105	115	107
Outer Ø [mm]	AW	149		10		9
Weight [kg]		10	10,3	10		9
In stock		✓	✓	✓	✓	✓
Order no.		10787/0044	10787/0046	10787/0028	10787/0029	10787/0030





TOPlus mini pull-back size 65. Technical data



Size	65	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	120	
Max. axial drawtube force [pull / push] [kN]	45	
RPM n max. [1/min.]	6000	
Clamping range [mm]	A	3 – 65
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	54
Ø Capacity [mm]	BQ	66
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 129 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 112 [3 x M8]
Length [mm]	H	49
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

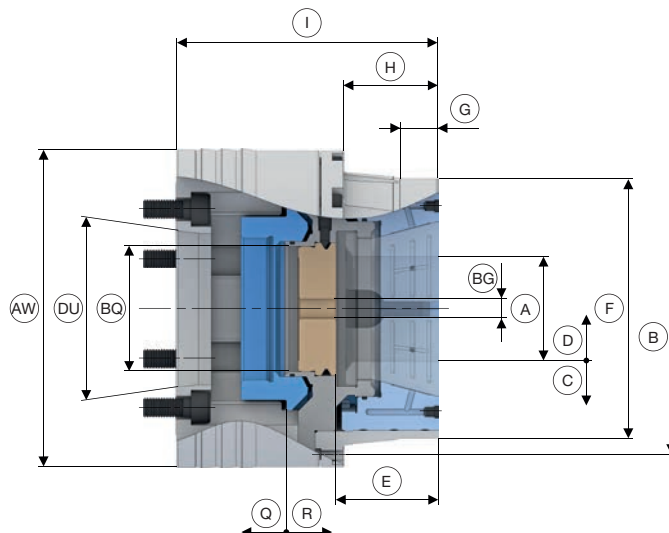
Spindle nose	DU	A2-5			A2-6			A2-8	
Total length [mm]	I	124	130	150	126	130	155	130	155
Outer Ø [mm]	AW	165			165			204	
Weight [kg]		11,5	13		11			16	
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10784/0048	10784/0001	10784/0002	10784/0003	10784/0004	10784/0005	10784/0006	10784/0007

Spindle nose	DU	AP120		AP140		AP170
Total length [mm]	I	111	120	111	120	115
Outer Ø [mm]	AW	165		165		180
Weight [kg]		12,5		11,8		12,5
In stock		✓	✓	✓	✓	✓
Order no.		10784/0010	10784/0011	10784/0008	10784/0009	10784/0012

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus mini deadlength size 65. Technical data



Size	65	
Variant	Deadlength	
Run-out ≤ [mm]	0,025	
Max. radial clamping force [kN]	120	
Max. axial compression force [kN]	45	
RPM n max. [1/min.]	6000	
Clamping range [mm]	A	3 – 65
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	54
Ø Capacity [mm]	BQ	66
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 137 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 154 [3 x M6]
Length [mm]	H	50
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

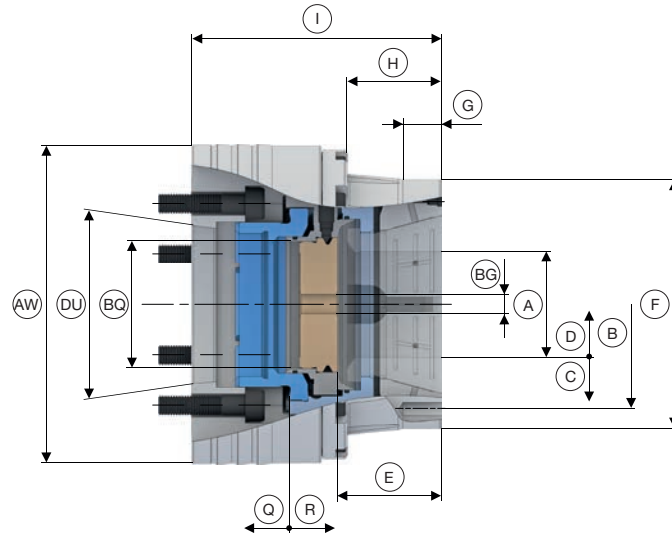
Spindle nose	DU	A2-5		A2-6			A2-8	
Total length [mm]	I	128	138	124	138	163	133	163
Outer Ø [mm]	AW	167		165			202	
Weight [kg]		14,5		14			18	
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10787/0001	10787/0002	10787/0003	10787/0004	10787/0005	10787/0006	10787/0007

Spindle nose	DU	AP120	AP140	AP170	
Total length [mm]	I	129	138	110	128
Outer Ø [mm]	AW	167		180	
Weight [kg]		14	14,5	15	
In stock		✓	✓	✓	✓
Order no.		10787/0053	10787/0008	10787/0049	10787/0009

Clamping heads	Accessory overview
Page 358	Page 396



TOPlus mini pull-back size 100. Technical data



Size	100	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	172	
Max. axial drawtube force [pull / push] [kN]	65	
RPM n max. [1/min.]	5000	
Clamping range [mm]	A	15 – 100
Release stroke in Ø [mm]	C	1,6
Reserve stroke in Ø [mm]	D	1,5
Range / recommended workpiece tolerance [mm]	± 1,0	
End-stop depth [mm]	E	72
Ø Capacity [mm]	BQ	102
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 183 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 160 [3 x M8]
Length [mm]	H	64
Reserve stroke axial [mm]	Q	3
Release stroke axial [mm]	R	5

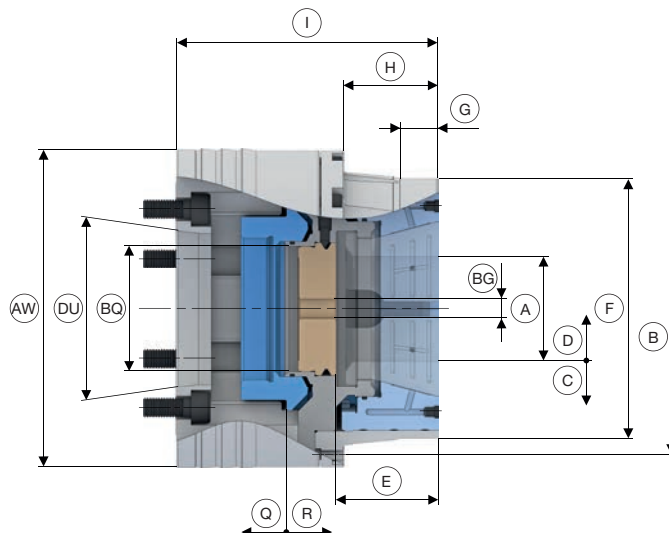
Spindle nose	DU	A2-5	A2-6		A2-8		A2-11	
Total length [mm]	I	160	164	170	162	180	195	
Outer Ø [mm]	AW	221						
Weight [kg]		27	31		31,5		43	
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10784/0033	10784/0034	10784/0035	10784/0036	10784/0037	10784/0038	10784/0039

Spindle nose	DU	AP170	AP220
Total length [mm]	I	164	150
Outer Ø [mm]	AW	221	230
Weight [kg]		28	26
In stock		✓	✓
Order no.		10784/0040	10784/0041

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus mini deadlength size 100. Technical data



Size	100	
Variant	Deadlength	
Run-out ≤ [mm]	0,025	
Max. radial clamping force [kN]	172	
Max. axial compression force [kN]	65	
RPM n max. [1/min.]	5000	
Clamping range [mm]	A	15 – 100
Release stroke in Ø [mm]	C	1,6
Reserve stroke in Ø [mm]	D	1,5
Range / recommended workpiece tolerance [mm]	± 1,0	
End-stop depth [mm]	E	74
Ø Capacity [mm]	BQ	102
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 191 f7
Centering length [mm]	G	30
Bolt hole circle end-stop	B	LK Ø 208 [3 x M6]
Length [mm]	H	64
Reserve stroke axial [mm]	Q	3
Release stroke axial [mm]	R	5

Spindle nose	DU	A2-5	A2-6		A2-8		A2-11	
Total length [mm]	I	171	175	182	169	192	185	200
Outer Ø [mm]	AW	221						276
Weight [kg]		31,5	33				42,6	43
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10787/0031	10787/0032	10787/0033	10787/0034	10787/0035	10787/0036	10787/0037

Spindle nose	DU	AP140	AP170	AP220
Total length [mm]	I	171	175	162
Outer Ø [mm]	AW	221		230
Weight [kg]		32,5	32	30
In stock		✓	✓	✓
Order no.		10787/0041	10787/0038	10787/0039

Clamping heads	Accessory overview
Page 358	Page 396

CHUCKS
TOPlus mini chuck

Chucks

Mandrels

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles



TOPlus

Six to win





Up to 25 % more clamping force and higher output – with the same draw force of the clamping cylinder that is used to actuate our SPANNTOP chucks. The pyramid arrangement of glide surfaces is what makes it possible. The clamping head rests with full-surface contact in the TOPlus chuck body – even with large workpiece tolerances. In addition this geometry ensures that TOPlus is significantly less sensitive to contamination than previous chuck/clamping head solutions, and it offers a concentric precision of approx. 0.015 mm [for chuck size 65]! Thus TOPlus is even better suited for raw material, cast and forged parts, as well as fine-particle non-ferrous metals such as brass. Therefore, the optimized values make the chuck an ideal partner for modern manufacturing strategies and state-of-the-art machine tools.

TOPlus – simply revolutionary!



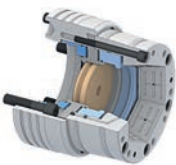
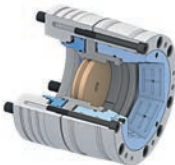
Key advantages

- 25 % higher holding power than SPANNTOP
- Unequalled rigidity due to full-surface contact of the clamping segments
- Superior resistance to contamination because of the clamping head geometry
- Absorbs vibration
- Optimal lubrication thanks to lubricating grooves in the clamping head reception
- Minimal inertia loss compared to 3-jaw chucks

TOPlus combi pull-back chuck in use



TOPlus chuck types

	Combi pull-back	Combi deadlength	Modular
			
Description	Workpiece clamping with pull-back effect. Chuck with dismountable end-stop plate. Without end-stop plate ideal for machining pipes and bars.	Workpiece clamping without pull-back effect. Chuck with dismountable end-stop plate. It is also frequently used on the sub spindle.	Through-bore chuck only – ideal for machining pipes and bars.
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Workpiece clamping without axial movement of the clamping head ■ Clamps workpieces with a short collar or shoulder ■ Suitable for pick-off without pull-back effect ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Fully-functional bar chuck ■ Due to pull-back effect significantly more rigid clamping is achieved than by conventional collets ■ Higher RPM and metal removal rates for bar work
Clamping elements	 Clamping head SE	 Clamping head SE	 Clamping head SE
Adaptations	 MANDO Adapt T211 SE [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE [Adaptation for jaw clamping]  Face driver SE / morse taper adapter SE [Adaptation for clamping between centers]  Magnet module SE [Adaptation for magnetic clamping]		 MANDO Adapt T211 SE [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE [Adaptation for jaw clamping]  Face driver SE / morse taper adapter SE [Adaptation for clamping between centers]  Magnet module SE [Adaptation for magnetic clamping]



Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T211 [approx. 1 min.]



Change-over to mandrel adaptation T212 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]





Change-over to face driver adaptation [approx. 1 min.]



Clamping device with
clamping head

Remove clamping head
and workpiece end-stop

Insert face driver

Secure face driver

Clamping device set-up

Change-over to morse taper [approx. 1 min.]



Remove clamping head
and workpiece end-stop

Insert morse taper

Secure morse taper

Insert center

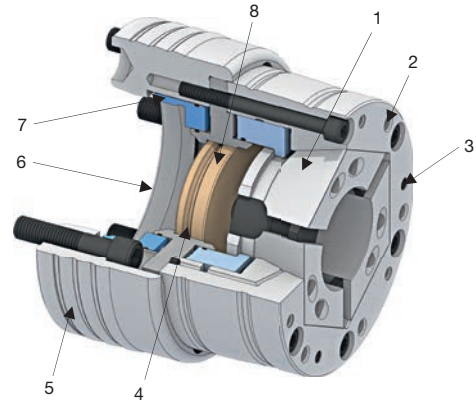
Clamping device set-up



TOPlus combi pull-back in detail

Designation

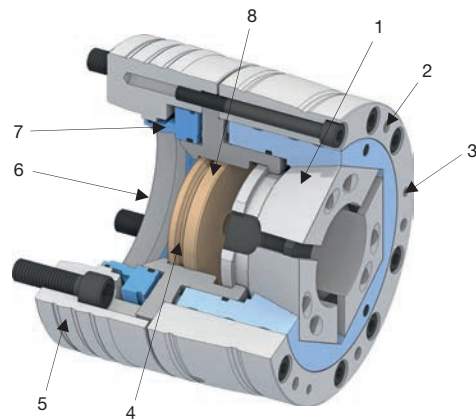
- 1 Vulcanized clamping head with pull-back and hexagonal geometry for optimum chuck sealing and improved clamping force
- 2 Mounting threads for front end-stop
- 3 Grease nipple, optimal holding power due to efficient lubrication
- 4 Clamping screw for base end-stop, easy mounting through external actuation
- 5 Spindle flange
- 6 Full chuck through-bore for bar work after disassembling the base end-stop
- 7 Mounting thread for drawtube connection
- 8 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop



TOPlus combi deadlength in detail

Designation

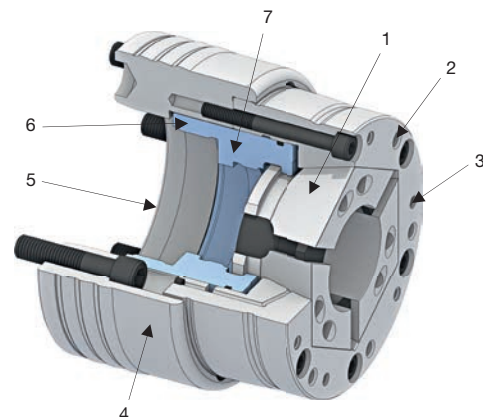
- 1 Vulcanized standing clamping head with hexagonal geometry for improved chuck sealant and higher clamping force
- 2 Mounting threads for front end-stop
- 3 Grease nipple, optimal holding power due to efficient lubrication
- 4 Clamping screw for base end-stop, easy mounting through external actuation
- 5 Spindle flange
- 6 Full chuck through-bore for bar work after disassembling the base end-stop
- 7 Mounting thread for drawtube connection
- 8 Fixed base end-stop with central mounting thread for workpiece specific end-stop



TOPlus modular in detail

Designation

- 1 Vulcanized clamping head with pull-back and hexagonal geometry for optimum chuck sealing and improved clamping force
- 2 Mounting threads for front end-stop
- 3 Grease nipple, optimal holding power due to efficient lubrication
- 4 Spindle flange
- 5 Full chuck passage for bar work
- 6 Mounting thread for drawtube connection
- 7 Mounting thread for guide rings, introduction, spring ejectors, etc.





Order overview. TOPlus chuck

					Clamping elements and adaptations					
Size	Variant	Spindle nose	Order no.	In stock						
					Page 358	Page 244	Page 250	Page 286	Page 292	Page 300
52	Combi pull-back	A2-5	2902/0007	✓						
		A2-6	2902/0008	✓						
		AP120	2902/0009	✓	✓	✓	✓		✓	✓
		AP140	2902/0010	✓						
	Combi deadlength	A2-5	2903/0011	✓						
		A2-6	2903/0012	✓						
		AP120	2903/0014	✓	✓					
		AP140	2903/0015	✓						
	Modular	A2-5	2901/0007	✓						
		A2-6	2901/0008	✓						
		AP120	2901/0009	✓	✓	✓	✓		✓	✓
		AP140	2901/0010	✓						
65	Combi pull-back	A2-5	2902/0001	✓						
		A2-6	2902/0002	✓						
		A2-8	2902/0003	✓						
		AP120	2902/0004	✓	✓	✓	✓	✓	✓	✓
		AP140	2902/0005	✓						
		AP170	2902/0006	✓						
	Combi deadlength	A2-5	2903/0001	✓						
		A2-6	2903/0002	✓						
		A2-8	2903/0003	✓	✓					
		AP140	2903/0004	✓						
		AP170	2903/0005	✓						
	Modular	A2-5	2901/0001	✓						
		A2-6	2901/0002	✓						
		A2-8	2901/0003	✓						
		AP120	2901/0004	✓	✓	✓	✓	✓	✓	✓
		AP140	2901/0005	✓						
		AP170	2901/0006	✓						
100	Combi pull-back	A2-6	2902/0011	✓						
		A2-8	2902/0012	✓						
		A2-11	2902/0020	✓	✓	✓	✓	✓	✓	✓
		AP170	2902/0013	✓						
		AP220	2902/0014	✓						
	Combi deadlength	A2-6	2903/0006	✓						
		A2-8	2903/0007	✓						
		AP170	2903/0008	✓	✓					
		AP220	2903/0009	✓						
	Modular	A2-8	2901/0011	✓						
		AP170	2901/0012	✓	✓	✓	✓	✓	✓	✓
		AP220	2901/0013	✓						

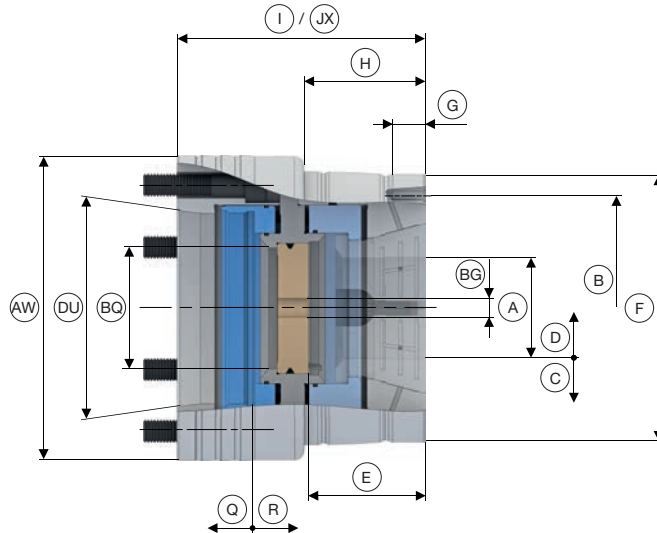
Detailed technical data follows.

Scope of delivery

- Chuck
- Base end-stop [depending on the variant]
- Chip protection cover



TOPlus combi pull-back size 52. Technical data



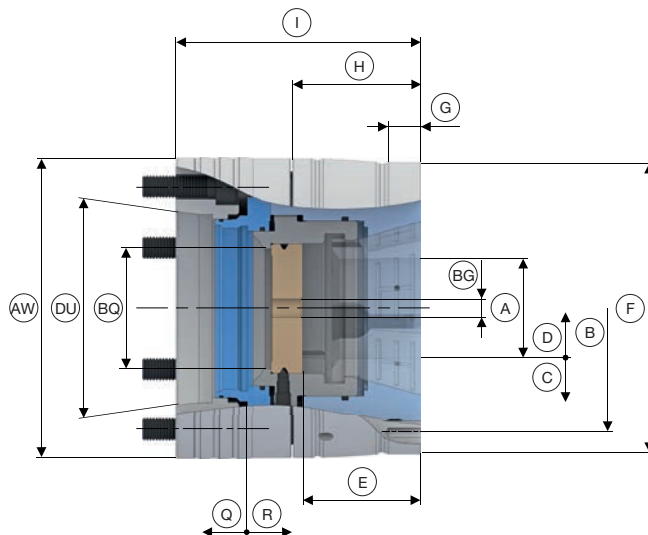
Size	52				
Variant	Combi pull-back				
Spindle nose	DU	A2-5	A2-6	AP120	AP140
Run-out ≤ [mm]				0,015	
Max. radial clamping force [kN]				108	
Max. axial drawtube force [pull / push] [kN]				40	
RPM n max. [1/min.]				7000	
Clamping range [mm]	A			3 – 52	
Release stroke in Ø [mm]	C			0,6	
Reserve stroke in Ø [mm]	D			1,0	
Range / recommended workpiece tolerance [mm]				± 0,5	
End-stop depth [mm]	E			56,5	
Ø Capacity [mm]	BQ			53	
End-stop thread size [M]	BG			10	
Location front end-stop	F			Ø 125 f7	
Centering length [mm]	G			17	
Bolt hole circle end-stop	B			LK Ø 107 [3 x M6]	
Length [mm]	H			59	
Total length [mm]	I	122			115
Total length with guard plate [mm]	JX	125			118
Reserve stroke axial [mm]	Q			2,0	
Release stroke axial [mm]	R			2,5	
Outer Ø [mm]	AW	144	165	144	150
Weight [kg]		10	12	9	10
In stock		✓	✓	✓	✓
Order no.		2902/0007	2902/0008	2902/0009	2902/0010

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus combi deadlength size 52. Technical data



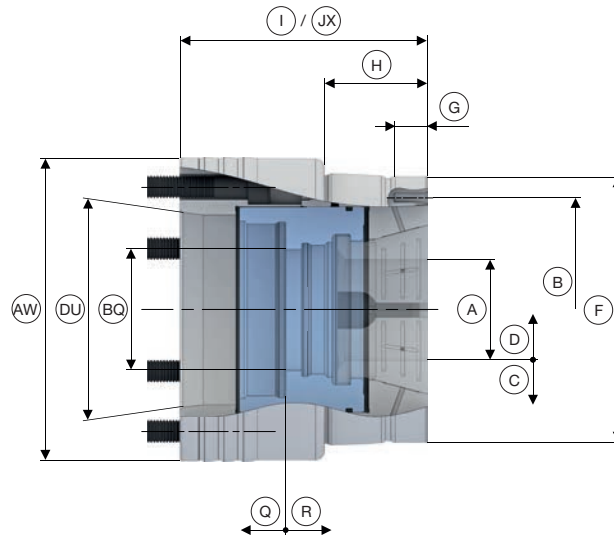
Size	52			
Variant	Combi deadlength			
Spindle nose	DU	A2-5	A2-6	AP120
Run-out ≤ [mm]				0,025
Max. radial clamping force [kN]				108
Max. axial compression force [kN]				40
RPM n max. [1/min.]				7000
Clamping range [mm]	A			3 – 52
Release stroke in Ø [mm]	C			0,6
Reserve stroke in Ø [mm]	D			1
Range / recommended workpiece tolerance [mm]				± 0,5
End-stop depth [mm]	E			54,8
Ø Capacity [mm]	BQ			53
End-stop thread size [M]	BG			10
Location front end-stop	F			Ø 140 f7
Centering length [mm]	G			17
Bolt hole circle end-stop	B			LK Ø 122 [3 x M6]
Length [mm]	H			61,5
Total length [mm]	I	120		110
Reserve stroke axial [mm]	Q			2
Release stroke axial [mm]	R			2,5
Outer Ø [mm]	AW	145	162	145
Weight [kg]		11	12	10
In stock		✓	✓	✓
Order no.		2903/0011	2903/0012	2903/0014
				2903/0015

Machine spindle standard DIN 55026.
Total length can be extended via flange.





TOPlus modular size 52. Technical data



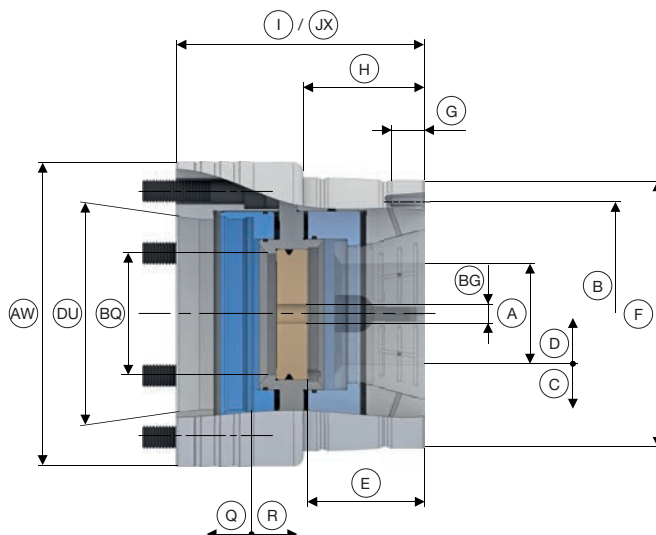
Size	52			
Variant	Modular			
Spindle nose	DU	A2-5	A2-6	AP120 AP140
Run-out ≤ [mm]			0,015	
Max. radial clamping force [kN]			108	
Max. axial drawtube force [pull / push] [kN]			40	
RPM n max. [1/min.]			7000	
Clamping range [mm]	A		3 – 52	
Release stroke in Ø [mm]	C		0,6	
Reserve stroke in Ø [mm]	D		1	
Range / recommended workpiece tolerance [mm]			± 0,5	
Ø Capacity [mm]	BQ		53	
Location front end-stop	F		Ø 125 f7	
Centering length [mm]	G		17	
Bolt hole circle end-stop			LK Ø 107 [3 x M6]	
Length [mm]	H		49	
Total length [mm]	I	112		105
Total length with guard plate [mm]	JX	115		108
Reserve stroke axial [mm]	Q		2	
Release stroke axial [mm]	R		2,5	
Outer Ø [mm]	AW	144	165	144 150
Weight [kg]		9	11	9
In stock		✓	✓	✓
Order no.		2901/0007	2901/0008	2901/0009 2901/0010

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus combi pull-back size 65. Technical data



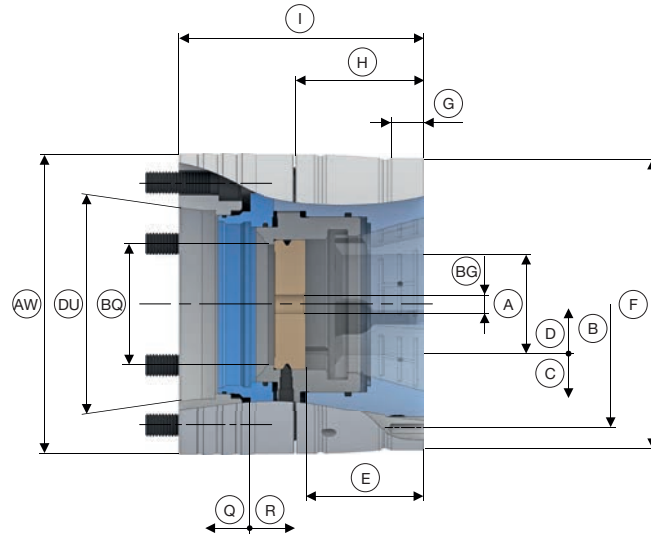
Size	65						
Variant	Combi pull-back						
Spindle nose	DU	A2-5	A2-6	A2-8	AP120	AP140	AP170
Run-out ≤ [mm]					0,015		
Max. radial clamping force [kN]					120		
Max. axial drawtube force [pull / push] [kN]					45		
RPM n max. [1/min.]					6000		
Clamping range [mm]	A				3 – 65		
Release stroke in Ø [mm]	C				0,6		
Reserve stroke in Ø [mm]	D				1,0		
Range / recommended workpiece tolerance [mm]					± 0,5		
End-stop depth [mm]	E				63,5		
Ø Capacity [mm]	BQ				66		
End-stop thread size [M]	BG				12		
Location front end-stop	F				Ø 145 f7		
Centering length [mm]	G				20		
Bolt hole circle end-stop	B				LK Ø 126 [3 x M6]		
Length [mm]	H				66		
Total length [mm]	I	131	130	131	120		115
Total length with guard plate [mm]	JX	134	133	134	123		118
Reserve stroke axial [mm]	Q				2		
Release stroke axial [mm]	R				2,5		
Outer Ø [mm]	AW	160	165	210	160		184
Weight [kg]		14	12	18	12	13	12
In stock		✓	✓	✓	✓	✓	✓
Order no.		2902/0001	2902/0002	2902/0003	2902/0004	2902/0005	2902/0006

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus combi deadlength size 65. Technical data



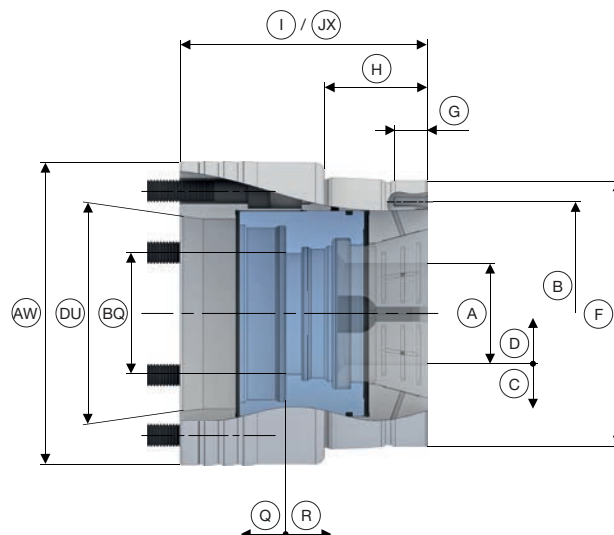
Size	65					
Variant	Combi deadlength					
Spindle nose	DU	A2-5	A2-6	A2-8	AP140	AP170
Run-out ≤ [mm]				0,025		
Max. radial clamping force [kN]				120		
Max. axial compression force [kN]				45		
RPM n max. [1/min.]				6000		
Clamping range [mm]	A			3 – 65		
Release stroke in Ø [mm]	C			0,6		
Reserve stroke in Ø [mm]	D			1		
Range / recommended workpiece tolerance [mm]				± 0,5		
End-stop depth [mm]	E			65		
Ø Capacity [mm]	BQ			66		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 160 f7		
Centering length [mm]	G			17		
Bolt hole circle end-stop	B			LK Ø 141 [3 x M6]		
Length [mm]	H			71,5		
Total length [mm]	I		135			125
Reserve stroke axial [mm]	Q			2		
Release stroke axial [mm]	R			2,5		
Outer Ø [mm]	AW	165		210	165	180
Weight [kg]		16		21	16	
In stock		✓	✓	✓	✓	✓
Order no.		2903/0001	2903/0002	2903/0003	2903/0004	2903/0005

Machine spindle standard DIN 55026.
Total length can be extended via flange.





TOPlus modular size 65. Technical data



Size	65						
Variant	Modular						
Spindle nose	DU	A2-5	A2-6	A2-8	AP120	AP140	AP170
Run-out ≤ [mm]		0,015					
Max. radial clamping force [kN]		120					
Max. axial drawtube force [pull / push] [kN]		45					
RPM n max. [1/min.]		6000					
Clamping range [mm]	A	3 – 65					
Release stroke in Ø [mm]	C	0,6					
Reserve stroke in Ø [mm]	D	1,0					
Range / recommended workpiece tolerance [mm]		± 0,5					
Ø Capacity [mm]	BQ	66					
Location front end-stop	F	Ø 145 f7					
Centering length [mm]	G	20					
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]					
Length [mm]	H	56					
Total length [mm]	I	121	120	121	110		105
Total length with guard plate [mm]	JX	124	123	124	113		108
Reserve stroke axial [mm]	Q	2					
Release stroke axial [mm]	R	2,5					
Outer Ø [mm]	AW	160	165	210	160		184
Weight [kg]		12		17	11		12
In stock		✓	✓	✓	✓	✓	✓
Order no.		2901/0001	2901/0002	2901/0003	2901/0004	2901/0005	2901/0006

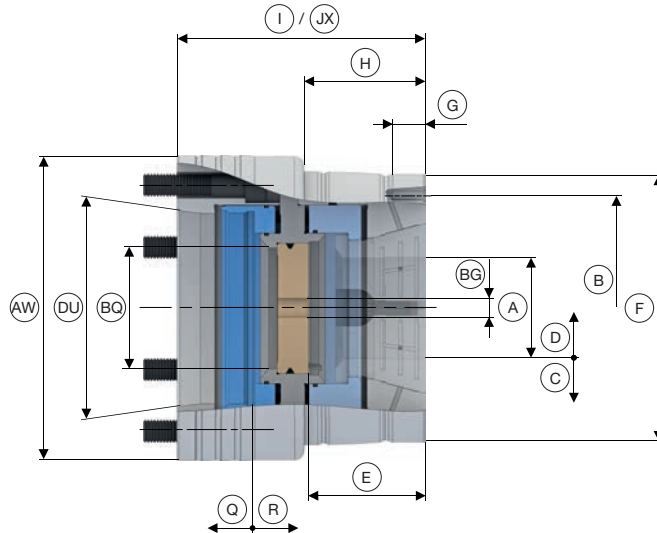
Machine spindle standard DIN 55026.

Total length can be extended via flange.

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus combi pull-back size 100. Technical data



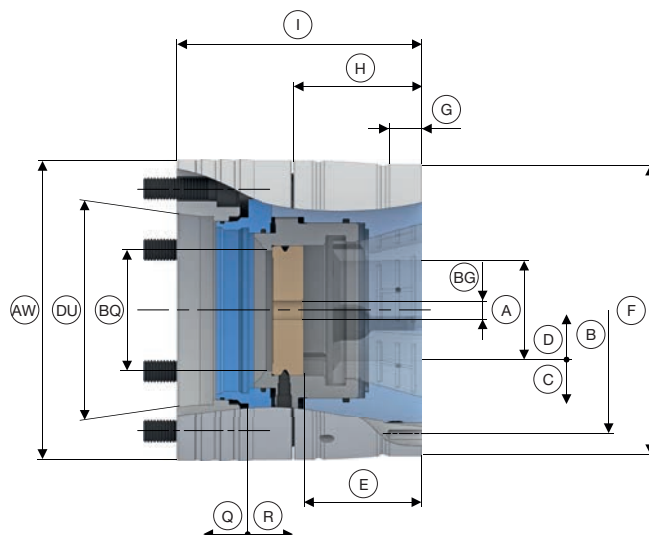
Size	100				
Variant	Combi pull-back				
Spindle nose	DU	A2-6	A2-8	A2-11	AP170 AP220
Run-out ≤ [mm]				0,015	
Max. radial clamping force [kN]				172	
Max. axial drawtube force [pull / push] [kN]				65	
RPM n max. [1/min.]				5000	
Clamping range [mm]	A			15 – 100	
Release stroke in Ø [mm]	C	1,6		2	1,6
Reserve stroke in Ø [mm]	D			1,5	
Range / recommended workpiece tolerance [mm]				± 1,0	
End-stop depth [mm]	E			73	
Ø Capacity [mm]	BQ			101	
End-stop thread size [M]	BG			12	
Location front end-stop	F			Ø 215 f7	
Centering length [mm]	G			23	
Bolt hole circle end-stop	B			LK Ø 180 [3 x M8]	
Length [mm]	H			78,5	
Total length [mm]	I	155	159	165	159
Total length with guard plate [mm]	JX	159	163	169	163
Reserve stroke axial [mm]	Q			3	
Release stroke axial [mm]	R			5	
Outer Ø [mm]	AW	235		280	235 240
Weight [kg]		33	32	42	32 35
In stock		✓	✓	✓	✓
Order no.		2902/0011	2902/0012	2902/0020	2902/0013 2902/0014

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



TOPlus combi deadlength size 100. Technical data



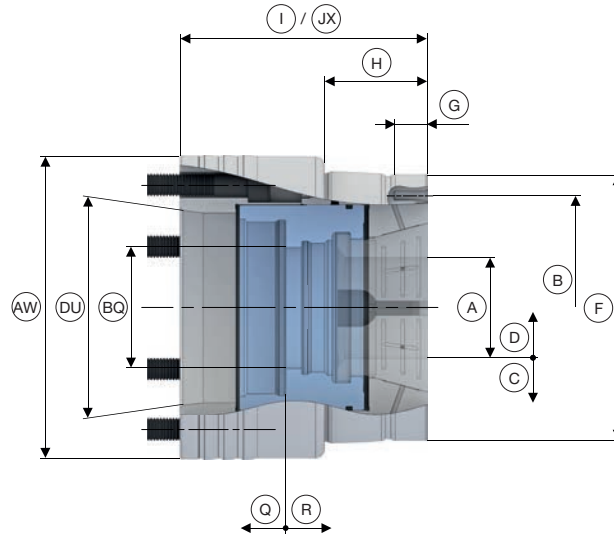
Size	100				
Variant	Combi deadlength				
Spindle nose	DU	A2-6	A2-8	AP170	AP220
Run-out ≤ [mm]				0,025	
Max. radial clamping force [kN]				172	
Max. axial compression force [kN]				65	
RPM n max. [1/min.]				5000	
Clamping range [mm]	A			15 – 100	
Release stroke in Ø [mm]	C			1,6	
Reserve stroke in Ø [mm]	D			1,5	
Range / recommended workpiece tolerance [mm]				± 1,0	
End-stop depth [mm]	E			85,5	
Ø Capacity [mm]	BQ	84		101	
End-stop thread size [M]	BG			12	
Location front end-stop	F			Ø 215 f7	
Centering length [mm]	G			23	
Bolt hole circle end-stop	B			LK Ø 192 [3 x M8]	
Length [mm]	H			94	
Total length [mm]	I	175		180	170
Reserve stroke axial [mm]	Q			3	
Release stroke axial [mm]	R			5	
Outer Ø [mm]	AW		220		240
Weight [kg]		36	34	37	38
In stock		✓	✓	✓	✓
Order no.		2903/0006	2903/0007	2903/0008	2903/0009

Machine spindle standard DIN 55026.
Total length can be extended via flange.





TOPlus modular size 100. Technical data



Size	100			
Variant	Modular			
Spindle nose	DU	A2-8	AP170	AP220
Run-out ≤ [mm]			0,015	
Max. radial clamping force [kN]			172	
Max. axial drawtube force [pull / push] [kN]			65	
RPM n max. [1/min.]			5000	
Clamping range [mm]	A		15 – 100	
Release stroke in Ø [mm]	C		2	
Reserve stroke in Ø [mm]	D		1,5	
Range / recommended workpiece tolerance [mm]			± 1,0	
Ø Capacity [mm]	BQ		104,5	
Location front end-stop	F		Ø 215 f7	
Centering length [mm]	G		23	
Bolt hole circle end-stop	B		LK Ø 180 [3 x M8]	
Length [mm]	H		68,5	
Total length [mm]	I		149	
Total length with guard plate [mm]	JX		153	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		5	
Outer Ø [mm]	AW	235		240
Weight [kg]		28	31	30
In stock		✓	✓	✓
Order no.		2901/0011	2901/0012	2901/0013

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP mini

Smaller than ever





The »mini« series really shines with a mass reduced by as much as 30 %, and a chuck diameter that is reduced by 1/3. This means reduced energy consumption and better tool accessibility. Naturally, adaptation devices may also be used with the SPANNTOP mini. An additional ring enables use of the adaptation devices that are also used with the SPANNTOP nova.

Thanks to the reduced interference contour, it is easier to choose the tool that you need. Now it can also be shorter and more stable – on the main and sub spindles. Particularly in the case of limited installation space and in series operation, SPANNTOP mini is ideal: Lower energy consumption, dynamic spindle acceleration, and shorter cycle times reduce the costs per workpiece.

Minimalism that pays off!



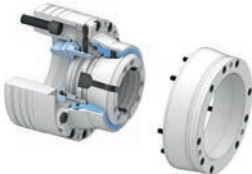
Key advantages

- Adaptation devices possible [modular system]
- Significantly reduced interference contour
- Improved tool accessibility
- Ideal for limited installation space
- Lower mass
- Minimal inertia loss compared to 3-jaw chucks

SPANNTOP mini pull-back in use



SPANNTOP mini chuck types

	Pull-back	Deadlength
		
Description	Workpiece clamping with pull-back effect. Chuck with dismountable end-stop plate.	Workpiece clamping without pull-back effect. Chuck with dismountable end-stop plate.
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Workpiece clamping without axial movement of the clamping head ■ Clamps workpieces with a short collar or shoulder ■ Suitable for pick-off without pull-back effect ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed
Clamping elements	 Clamping head RD	 Clamping head RD
Adaptations	 MANDO Adapt T211 RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module RD [Adaptation for jaw clamping]  Face driver RD / morse taper adapter RD [Adaptation for clamping between centers]  Magnet module RD [Adaptation for magnetic clamping]	 MANDO Adapt T812 RD [Mandrel-in-clamping-device, without draw bolt]

An adaptation ring, which is available as an option, is required for use of clamping adaptation devices.



Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T212 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]



Change-over to face driver adaptation [approx. 1 min.]





SPANNTOP mini pull-back in detail

Designation	
1 Vulcanized clamping head with hardened steel segments and pull-back 2 Adaptation ring [required for the adaptation elements] 3 Spindle flange 4 Chuck through-bore for bar work after disassembling the base end-stop 5 Fixed base end-stop with central mounting thread for workpiece specific end-stop 6 Mounting thread for drawtube connection 7 Clamping screw for base end-stop, easy mounting through external actuation 8 Torsional safety lock of the clamping head	

SPANNTOP mini deadlength in detail

Designation	
1 Vulcanized standing clamping head with hardened steel segments 2 Adaptation ring [required for the adaptation elements] 3 Spindle flange 4 Chuck through-bore for bar work after disassembling the base end-stop 5 Fixed base end-stop with central mounting thread for workpiece specific end-stop 6 Mounting thread for drawtube connection 7 Clamping screw for base end-stop, easy mounting through external actuation 8 Torsional safety lock of the clamping head	



Order overview. SPANNTOP mini chuck

						Clamping elements and adaptations						
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock							
						Clamping head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
						Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
32	Pull-back	A2-4	117	10791/0010	✓	✓						
		A2-5		10791/0011	✓							
			140	10791/0012	✓							
		A2-6	117	10791/0057	✓							
	Deadlength	A2-4	112	10794/0009	✓	✓						
			122	10794/0010	✓							
			114	10794/0011	✓							
		A2-5	122	10794/0012	✓							
			142	10794/0013	✓							
		A2-6	115	10794/0067	✓							
		AP140	101	10794/0068	✓							
42	Pull-back	A2-4	122	10791/0013	✓	✓					✓	
			114	10791/0014	✓							
		A2-5	122	10791/0015	✓							
			140	10791/0016	✓							
		A2-6	122	10791/0017	✓							
			140	10791/0018	✓							
		AP120	102	10791/0019	✓							
			115	10791/0020	✓							
		AP140	102	10791/0021	✓							
			115	10791/0022	✓							
	Deadlength	AP170	102	10791/0061	✓							
		A2-4	125	10794/0050	✓							
			118	10794/0014	✓							
		A2-5	125	10794/0015	✓							
			142	10794/0016	✓							
		A2-6	124	10794/0017	✓							
			142	10794/0018	✓							
		AP110	105	10794/0051	✓							
		AP120		10794/0066	✓							
				10794/0019	✓							
		AP140		10794/0020	✓							
			117									
52	Pull-back	A2-5	122	10791/0024	✓	✓	✓	✓			✓	✓
			145	10791/0025	✓							
		A2-6	122	10791/0026	✓							
			145	10791/0027	✓							
		A2-8	120	10791/0054	✓							
			145	10791/0055	✓							
		AP110	120	10791/0051	✓							
		AP120	105	10791/0047	✓							
			115	10791/0048	✓							
			105	10791/0049	✓							
		AP140	115	10791/0050	✓							

Detailed technical data follows.

An adaptation ring, which is available as an option, is required for use of clamping adaptation devices.

Machine spindle standard DIN ISO 702-1.

CHUCKS

SPANNTOP mini chuck



Order overview. SPANNTOP mini chuck

						Clamping elements and adaptations						
												
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock	Clamping head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
						Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
52	Deadlength	A2-4	122	10794/0021	✓	✓			✓			
		A2-5		10794/0022	✓							
		A2-6	147	10794/0023	✓							
			122	10794/0024	✓							
		A2-8	147	10794/0025	✓							
			120	10794/0049	✓							
		AP110	100	10794/0043	✓							
			115	10794/0052	✓							
		AP120	105	10794/0026	✓							
			115	10794/0027	✓							
		AP140	107	10794/0028	✓							
65	Pull-back	A2-5	124	10791/0058	✓	✓	✓	✓		✓	✓	✓
			130	10791/0001	✓							
			150	10791/0002	✓							
		A2-6	126	10791/0003	✓							
			130	10791/0004	✓							
			155	10791/0005	✓							
		A2-8	130	10791/0006	✓							
			155	10791/0007	✓							
		AP120	111	10791/0028	✓							
			120	10791/0029	✓							
		AP140	111	10791/0008	✓							
			120	10791/0009	✓							
		AP170	115	10791/0030	✓							
		AP220	112	10791/0056	✓							
	Deadlength	A2-4	128	10794/0065	✓	✓			✓			
		A2-5		10794/0001	✓							
		A2-5	138	10794/0002	✓							
		A2-6	124	10794/0003	✓							
			138	10794/0004	✓							
			163	10794/0005	✓							
		A2-8	133	10794/0006	✓							
			163	10794/0007	✓							
		AP110	125	10794/0048	✓							
		AP120	129	10794/0063	✓							
		AP140	138	10794/0008	✓							
		AP170	110	10794/0053	✓							
			128	10794/0029	✓							
		AP220	111	10794/0064	✓							

Detailed technical data follows.

An adaptation ring, which is available as an option, is required for use of clamping adaptation devices.

Machine spindle standard DIN ISO 702-1.



Order overview. SPANNTOP mini chuck

						Clamping elements and adaptations						
Size	Variant	Spindle nose	Total length [mm]	Order no.	In stock	      						
						Clamping head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
						Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
80	Pull-back	A2-5	132	10791/0052	✓							
			128	10791/0031	✓							
		A2-6	135	10791/0032	✓							
			155	10791/0033	✓							
			132	10791/0034	✓	✓	✓	✓		✓	✓	✓
		A2-8	150	10791/0035	✓							
			180	10791/0036	✓							
		AP140	132	10791/0060	✓							
		AP170	115	10791/0037	✓							
	Deadlength	A2-5	136	10794/0044	✓							
			130	10794/0030	✓							
		A2-6	137	10794/0031	✓							
			157	10794/0032	✓							
			132	10794/0033	✓	✓			✓			
		A2-8	152	10794/0034	✓							
			182	10794/0035	✓							
		AP140	134	10794/0036	✓							
		AP170	115	10794/0045	✓							
100	Pull-back	A2-5	160	10791/0053	✓							
			164	10791/0039	✓							
		A2-6	170	10791/0040	✓							
			162	10791/0041	✓							
		A2-8	180	10791/0042	✓	✓	✓	✓		✓	✓	✓
			180	10791/0043	✓							
			195	10791/0044	✓							
		AP140	161	10791/0059	✓							
		AP170	164	10791/0045	✓							
		AP220	150	10791/0046	✓							
	Deadlength	A2-5	171	10794/0058	✓							
			175	10794/0037	✓							
		A2-6	182	10794/0038	✓							
			169	10794/0039	✓							
		A2-8	192	10794/0040	✓	✓						
			185	10794/0059	✓							
		A2-11	200	10794/0060	✓							
		AP140	171	10794/0061	✓							
		AP170	175	10794/0041	✓							
		AP220	162	10794/0042	✓							

Detailed technical data follows.

An adaptation ring, which is available as an option, is required for use of clamping adaptation devices.

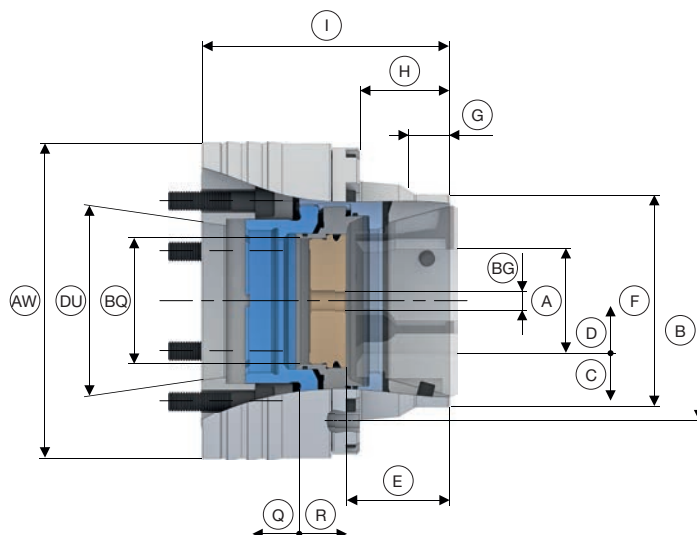
Machine spindle standard DIN ISO 702-1.

Scope of delivery

- Chuck
- Base end-stop
- Socket wrench insert 1/2"



SPANNTOP mini pull-back size 32. Technical data



Size		32
Variant		Pull-back
Run-out ≤ [mm]		0,010
Max. radial clamping force [kN]		70
Max. axial drawtube force [pull / push] [kN]		25
RPM n max. [1/min.]		8000
Clamping range [mm]	A	3 – 32
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	0,8
Range / recommended workpiece tolerance [mm]		± 0,3
End-stop depth [mm]	E	45
Ø Capacity [mm]	BQ	33
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 66 f7
Centering length [mm]	G	17
Bolt hole circle end-stop	B	LK Ø 110 [3 x M6]
Length [mm]	H	43
Reserve stroke axial [mm]	Q	2,5
Release stroke axial [mm]	R	3

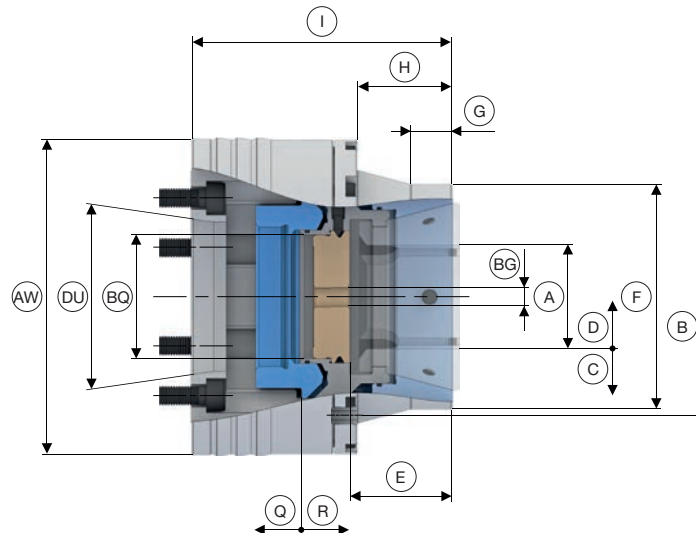
Spindle nose	DU	A2-4	A2-5	A2-6
Total length [mm]	I	117	140	117
Outer Ø [mm]	AW	132		159
Weight [kg]		7	6,5	8,6
In stock		✓	✓	✓
Order no.		10791/0010	10791/0011	10791/0012



	
Clamping heads	Accessory overview
Page 366	Page 396



SPANNTOP mini deadlength size 32. Technical data



Size	32	
Variant	Deadlength	
Run-out ≤ [mm]	0,020	
Max. radial clamping force [kN]	70	
Max. axial compression force [kN]	25	
RPM n max. [1/min.]	8000	
Clamping range [mm]	A	3 – 32
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,3	
End-stop depth [mm]	E	45,5
Ø Capacity [mm]	BQ	33
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 74 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 115 [3 x M6]
Length [mm]	H	44
Reserve stroke axial [mm]	Q	2,5
Release stroke axial [mm]	R	3

Spindle nose	DU	A2-4		A2-5			A2-6
Total length [mm]	I	112	122	114	122	142	115
Outer Ø [mm]	AW	130					159
Weight [kg]		7		6,5			8,3
In stock		✓	✓	✓	✓	✓	✓
Order no.		10794/0009	10794/0010	10794/0011	10794/0012	10794/0013	10794/0067

Spindle nose	DU	AP140	
Total length [mm]	I	101	
Outer Ø [mm]	AW	149	
Weight [kg]		7,2	
In stock		✓	
Order no.		10794/0068	



Clamping heads

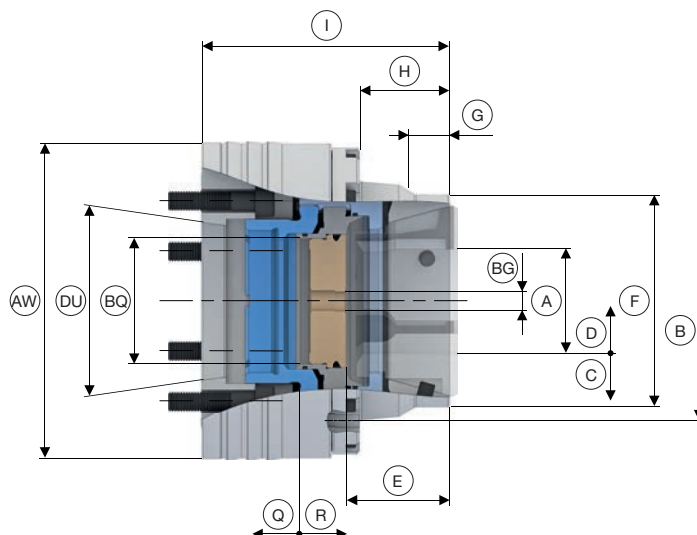
Page 366

Accessory overview

Page 396



SPANNTOP mini pull-back size 42. Technical data



Size	42	
Variant	Pull-back	
Run-out ≤ [mm]	0,010	
Max. radial clamping force [kN]	80	
Max. axial drawtube force [pull / push] [kN]	35	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 42
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	42
Ø Capacity [mm]	BQ	44
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 90 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 117 [3 x M6]
Length [mm]	H	42
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

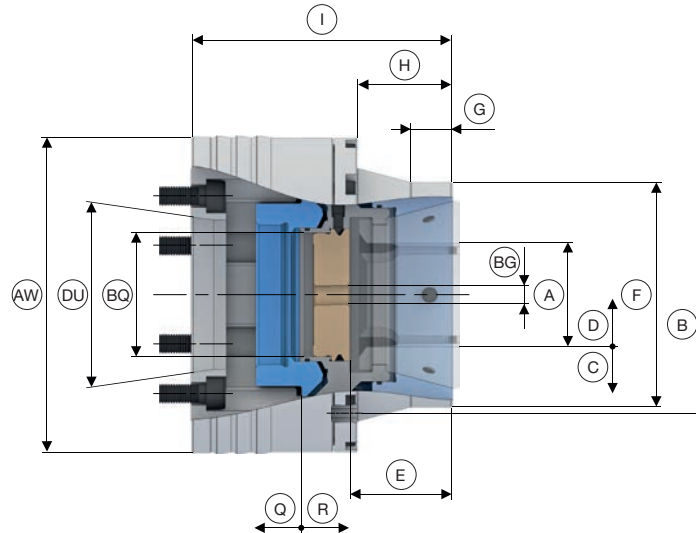
Spindle nose	DU	A2-4		A2-5		A2-6	
Total length [mm]	I	122	114	122	140	122	140
Outer Ø [mm]	AW	134				159	
Weight [kg]		7,5	7	7,5	9		
In stock		✓	✓	✓	✓	✓	✓
Order no.		10791/0013	10791/0014	10791/0015	10791/0016	10791/0017	10791/0018

Spindle nose	DU	AP120		AP140		AP170
Total length [mm]	I	102	115	102	115	102
Outer Ø [mm]	AW	134		150		180
Weight [kg]		7		9		10,4
In stock		✓	✓	✓	✓	✓
Order no.		10791/0019	10791/0020	10791/0021	10791/0022	10791/0061

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Accessory overview Page 396



SPANNTOP mini deadlength size 42. Technical data



Size	42	
Variant	Deadlength	
Run-out ≤ [mm]	0,020	
Max. radial clamping force [kN]	80	
Max. axial compression force [kN]	35	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 42
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	45,8
Ø Capacity [mm]	BQ	44
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 98 f7
Centering length [mm]	G	25
Bolt hole circle end-stop	B	LK Ø 113 [9 x M6]
Length [mm]	H	44
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

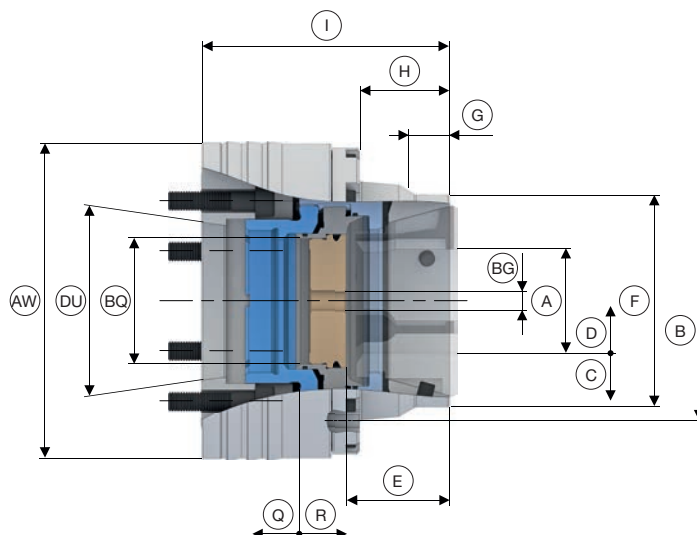
Spindle nose	DU	A2-4	A2-5			A2-6	
Total length [mm]	I	125	118	125	142	124	142
Outer Ø [mm]	AW	139				159	
Weight [kg]		8,6	8,5			9,5	
In stock		✓	✓	✓	✓	✓	✓
Order no.		10794/0050	10794/0014	10794/0015	10794/0016	10794/0017	10794/0018

Spindle nose	DU	AP110	AP120	AP140	
Total length [mm]	I	105			117
Outer Ø [mm]	AW	149			
Weight [kg]		8,4	8,1	9	
In stock		✓	✓	✓	✓
Order no.		10794/0051	10794/0066	10794/0019	10794/0020

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Accessory overview Page 396



SPANNTOP mini pull-back size 52. Technical data



Size	52	
Variant	Pull-back	
Run-out ≤ [mm]	0,010	
Max. radial clamping force [kN]	94	
Max. axial drawtube force [pull / push] [kN]	40	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 52
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	46
Ø Capacity [mm]	BQ	53
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 90 f7
Centering length [mm]	G	15
Bolt hole circle end-stop	B	LK Ø 133 [3 x M8]
Length [mm]	H	45
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

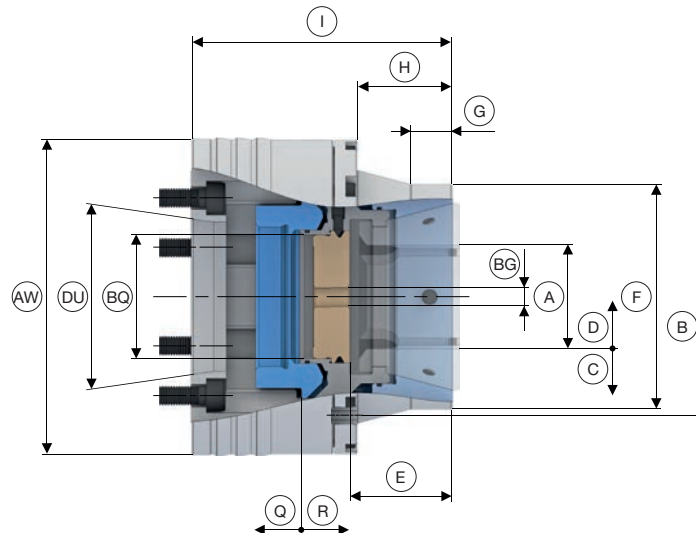
Spindle nose	DU	A2-5		A2-6		A2-8	
Total length [mm]	I	122	145	122	145	120	145
Outer Ø [mm]	AW	149		159		204	
Weight [kg]		9		9,5		14,5	
In stock		✓	✓	✓	✓	✓	✓
Order no.		10791/0024	10791/0025	10791/0026	10791/0027	10791/0054	10791/0055

Spindle nose	DU	AP110	AP120		AP140	
Total length [mm]	I	120	105	115	105	115
Outer Ø [mm]	AW	149			150	
Weight [kg]		9,5	9			
In stock		✓	✓	✓	✓	✓
Order no.		10791/0051	10791/0047	10791/0048	10791/0049	10791/0050

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP mini deadlength size 52. Technical data



Size	52	
Variant	Deadlength	
Run-out ≤ [mm]	0,020	
Max. radial clamping force [kN]	94	
Max. axial compression force [kN]	40	
RPM n max. [1/min.]	7000	
Clamping range [mm]	A	3 – 52
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	45,8
Ø Capacity [mm]	BQ	53
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 98 f7
Centering length [mm]	G	23
Bolt hole circle end-stop	B	LK Ø 125 [9 x M6]
Length [mm]	H	44
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

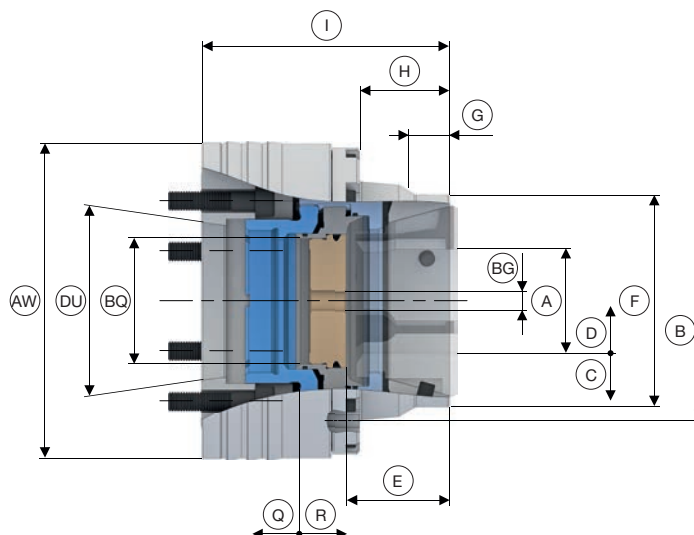
Spindle nose	DU	A2-4	A2-5		A2-6		A2-8
Total length [mm]	I	122		147	122	147	120
Outer Ø [mm]	AW	149			163		202
Weight [kg]		9,8	9,5		10		14
In stock		✓	✓	✓	✓	✓	✓
Order no.		10794/0021	10794/0022	10794/0023	10794/0024	10794/0025	10794/0049

Spindle nose	DU	AP110		AP120		AP140
Total length [mm]	I	100	115	105	115	107
Outer Ø [mm]	AW	149		149		
Weight [kg]		9	9,4	9		
In stock		✓	✓	✓	✓	✓
Order no.		10794/0043	10794/0052	10794/0026	10794/0027	10794/0028

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Accessory overview Page 396



SPANNTOP mini pull-back size 65. Technical data



Size	65	
Variant	Pull-back	
Run-out ≤ [mm]	0,010	
Max. radial clamping force [kN]	105	
Max. axial drawtube force [pull / push] [kN]	45	
RPM n max. [1/min.]	6000	
Clamping range [mm]	A	3 – 65
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	54
Ø Capacity [mm]	BQ	66
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 111 f7
Centering length [mm]	G	18
Bolt hole circle end-stop	B	LK Ø 145 [3 x M8]
Length [mm]	H	47
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

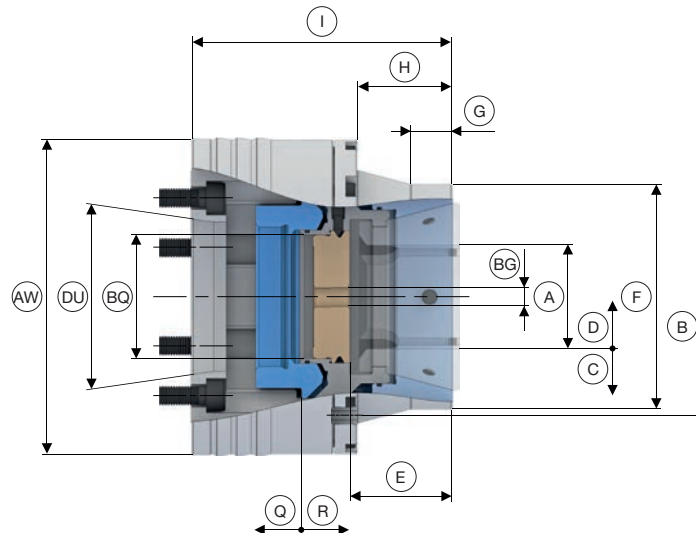
Spindle nose	DU	A2-5			A2-6			A2-8	
Total length [mm]	I	124	130	150	126	130	155	130	155
Outer Ø [mm]	AW	165						204	
Weight [kg]		11,5	12		11			15	
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10791/0058	10791/0001	10791/0002	10791/0003	10791/0004	10791/0005	10791/0006	10791/0007

Spindle nose	DU	AP120		AP140		AP170	AP220
Total length [mm]	I	111	120	111	120	115	112
Outer Ø [mm]	AW	165				180	230
Weight [kg]		11		10,5		11	16,7
In stock		✓	✓	✓	✓	✓	✓
Order no.		10791/0028	10791/0029	10791/0008	10791/0009	10791/0030	10791/0056

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP mini deadlength size 65. Technical data



Size	65	
Variant	Deadlength	
Run-out ≤ [mm]	0,020	
Max. radial clamping force [kN]	105	
Max. axial compression force [kN]	45	
RPM n max. [1/min.]	6000	
Clamping range [mm]	A	3 – 65
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	54
Ø Capacity [mm]	BQ	66
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 119 f7
Centering length [mm]	G	22
Bolt hole circle end-stop	B	LK Ø 145 [9 x M6]
Length [mm]	H	50
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

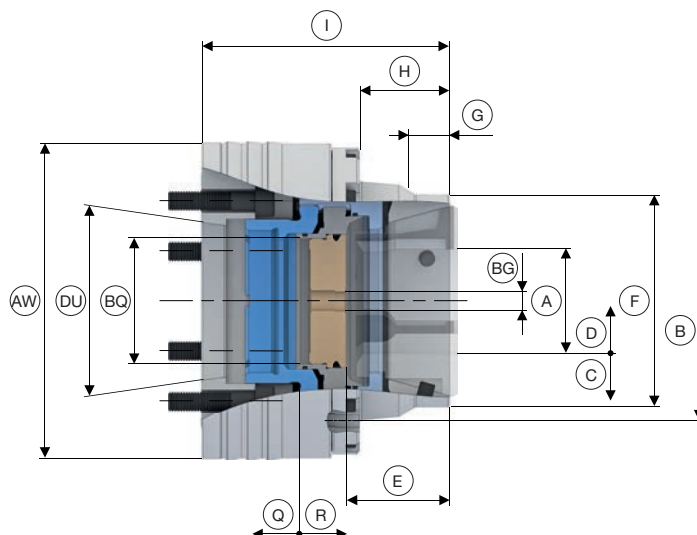
Spindle nose	DU	A2-4	A2-5		A2-6			A2-8	
Total length [mm]	I	128		138	124	138	163	133	163
Outer Ø [mm]	AW	167							202
Weight [kg]		13	13,5		12,5			16,5	
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10794/0065	10794/0001	10794/0002	10794/0003	10794/0004	10794/0005	10794/0006	10794/0007

Spindle nose	DU	AP110	AP120	AP140	AP170		AP220
Total length [mm]	I	125	129	138	110	128	111
Outer Ø [mm]	AW	167			180		230
Weight [kg]		12,6		13,6	8,5	13,5	21,7
In stock		✓	✓	✓	✓	✓	✓
Order no.		10794/0048	10794/0063	10794/0008	10794/0053	10794/0029	10794/0064

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Accessory overview Page 396



SPANNTOP mini pull-back size 80. Technical data



Size	80	
Variant	Pull-back	
Run-out ≤ [mm]	0,010	
Max. radial clamping force [kN]	115	
Max. axial drawtube force [pull / push] [kN]	50	
RPM n max. [1/min.]	5500	
Clamping range [mm]	A	4 – 80
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	54
Ø Capacity [mm]	BQ	82
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 126 f7
Centering length [mm]	G	18
Bolt hole circle end-stop	B	LK Ø 156 [3 x M8]
Length [mm]	H	47
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

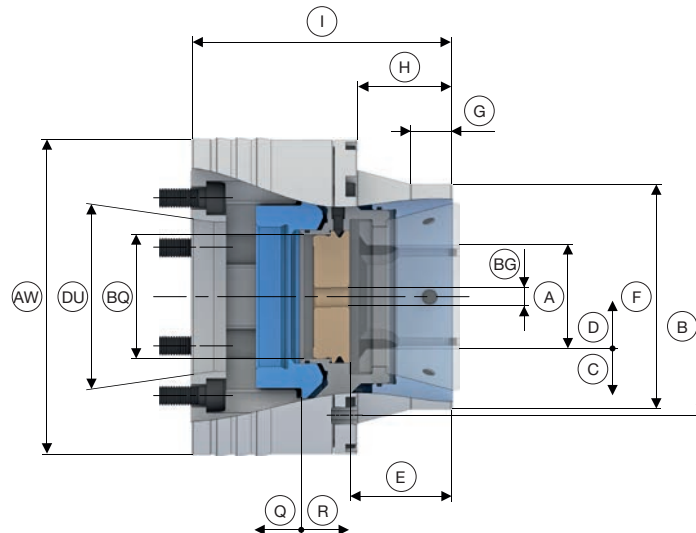
Spindle nose	DU	A2-5	A2-6			A2-8		
Total length [mm]	I	132	128	135	155	132	150	180
Outer Ø [mm]	AW	171						
Weight [kg]		12,8	12,5			15,5		
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10791/0052	10791/0031	10791/0032	10791/0033	10791/0034	10791/0035	10791/0036

Spindle nose	DU	AP140	AP170
Total length [mm]	I	132	115
Outer Ø [mm]	AW	171	180
Weight [kg]		13,0	12
In stock		✓	✓
Order no.		10791/0060	10791/0037

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP mini deadlength size 80. Technical data



Size	80	
Variant	Deadlength	
Run-out ≤ [mm]	0,020	
Max. radial clamping force [kN]	115	
Max. axial compression force [kN]	50	
RPM n max. [1/min.]	5500	
Clamping range [mm]	A	4 – 80
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1,0
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm]	E	55
Ø Capacity [mm]	BQ	82
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 136 f7
Centering length [mm]	G	22
Bolt hole circle end-stop	B	LK Ø 160,5 [9 x M6]
Length [mm]	H	51
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5

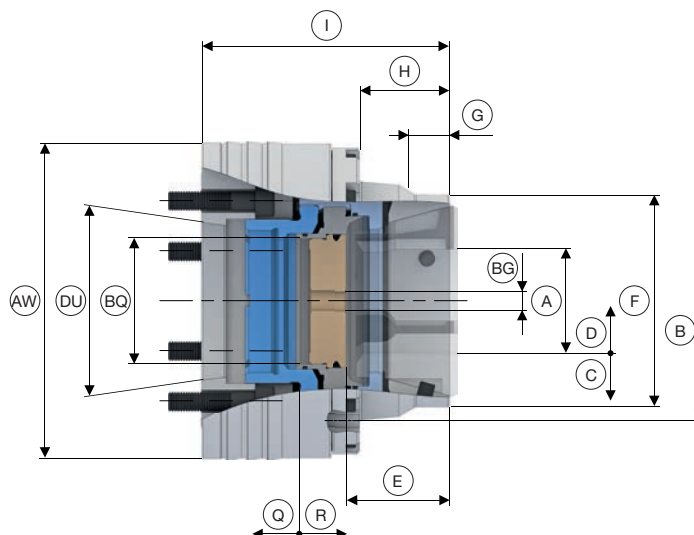
Spindle nose	DU	A2-5	A2-6				A2-8		
Total length [mm]	I	136	130	137	157	132	152	182	
Outer Ø [mm]	AW	180				205			
Weight [kg]		15,5	14,5				18,5		
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10794/0044	10794/0030	10794/0031	10794/0032	10794/0033	10794/0034	10794/0035	

Spindle nose	DU	AP140		AP170	
Total length [mm]	I	134		115	
Outer Ø [mm]	AW	180		12	
Weight [kg]		15		12	
In stock		✓		✓	
Order no.		10794/0036		10794/0045	

Clamping heads	Adaptations I.D. clamping	Accessory overview
Page 366	Page 240	Page 396



SPANNTOP mini pull-back size 100. Technical data



Size	100	
Variant	Pull-back	
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	150	
Max. axial drawtube force [pull / push] [kN]	65	
RPM n max. [1/min.]	5000	
Clamping range [mm]	A	15 – 100
Release stroke in Ø [mm]	C	2,0
Reserve stroke in Ø [mm]	D	1,5
Range / recommended workpiece tolerance [mm]	± 1,0	
End-stop depth [mm]	E	72
Ø Capacity [mm]	BQ	102
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 160 f7
Centering length [mm]	G	20
Bolt hole circle end-stop	B	LK Ø 198 [3 x M8]
Length [mm]	H	64
Reserve stroke axial [mm]	Q	3
Release stroke axial [mm]	R	5

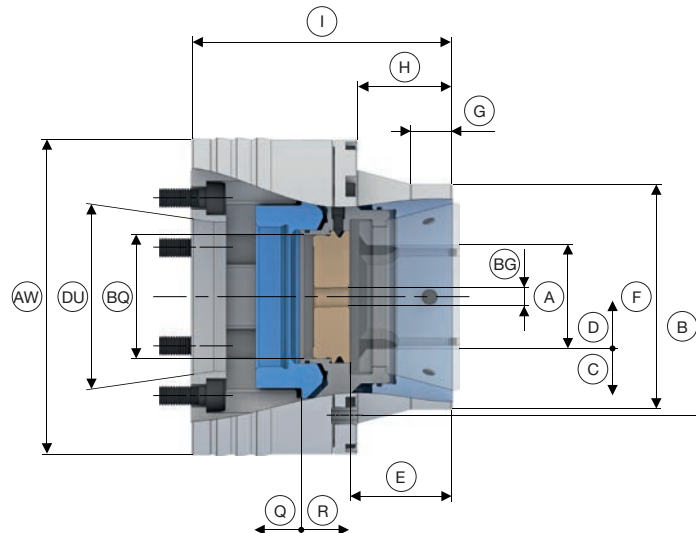
Spindle nose	DU	A2-5	A2-6		A2-8		A2-11	
Total length [mm]	I	160	164	170	162	180	195	
Outer Ø [mm]	AW	221				280		
Weight [kg]		9,5	25				40	
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10791/0053	10791/0039	10791/0040	10791/0041	10791/0042	10791/0043	10791/0044

Spindle nose	DU	AP140	AP170	AP220
Total length [mm]	I	161	164	150
Outer Ø [mm]	AW	221		230
Weight [kg]		25	26	24
In stock		✓	✓	✓
Order no.		10791/0059	10791/0045	10791/0046

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP mini deadlength size 100. Technical data



Size	100	
Variant	Deadlength	
Run-out ≤ [mm]		0,025
Max. radial clamping force [kN]		150
Max. axial compression force [kN]		65
RPM n max. [1/min.]		5000
Clamping range [mm]	A	15 – 100
Release stroke in Ø [mm]	C	2,0
Reserve stroke in Ø [mm]	D	1,5
Range / recommended workpiece tolerance [mm]		± 1,0
End-stop depth [mm]	E	74
Ø Capacity [mm]	BQ	102
End-stop thread size [M]	BG	12
Location front end-stop	F	Ø 168 f7
Centering length [mm]	G	22
Bolt hole circle end-stop	B	LK Ø 208 [3 x M6]
Length [mm]	H	64
Reserve stroke axial [mm]	Q	3
Release stroke axial [mm]	R	5

Spindle nose	DU	A2-5	A2-6		A2-8		A2-11	
Total length [mm]	I	171	175	182	169	192	185	200
Outer Ø [mm]	AW		221				276	
Weight [kg]		28,7	30,3		30		39	
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10794/0058	10794/0037	10794/0038	10794/0039	10794/0040	10794/0059	10794/0060

Spindle nose	DU	AP140		AP170		AP220	
Total length [mm]	I	171		175		162	
Outer Ø [mm]	AW	221				230	
Weight [kg]		29		30		28	
In stock		✓		✓		✓	
Order no.		10794/0061		10794/0041		10794/0042	





SPANNTOP

The original, that wrote workholding history

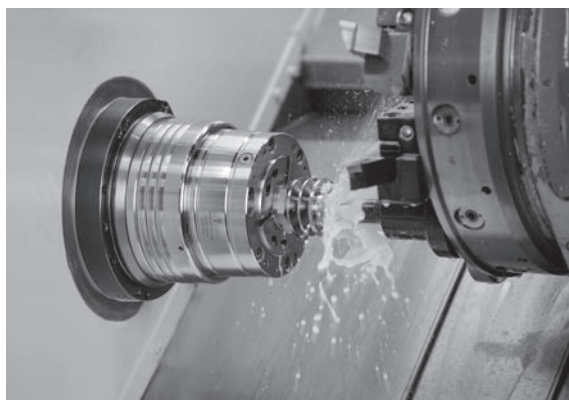




SPANNTOP nova – this development represents more than 30 years of SPANNTOP experience. It exploits all the advantages of the latest machine tools. The components are optimized for balance quality, and have an extended guide length. The clamping length of the workpieces is also significantly greater. This chuck is designed for maximum RPM and holding power at ideal run-out accuracy. It is extremely rigid, precise, and has an extremely long life.

The position-oriented base end-stop of the »combi pull-back« and »combi deadlength« variants can be conveniently changed from the outside via three clamping screws countersunk in the chuck, and for standard chucks, provides excellent accuracy for face location combined with through-bore capacity.

SPANNTOP nova: reliable and solid. The product is the result of more than 30 years of experience!



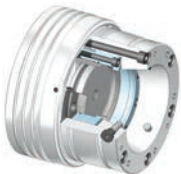
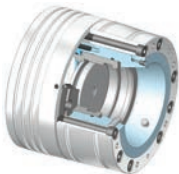
Key advantages

- Ideal for customers with existing RD clamping heads
- Typical features of all HAINBUCH power chucks, such as high holding power, parallel clamping with high accuracy and easy set-up
- Minimal inertia loss compared to 3-jaw chucks

SPANNTOP nova combi pull-back chuck in use



SPANNTOP nova chuck types

	Combi pull-back	Combi deadlength	Modular
			
Description	Workpiece clamping with pull-back effect. Chuck with dismountable end-stop plate. Without end-stop plate ideal for machining pipes and bars.	Workpiece clamping without pull-back effect. Chuck with dismountable end-stop plate. It is also frequently used on the sub spindle.	Through-bore chuck only – ideal for machining pipes and bars.
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Workpiece clamping without axial movement of the clamping head ■ Clamps workpieces with a short collar or shoulder ■ Suitable for pick-off without pull-back effect ■ Prepared for inside and front end-stop ■ Converts to a fully functional »bar chuck« when the end-stop plate is removed	■ Fully-functional bar chuck ■ Due to pull-back effect significantly more rigid clamping is achieved than by conventional collets ■ Higher RPM and metal removal rates for bar work
Clamping elements	 Clamping head RD	 Clamping head RD	 Clamping head RD
Adaptations	 MANDO Adapt T211 RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module RD [Adaptation for jaw clamping]  Face driver RD / morse taper adapter RD [Adaptation for clamping between centers]  Magnet module RD [Adaptation for magnetic clamping]	 MANDO Adapt T812 RD [Mandrel-in-clamping-device, without draw bolt]	 MANDO Adapt T211 RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module RD [Adaptation for jaw clamping]  Face driver RD / morse taper adapter RD [Adaptation for clamping between centers]  Magnet module RD [Adaptation for magnetic clamping]



Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T211 [approx. 1 min.]



Change-over to mandrel adaptation T212 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]





Change-over to face driver adaptation [approx. 1 min.]



Clamping device with clamping head

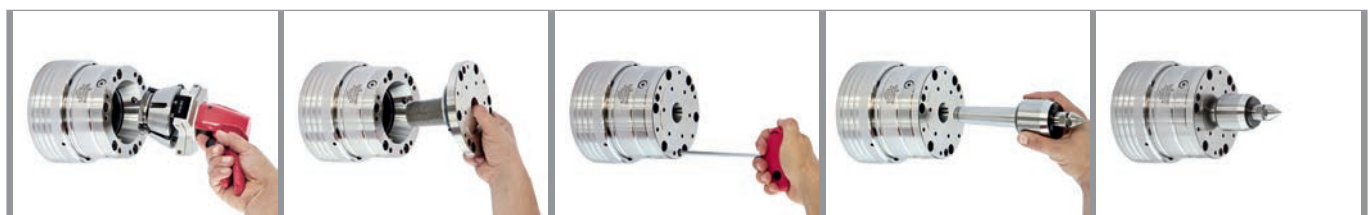
Remove clamping head and workpiece end-stop

Insert face driver

Secure face driver

Clamping device set-up

Change-over to morse taper [approx. 1 min.]



Remove clamping head and workpiece end-stop

Insert morse taper

Secure morse taper

Insert center

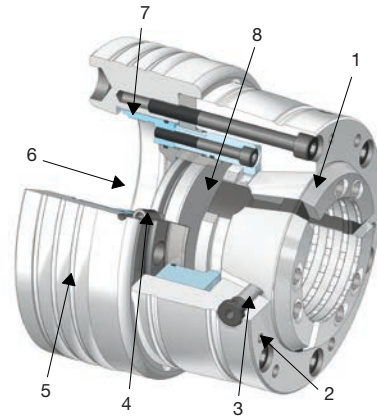
Clamping device set-up



SPANNTOP nova combi pull-back in detail

Designation

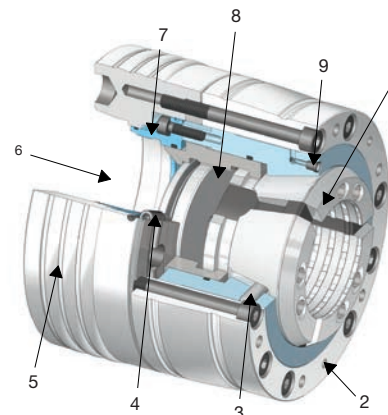
- 1 Vulcanized clamping head with hardened steel segments and pull-back
- 2 Mounting threads for front end-stop
- 3 Torsional safety lock of the clamping head
- 4 Clamping screw for base end-stop, easy mounting through external actuation
- 5 Spindle flange
- 6 Full through-bore after removing the base end-stop plate
- 7 Mounting thread for drawtube connection
- 8 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop



SPANNTOP nova combi deadlength in detail

Designation

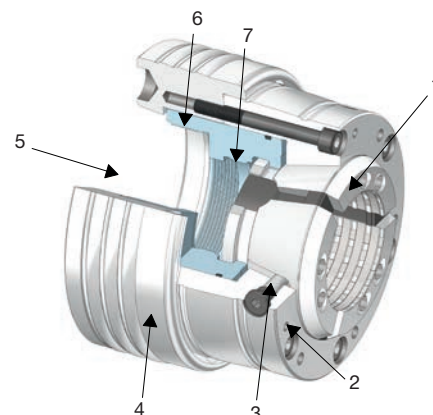
- 1 Vulcanized clamping head with hardened steel segments
- 2 Mounting threads for front end-stop
- 3 Torsional safety lock of the clamping head
- 4 Clamping screw for base end-stop, easy mounting through external actuation
- 5 Spindle flange
- 6 Full through-bore after removing the base end-stop plate
- 7 Mounting thread for drawtube connection
- 8 Fixed base end-stop with central mounting thread for workpiece specific end-stop
- 9 Central grease nipple, optimum tool life and holding power due to perfect lubrication



SPANNTOP nova modular in detail

Designation

- 1 Vulcanized clamping head with hardened steel segments and pull-back
- 2 Mounting threads for front end-stop
- 3 Torsional safety lock of the clamping head
- 4 Spindle flange
- 5 Full chuck passage for bar work
- 6 Mounting thread for drawtube connection
- 7 Mounting thread for guide rings, introduction, spring ejectors, etc.



CHUCKS

SPANNTOP nova chuck



Order overview. SPANNTOP nova chuck

					Clamping elements and adaptations						
Size	Variant	Spindle nose	Order no.	In stock							
					Clamp- ing head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
					Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
32	Combi pull-back	A2-4	2702/0001	✓	✓						
		A2-5	2702/0002	✓							
	Combi deadlength	A2-4	2703/0001	✓	✓						
		A2-5	2703/0002	✓							
	Modular	A2-4	2701/0001	✓	✓						
		A2-5	2701/0002	✓							
42	Combi pull-back	A2-4	2702/0025	✓	✓						
		A2-5	2702/0003	✓							
		A2-6	2702/0004	✓		✓	✓			✓	
		AP120	2702/0014	✓							
		AP140	2702/0015	✓							
	Combi deadlength	A2-5	2703/0003	✓	✓			✓			
		A2-6	2703/0004	✓							
		AP140	2703/0014	✓							
	Modular	A2-5	2701/0003	✓	✓						
		A2-6	2701/0004	✓		✓	✓			✓	
		AP120	2701/0013	✓							
		AP140	2701/0014	✓							
52	Combi pull-back	A2-5	2702/0005	✓	✓						
		A2-6	2702/0006	✓		✓	✓			✓	✓
		AP120	2702/0016	✓							
		AP140	2702/0017	✓							
	Combi deadlength	A2-5	2703/0005	✓	✓			✓			
		A2-6	2703/0006	✓							
		AP120	2703/0034	✓							
		AP140	2703/0015	✓							
	Modular	A2-5	2701/0005	✓	✓						
		A2-6	2701/0006	✓		✓	✓			✓	✓
		AP120	2701/0015	✓							
		AP140	2701/0016	✓							
65	Combi pull-back	A2-5	2702/0007	✓	✓						
		A2-6	2702/0008	✓							
		A2-8	2702/0009	✓							
		AP120	2702/0018	✓		✓	✓		✓	✓	✓
		AP140	2702/0019	✓							
		AP170	2702/0020	✓							

Detailed technical data follows.



Order overview. SPANNTOP nova chuck

					Clamping elements and adaptations						
Size	Variant	Spindle nose	Order no.	In stock							
					Clamp- ing head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
					Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
65	Combi deadlength	A2-5	2703/0007	✓							
		A2-6	2703/0008	✓							
		A2-8	2703/0009	✓	✓			✓			
		AP140	2703/0016	✓							
		AP170	2703/0017	✓							
	Modular	A2-5	2701/0007	✓							
		A2-6	2701/0008	✓							
		A2-8	2701/0009	✓	✓	✓	✓		✓	✓	✓
		AP120	2701/0017	✓							
		AP140	2701/0018	✓							
		AP170	2701/0019	✓							
80	Combi pull-back	A2-5	2702/0054	✓							
		A2-6	2702/0010	✓							
		A2-8	2702/0011	✓	✓	✓	✓		✓	✓	✓
		AP170	2702/0021	✓							
		AP220	2702/0022	✓							
	Combi deadlength	A2-6	2703/0010	✓							
		A2-8	2703/0011	✓	✓			✓			
		AP140	2703/0018	✓							
	Modular	A2-6	2701/0010	✓							
		A2-8	2701/0011	✓	✓	✓	✓		✓	✓	✓
		AP220	2701/0020	✓							
100	Combi pull-back	A2-6	2702/0012	✓							
		A2-8	2702/0013	✓							
		A2-11	2702/0026	✓	✓	✓	✓		✓	✓	✓
		AP170	2702/0023	✓							
		AP220	2702/0024	✓							
	Combi deadlength	A2-6	2703/0012	✓							
		A2-8	2703/0013	✓							
		A2-11	2703/0051	✓	✓						
		AP170	2703/0019	✓							
		AP220	2703/0020	✓							
	Modular	A2-8	2701/0012	✓							
		A2-11	2701/0023	✓	✓	✓	✓		✓	✓	✓
		AP170	2701/0021	✓							
		AP220	2701/0022	✓							

Detailed technical data follows.

CHUCKS

SPANNTOP nova chuck



Order overview. SPANNTOP nova chuck

					Clamping elements and adaptations						
Size	Variant	Spindle nose	Order no.	In stock							
					Clamp- ing head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	MANDO Adapt T812 RD	Jaw module RD	Face driver / morse taper adapter RD	Magnet module RD
					Page 366	Page 260	Page 266	Page 278	Page 286	Page 292	Page 300
125	Combi pull-back	A2-6	2702/0055	✓	✓		✓				
		A2-8	2702/0056	✓							
		A2-11	2702/0057	✓							
		AP170	2702/0058	✓							
		AP220	2702/0059	✓							
	Combi deadlength	A2-6	2703/0046	✓	✓						
		A2-8	2703/0047	✓							
		A2-11	2703/0048	✓							
		AP170	2703/0049	✓							
		AP220	2703/0050	✓							
	Modular	A2-6	2701/0043	-	✓		✓				
		A2-8	2701/0044	-							
		A2-11	2701/0045	-							
		AP170	2701/0046	-							
		AP220	2701/0047	-							
160	Combi pull-back	A2-6	2702/0061	✓	✓						
		A2-8	2702/0062	✓							
		A2-11	2702/0063	✓							
		AP170	2702/0064	✓							
		AP220	2702/0065	✓							

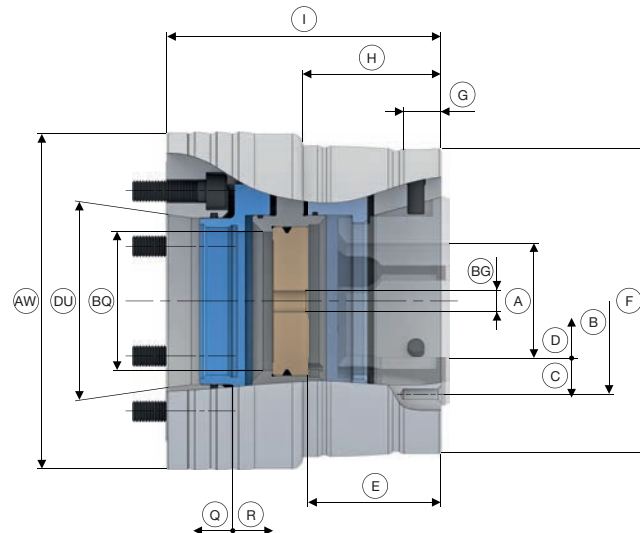
Detailed technical data follows.

Scope of delivery

- Chuck
- Base end-stop [depending on the variant]



SPANNTOP nova combi pull-back size 32. Technical data



Size	32	
Variant	Combi pull-back	
Spindle nose	DU	
Run-out ≤ [mm]	A2-4	A2-5
Max. radial clamping force [kN]	0,010	
Max. axial drawtube force [pull / push] [kN]	70	
RPM n max. [1/min.]	25	
Clamping range [mm]	8000	
Release stroke in Ø [mm]	A	
Reserve stroke in Ø [mm]	3 – 32	
Range / recommended workpiece tolerance [mm]	C	
End-stop depth [mm]	D	
Ø Capacity [mm]	± 0,3	
End-stop thread size [M]	E	
Location front end-stop	52,5	
Centering length [mm]	BQ	
Bolt hole circle end-stop	33	
Length [mm]	BG	
Total length [mm]	10	
Reserve stroke axial [mm]	F	
Release stroke axial [mm]	Ø 75 f7	
Outer Ø [mm]	G	
Weight [kg]	14	
In stock	LK Ø 67 [3 x M4]	
Order no.	I	
	55	
	117	
	2,5	
	3	
	115	
	135	
	6	
	7	
	✓	
	✓	
	2702/0001	
	2702/0002	

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads

Page 366

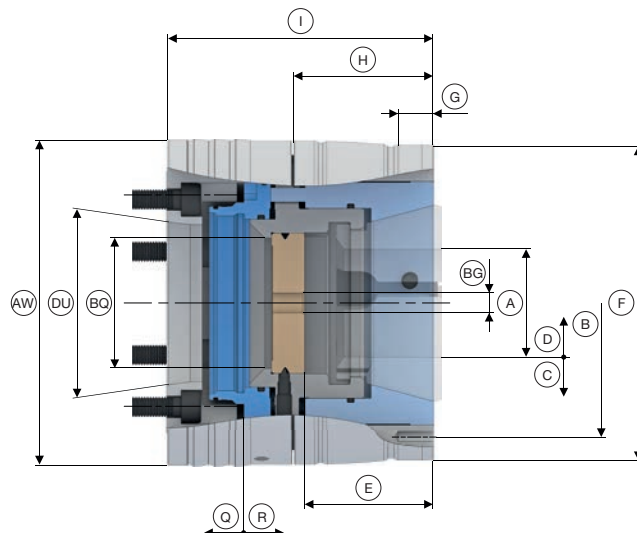


Accessory overview

Page 396



SPANNTOP nova combi deadlength size 32. Technical data



Size	32	
Variant	Combi deadlength	
Spindle nose	DU	A2-4
Run-out ≤ [mm]		0,020
Max. radial clamping force [kN]		70
Max. axial compression force [kN]		25
RPM n max. [1/min.]		8000
Clamping range [mm]	A	3 – 32
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Range / recommended workpiece tolerance [mm]		± 0,3
End-stop depth [mm]	E	53,5
Ø Capacity [mm]	BQ	33
End-stop thread size [M]	BG	10
Location front end-stop	F	Ø 100 f7
Centering length [mm]	G	10
Bolt hole circle end-stop	B	LK Ø 92,5 [3 x M4]
Length [mm]	H	60
Total length [mm]	I	120
Reserve stroke axial [mm]	Q	2,5
Release stroke axial [mm]	R	3
Outer Ø [mm]	AW	145
Weight [kg]		10
In stock		✓
Order no.	2703/0001	2703/0002

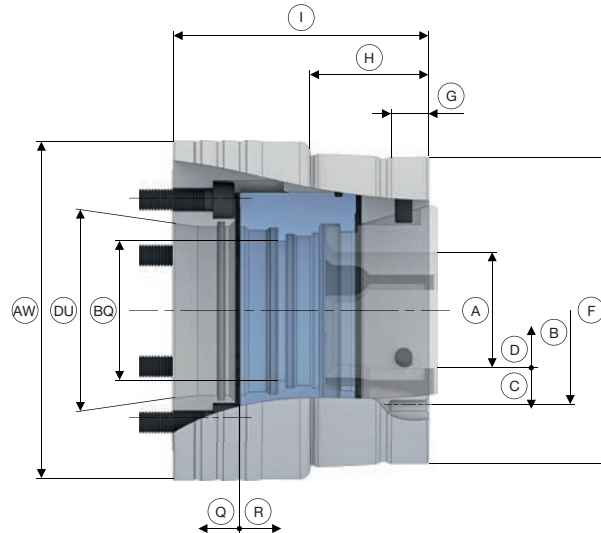
Machine spindle standard DIN 55026.
Total length can be extended via flange.



	
Clamping heads	Accessory overview
Page 366	Page 396



SPANNTOP nova modular size 32. Technical data



Size	32		
Variant	Modular		
Spindle nose	DU	A2-4	A2-5
Run-out ≤ [mm]		0,010	
Max. radial clamping force [kN]		70	
Max. axial drawtube force [pull / push] [kN]		25	
RPM n max. [1/min.]		8000	
Clamping range [mm]	A	3 – 32	
Release stroke in Ø [mm]	C	0,6	
Reserve stroke in Ø [mm]	D	1	
Range / recommended workpiece tolerance [mm]		± 0,5	
Ø Capacity [mm]	BQ	34	
Location front end-stop	F	Ø 75 f7	
Centering length [mm]	G	14	
Bolt hole circle end-stop	B	LK Ø 67 [3 x M4]	
Length [mm]	H	45	
Total length [mm]	I	107	
Reserve stroke axial [mm]	Q	2,5	
Release stroke axial [mm]	R	3	
Outer Ø [mm]	AW	115	135
Weight [kg]		5	6
In stock		✓	✓
Order no.		2701/0001	2701/0002

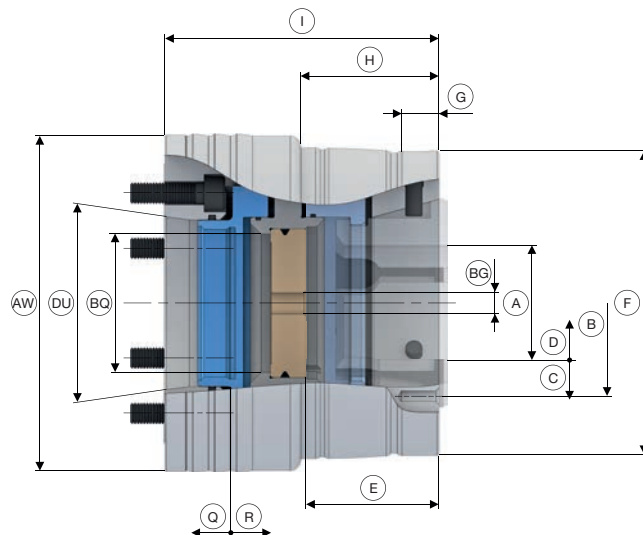
Machine spindle standard DIN 55026.
Total length can be extended via flange.



	
Clamping heads	Accessory overview
Page 366	Page 396



SPANNTOP nova combi pull-back size 42. Technical data



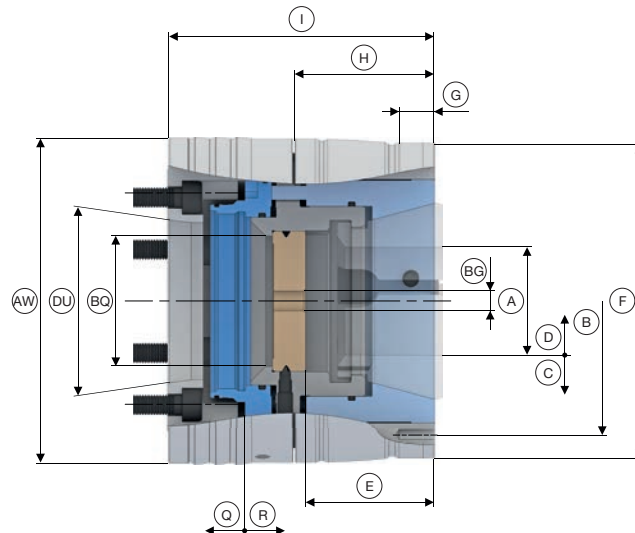
Size	42				
Variant	Combi pull-back				
Spindle nose	DU	A2-4	A2-5	A2-6	AP120 AP140
Run-out ≤ [mm]				0,010	
Max. radial clamping force [kN]				80	
Max. axial drawtube force [pull / push] [kN]				35	
RPM n max. [1/min.]				7000	
Clamping range [mm]	A			3 – 42	
Release stroke in Ø [mm]	C			0,6	
Reserve stroke in Ø [mm]	D			1	
Range / recommended workpiece tolerance [mm]				± 0,5	
End-stop depth [mm]	E			56,5	
Ø Capacity [mm]	BQ			43	
End-stop thread size [M]	BG			10	
Location front end-stop	F			Ø 125 f7	
Centering length [mm]	G			17	
Bolt hole circle end-stop	B			LK Ø 107 [3 x M6]	
Length [mm]	H			59	
Total length [mm]	I		122		115
Reserve stroke axial [mm]	Q			2	
Release stroke axial [mm]	R			2,5	
Outer Ø [mm]	AW		144	165	144 150
Weight [kg]		11	10	12	10 11
In stock		✓	✓	✓	✓
Order no.		2702/0025	2702/0003	2702/0004	2702/0014 2702/0015

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Accessory overview Page 396



SPANNTOP nova combi deadlength size 42. Technical data



Size	42		
Variant	Combi deadlength		
Spindle nose	DU	A2-5	A2-6
Run-out ≤ [mm]			0,020
Max. radial clamping force [kN]			80
Max. axial compression force [kN]			35
RPM n max. [1/min.]			7000
Clamping range [mm]	A		3 – 42
Release stroke in Ø [mm]	C		0,6
Reserve stroke in Ø [mm]	D		1
Range / recommended workpiece tolerance [mm]			± 0,5
End-stop depth [mm]	E		54,8
Ø Capacity [mm]	BQ		43
End-stop thread size [M]	BG		10
Location front end-stop	F		Ø 140 f7
Centering length [mm]	G		17
Bolt hole circle end-stop	B		LK Ø 122 [3 x M6]
Length [mm]	H		61,5
Total length [mm]	I	120	110
Reserve stroke axial [mm]	Q		2
Release stroke axial [mm]	R		2,5
Outer Ø [mm]	AW	145	162
Weight [kg]		13,5	14
In stock		✓	✓
Order no.		2703/0003	2703/0004
			2703/0014

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads

Page 366

Adaptations I.D. clamping

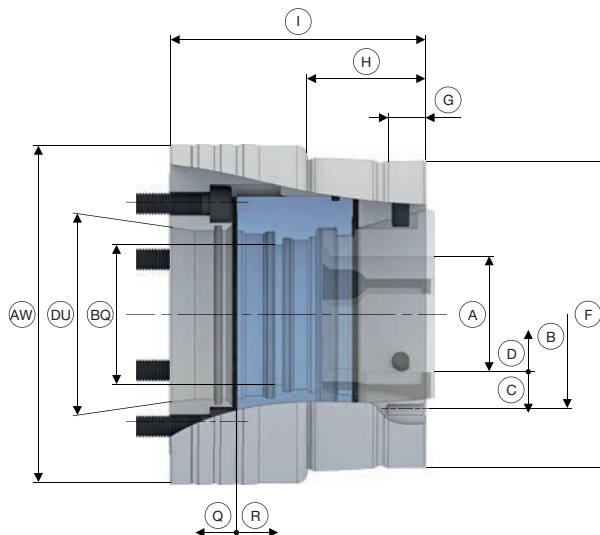
Page 278

Accessory overview

Page 396



SPANNTOP nova modular size 42. Technical data



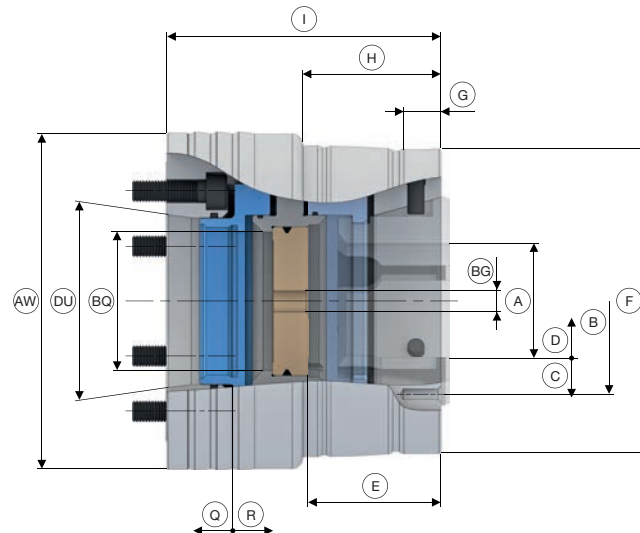
Size	42			
Variant	Modular			
Spindle nose	DU	A2-5	A2-6	AP120 AP140
Run-out ≤ [mm]				0,010
Max. radial clamping force [kN]				80
Max. axial drawtube force [pull / push] [kN]				35
RPM n max. [1/min.]				7000
Clamping range [mm]	A			3 – 42
Release stroke in Ø [mm]	C			0,6
Reserve stroke in Ø [mm]	D			1
Range / recommended workpiece tolerance [mm]				± 0,5
Ø Capacity [mm]	BQ			45
Location front end-stop	F			Ø 125 f7
Centering length [mm]	G			17
Bolt hole circle end-stop	B			LK Ø 107 [3 x M6]
Length [mm]	H			49
Total length [mm]	I	112		105
Reserve stroke axial [mm]	Q			2
Release stroke axial [mm]	R			2,5
Outer Ø [mm]	AW	144	165	144 150
Weight [kg]		9	11	9
In stock		✓	✓	✓
Order no.		2701/0003	2701/0004	2701/0013 2701/0014

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Accessory overview Page 396



SPANNTOP nova combi pull-back size 52. Technical data



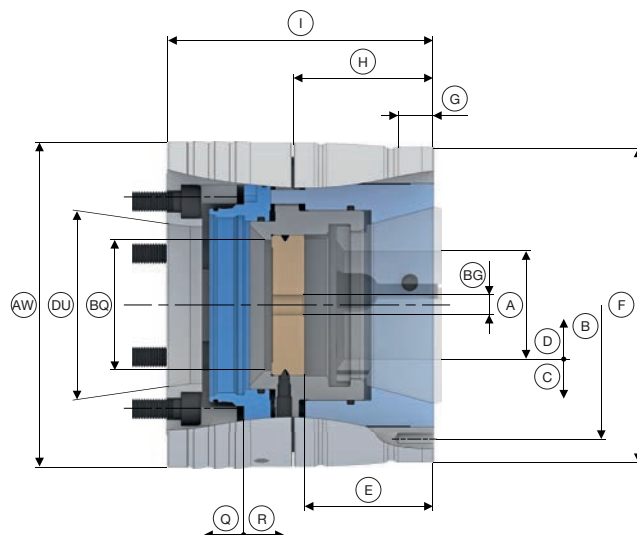
Size	52				
Variant	Combi pull-back				
Spindle nose	DU	A2-5	A2-6	AP120	AP140
Run-out ≤ [mm]			0,010		
Max. radial clamping force [kN]			94		
Max. axial drawtube force [pull / push] [kN]			40		
RPM n max. [1/min.]			7000		
Clamping range [mm]	A		3 – 52		
Release stroke in Ø [mm]	C		0,6		
Reserve stroke in Ø [mm]	D		1		
Range / recommended workpiece tolerance [mm]			± 0,5		
End-stop depth [mm]	E		56,5		
Ø Capacity [mm]	BQ		53		
End-stop thread size [M]	BG		10		
Location front end-stop	F		Ø 125 f7		
Centering length [mm]	G		17		
Bolt hole circle end-stop	B		LK Ø 107 [3 x M6]		
Length [mm]	H		59		
Total length [mm]	I	122		115	
Reserve stroke axial [mm]	Q		2		
Release stroke axial [mm]	R		2,5		
Outer Ø [mm]	AW	144	165	144	150
Weight [kg]		10	12	10	
In stock		✓	✓	✓	✓
Order no.		2702/0005	2702/0006	2702/0016	2702/0017

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi deadlength size 52. Technical data



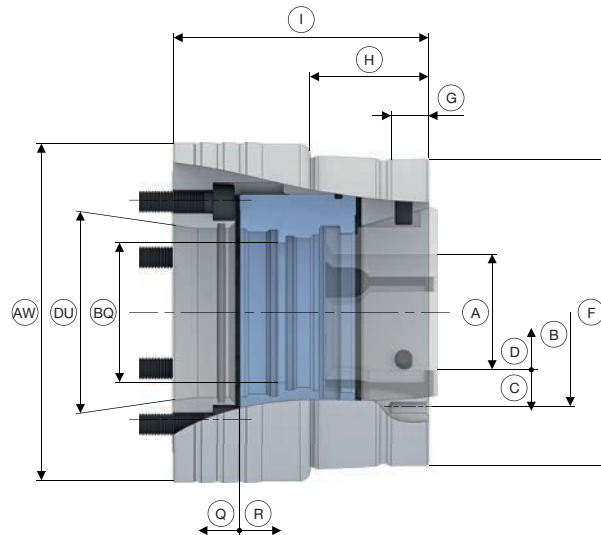
Size	52			
Variant	Combi deadlength			
Spindle nose	DU	A2-5	A2-6	AP120
Run-out ≤ [mm]				AP140
Max. radial clamping force [kN]				
Max. axial compression force [kN]				
RPM n max. [1/min.]				
Clamping range [mm]	A			
Release stroke in Ø [mm]	C			
Reserve stroke in Ø [mm]	D			
Range / recommended workpiece tolerance [mm]				
End-stop depth [mm]	E			
Ø Capacity [mm]	BQ			
End-stop thread size [M]	BG			
Location front end-stop	F			
Centering length [mm]	G	17	13	20
Bolt hole circle end-stop	B			
Length [mm]	H			
Total length [mm]	I	120		110
Reserve stroke axial [mm]	Q			
Release stroke axial [mm]	R			
Outer Ø [mm]	AW	145	162	145
Weight [kg]		13		13,5
In stock		✓	✓	✓
Order no.		2703/0005	2703/0006	2703/0034
				2703/0015

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 278	Accessory overview Page 396



SPANNTOP nova modular size 52. Technical data



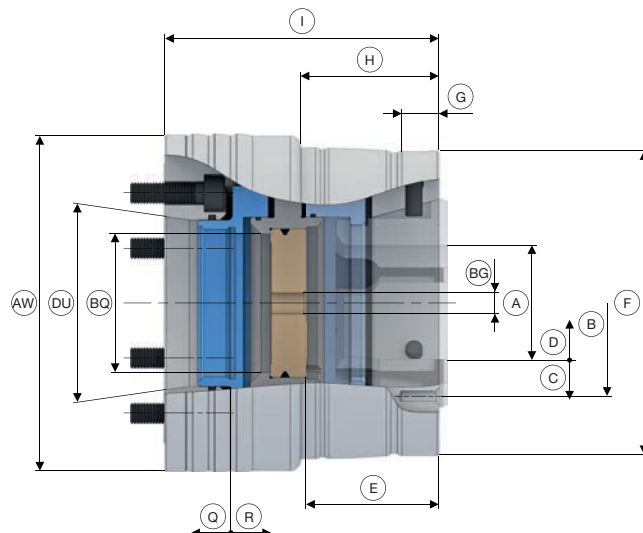
Size	52			
Variant	Modular			
Spindle nose	DU	A2-5	A2-6	AP120 AP140
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			94	
Max. axial drawtube force [pull / push] [kN]			40	
RPM n max. [1/min.]			7000	
Clamping range [mm]	A		3 – 52	
Release stroke in Ø [mm]	C		0,6	
Reserve stroke in Ø [mm]	D		1	
Range / recommended workpiece tolerance [mm]			± 0,5	
Ø Capacity [mm]	BQ		53	
Location front end-stop	F		Ø 125 f7	
Centering length [mm]	G		17	
Bolt hole circle end-stop	B		LK Ø 107 [3 x M6]	
Length [mm]	H		49	
Total length [mm]	I	112		105
Reserve stroke axial [mm]	Q		2	
Release stroke axial [mm]	R		2,5	
Outer Ø [mm]	AW	144	165	144 150
Weight [kg]		9	11	9
In stock		✓	✓	✓
Order no.		2701/0005	2701/0006	2701/0015 2701/0016

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi pull-back size 65. Technical data



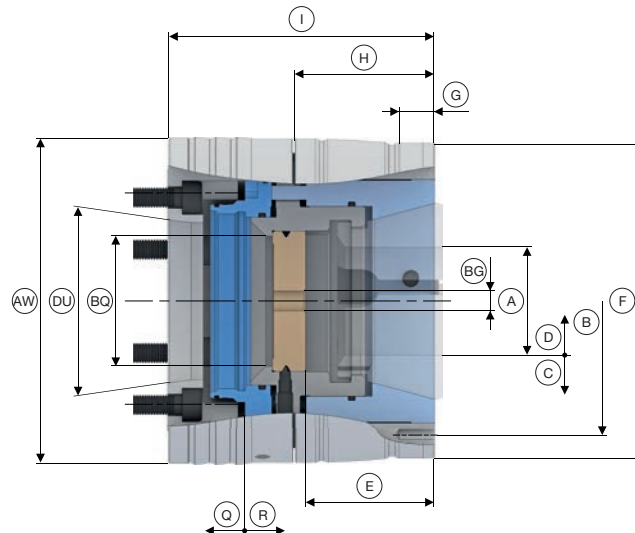
Size	65						
Variant	Combi pull-back						
Spindle nose	DU	A2-5	A2-6	A2-8	AP120	AP140	AP170
Run-out ≤ [mm]		0,010					
Max. radial clamping force [kN]		105					
Max. axial drawtube force [pull / push] [kN]		45					
RPM n max. [1/min.]		6000					
Clamping range [mm]	A	3 – 65					
Release stroke in Ø [mm]	C	0,6					
Reserve stroke in Ø [mm]	D	1					
Range / recommended workpiece tolerance [mm]		± 0,5					
End-stop depth [mm]	E	63,5					
Ø Capacity [mm]	BQ	66					
End-stop thread size [M]	BG	12					
Location front end-stop	F	Ø 145 f7					
Centering length [mm]	G	17					
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]					
Length [mm]	H	66					
Total length [mm]	I	131	130	131	120		115
Reserve stroke axial [mm]	Q	2					
Release stroke axial [mm]	R	2,5					
Outer Ø [mm]	AW	160	165	210	160		184
Weight [kg]		13,5	13	18,5	12,5		14
In stock		✓	✓	✓	✓	✓	✓
Order no.		2702/0007	2702/0008	2702/0009	2702/0018	2702/0019	2702/0020

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi deadlength size 65. Technical data



Size	65				
Variant	Combi deadlength				
Spindle nose	DU	A2-5	A2-6	A2-8	AP140
Run-out ≤ [mm]				0,020	
Max. radial clamping force [kN]				105	
Max. axial compression force [kN]				45	
RPM n max. [1/min.]				6000	
Clamping range [mm]	A			3 – 65	
Release stroke in Ø [mm]	C			0,6	
Reserve stroke in Ø [mm]	D			1	
Range / recommended workpiece tolerance [mm]				± 0,5	
End-stop depth [mm]	E			65	
Ø Capacity [mm]	BQ			66	
End-stop thread size [M]	BG			12	
Location front end-stop	F			Ø 160 f7	
Centering length [mm]	G			17	
Bolt hole circle end-stop	B			LK Ø 141 [3 x M6]	
Length [mm]	H			71,5	
Total length [mm]	I		135		125
Reserve stroke axial [mm]	Q			2	
Release stroke axial [mm]	R			2,5	
Outer Ø [mm]	AW	165		210	165
Weight [kg]		15,5	15	20	16
In stock		✓	✓	✓	✓
Order no.		2703/0007	2703/0008	2703/0009	2703/0016

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads

Page 366

Adaptations I.D. clamping

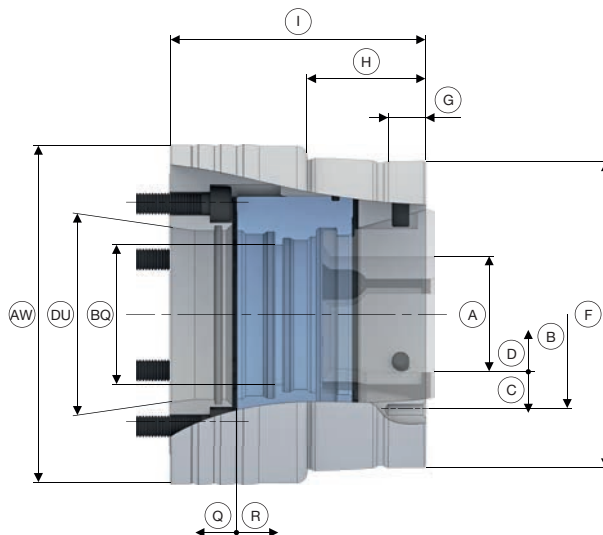
Page 278

Accessory overview

Page 396



SPANNTOP nova modular size 65. Technical data



Size	65						
Variant	Modular						
Spindle nose	DU	A2-5	A2-6	A2-8	AP120	AP140	AP170
Run-out ≤ [mm]		0,010					
Max. radial clamping force [kN]		105					
Max. axial drawtube force [pull / push] [kN]		45					
RPM n max. [1/min.]		6000					
Clamping range [mm]	A	3 – 65					
Release stroke in Ø [mm]	C	0,6					
Reserve stroke in Ø [mm]	D	1					
Range / recommended workpiece tolerance [mm]		± 0,5					
Ø Capacity [mm]	BQ	66					
Location front end-stop	F	Ø 145 f7					
Centering length [mm]	G	17					
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]					
Length [mm]	H	56					
Total length [mm]	I	121	120	121	110		105
Reserve stroke axial [mm]	Q	2					
Release stroke axial [mm]	R	2,5					
Outer Ø [mm]	AW	160	165	210	160		184
Weight [kg]		12		17	11		12,5
In stock		✓	✓	✓	✓	✓	✓
Order no.		2701/0007	2701/0008	2701/0009	2701/0017	2701/0018	2701/0019

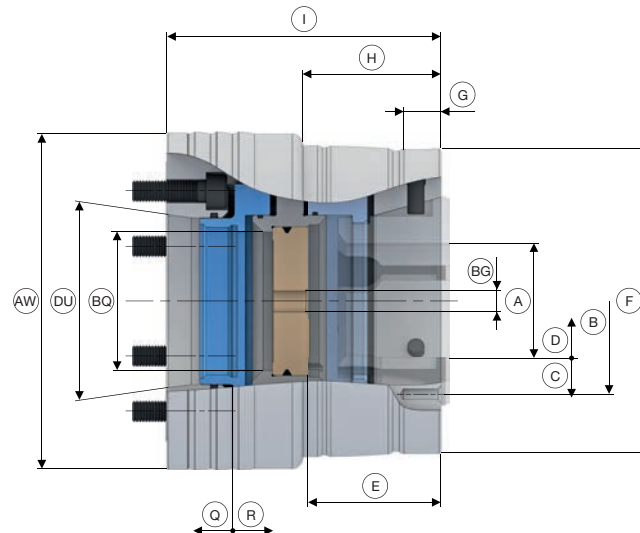
Machine spindle standard DIN 55026.

Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi pull-back size 80. Technical data



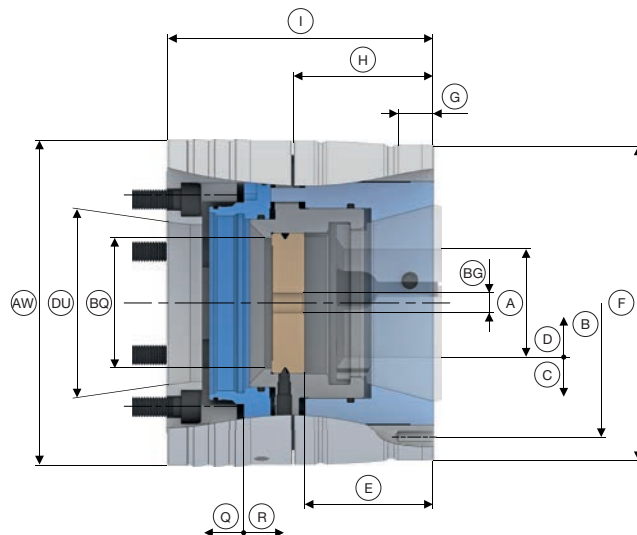
Size	80					
Variant	Combi pull-back					
Spindle nose	DU	A2-5	A2-6	A2-8	AP170	AP220
Run-out ≤ [mm]				0,010		
Max. radial clamping force [kN]				115		
Max. axial drawtube force [pull / push] [kN]				50		
RPM n max. [1/min.]				5500		
Clamping range [mm]	A			4 – 80		
Release stroke in Ø [mm]	C			0,6		
Reserve stroke in Ø [mm]	D			1		
Range / recommended workpiece tolerance [mm]				± 0,5		
End-stop depth [mm]	E			63,5		
Ø Capacity [mm]	BQ			81		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 160 f7		
Centering length [mm]	G			17		
Bolt hole circle end-stop	B			LK Ø 139 [3 x M6]		
Length [mm]	H			66		
Total length [mm]	I	134	135	140	135	148
Reserve stroke axial [mm]	Q			2		
Release stroke axial [mm]	R			2,5		
Outer Ø [mm]	AW	180		210	180	235
Weight [kg]		17	16	21	17	
In stock		✓	✓	✓	✓	✓
Order no.		2702/0054	2702/0010	2702/0011	2702/0021	2702/0022

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi deadlength size 80. Technical data



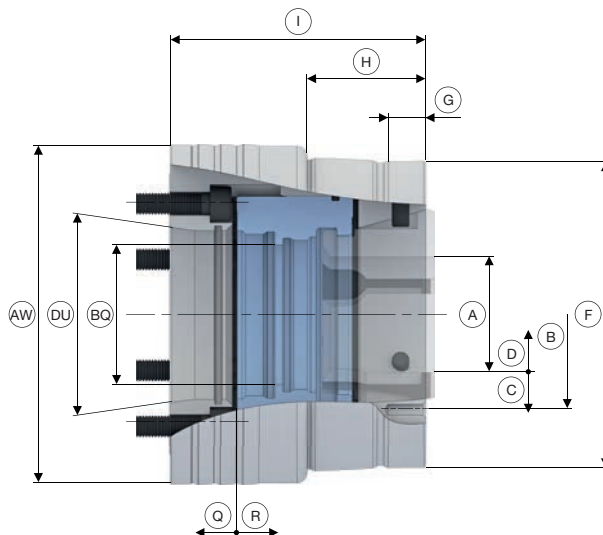
Size	80			
Variant	Combi deadlength			
Spindle nose	DU	A2-6	A2-8	AP140
Run-out ≤ [mm]			0,020	
Max. radial clamping force [kN]			115	
Max. axial compression force [kN]			50	
RPM n max. [1/min.]			5500	
Clamping range [mm]	A		4 – 80	
Release stroke in Ø [mm]	C		0,6	
Reserve stroke in Ø [mm]	D		1	
Range / recommended workpiece tolerance [mm]			± 0,5	
End-stop depth [mm]	E		65	
Ø Capacity [mm]	BQ		81	
End-stop thread size [M]	BG		12	
Location front end-stop	F		Ø 175 f7	
Centering length [mm]	G		17	
Bolt hole circle end-stop	B		LK Ø 156 [3 x M6]	
Length [mm]	H		71,5	
Total length [mm]	I		145	
Reserve stroke axial [mm]	Q		2	
Release stroke axial [mm]	R		2,5	
Outer Ø [mm]	AW	179	210	179
Weight [kg]		19	23	20
In stock		✓	✓	✓
Order no.		2703/0010	2703/0011	2703/0018

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 278	Accessory overview Page 396



SPANNTOP nova modular size 80. Technical data



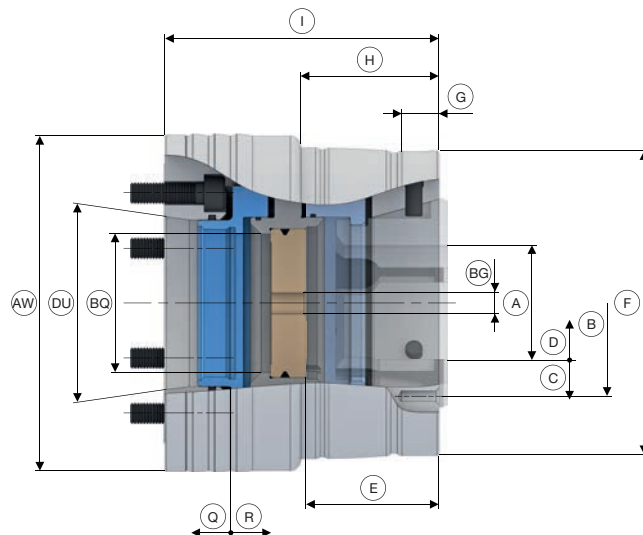
Size	80		
Variant	Modular		
Spindle nose	DU	A2-6	A2-8
Run-out ≤ [mm]			0,010
Max. radial clamping force [kN]			115
Max. axial drawtube force [pull / push] [kN]			50
RPM n max. [1/min.]			5500
Clamping range [mm]	A		4 – 80
Release stroke in Ø [mm]	C		0,6
Reserve stroke in Ø [mm]	D		1
Range / recommended workpiece tolerance [mm]			± 0,5
Ø Capacity [mm]	BQ		81
Location front end-stop	F		Ø 160 f7
Centering length [mm]	G		17
Bolt hole circle end-stop	B		LK Ø 139 [3 x M6]
Length [mm]	H		56
Total length [mm]	I	125	130
Reserve stroke axial [mm]	Q		2
Release stroke axial [mm]	R		2,5
Outer Ø [mm]	AW	180	210
Weight [kg]		14	19
In stock		✓	✓
Order no.		2701/0010	2701/0011
			2701/0020

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi pull-back size 100. Technical data



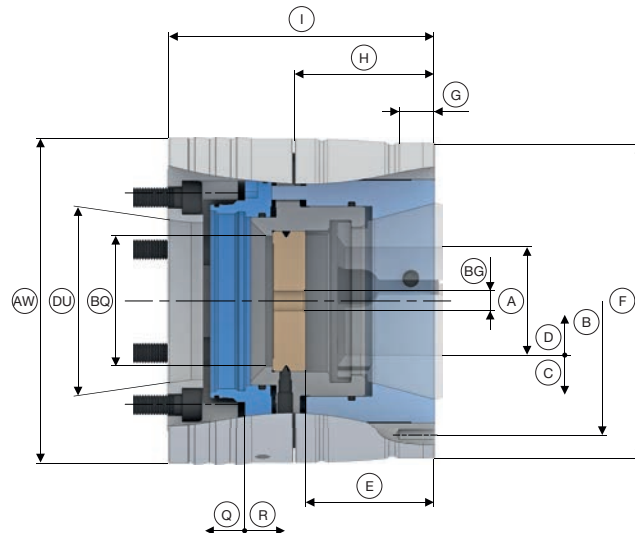
Size	100					
Variant	Combi pull-back					
Spindle nose	DU	A2-6	A2-8	A2-11	AP170	AP220
Run-out ≤ [mm]				0,015		
Max. radial clamping force [kN]				150		
Max. axial drawtube force [pull / push] [kN]				65		
RPM n max. [1/min.]				5000		
Clamping range [mm]	A			15 – 100		
Release stroke in Ø [mm]	C			2		
Reserve stroke in Ø [mm]	D			1,5		
Range / recommended workpiece tolerance [mm]				± 1,0		
End-stop depth [mm]	E			73		
Ø Capacity [mm]	BQ			101		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 215 f7		
Centering length [mm]	G			20		
Bolt hole circle end-stop	B			LK Ø 180 [3 x M8]		
Length [mm]	H			78,5		
Total length [mm]	I	155	159	165	159	
Reserve stroke axial [mm]	Q			3		
Release stroke axial [mm]	R			5		
Outer Ø [mm]	AW	235		280	235	240
Weight [kg]		33,5	33	43	35	
In stock		✓	✓	✓	✓	✓
Order no.		2702/0012	2702/0013	2702/0026	2702/0023	2702/0024

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 302	Accessory overview Page 396



SPANNTOP nova combi deadlength size 100. Technical data



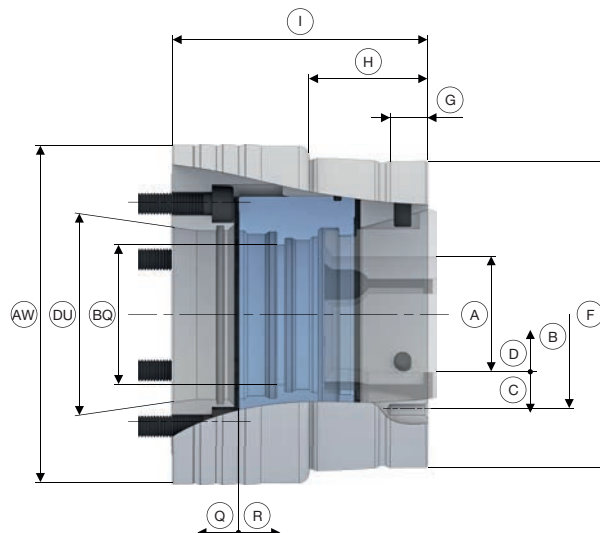
Size	100					
Variant	Combi deadlength					
Spindle nose	DU	A2-6	A2-8	A2-11	AP170	AP220
Run-out ≤ [mm]		0,025				
Max. radial clamping force [kN]		150				
Max. axial compression force [kN]		65				
RPM n max. [1/min.]		5000				
Clamping range [mm]	A	15 – 100				
Release stroke in Ø [mm]	C	2				
Reserve stroke in Ø [mm]	D	1,5				
Range / recommended workpiece tolerance [mm]		± 1,0				
End-stop depth [mm]	E	85,5				
Ø Capacity [mm]	BQ	84	101			
End-stop thread size [M]	BG	12				
Location front end-stop	F	Ø 215 f7				
Centering length [mm]	G	20	22	20		
Bolt hole circle end-stop	B	LK Ø 192 [3 x M8]				
Length [mm]	H	94				
Total length [mm]	I	175	180	170		
Reserve stroke axial [mm]	Q	3				
Release stroke axial [mm]	R	5				
Outer Ø [mm]	AW	220	280	220	240	
Weight [kg]		35	34	46	37	38
In stock		✓	✓	✓	✓	✓
Order no.		2703/0012	2703/0013	2703/0051	2703/0019	2703/0020

Machine spindle standard DIN 55026.
Total length can be extended via flange.





SPANNTOP nova modular size 100. Technical data



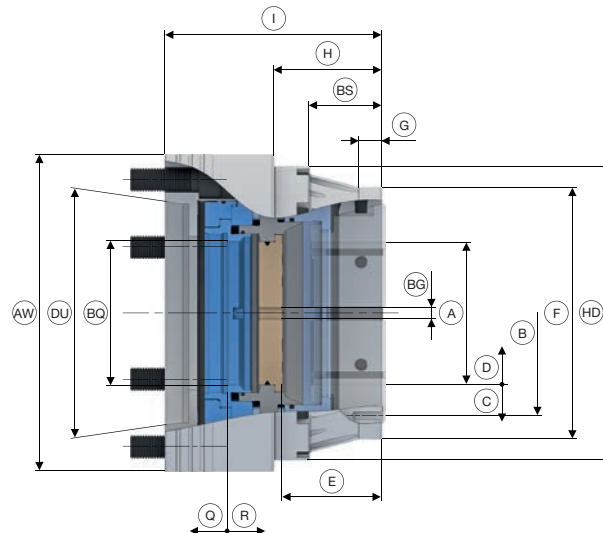
Size	100			
Variant	Modular			
Spindle nose	DU	A2-8	A2-11	AP170 AP220
Run-out ≤ [mm]				0,015
Max. radial clamping force [kN]				150
Max. axial drawtube force [pull / push] [kN]				65
RPM n max. [1/min.]				5000
Clamping range [mm]	A			15 – 100
Release stroke in Ø [mm]	C			2
Reserve stroke in Ø [mm]	D			1,5
Range / recommended workpiece tolerance [mm]				± 1,0
Ø Capacity [mm]	BQ			104,5
Location front end-stop	F			Ø 215 f7
Centering length [mm]	G			20
Bolt hole circle end-stop	B			LK Ø 180 [3 x M8]
Length [mm]	H			68,5
Total length [mm]	I	149	155	149
Reserve stroke axial [mm]	Q			3
Release stroke axial [mm]	R			5
Outer Ø [mm]	AW	235	280	235 240
Weight [kg]		29	39	32 31
In stock		✓	✓	✓ ✓
Order no.		2701/0012	2701/0023	2701/0021 2701/0022

Machine spindle standard DIN 55026.
Total length can be extended via flange.

Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 296	Face driver / morse taper Page 292	Magnet module Page 300	Accessory overview Page 396



SPANNTOP nova combi pull-back size 125. Technical data



Size	125					
Variant	Combi pull-back					
Spindle nose	DU	A2-6	A2-8	A2-11	AP170	AP220
Run-out ≤ [mm]				0,020		
Max. radial clamping force [kN]				165		
Max. axial drawtube force [pull / push] [kN]				70		
RPM n max. [1/min.]				3200		
Clamping range [mm]	A			25 – 125		
Release stroke in Ø [mm]	C			2,5		
Reserve stroke in Ø [mm]	D			2,5		
Range / recommended workpiece tolerance [mm]				± 1,0		
End-stop depth [mm]	E			87,5		
Ø Capacity [mm]	BQ			127,5		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 221,5 f7		
Centering length [mm]	G			20		
Bolt hole circle end-stop	B			LK Ø 208,5 [6 x M8]		
Length [mm]	H			95		
Length 2 [mm]	BS			64		
Total length [mm]	I	191			185	190
Reserve stroke axial [mm]	Q			5		
Release stroke axial [mm]	R			6		
Outer Ø [mm]	AW	270		280	270	
Outer Ø 2 [mm]	HD			258		
Weight [kg]		50	48	46	49	47
In stock		✓	✓	✓	✓	✓
Order no.		2702/0055	2702/0056	2702/0057	2702/0058	2702/0059

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads

Page 366

Adaptations I.D. clamping

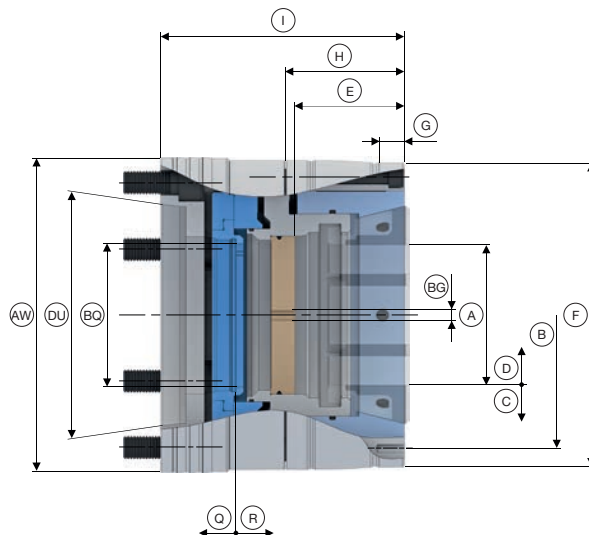
Page 240

Accessory overview

Page 396



SPANNTOP nova combi deadlength size 125. Technical data



Size	125					
Variant	Combi deadlength					
Spindle nose	DU	A2-6	A2-8	A2-11	AP170	AP220
Run-out ≤ [mm]				0,030		
Max. radial clamping force [kN]				165		
Max. axial compression force [kN]				70		
RPM n max. [1/min.]				3200		
Clamping range [mm]	A			25 – 125		
Release stroke in Ø [mm]	C			2,5		
Reserve stroke in Ø [mm]	D			2,5		
Range / recommended workpiece tolerance [mm]				± 1,0		
End-stop depth [mm]	E			90		
Ø Capacity [mm]	BQ			127,5		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 270 f7		
Centering length [mm]	G			22		
Bolt hole circle end-stop	B			LK Ø 245 [3 x M8]		
Length [mm]	H			97,5		
Total length [mm]	I	190	200		185	190
Reserve stroke axial [mm]	Q			5		
Release stroke axial [mm]	R			6		
Outer Ø [mm]	AW			275		
Weight [kg]		61	63	61	62	
In stock		✓	✓	✓	✓	✓
Order no.		2703/0046	2703/0047	2703/0048	2703/0049	2703/0050

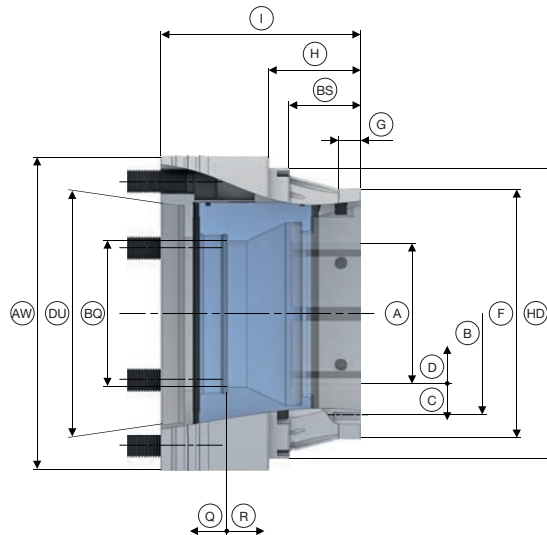
Machine spindle standard DIN 55026.
Total length can be extended via flange.



	
Clamping heads	Accessory overview
Page 366	Page 396



SPANNTOP nova modular size 125. Technical data



Size	125				
Variant	Modular				
Spindle nose	DU	A2-6	A2-8	A2-11	AP170 AP220
Run-out ≤ [mm]				0,020	
Max. radial clamping force [kN]				165	
Max. axial drawtube force [pull / push] [kN]				70	
RPM n max. [1/min.]				3200	
Clamping range [mm]	A			25 – 125	
Release stroke in Ø [mm]	C			2,5	
Reserve stroke in Ø [mm]	D			2,5	
Range / recommended workpiece tolerance [mm]				± 1,0	
Ø Capacity [mm]	BQ			130	
Location front end-stop	F			Ø 221,5 f7	
Centering length [mm]	G			20	
Bolt hole circle end-stop	B			LK Ø 208,5 [6 x M8]	
Length [mm]	H			82	
Length 2 [mm]	BS			64	
Total length [mm]	I		178		177
Reserve stroke axial [mm]	Q			5	
Release stroke axial [mm]	R			6	
Outer Ø [mm]	AW	270		280	270
Outer Ø 2 [mm]	HD			258	
Weight [kg]		44	43	44	43
In stock		-	-	-	-
Order no.		2701/0043	2701/0044	2701/0045	2701/0046 2701/0047

Machine spindle standard DIN 55026.
Total length can be extended via flange.



Clamping heads

Page 366

Adaptations I.D. clamping

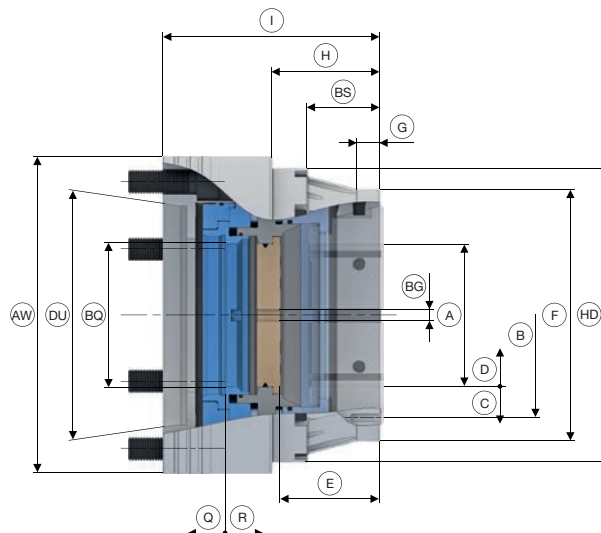
Page 240

Accessory overview

Page 396



SPANNTOP nova combi pull-back size 160. Technical data



Size	160					
Variant	Combi pull-back					
Spindle nose	DU	A2-6	A2-8	A2-11	AP170	AP220
Run-out ≤ [mm]				0,025		
Max. radial clamping force [kN]				235		
Max. axial drawtube force [pull / push] [kN]				100		
RPM n max. [1/min.]				3200		
Clamping range [mm]	A			27 – 160		
Release stroke in Ø [mm]	C			1,3		
Reserve stroke in Ø [mm]	D			1,5		
Range / recommended workpiece tolerance [mm]				± 1,0		
End-stop depth [mm]	E			89,5		
Ø Capacity [mm]	BQ			162		
End-stop thread size [M]	BG			12		
Location front end-stop	F			Ø 254 f7		
Centering length [mm]	G			20		
Bolt hole circle end-stop	B			LK Ø 240,5 [3 x M8]		
Length [mm]	H			95		
Length 2 [mm]	BS			64		
Total length [mm]	I	190	195	200	189	194
Reserve stroke axial [mm]	Q			3		
Release stroke axial [mm]	R			3		
Outer Ø [mm]	AW			302		
Outer Ø 2 [mm]	HD			290		
Weight [kg]		60	60,8	59	62	
In stock		✓	✓	✓	✓	✓
Order no.		2702/0061	2702/0062	2702/0063	2702/0064	2702/0065

Machine spindle standard DIN 55026.
Total length can be extended via flange.



CHUCKS
SPANNTOP nova chuck

Chucks

Mandrels

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

CHUCKS

Machine specific chucks

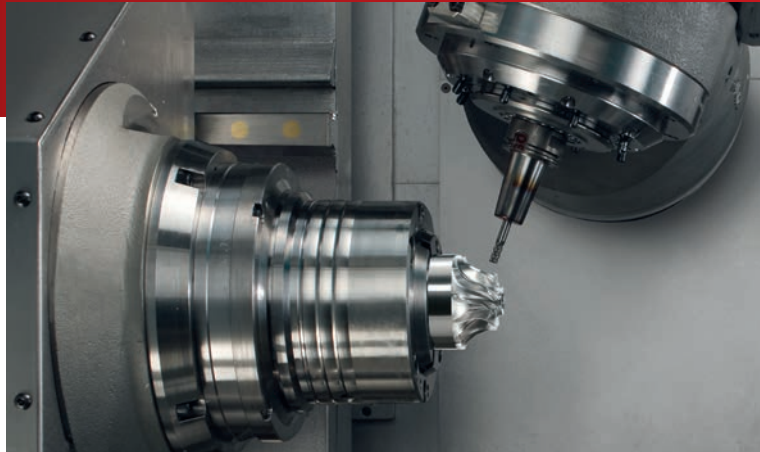


Photo: INDEX-Werke GmbH & Co. KG

Machine specific chucks

Standard or machine specific, which chuck fits?

In 90 % of all cases, you will find what you are looking for with our standard chucks, that fit for the following brands, such as:

- Biglia
- Daewoo
- Doosan
- Emco
- Gildemeister
- MAG Boehringer
- MAG Hessapp
- Mazak
- Miyano
- Monforts
- Mori Seiki
- Nakamura
- Okuma
- Scherer
- Spinner
- Takamaz
- Weiler
- Weisser
- and other machine manufacturers

For certain lathes we have designed special chucks that take the connection or other equipment features of the respective machine into account. You will find a selection to the right, such as

- EMAG
- INDEX
- TRAUB
- LEHMANN rotary indexing tables

Of course, we still have much more in the product line. Simply ask us about it.

EMAG

SPANNTOP nova chuck for EMAG

Size	Variant	Machine type	Spindle nose	Connecting thread outside	In stock	Order no.
80	Combi pull-back	VSC 200 / VL	A2-5	M20 x 2,5	-	2712/0003
100	Combi pull-back	VSC 250 / VL 5	A2-6	M20 x 2,5	-	2712/0004

Machine spindle standard DIN 55026.

INDEX

TOPlus mini chuck for INDEX

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread inside	In stock	Order no.
65	Deadlength	G160-D65 / C65 / C200-D65 / ABC65 HSP / R200 D65 / G220-D65	66	AP140	M76 x 1,5	✓	10653/0001

SPANNTOP mini chuck for INDEX

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread inside	In stock	Order no.
42	Deadlength	TNK42 GSP / TNK65 GSP / ABC65	44	AP100	M62 x 1,5	✓	10686/0001
52	Deadlength	TNK42 GSP / TNK65 GSP / ABC65	54	AP100	M62 x 1,5	✓	10686/0002

SPANNTOP nova chuck for INDEX

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread inside	In stock	Order no.
42	Combi pull-back	C100-D42 / A100-D42	43	A2-5	M52 x 1,5	✓	2712/0002
	Combi deadlength	A100-D42 / C100	42,5			✓	2713/0001
65	Combi pull-back	G160-D65 / C65 / C200-D65 / ABC65 / G220-D65	66	AP140	M76 x 1,5	✓	2712/0014
	Combi deadlength	C200 / G160 / R200-D65	67			✓	2713/0002
	Modular	G220-D65				✓	2711/0005
100	Modular	C200-D100	91	A2-8	M100 x 1,5	✓	2711/0003

Machine spindle standard DIN 55026.

CHUCKS

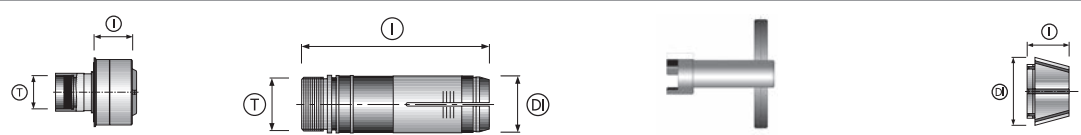
Machine specific chucks

SPANNTOP nova chuck for INDEX

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread outside	Connecting thread inside	In stock	Order no.
42	Combi deadlength	G200-42 / G160-42	43	A2-5		M52 x 1,5	✓	2613/0009
	Modular	ABC36/42 / G160-D42 / G200-D42	44,1		M52 x 1,5		✓	2611/0024
		C100-D42	44			M52 x 1,5	✓	2611/0027
65	Combi pull-back	G200-D60	61,5	AP85		M69 x 1,5	-	2612/0004
	Combi deadlength		62				-	2603/0002
	Modular	C200-D65 / G160-D65 / R200-D65	65,5	AP140	M69 x 1,5	M76 x 1,5	✓	2611/0022
		ABC52/60 / G200-D60	61				✓	2611/0023
		ABC / G200-D65	68			M74 x 1,5	✓	2611/0025
100	Modular	G300-D102	103	A2-8		M112 x 1,5	-	2611/0013
		G300-D90	91			M100 x 1,5	✓	2611/0018

Machine spindle standard DIN 55026.

INDEX ABC 36 / 42. Machine specific chucks incl. accessories

										
Product variants	Product	Profile	Clamping range [mm]	Type of serration	Base bore Ø [mm]	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
	Machine specific SPANNTOP chucks						M52 x 1,5	81	✓	2611/0024
	Manual changing fixture								✓	mq42
SPANNTOP BZI	Clamping head RD	●	4,0 - 7,5	Smooth	80			47	✓	sk42bzir4,0-7,5
			8,0 - 10,5	Radial grooves					✓	sk42bzir8,0-10,5
			11 - 42	Radial and axial grooves					✓	sk42bzir11,0-42,0
		■	7	Smooth					✓	sk42bziv7,0
			8 - 28	Radial grooves					✓	sk42bziv8,0-28,0
									✓	sk42bziv8,0-28,0
		⬢	7	Smooth					✓	sk42bzis7,0
			8 - 37*	Radial grooves					✓	sk42bzis8,0-37,0
									✓	sk42bzis8,0-37,0

CHUCKS

Machine specific chucks

Product variants	Product	Profile	Clamping range [mm]	Type of serration	Base bore Ø [mm]	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve					39,6	M40 x 1 - LH	116	✓	254e/rs
	Inner collet steel	●	4,0 - 32,0						✓	rs32/st/r4,0-32,0
		■	7,0 - 9,0						-	rs32/st/v7,0-9,0
			10,0 - 22,0						-	rs32/st/v10,0-22,0
		⬡	7,0 - 9,0						-	rs32/st/s7,0-9,0
			10,0 - 27,0						-	rs32/st/s10,0-27,0
	Inner collet steel brass	●	4,0 - 32,0						-	rs32/sb/r4,0-32,0
		■	7,0 - 9,0						-	rs32/sb/v7,0-9,0
			10,0 - 22,0						-	rs32/sb/v10,0-22,0
		⬡	7,0 - 9,0						-	rs32/sb/s7,0-9,0
			10,0 - 27,0						-	rs32/sb/s10,0-27,0
	Inner collet SPH	●	4,0 - 32,0						-	rs32/sph/r4,0-32,0
		■	7,0 - 9,0						-	rs32/sph/v7,0-9,0
			10,0 - 22,0						-	rs32/sph/v10,0-22,0
		⬡	7,0 - 9,0						-	rs32/sph/s7,0-9,0
			10,0 - 27,0						-	rs32/sph/s10,0-27,0
	Inner collet KSB	●	4,0 - 29,5						-	rs32/ksb/r4,0-29,5
		■	8,0 - 9,0						-	rs32/ksb/v8,0-9,0
			10,0 - 22,0						-	rs32/ksb/v10,0-22,0
		⬡	8,0 - 9,0						-	rs32/ksb/s8,0-9,0
			10,0 - 27,0						-	rs32/ksb/s10,0-27,0
	Inner collet OXK	●	6,0 - 20,0						-	rs32/oxk/r6,0-20,0
			20,1 - 29,0						-	rs32/oxk/r20,1-29,0
	Wrench								✓	s32
	Guide ring for feed tube								-	254e/f-c
	Segmented collet	●	4,0 - 42,0	Smooth		59,57		39	✓	sz42r4,0-42,0
		■	7,0 - 9,0						-	sz42v7,0-9,0
			10,0 - 29,0						-	sz42v10,0-29,0
		⬡	7,0 - 9,0						✓	sz42s7,0-9,0
			10,0 - 36,0						✓	sz42s10,0-36,0
	Segmented collet for machining to size	●			8				✓	sz42hswr8,0
					15				✓	sz42hswr15,0
					30				✓	sz42hswr30,0
	Spindle head adapter plate								✓	1146/0001

CHUCKS

Machine specific chucks

Chucks

Mandrels

Stationary clamping devices

Adaptation clamping devices

Measuring technology / Automation

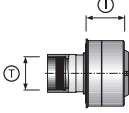
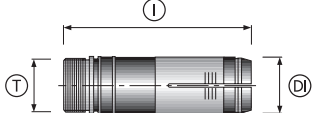
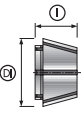
Quick change-over systems

Special solutions

Clamping elements / Accessories

Multi spindles

INDEX ABC 52 / 60. Machine specific chucks incl. accessories

   										
Product variants	Product	Profile	Clamping range [mm]	Type of serration	Base bore Ø [mm]	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
	Machine specific SPANNTOP chucks					99,5	M69 x 1,5	81	✓	2611/0023
	Manual changing fixture								✓	mq65
SPANNTOP BZI	Clamping head RD	●	4,0 - 7,5	Smooth		99,5		58	✓	sk65bzir4,0-7,5
			8,0 - 10,5	Radial grooves					✓	sk65bzir8,0-10,5
			11 - 65	Radial and axial grooves					✓	sk65bzir11,0-65,0
		■	8 - 46	Radial grooves					✓	sk65bziv8,0-46,0
									✓	sk65bziv8,0-46,0
									✓	sk65bziv8,0-46,0
		⬢	7	Smooth					✓	sk65bzis7,0
			8 - 56	Radial grooves					✓	sk65bzis8,0-56,0
									✓	sk65bzis8,0-56,0
									✓	sk65bzis8,0-56,0
RS system	Outer sleeve					57,6	M58 x 1 - LH	140	✓	273e/rs
	Inner collet steel	●	6,0 - 48,0						✓	rs50/st/r6,0-48,0
		■	12,0 - 34,0						-	rs50/st/v12,0-34,0
		⬢	6,0 - 9,0						-	rs50/st/s6,0-9,0
			10,0 - 41,0						-	rs50/st/s10,0-41,0
	Inner collet steel brass	●	6,0 - 48,0						-	rs50/sb/r6,0-48,0
		■	12,0 - 34,0						-	rs50/sb/v12,0-34,0
		⬢	6,0 - 9,0						-	rs50/sb/s6,0-9,0
			10,0 - 41,0						-	rs50/sb/s10,0-41,0
	Inner collet SPH	●	6,0 - 48,0						-	rs50/sph/r6,0-48,0
		■	12,0 - 34,0						-	rs50/sph/v12,0-34,0
		⬢	6,0 - 9,0						-	rs50/sph/s6,0-9,0
			10,0 - 41,0						-	rs50/sph/s10,0-41,0
	Inner collet KSB	●	12,0 - 44,5						-	rs50/ksb/r12,0-44,5
		■	12,0 - 31,0						-	rs50/ksb/v12,0-31,0
		⬢	12,0 - 41,0						-	rs50/ksb/s12,0-41,0

CHUCKS

Machine specific chucks

Product variants	Product	Profile	Clamping range [mm]	Type of serration	Base bore Ø [mm]	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet OXK	●	12,0 - 20,0						-	rs50/oxk/r12,0-20,0
			20,1 - 40,0						-	rs50/oxk/r20,1-40,0
			40,1 - 46,0						-	rs50/oxk/r40,1-46,0
	Wrench								✓	s50
	Guide ring for feed tube								-	273e/f-c
	Segmented collet	●	4,0 - 42,0	Smooth		59,57		39	✓	sz42r4,0-42,0
		■	7,0 - 9,0						-	sz42v7,0-9,0
			10,0 - 29,0						-	sz42v10,0-29,0
		⬡	7,0 - 9,0						✓	sz42s7,0-9,0
			10,0 - 36,0						✓	sz42s10,0-36,0
	Segmented collet for machining to size	●			8				✓	sz42hswr8,0
					15				✓	sz42hswr15,0
					30				✓	sz42hswr30,0
	Spindle head adapter plate								✓	1146/0001

TRAUB

TOPlus mini chuck for TRAUB

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread outside	In stock	Order no.
40	Deadlength	TNL32 GSP	33	A2-4	M42 x 1,5 - LH	✓	10653/0003

Machine spindle standard DIN ISO 702-1.

SPANNTOP mini chuck for TRAUB

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread inside	In stock	Order no.
42	Deadlength	TNK42 GSP / TNK65 GSP / ABC65	44	AP100	M62 x 1,5	✓	10686/0001
52	Deadlength	TNK42 GSP / TNK65 GSP / ABC65	54	AP100	M62 x 1,5	✓	10686/0002

Machine spindle standard DIN ISO 702-1.

SPANNTOP nova chuck for TRAUB

Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread inside	In stock	Order no.
65	Modular	TNX 65/42	67	A2-6	M75 x 1,5	-	2711/0001

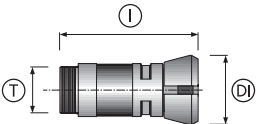
Machine spindle standard DIN 55026.

SPANNTOP chuck for TRAUB

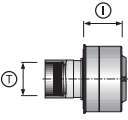
Size	Variant	Machine type	Ø Capacity [mm]	Spindle nose	Connecting thread outside	Connecting thread inside	In stock	Order no.
36	Combi deadlength	TNK36 GS	36	A2-4	M42 x 1,5		-	2613/0016
42	Combi deadlength	TNC 42	46	A2-5		M54 x 1,5	-	2613/0003
65	Combi deadlength	TNC 65 / TNX 65-D65	67	A2-6	M74 x 1,5		✓	2613/0004
	Modular	TNA 300/400-65 / TND350/G / TND 400 / TNS 65				M74 x 1,5	-	2611/0015

Machine spindle standard DIN 55026.

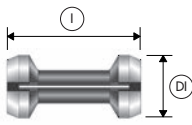
TRAUB TNK26/32. Machine specific chucks incl. accessories - main spindle

							
Product	Profile	Clamping range [mm] A	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
Basic body			69,7	M42 x 1,5 - LH	132,3	✓	1105/0005
Clamping head ZW	●	4 – 36	69,7			✓	sk6970zwr4,0-36,0
	■	7 – 9				-	sk6970zww7,0-9,0
		10 – 24				-	sk6970zww10,0-24,0
	●	7 – 9				✓	sk6970zws7,0-9,0
	■	10 – 30				✓	sk6970zws10,0-30,0
Manual changing fixture						✓	mq32
Assembling aid						✓	eaw36tnk

TRAUB TNK26/32. Machine specific chucks incl. accessories - sub spindle

							
Product	Profile	Clamping range [mm] A	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
Machine specific SPANNTOP chucks				M42 x 1,5	90	-	2613/0016
Clamping head ZWG	●	4 – 36	69,7			✓	sk6970zwgr4,0-36,0
	■	7 – 9				-	sk6970zwgv7,0-9,0
		10 – 24				-	sk6970zwgv10,0-24,0
	●	7 – 9				-	sk6970zwgs7,0-9,0
	■	10 – 30				-	sk6970zwgs10,0-30,0

TRAUB TNK26/32

						
Product	Profile	Clamping range [mm] A	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.
Segmented collet	●	5 – 32	42	90	✓	sb.d/0001r5,0-32,0
	■	8 – 22			-	sb.d/0001v8,0-22,0
	●	8 – 27			-	sb.d/0001s8,0-27,0

LEHMANN

TOPlus mini chuck for pl Lehmann rotary indexing tables

Size	Variant	Type	Spindle nose	In stock	Order no.
26	Pull-back	507	HSK63	-	10908/0001
	Deadlength			-	10909/0001
52	Pull-back	510	HSK63	-	10908/0002
		520		-	10908/0003
	Deadlength	510	A2-5	-	10909/0003
			HSK63	-	10909/0002
65	Pull-back	530	A2-8	-	10908/0004
	Deadlength			-	10909/0004

Incl. drawtube adapter for direct assembly on the rotary indexing table.

SPANNTOP mini chuck for pl Lehmann rotary indexing tables

Size	Variant	Type	Spindle nose	In stock	Order no.
32	Pull-back	507	HSK63	-	10910/0001
	Deadlength			-	10911/0001
52	Pull-back	520	A2-5	-	10910/0003
		510	HSK63	-	10910/0002
	Deadlength	520	A2-5	-	10911/0003
		510	HSK63	-	10911/0002
65	Pull-back	530	A2-8	-	10910/0004
	Deadlength			-	10911/0004

Incl. drawtube adapter for direct assembly on the rotary indexing table.

TOROK manual chuck for pl Lehmann rotary indexing tables

Product line	Size	Type	Spindle nose	In stock	Order no.
SE	52	520	A2-5	-	10913/0002
		510	HSK63	-	10913/0001
	65	530	A2-8	-	10913/0003
RD	52	520	A2-5	-	10912/0002
		530	A2-8	-	10912/0003
		510	HSK63	-	10912/0001



TOROK

Clamps gently or forcefully





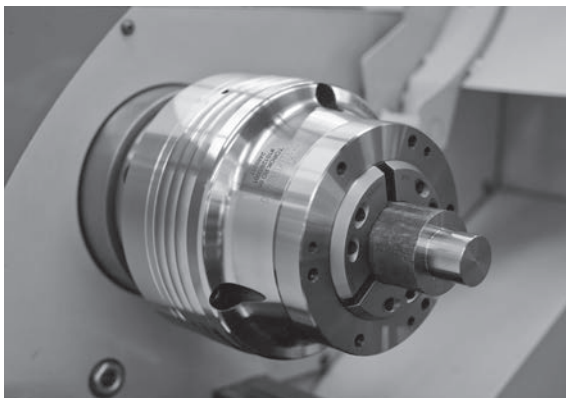
The TOROK manual chuck is primarily used in tool prototyping on machines without a clamping cylinder. For example, thanks to its easy manual actuation, when used on grinding machines you can safely and delicately clamp. In combination with our clamping device adaptations, such as the MANDO Adapt mandrel-in-chuck or the jaw module, many more clamping options are possible.

And most recent: Thanks to the optional lightweight CFRP design, with the TOROK CFK you save one-third the weight. This is particularly set-up friendly and it off-loads the machine spindle bearings.



Key advantages

- Also available in a CFRP lightweight design
- Manual actuation – a clamping cylinder is not required
- Sensitive clamping possible
- Workpiece stabilization through axial draw force applied against the workpiece end-stop
- Mandrels, jaw modules, face drivers, and morse taper adaptable



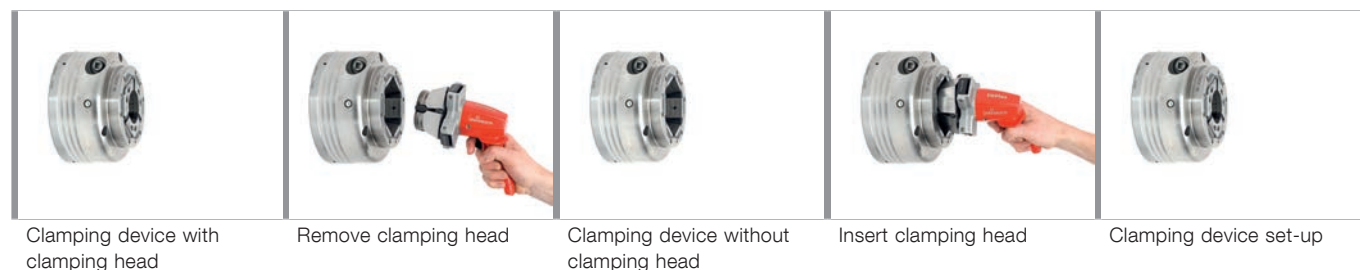
TOROK manual chuck in use



TOROK manually actuated chuck types

	TOROK CFK	TOROK
		
Description	Manually actuated lightweight chuck	Manually actuated chuck
Sizes	52, 65	52, 65, 100
Clamping range of all sizes [mm]	3 – 65	3 – 100
Variant	SE [hexagonal] / RD [round]	SE [hexagonal] / RD [round]
Advantages	■ Made of carbon fiber ■ 1/3 lighter than the standard model	
Clamping elements	 Clamping head SE  Clamping head RD	 Clamping head SE  Clamping head RD
Adaptations	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Face driver / morse taper adapter SE / RD [Adaptation for clamping between centers]  Magnet module SE / RD [Adaptation for magnetic clamping]	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Face driver / morse taper adapter SE / RD [Adaptation for clamping between centers]  Magnet module SE / RD [Adaptation for magnetic clamping]

Clamping head change-over [approx. 10 sec.]

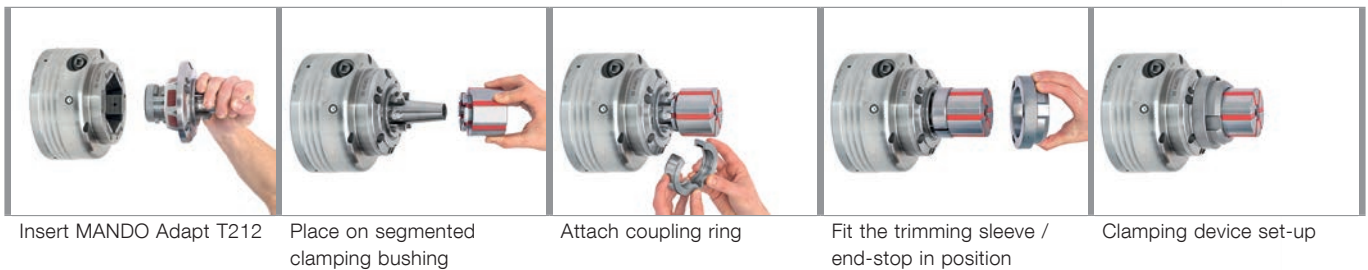




Change-over to mandrel adaptation T211 [approx. 1 min.]



Change-over to mandrel adaptation T212 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]



Change-over to face driver adaptation [approx. 1 min.]



Change-over to morse taper [approx. 1 min.]





TOROK CFK SE in detail

Designation	
1 Manual actuation via socket wrench 2 Chuck body made of carbon fiber 3 Clamping head with pull-back and hexagon geometry for optimum chuck sealing and improved clamping force 4 Mounting threads for front end-stop 5 Grease nipple, optimal holding power due to efficient lubrication 6 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop 7 Clamping screw for base end-stop, easy mounting through external actuation	

TOROK CFK RD in detail

Designation	
1 Manual actuation via socket wrench 2 Chuck body made of carbon fiber 3 Vulcanized clamping head with hardened steel segments and pull-back 4 Mounting threads for front end-stop 5 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop 6 Clamping screw for base end-stop, easy mounting through external actuation	

TOROK SE type 1 in detail

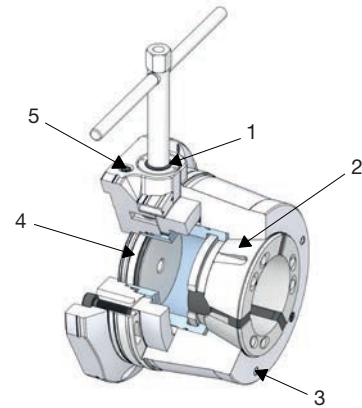
Designation	
1 Manual actuation via socket wrench 2 Clamping head with pull-back and hexagon geometry for optimum chuck sealing and improved clamping force 3 Mounting threads for front end-stop 4 Clamping screw for base end-stop, easy mounting through external actuation 5 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop 6 Grease nipple, optimal holding power due to efficient lubrication	



TOROK RD type 2 in detail

Designation

- 1 Manual actuation via socket wrench
- 2 Vulcanized clamping head with hardened steel segments and pull-back
- 3 Mounting threads for front end-stop
- 4 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop
- 5 Clamping screw for base end-stop, easy mounting through external actuation





Order overview. TOROK CFK SE / RD

				Clamping elements and adaptations					
Product line	Size	Order no.	In stock						
				Page 358	Page 244	Page 250	Page 286	Page 292	Page 300
SE	52	10575/0003	✓	✓	✓	✓		✓	✓
	65	10575/0004	✓	✓	✓	✓	✓	✓	✓
Product line	Size	Order no.	In stock						
				Page 366	Page 260	Page 266	Page 286	Page 292	Page 300
RD	52	10576/0003	✓	✓	✓	✓		✓	✓
	65	10576/0004	✓	✓	✓	✓	✓	✓	✓

Detailed technical data follows.

Order overview. TOROK SE / RD

				Clamping elements and adaptations					
Product line	Size	Order no.	In stock						
				Page 360	Page 244	Page 250	Page 286	Page 292	Page 300
SE	52	10129/0003	✓	✓	✓	✓		✓	✓
	65	10129/0004	✓	✓	✓	✓	✓	✓	✓
	100	2641/0002	✓	✓	✓	✓	✓	✓	✓
Product line	Size	Order no.	In stock						
				Page 366	Page 260	Page 266	Page 286	Page 292	Page 300
RD	52	10128/0003	✓	✓	✓	✓		✓	✓
	65	10128/0004	✓	✓	✓	✓	✓	✓	✓
	100	2638/0004	✓	✓	✓	✓	✓	✓	✓

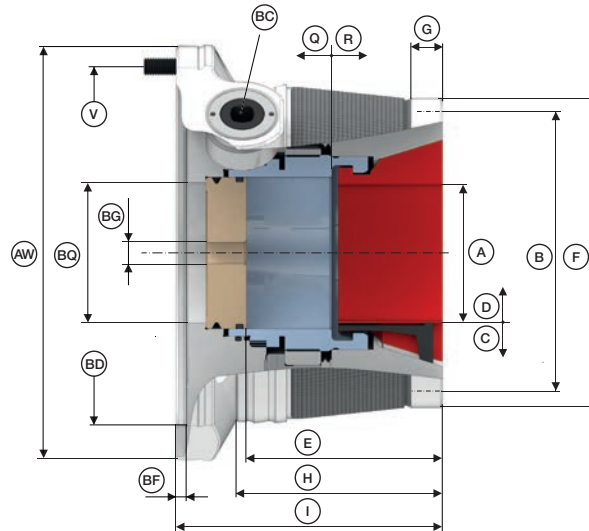
Detailed technical data follows.

Scope of delivery

- Chuck without spindle flange
- Base end-stop
- Actuation tool



TOROK CFK SE. Technical data



Product line	SE	
Size	52	65
Run-out ≤ [mm]	0,015	
Max. radial clamping force [kN]	108	120
Max. axial drawtube force [pull / push] [kN]	40	45
Flange location BD	Ø 145 H7	Ø 162 H7
Flange fit length [mm] BF	5,1	
Max. actuating torque [Nm] BC	75	90
RPM n max. [1/min.]	7000	6000
Clamping range [mm] A	3 – 52	3 – 65
Release stroke in Ø [mm] C	0,6	
Reserve stroke in Ø [mm] D	1	
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm] E	90	92
Ø Capacity [mm] BQ	53	66
End-stop thread size [M] BG	10	12
Location front end-stop F	Ø 125 f7	Ø 145 f7
Length [mm] H	92	97
Centering length [mm] G	15	
Bolt hole circle end-stop B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]
Total length [mm] I	120	125
Reserve stroke axial [mm] Q	2	
Release stroke axial [mm] R	2,5	
Bolt hole circle V	LK Ø 156 [6 x M8]	LK Ø 176 [6 x M8]
Outer Ø [mm] AW	174	194
Weight [kg]	7	10,3
In stock	✓	✓
Order no.	10575/0003	10575/0004



Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Flanges Page 125	Accessory overview Page 396



TOROK SE. Technical data

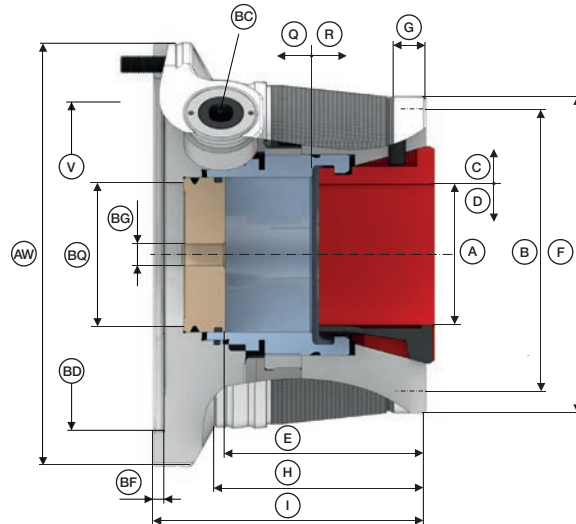
Type 1		Type 2		
Product line		SE		
Size		52	65	100
Type		2		1
Run-out ≤ [mm]		0,015		0,020
Max. radial clamping force [kN]		108	120	172
Max. axial drawtube force [pull / push] [kN]		40	45	65
Flange location	BD	Ø 145 H7	Ø 162 H7	Ø 240 H6
Flange fit length [mm]	BF	5,1		4
Max. actuating torque [Nm]	BC	75	90	50
RPM n max. [1/min.]		7000	6000	5000
Clamping range [mm]	A	3 – 52	3 – 65	15 – 100
Release stroke in Ø [mm]	C		0,6	2
Reserve stroke in Ø [mm]	D		2	1,5
Range / recommended workpiece tolerance [mm]		± 0,5		± 1,0
End-stop depth [mm]	E	90	92	101,5
Ø Capacity [mm]	BQ	53	66	100,5
End-stop thread size [M]	BG	10		12
Location front end-stop	F	Ø 125 f7	Ø 145 f7	Ø 215 f7
Length [mm]	H	92	97	
Centering length [mm]	G	17	14	20
Bolt hole circle end-stop	B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 180 [3 x M8]
Total length [mm]	I	120	125	130
Reserve stroke axial [mm]	Q		2	3
Release stroke axial [mm]	R		2,5	5
Bolt hole circle	V	LK Ø 156 [6 x M8]	LK Ø 176 [6 x M8]	LK Ø 234 [3 x M10]
Outer Ø [mm]	AW	174	194	260
Weight [kg]		12,6	15,2	36
In stock		✓	✓	✓
Order no.		10129/0003	10129/0004	2641/0002

For type 2 the bolt hole circle does not have equal division.

Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Face driver / morse taper	Magnet module	Flanges	Accessory overview
Page 358	Page 240	Page 286	Page 292	Page 300	Page 125	Page 396



TOROK CFK RD. Technical data



Product line	RD	
Size	52	65
Run-out ≤ [mm]	0,010	
Max. radial clamping force [kN]	94	105
Max. axial drawtube force [pull / push] [kN]	40	45
Flange location BD	Ø 145 H7	Ø 162 H7
Flange fit length [mm] BF	5,1	
Max. actuating torque [Nm] BC	75	90
RPM n max. [1/min.]	7000	6000
Clamping range [mm] A	3 – 52	3 – 65
Release stroke in Ø [mm] C	0,6	
Reserve stroke in Ø [mm] D	1	
Range / recommended workpiece tolerance [mm]	± 0,5	
End-stop depth [mm] E	90	92
Ø Capacity [mm] BQ	53	66
End-stop thread size [M] BG	10	12
Location front end-stop F	Ø 125 f7	Ø 145 f7
Length [mm] H	92	97
Centering length [mm] G	15	
Bolt hole circle end-stop B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]
Total length [mm] I	120	125
Reserve stroke axial [mm] Q	2	
Release stroke axial [mm] R	2,5	
Bolt hole circle V	LK Ø 156 [6 x M8]	LK Ø 176 [6 x M8]
Outer Ø [mm] AW	174	194
Weight [kg]	7,3	10,4
In stock	✓	✓
Order no.	10576/0003	10576/0004



Clamping heads Page 366	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Face driver / morse taper Page 292	Magnet module Page 300	Flanges Page 125	Accessory overview Page 396



TOROK RD. Technical data

Type 1		Type 2		
Product line		RD		
Size		52	65	100
Type		2		1
Run-out ≤ [mm]		0,010		0,015
Max. radial clamping force [kN]		94	105	150
Max. axial drawtube force [pull / push] [kN]		40	45	65
Flange location	BD	Ø 145 H7	Ø 162 H7	Ø 240 H6
Flange fit length [mm]	BF	5,1		4
Max. actuating torque [Nm]	BC	75	90	50
RPM n max. [1/min.]		7000	6000	5000
Clamping range [mm]	A	3 – 52	3 – 65	15 – 100
Release stroke in Ø [mm]	C	0,6		2
Reserve stroke in Ø [mm]	D	1		1,5
Range / recommended workpiece tolerance [mm]		± 0,5		± 1,0
End-stop depth [mm]	E	90	92	101,5
Ø Capacity [mm]	BQ	53	66	100,5
End-stop thread size [M]	BG	10		12
Location front end-stop	F	Ø 125 f7	Ø 145 f7	Ø 215 f7
Length [mm]	H	92	97	
Centering length [mm]	G	17	14	20
Bolt hole circle end-stop	B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 180 [3 x M8]
Total length [mm]	I	120	125	130
Reserve stroke axial [mm]	Q	2		3
Release stroke axial [mm]	R	2,5		5
Bolt hole circle	V	LK Ø 156 [6 x M8]	LK Ø 176 [6 x M8]	LK Ø 234 [3 x M10]
Outer Ø [mm]	AW	174	194	260
Weight [kg]		12,6	15,2	36
In stock		✓	✓	✓
Order no.		10128/0003	10128/0004	2638/0004

For type 2 the bolt hole circle does not have equal division.

Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Face driver / morse taper	Magnet module	Flanges	Accessory overview
Page 366	Page 240	Page 286	Page 292	Page 300	Page 125	Page 396

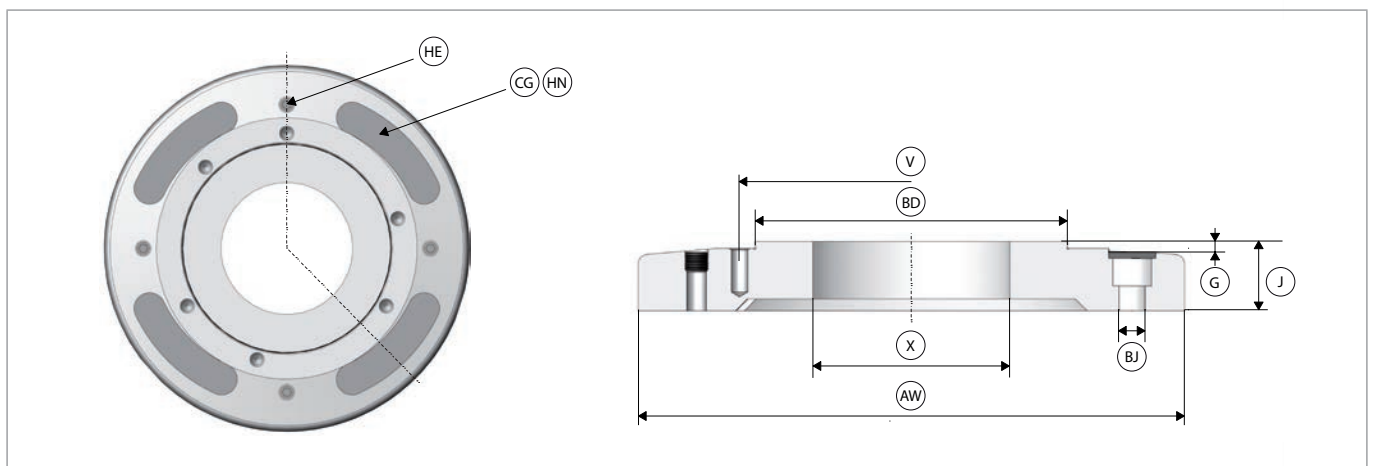


Flanges. For TOROK and TOROK CFK

Size	Figure	Spindle nose DU	Length 2 [mm] BS	Interface X	Interface hole circle Y	Outer Ø [mm] AW	Bolt hole circle V	Variant	In stock	Order no.
52		A2-5	20	Ø 145 g5	LK Ø 156 [6 x M8]	194	LK Ø 104,8 [4 x M10]	Adjustable bolt DIN 55027 M10 x 43	✓	10352/0010
		A2-6					LK Ø 133,4 [4 x M12]	Adjustable bolt DIN 55027 M10 x 50	✓	10352/0011
		A2-8				210	LK Ø 171,4 [4 x M16]	Adjustable bolt DIN 55027 M10 x 60	✓	10352/0012
65		A2-5	20	Ø 162 g5	LK Ø 176 [6 x M8]	194	LK Ø 104,8 [4 x M10]	Adjustable bolt DIN 55027 M10 x 43	✓	10352/0020
		A2-6					LK Ø 133,4 [4 x M12]	Adjustable bolt DIN 55027 M10 x 50	✓	10352/0021
		A2-8				210	LK Ø 171,4 [4 x M16]	Adjustable bolt DIN 55027 M10 x 60	✓	10352/0022

Upon request for: TOROK size 100, DIN Camlock.

TOROK base plate for stationary use e.g. on a machining center. Technical data



Size	100 SE / RD	
Bolt hole circle	V	LK Ø 234 [6 x M10]
Flange location	BD	Ø 240 f7
Interface	X	Ø 140 H7
Outer Ø [mm]	AW	350
Height [mm]	J	35
Centering length [mm]	G	3,5
Mounting slots for T-groove table with groove spacing [mm]	CG	63, 80, 100
Groove width [mm]	BJ	13,5
Protective cover	HN	4x
Torsional safety	HE	300 [4 x M10]
Weight [kg]		17
In stock		✓
Order no.		1205/0005

B-Top

A large through-bore, for a reason



Fast jaw change with quick change design and high repeatability – that is what makes the B-Top jaw chuck product line so flexible. Particularly for small lot sizes. Thus in most cases machining the chuck jaw to size is unnecessary. Also the insert bushing system is configured for small lot sizes and maximum flexibility. It enables clamping devices to be conveniently adapted to your requirement: Closed with ejector, spray nozzles, or with variable end-stop. Just the way you need it. And the innovative lubricating system ensures improved clamping force behavior of the wedge bar principle.



Key advantages

- Fast jaw change with individual unlocking
- Large through-bore with bushing inserts that can be changed from the front
- Proven wedge rod mechanism

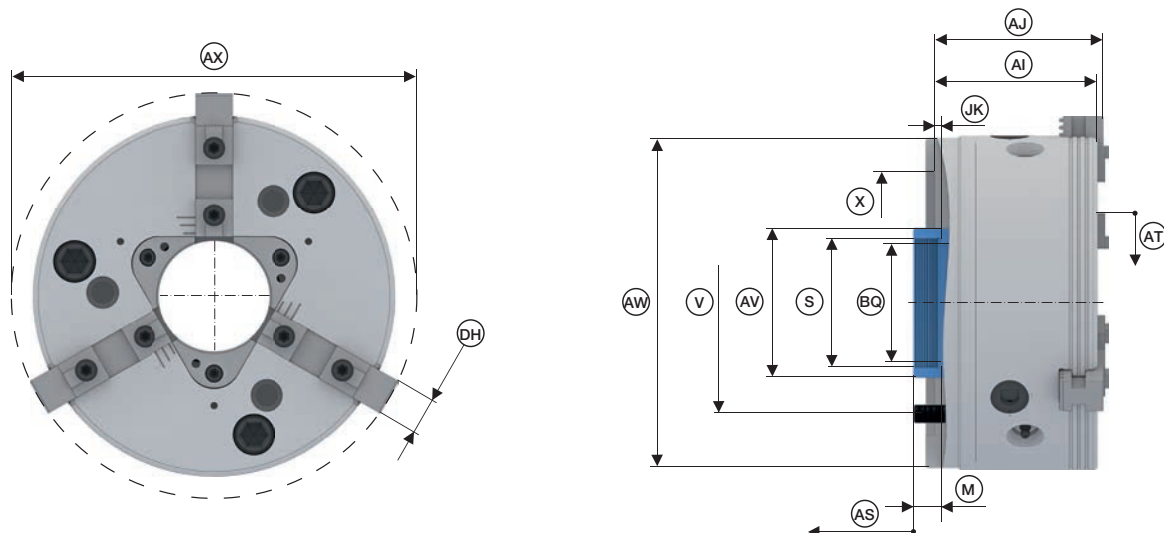


B-Top jaw chuck in use

CHUCKS

Jaw chuck B-Top

Jaw chuck B-Top. Technical data and order overview



Size		165	215	260	315
Variant		B-Top			
Run-out ≤ [mm]		0,020		0,025	0,030
Max. clamping force [kN]		41	74	115	160
Max. axial drawtube force [pull / push] [kN]		30	46	65	90
RPM n max. [1/min.]		6000	5400	4000	3600
Stroke per jaw [mm]	AT	5,9	7,4	8,2	8,6
Ø Capacity [mm]	BQ	43	66	81	104
Length without jaws [mm]	AI	89	104,6	123,3	132,1
Length with jaws [mm]	AJ	94,4	109,4	129,5	139,8
Jaw width [mm]	DH	20	22	26	32
Connecting thread inside	S	M54 x 1,5	M78 x 1,5	M90 x 2	M115 x 2
Piston stroke [mm]	AS	20	25	28	
Bolt hole circle	V	LK Ø 104,8 [3 x M10]	LK Ø 133,4 [3 x M12]	LK Ø 171,4 [3 x M16]	
Outer Ø [mm]	AW	165	215	260	315
Inner Ø [mm]	AV	68	96	118	148
Swing Ø	AX	191,4	265,8	315	375,4
Interface	X	Ø 140	Ø 170	Ø 220	
Depth of thread [mm]	M	15	17	20,3	22,7
Thread position in unclamped position [mm]	JK	35,2	42,2	48,5	51,2
Weight [kg]		13	24	42	66
In stock		✓	✓	✓	✓
Order no.		3015/0001	3015/0002	3015/0003	3015/0004

The full functional range is only guaranteed if HAINBUCH universal grease, part no. 2085/0004, and high-pressure grease gun, part no. 2086/0005 are used. The run-out is related to the soft, machinable jaws.

		
Jaws	Flanges	Accessory overview
Page 390	Page 129	Page 396

Scope of delivery

- Jaw chuck
- Master jaws
- Actuation tool
- Assembly wrench for revolving threaded ring [size 260/315]

Jaw chuck B-Top in detail

Designation	
1 Jaws with cross offset 2 Large chuck through-bore 3 Innovative lubricating system, consequently longer lubricating intervals and improved clamping force behavior 4 Operational safety when changing jaws due to ball mechanism: The actuating wrench can only be pulled off if the wedge bar is properly engaged in the master jaw 5 Locking mechanism in the wedge bar enables a secure master jaw position and thus guarantees secure mesh of the master jaw gearing in the wedge bar 6 Different insert bushings for fast adaptation to the machining requirements	

Flanges for jaw chuck B-Top

Size	Spindle nose DU	Flange type	Interface X	Length [mm] H	Bolt hole circle V	In stock	Order no.
165	A2-4	2	Ø 140	21	LK Ø 82,6 [6 x M10]	✓	2083/0004
	A2-5	1		16	LK Ø 104,8 [6 x M10]	✓	2083/0005
	A2-6	3		34	LK Ø 133,4 [6 x M12]	✓	2083/0006
215	A2-5	2	Ø 170	25	LK Ø 104,8 [6 x M10]	✓	2083/0007
	A2-6	1		17	LK Ø 133,4 [6 x M12]	✓	2083/0008
	A2-8	3		40	LK Ø 171,4 [6 x M16]	✓	2083/0009
260/315	A2-5	2	Ø 220	28	LK Ø 104,8 [6 x M10]	✓	2083/0010
	A2-6				LK Ø 133,4 [6 x M12]	✓	2083/0011
	A2-8	1		19	LK Ø 171,4 [6 x M16]	✓	2083/0012
	A2-11	3		50	LK Ø 235 [6 x M16]	✓	2083/0013

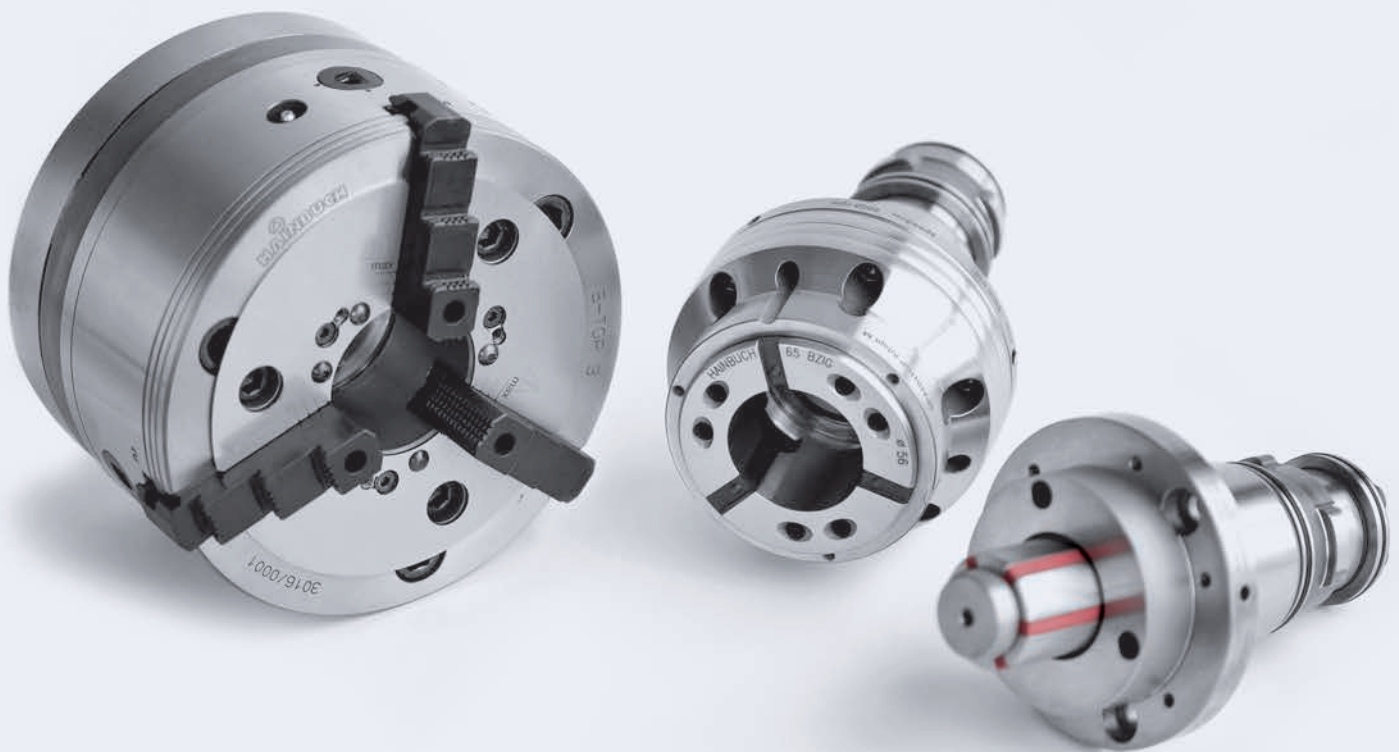
Machine spindle standard DIN 55026.

CHUCKS

Jaw chuck B-Top3

B-Top3

All fits in one another



I.D., O.D. or jaw clamping – it's easy with the B-Top3 modular system. Everything fits together. With MANDO Adapt segmented mandrel, you can change to perfect I.D. clamping in less than 2 minutes. The SPANNTOP adaptation is the right partner if you have reached your holding power and accuracy limits for O.D. clamping. And all without removing the chuck!

B-Top3 basic clamping device also has its advantages: The fast jaw change with single-jaw unlocking mechanism and high repeatability is ideal for small lot sizes. Thus, in most cases machining the chuck jaw to size is unnecessary. Also the insert bushing system is configured for small lot sizes and maximum flexibility. It enables clamping devices to be conveniently adapted to your requirement: Closed with ejector, with spray nozzles, or with variable end-stop. Just the way you need it. And the innovative lubricating system ensures improved clamping force behavior of the wedge bar principle.

You have never turned like this before.



Key advantages

- Jaw chuck with quick conversion to a segmented clamping bushing [I.D. clamping] and a clamping head [O.D. clamping]
- Fast jaw change with individual unlocking
- Large through-bore with bushing inserts that can be changed from the front
- Proven wedge rod mechanism

B-Top3 in use

CHUCKS

Jaw chuck B-Top3

Change-over to mandrel adaptation [approx. 2 min.]



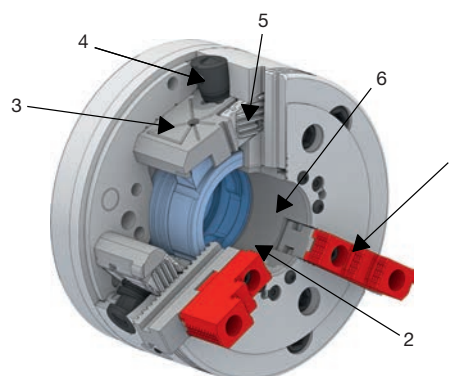
Change-over to clamping head solution with SPANNTOP [approx. 2 min.]



Jaw chuck B-Top3 in detail

Designation

- 1 Jaws with cross offset
- 2 Large chuck bore with CENTREX interface for ultra-precise change-over without adjustment
- 3 Innovative lubricating system, consequently longer lubricating intervals and improved clamping force behavior
- 4 Operational safety when changing jaws due to ball mechanism: The actuating wrench can only be pulled off if the wedge bar is properly engaged in the master jaw
- 5 Locking mechanism in the wedge bar enables a secure master jaw position and thus guarantees secure mesh of the master jaw gearing in the wedge bar
- 6 Different insert bushings for fast adaptation to the machining requirements



CHUCKS

Jaw chuck B-Top3

Order overview. Jaw chuck B-Top3

			Clamping elements and adaptations			
Size	Order no.	In stock	 Jaws for jaw chuck Page 390	 MANDO Adapt for jaw chuck Page 137	 SPANNTOP Adapt Page 138	 SPANNTOP Adapt M Page 139
215	3016/0001	✓	✓	✓	✓	✓

Detailed technical data follows.

The full functional range is only guaranteed if HAINBUCH universal grease, part no. 2085/0004, and high-pressure grease gun, part no. 2086/0005 are used.

Scope of delivery

- Jaw chuck without spindle flange
- Master jaws
- Protection jaws
- Guard bushing for 22 mm wide top jaws
- Actuation tool

Chucks

Mandrels

Stationary clamping devices

Adaptation clamping devices

Measuring technology/Automation

Quick change-over systems

Special solutions

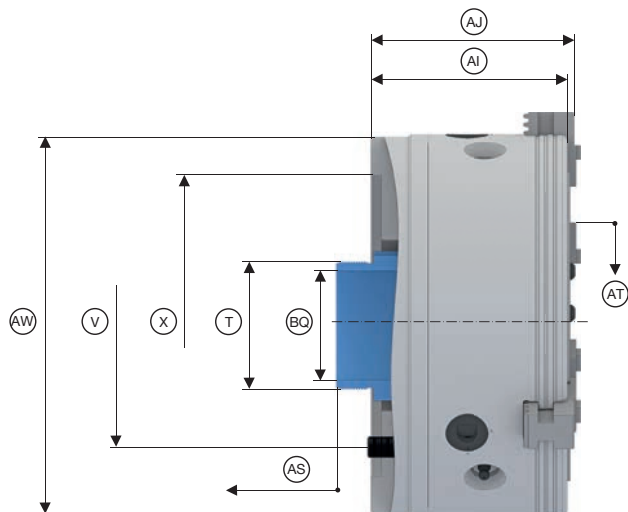
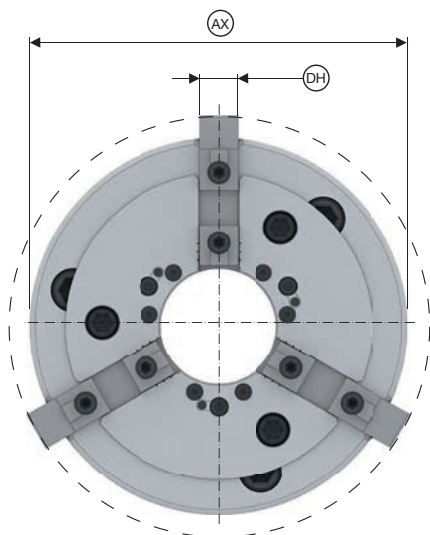
Clamping elements/Accessories

Multi spindles

CHUCKS

Jaw chuck B-Top3

Jaw chuck B-Top3. Technical data



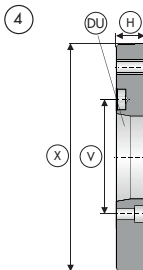
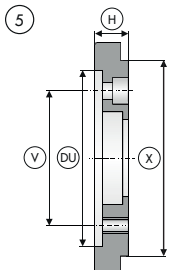
Size		215
Variant		B-Top3
Run-out ≤ [mm]		0,020
Max. clamping force [kN]		74
Max. axial drawtube force [pull / push] [kN]		46
RPM n max. [1/min.]		5400
Stroke per jaw [mm]	AT	7,4
Ø Capacity [mm]	BQ	62
Length without jaws [mm]	AI	104,6
Length with jaws [mm]	AJ	109,4
Jaw width [mm]	DH	22
Connecting thread outside	T	M72 x 1,5
Piston stroke [mm]	AS	25
Bolt hole circle	V	LK Ø 133,4 [3 x M12]
Outer Ø [mm]	AW	215
Swing Ø	AX	265,8
Interface	X	Ø 170
Weight [kg]		29,5
In stock		✓
Order no.		3016/0001

The run-out is related to the already machined top jaws.



				
Jaws	Flanges	Adaptations I.D. clamping	Adaptations O.D. clamping	Accessory overview
Page 390	Page 135	Page 137	Page 138	Page 396

Flanges for jaw chuck B-Top3

 							
Size	Spindle nose DU	Flange type	Interface X	Length [mm] H	Bolt hole circle V	In stock	Order no.
215	A2-6	4	Ø 170	20	LK Ø 133,4 [6 x M12]	✓	2083/0001
	A2-8			37	LK Ø 171,4 [6 x M16]	✓	2083/0002
	AP170	5		20	LK Ø 133,4 [6 x M12]	✓	2083/0003

Machine spindle standard DIN 55026.

All adaptation variants at a glance

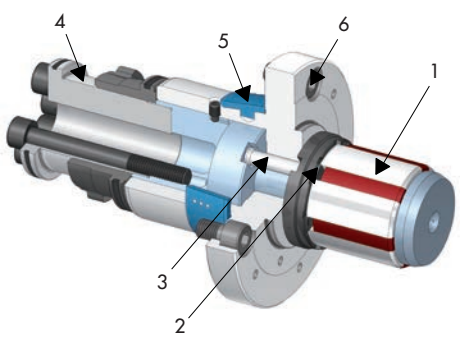
	MANDO Adapt for jaw chuck	SPANNTOP Adapt	SPANNTOP Adapt M
			
Description	Mandrel-in-jaw-chuck with draw bolt	Clamping head end-stop chuck	Clamping head through-bore chuck
Sizes	0, 1, 2, 3	65, 80, 100	65
Clamping range of all sizes [mm]	20 – 80	3 – 100	3 – 65
Ø Capacity			51,3

Attention: These adaptations are configured for a cylinder stroke of 25 mm.
For shorter strokes a specially configured adaptation is required.

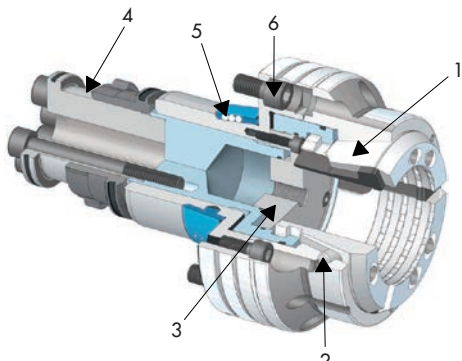
CHUCKS

Jaw chuck B-Top3

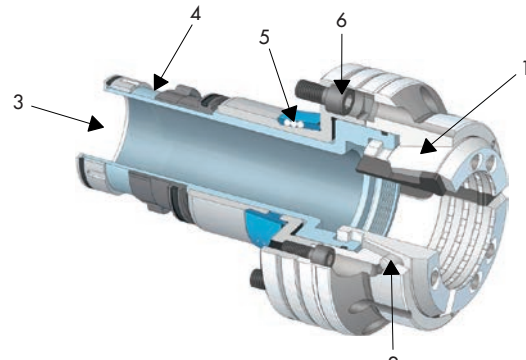
MANDO Adapt in detail

Designation	
1 Segmented clamping bushing with pull-back and hardened steel segments, joined in a vulcanization process 2 Torsional safety lock of segmented clamping bushing 3 Push-off pin 4 Integrated empty stroke. This means it is not necessary to adjust the limit switch on the clamping cylinder 5 CENTREX system for μm-precise used without adjustment 6 Mounting screws	

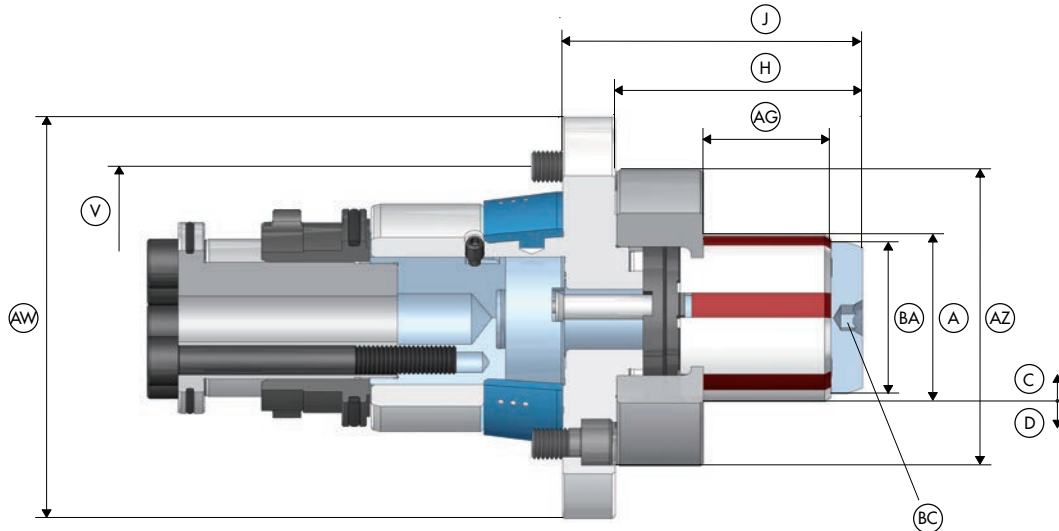
SPANNTOP Adapt in detail [end-stop chuck]

Designation	
1 Clamping head with pull-back and hardened steel segments, joined in a vulcanization process 2 Torsional safety lock of the clamping head 3 Fixed base end-stop for clamping with pull-back effect, central mounting thread for workpiece specific end-stop 4 Integrated empty stroke. This means it is not necessary to adjust the limit switch on the clamping cylinder 5 CENTREX system for μm-precise used without adjustment 6 Mounting screws	

SPANNTOP Adapt M in detail [through-bore chuck]

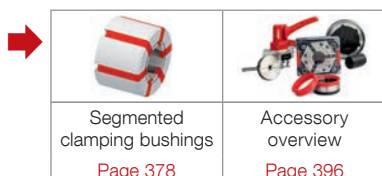
Designation	
1 Clamping head with pull-back and hardened steel segments, joined in a vulcanization process 2 Torsional safety lock of the clamping head 3 Through-bore $\varnothing 51.3 \text{ mm}$ 4 Integrated empty stroke. This means it is not necessary to adjust the limit switch on the clamping cylinder 5 CENTREX system for μm-precise used without adjustment 6 Mounting screws	

MANDO Adapt T211. Technical data and order overview



Size		0	1	2	3
Adaptation size		215			
Run-out ≤ [mm]		0,010			
Max. clamping length [mm]	AG	22,00	26,00	43,00	49,00
Clamping range [mm]	A	20 – 28	26 – 38	36 – 54	50 – 80
Release stroke in Ø [mm]	C		0,3		0,4
Reserve stroke in Ø [mm]	D		0,4		0,5
Range / recommended workpiece tolerance [mm]			± 0,25		± 0,35
Max. axial drawtube force [pull / push] [kN]		10		20	25
Max. radial clamping force [kN]		42		85	105
RPM n max. [1/min.]		6000			
Length [mm]	H	40	51	71	78
Height [mm]	J	60	71	90	97
Bolt hole circle	V	LK Ø 104,8 [3 x M10]			
Outer Ø [mm]	AW	130			
Draw bolt Ø [mm]	BA	19		35	49
Max. actuating torque [Nm]	BC	10	20	25	55
End-stop outer Ø [mm]	AZ	65	69	93	96
Weight [kg]		4		5	
In stock		✓	✓	✓	✓
Order no.		2522/0001	2522/0002	2522/0003	2522/0004

In addition to the run-out of the MANDO Adapt, the run-out of the jaw chuck must also be taken into account.
Attention: These adaptations are configured for a cylinder stroke of 25 mm. For shorter strokes a specially configured adaptation is required.

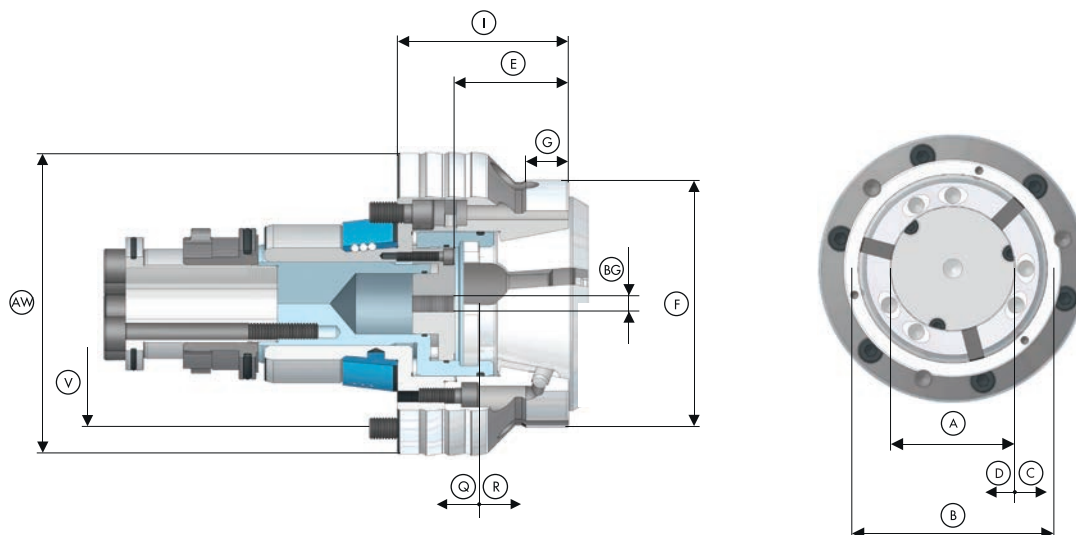


Scope of delivery

- Mandrel adaptation
- Draw bolt

Segmented
clamping bushings
Page 378

Accessory
overview
Page 396


SPANNTOP Adapt. Technical data and order overview


Size		65	80	100
Clamping range [mm]	A	3 – 65	4 – 80	15 – 100
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]		105	115	150
Max. axial drawtube force [pull / push] [kN]		45	50	65
Reserve stroke in Ø [mm]	D		1	1,5
Release stroke in Ø [mm]	C		0,6	2
RPM n max. [1/min.]		6000	5500	5000
Reserve stroke axial [mm]	Q		2	3
Release stroke axial [mm]	R		2,5	5
Location front end-stop	F	Ø 115 f7	Ø 145 f7	Ø 191 f7
Bolt hole circle end-stop	B	LK Ø 107 [3 x M5]	LK Ø 130 [3 x M6]	LK Ø 168 [3 x M8]
Centering length [mm]	G		10	
End-stop depth [mm]	E	53	52	63,5
End-stop thread size [M]	BG		12	
Total length [mm]	I	80	85	110
Outer Ø [mm]	AW	140	182	194
Bolt hole circle	V	LK Ø 120 [3 x M10]	LK Ø 160 [3 x M10]	
Weight [kg]		8	14	20
In stock		✓	✓	✓
Order no.		2604/0001	2604/0002	2604/0003

In addition to the run-out of the SPANNTOP Adapt, the run-out of the jaw chuck must also be taken into consideration.

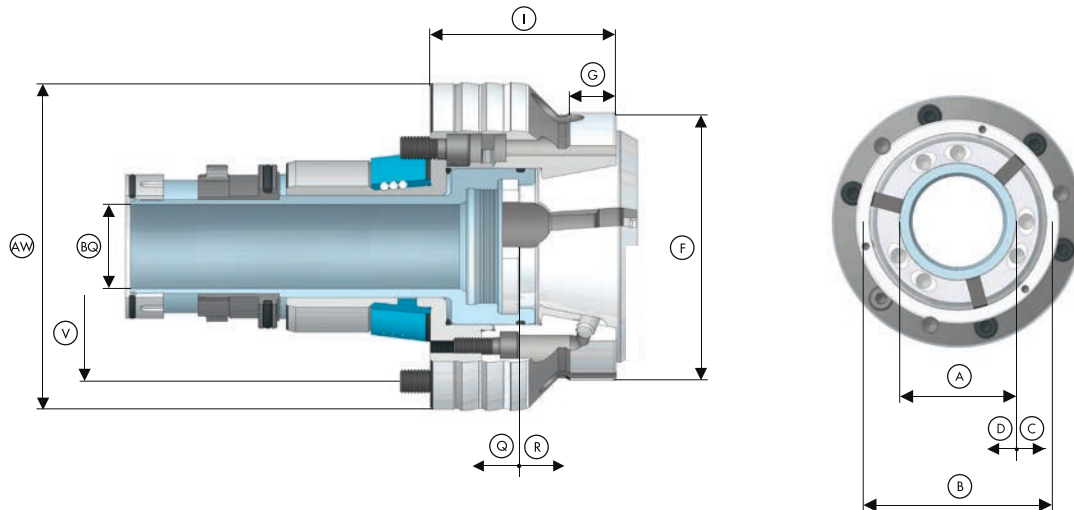
Attention: These adaptations are configured for a cylinder stroke of 25 mm. For shorter strokes a specially configured adaptation is required.



	
Clamping heads	Accessory overview
Page 366	Page 396



SPANNTOP Adapt M. Technical data and order overview



Size		65
Clamping range [mm]	A	3 – 65
Run-out ≤ [mm]		0,010
Max. radial clamping force [kN]		105
Max. axial drawtube force [pull / push] [kN]		45
Reserve stroke in Ø [mm]	D	1
Release stroke in Ø [mm]	C	0,6
RPM n max. [1/min.]		6000
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5
Location front end-stop	F	Ø 115 f7
Bolt hole circle end-stop	B	LK Ø 107 [3 x M5]
Centering length [mm]	G	10
Ø Capacity [mm]	BQ	51,3
Total length [mm]	I	80
Outer Ø [mm]	AW	140
Bolt hole circle	V	LK Ø 120 [3 x M10]
Weight [kg]		8
In stock		✓
Order no.		2604/0004

In addition to run-out of the SPANNTOP Adapt M, run-out of the jaw chuck must also be taken into consideration.
Attention: These adaptations are configured for a cylinder stroke of 25 mm. For shorter strokes a specially configured adaptation is required.

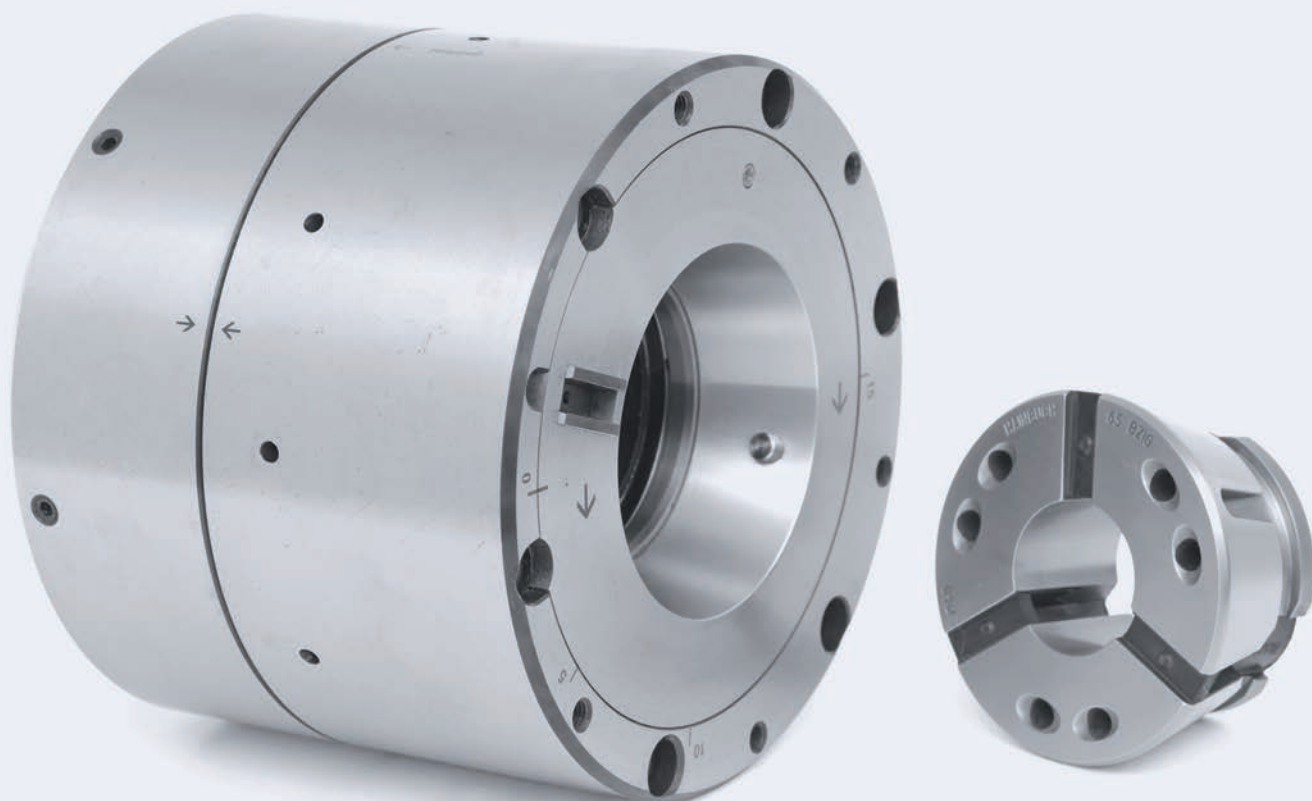


	
Clamping heads	Accessory overview
Page 366	Page 396



Eccentric chuck

Concentric and eccentric machining in a single clamping set-up





Concentric and eccentric complete machining in a single clamping set-up? That's right! With our compact chuck you can turn an eccentric position on the workpiece – in a single set-up without having to re-chuck it! Thus you save time and money. Change-over from concentric to eccentric takes just a few seconds – it is automatic and convenient due to the setting tool in the turret and the c-axis of the machine spindle. Minimum set-up times and no machine changes whatsoever. And first and foremost: You can use your normal clamping cylinder.



Key advantages

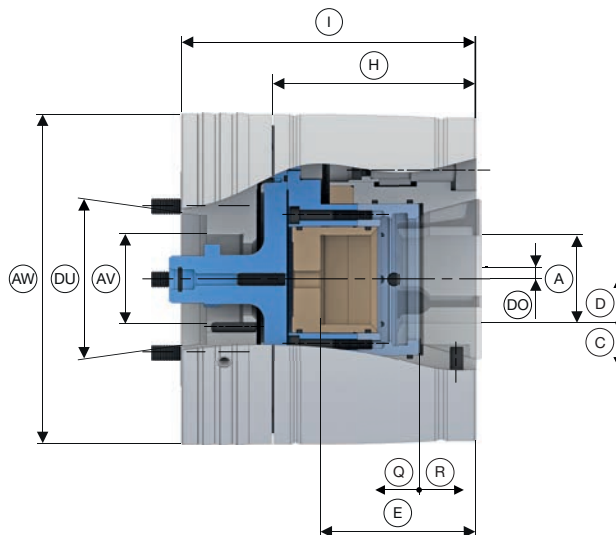
- Infinite eccentric adjustment via the c-axis
- Concentric and eccentric machining in a single clamping set-up
- Different eccentric dimensions are possible with the same chuck and clamping head
- Minimal inertia loss compared to 3-jaw chucks
- Workpiece stabilization through axial draw force applied against the workpiece end-stop
- Standard clamping heads can be used



Eccentric chuck in use



Eccentric chuck. Technical data and order overview



Size		65		
Spindle nose	DU	A2-5	A2-6	A2-8
Run-out ≤ [mm]			0,020	
Max. radial clamping force [kN]			105	
Max. axial drawtube force [pull / push] [kN]			45	
RPM n max. [1/min.]			6000	
Max. eccentricity [mm]	DO		15	
Clamping range [mm]	A		3 – 65	
Release stroke in Ø [mm]	C		0,6	
Reserve stroke in Ø [mm]	D		1	
End-stop depth [mm]	E		96	
Length [mm]	H		125,5	
Total length [mm]	I		183	
Reserve stroke axial [mm]	Q		2	
Release stroke axial [mm]	R		2,5	
Outer Ø [mm]	AW		205	
Inner Ø [mm]	AV		56	
Weight [kg]		40	39,5	38,6
In stock		-	-	-
Order no.		3506/0001	3506/0002	3506/0003

Please note: RPM depends upon the chuck position and workpiece.
Machine spindle standard DIN 55026.



	
Clamping heads	Accessory overview
Page 366	Page 396

CHUCKS
Eccentric chuck

Chucks

Mandrels

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

Overview

Find what's important fast



Mandrels

	Mandrel MANDO	148
	Mandrel MANDO G	182
	Mandrel MAXXOS	186
	Machine specific mandrels	198

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

PRODUCTS

Mandrels

Standard mandrels in overview

	MANDO T211	MANDO T212	MANDO T812
			
Description	Pull-back / with draw bolt	Pull-back / without draw bolt for blind bores	Deadlength / without draw bolt for pick-off with the sub spindle
Sizes	0, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 0, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 0, 1, 2, 3, 4
Clamping range of all sizes [mm]	20 – 200	8 – 190	8 – 100
Variant	RD [round]	RD [round]	RD [round]
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Less expensive segmented clamping bushings and end-stops compared to MANDO T212	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Clamping without draw bolt, consequently ideal for blind bores	■ Radial clamping, no pull-back against workpiece end-stop – ideal for pick-off from the main spindle ■ Clamping without draw bolt, consequently ideal for blind bores
Clamping elements	 SB segmented clamping bushing  SAD segmented clamping bushing	 SB segmented clamping bushing  SAD segmented clamping bushing	 SB segmented clamping bushing  SAD segmented clamping bushing
	 Page 148	 Page 148	 Page 148

MANDO G211	MAXXOS T211
	
Pull-back / with draw bolt for gear hobbing, shaping and grinding	Pull-back / with draw bolt for the highest accuracy and process reliability
0, 1, 2, 3, 4	A, B, C, D, E, F
20 – 120	18 – 100
RD [round]	SE [hexagonal]
■ Standard segmented mandrel with slim interference contour ■ Rigid radial clamping with pull-back effect ■ Large clamping range and vibration dampening due to vulcanized clamping elements ■ Three end-stop levels	■ I.D. clamping mandrel for clamping diameter 18 mm to 100 mm, in stock ■ High transferable torques and holding forces ■ Reduced tool wear through high rigidity ■ Run-out accuracy ≤ 0.01 mm / 0.007 mm possible
 SB segmented clamping bushing  SAD segmented clamping bushing	 SB segmented clamping bushing SE  SAD segmented clamping bushing SE
 Page 182	 Page 186



MANDO

Efficient and economical





Often complete machining fails for lack of an effective I.D. clamping device. In many cases the jaw chuck is a makeshift solution. However, even conventional mandrels with slotted clamping sleeves quickly reach their limits in terms of accuracy, rigidity, and opening stroke. HAINBUCH segmented mandrels use state-of-the-art clamping technology that is convincing, even in the most critical applications.

The central element is the vulcanized segmented clamping bushing. Because conventional clamping bushings are made of spring steel and are only annealed to spring hardness, they are »soft« and they must »bend« to clamp the workpiece. HAINBUCH segmented bushings, on the other hand, are made of case-hardened chromium-nickel-steel and have segments that are extremely hard, wear resistant and rigid. All contact surfaces are completely ground in one operation guaranteeing optimum run-out accuracy.



Key advantages

- Extremely high clamping force even at the smallest clamping Ø
- Clamping range Ø 8 – 200 mm
- Large clamping range and vibration dampening due to vulcanized clamping elements
- Standard segmented clamping bushings and workpiece end-stops for machining to size available

Mandrel MANDO T211 in use

Stationary clamping devices

Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

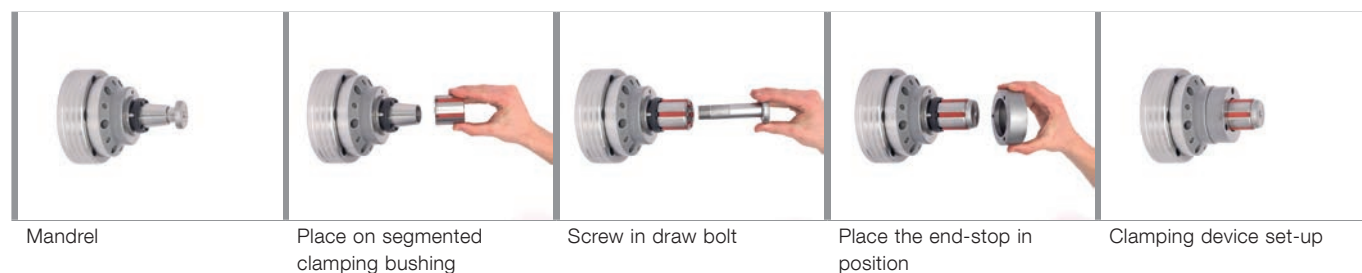
Multi spindles



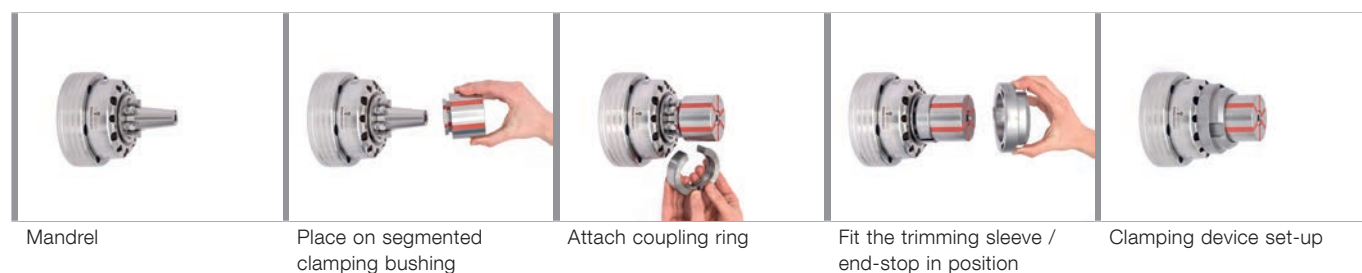
MANDO segmented mandrels at a glance

	MANDO T211	MANDO T212	MANDO T812
			
Description	Pull-back / with draw bolt	Pull-back / without draw bolt for blind bores	Deadlength / without draw bolt for pick-off with the sub spindle
Sizes	0, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 0, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 0, 1, 2, 3, 4
Clamping range of all sizes [mm]	20 – 200	8 – 190	8 – 100
Actuation	Draw	Draw	Pressure
Advantages	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Less expensive segmented clamping bushings and end-stops compared to MANDO T212	■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Clamping without draw bolt, consequently ideal for blind bores	■ Radial clamping, no pull-back against workpiece end-stop – ideal for pick-off from the main spindle ■ Clamping without draw bolt, consequently ideal for blind bores
Clamping elements	 SB segmented clamping bushing  SAD segmented clamping bushing	 SB segmented clamping bushing  SAD segmented clamping bushing	 SB segmented clamping bushing  SAD segmented clamping bushing

Insert segmented clamping bushing [MANDO T211]



Insert segmented clamping bushing [MANDO T212 and MANDO T812]

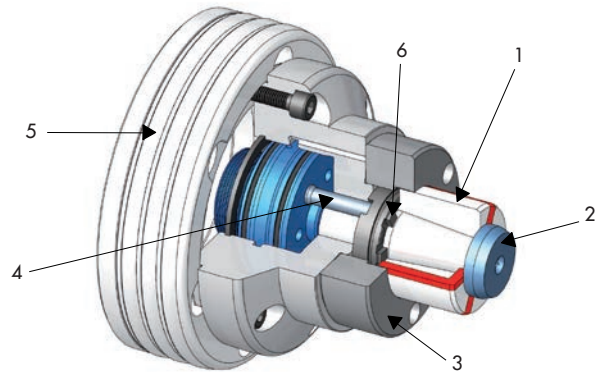




MANDO T211 in detail

Designation

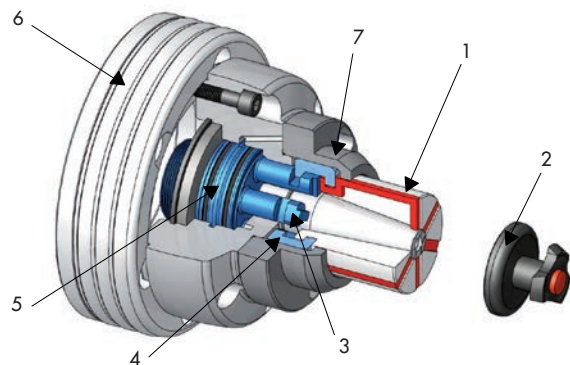
- 1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC]
- 2 Draw bolt [with safeguard to prevent unscrewing when in open position]
- 3 End-stop
- 4 Integrated ejector pins for forced opening of the clamping
- 5 Spindle flange suitable for all standard mandrel sizes
- 6 Torsional safety lock of segmented clamping bushing



MANDO T212 in detail

Designation

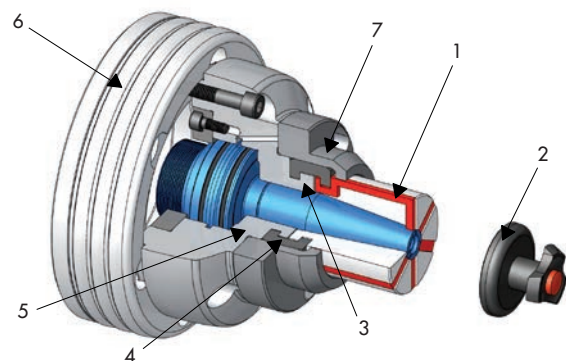
- 1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC]
- 2 Installation aid, recommended for vertical machines from mandrel size 2 and up
- 3 Torsional safety lock of segmented clamping bushing
- 4 Coupling ring for fast changing of the segmented clamping bushing
- 5 Crown-coupling
- 6 Spindle flange suitable for all standard mandrel sizes
- 7 End-stop



MANDO T812 in detail

Designation

- 1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC]
- 2 Installation aid, recommended for vertical machines from mandrel size 2 and up
- 3 Torsional safety lock of segmented clamping bushing
- 4 Coupling ring for fast changing of the segmented clamping bushing
- 5 Mandrel body including coupling
- 6 Spindle flange suitable for all standard mandrel sizes
- 7 End-stop





Order overview. MANDO mandrels

Product	Size	Clamping range [mm]	In stock	Order no.
MANDO T211	0	20 – 28	✓	2801/0014
	1	26 – 38	✓	2801/0016
	2	36 – 54	✓	2801/0018
	3	50 – 80	✓	2801/0020
	4	69 – 120	✓	2801/0024
	5	100 – 130	✓	2801/0003
	6	130 – 160	✓	2801/0032
	7	160 – 200	✓	2801/0033
MANDO T212	XXS	8 – 13	✓	2802/0012
	XS	13 – 19	✓	2802/0013
	S	16 – 21	✓	2802/0014
	0	20 – 28	✓	2802/0015
	1	26 – 38	✓	2802/0016
	2	36 – 54	✓	2802/0017
	3	50 – 80	✓	2802/0018
	4	69 – 100	✓	2802/0019
	5	100 – 130	✓	2802/0010
	6	130 – 160	✓	2802/0011
	7	160 – 190	✓	2802/0030
MANDO T812	XXS	8 – 13	✓	10600/0001
	XS	13 – 19	✓	10600/0002
	S	16 – 21	✓	10600/0003
	0	20 – 28	✓	10600/0004
	1	26 – 38	✓	10600/0005
	2	36 – 54	✓	10600/0006
	3	50 – 80	✓	10600/0007
	4	69 – 100	✓	10600/0008

Mandrels without spindle flange.



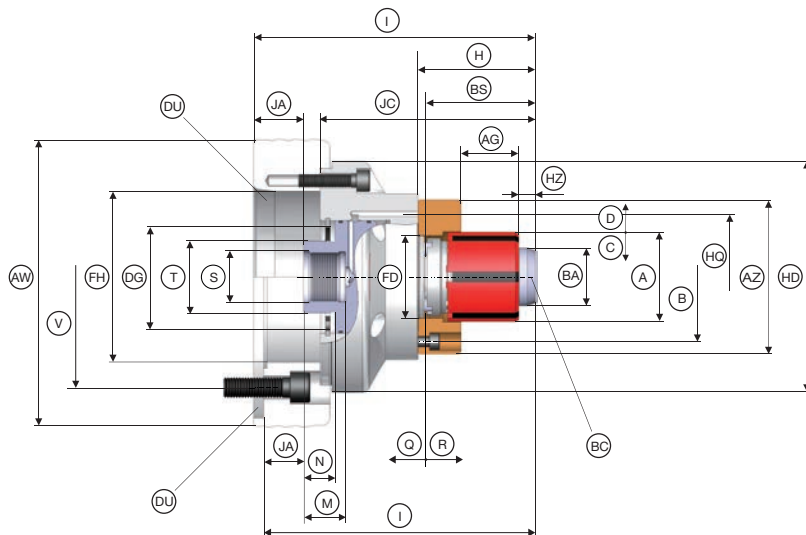
Technical drawing of a 3D model of a 2-way 3-position rotary valve. The drawing shows the valve in a cross-sectional view, highlighting its internal components and ports. Dimensions are indicated by arrows and labeled with letters in circles. The labels include: DU (top and bottom), JA (top and bottom), JC (top), AG (top), HZ (top), HD (right), AZ (right), HQ (right), A (right), B (right), C (right), D (right), BA (right), BC (right), R (right), Q (right), I (right), M (right), N (right), V (left), AW (left), FH (left), DG (left), T (left), S (left), FD (center), and I (bottom). The valve has a central shaft with a red cylindrical component, likely the rotor, and two main ports on the left side.

				
	Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396

- Mandrel without spindle flange / without air sensing adapter
- Draw bolt



MANDO T211 size 1 with flange. Technical data

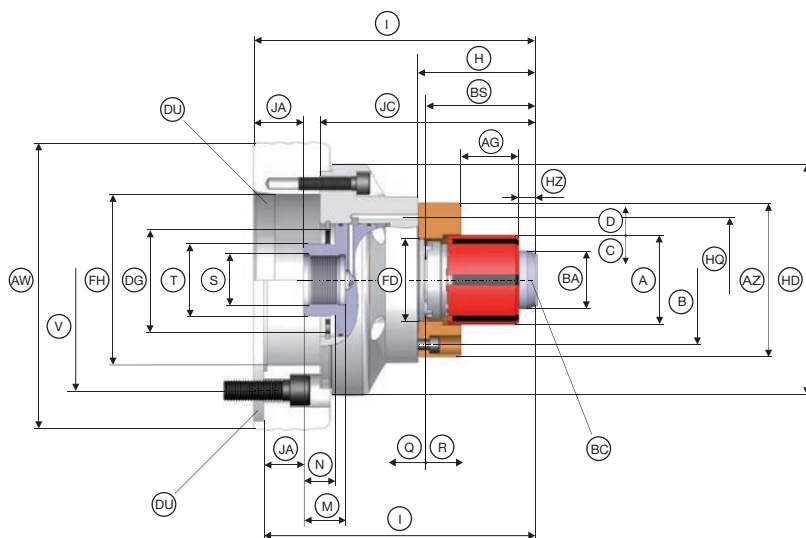


Size	1								
Clamping range [mm]	A	26 – 38							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	26,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Max. actuating torque [Nm]	BC	20							
Draw bolt Ø [mm]	BA	25							
Draw bolt head height [mm]	HZ	11							
Reception workpiece end-stop	FD	Ø 41 f7							
End-stop outer Ø [mm]	AZ	69							
Bolt hole circle end-stop	B	LK Ø 55 [3 x M6]							
Length [mm]	H	51							
Length 2 [mm]	BS	47,5							
Length 3 [mm]	JC	110							
Total length [mm]	I	150		154		150			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165		140		150	180 230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	64							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		8,6	8	9	13,8	8,2	8,8	10,6	16,1



Scope of delivery

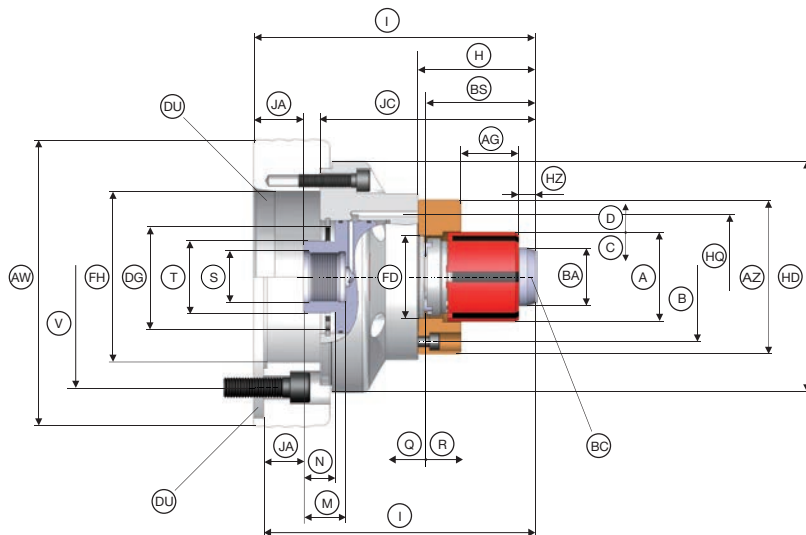
- Mandrel without spindle flange/
without air sensing adapter
- Draw bolt



				
	Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396



MANDO T211 size 3 with flange. Technical data



Size	3								
Clamping range [mm]	A	50 – 80							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		105							
Max. axial drawtube force [pull / push] [kN]		25							
Max. clamping length [mm]	AG	49,00							
Reserve stroke in Ø [mm]	D	0,4							
Release stroke in Ø [mm]	C	0,5							
RPM n max. [1/min.]		6000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2,5							
Max. actuating torque [Nm]	BC	55							
Draw bolt Ø [mm]	BA	49							
Draw bolt head height [mm]	HZ	11							
Reception workpiece end-stop	FD	Ø 65 f7							
End-stop outer Ø [mm]	AZ	96							
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]							
Length [mm]	H	78							
Length 2 [mm]	BS	68							
Length 3 [mm]	JC	140							
Total length [mm]	I	180		184		180			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165		210	140	150	180 230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	78							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		10,1	9,5	10,5	15,3	9,7	10,3	12,1	17,6



Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Draw bolt

[illegible]

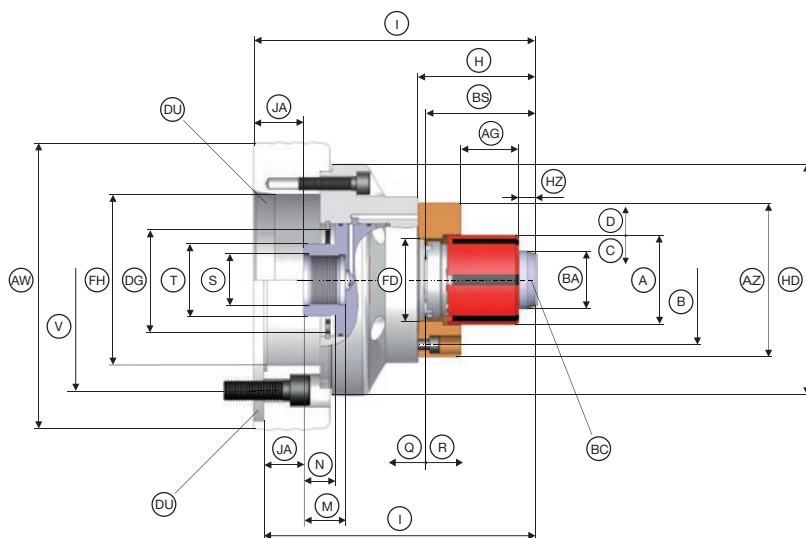
For size 4, clamping range 101 - 120 mm, a max. speed of 4200 RPM applies.



- Mandrel without spindle flange / without air sensing adapter
- Draw bolt



MANDO T211 size 5 with flange. Technical data



Size	5			
Clamping range [mm]	A	100 – 130		
Spindle nose	DU	A2-6	A2-8	A2-11
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			170	
Max. axial drawtube force [pull / push] [kN]			40	
Max. clamping length [mm]	AG		86	
Reserve stroke in Ø [mm]	D		0,6	
Release stroke in Ø [mm]	C		0,6	
RPM n max. [1/min.]			5000	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		3	
Max. actuating torque [Nm]	BC		65	
Draw bolt Ø [mm]	BA		97	
Draw bolt head height [mm]	HZ		16	
Reception workpiece end-stop	FD		Ø 102 f7	
End-stop outer Ø [mm]	AZ		150	
Bolt hole circle end-stop	B		LK Ø 117 [3 x M6]	
Length [mm]	H		120	
Length 2 [mm]	BS		112,5	
Length 3 [mm]	JC		195	
Total length [mm]	I	258,5	262,5	268,5
Connecting thread inside	S		M30 x 1,5	
Connecting thread outside	T		M44 x 1,5	
Distance [mm]	JA	53,5	57,5	63,5
Depth of thread [mm]	M		25,5	
Thread length [mm]	N		19	
Max. drawtube Ø [mm]	DG		97	
Minimum length of DG [mm]			12	
Bore-Ø	FH	103,2	136,2	155
Bolt hole circle	V	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 235 [6 x M20]
Outer Ø [mm]	AW	235		280
Outer Ø 2 [mm]	HD		230	
Weight [kg]		36	35	45

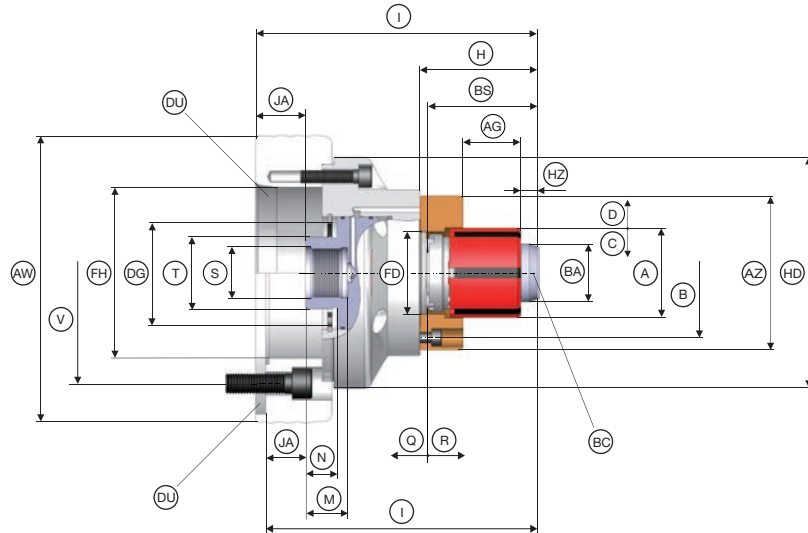


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Draw bolt



MANDO T211 size 6 with flange. Technical data



Size	6			
Clamping range [mm]	A	130 – 160		
Spindle nose	DU	A2-6	A2-8	A2-11
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			170	
Max. axial drawtube force [pull / push] [kN]			40	
Max. clamping length [mm]	AG		96	
Reserve stroke in Ø [mm]	D		0,6	
Release stroke in Ø [mm]	C		0,6	
RPM n max. [1/min.]			4000	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		3	
Max. actuating torque [Nm]	BC		65	
Draw bolt Ø [mm]	BA		125	
Draw bolt head height [mm]	HZ		25	
Reception workpiece end-stop	FD		Ø 132 f7	
End-stop outer Ø [mm]	AZ		180	
Bolt hole circle end-stop	B		LK Ø 148 [3 x M6]	
Length [mm]	H		137	
Length 2 [mm]	BS		129,5	
Length 3 [mm]	JC		220	
Total length [mm]	I	283,5	287,5	293,5
Connecting thread inside	S		M30 x 1,5	
Connecting thread outside	T		M44 x 1,5	
Distance [mm]	JA	53,5	57,5	63,5
Depth of thread [mm]	M		25,5	
Thread length [mm]	N		19	
Max. drawtube Ø [mm]	DG		120	
Minimum length of DG [mm]			12	
Bore-Ø	FH	103,2	136,2	155
Bolt hole circle	V	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 235 [6 x M20]
Outer Ø [mm]	AW	235		280
Outer Ø 2 [mm]	HD		230	
Weight [kg]		43		53

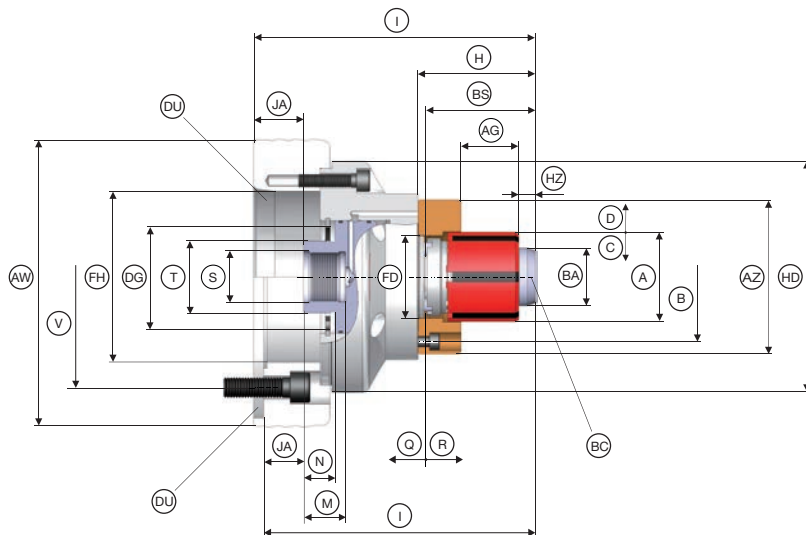


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Draw bolt



MANDO T211 size 7 with flange. Technical data



Size	7			
Clamping range [mm]	A	160 – 200		
Spindle nose	DU	A2-6	A2-8	A2-11
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			170	
Max. axial drawtube force [pull / push] [kN]			45	
Max. clamping length [mm]	AG		94	
Reserve stroke in Ø [mm]	D		0,6	
Release stroke in Ø [mm]	C		0,8	
RPM n max. [1/min.]			3200	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		3	
Max. actuating torque [Nm]	BC		65	
Draw bolt Ø [mm]	BA		156	
Draw bolt head height [mm]	HZ		29,5	
Reception workpiece end-stop	FD		Ø 162 f7	
End-stop outer Ø [mm]	AZ		220	
Bolt hole circle end-stop	B		LK Ø 177 [3 x M8]	
Length [mm]	H		155	
Length 2 [mm]	BS		184	
Length 3 [mm]	JC		245	
Total length [mm]	I	308,5	312,5	318,5
Connecting thread inside	S		M30 x 1,5	
Connecting thread outside	T		M44 x 1,5	
Distance [mm]	JA	53,5	57,5	63,5
Depth of thread [mm]	M		25,5	
Thread length [mm]	N		19	
Max. drawtube Ø [mm]	DG		140	
Minimum length of DG [mm]			12	
Bore-Ø	FH	103,2	136,2	155
Bolt hole circle	V	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 235 [6 x M20]
Outer Ø [mm]	AW		235	280
Outer Ø 2 [mm]	HD		230	
Weight [kg]		55	54	64

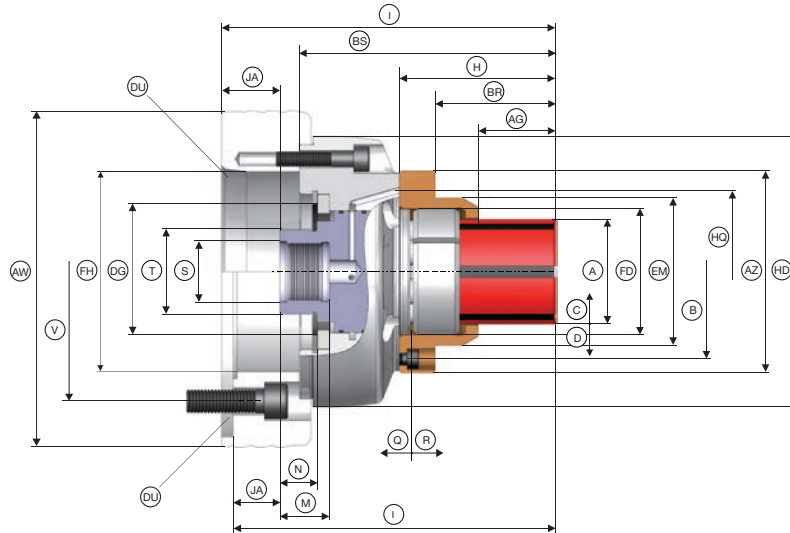


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Draw bolt



MANDO T212 size XXS with flange. Technical data



Size	XXS								
Clamping range [mm]	A	8 – 13							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,020							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	12,9							
Reserve stroke in Ø [mm]	D	0,2							
Release stroke in Ø [mm]	C	0,2							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	1,5							
Reception workpiece end-stop	FD	Ø 34 f7							
End-stop outer Ø [mm]	AZ	65							
End-stop outer Ø 2 [mm]	EM	41							
Bolt hole circle end-stop	B	LK Ø 53 [3 x M5]							
Length [mm]	H	45,5							
Length 2 [mm]	BS	100,5							
Total length [mm]	I	140,5		144,5		140			
Depth [mm]	BR	36,50							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	56							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,1	8,5	9,5	14,3	8,7	9,3	11,1	16,6

Please note: The maximum clamping length [AG] varies from 6 to 12.9 mm depending on the clamping diameter.

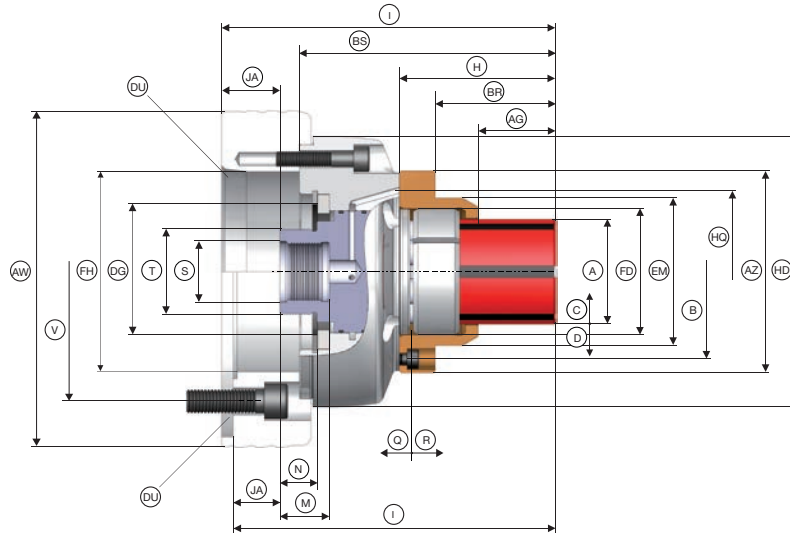
Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396

Scope of delivery

- Mandrel without spindle flange / without air sensing adapter
- Coupling ring
- Mounting aid depending on size



MANDO T212 size XS with flange. Technical data



Size	XS								
Clamping range [mm]	A	13 – 19							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,020							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	14							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Reception workpiece end-stop	FD	Ø 36 f7							
End-stop outer Ø [mm]	AZ	65							
End-stop outer Ø 2 [mm]	EM	42							
Bolt hole circle end-stop	B	LK Ø 53 [3 x M5]							
Length [mm]	H	40							
Length 2 [mm]	BS	95							
Total length [mm]	I	135			139		135		
Depth [mm]	BR	36,50							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30			34		30		
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140			165	210	140	150	180 230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	56							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		8,7	8,1	9,1	13,9	8,3	8,9	10,7	16,2

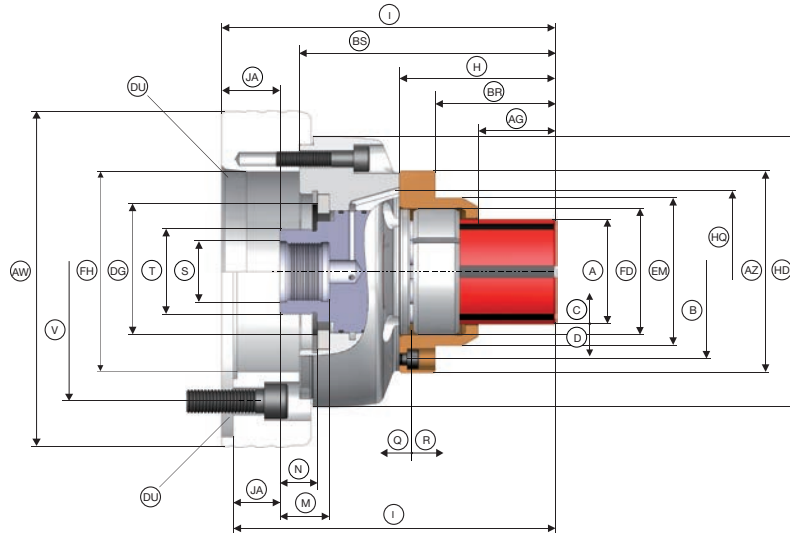


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size S with flange. Technical data



Size	S								
Clamping range [mm]	A	16 – 21							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,020							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	15,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Reception workpiece end-stop	FD	Ø 39 f7							
End-stop outer Ø [mm]	AZ	70							
End-stop outer Ø 2 [mm]	EM	45							
Bolt hole circle end-stop	B	LK Ø 57 [3 x M5]							
Length [mm]	H	47,5							
Length 2 [mm]	BS	97							
Total length [mm]	I	137		141		137			
Depth [mm]	BR	38,00							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	60							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		8.8	8.2	9.2	14	8.4	9	10.8	16.3

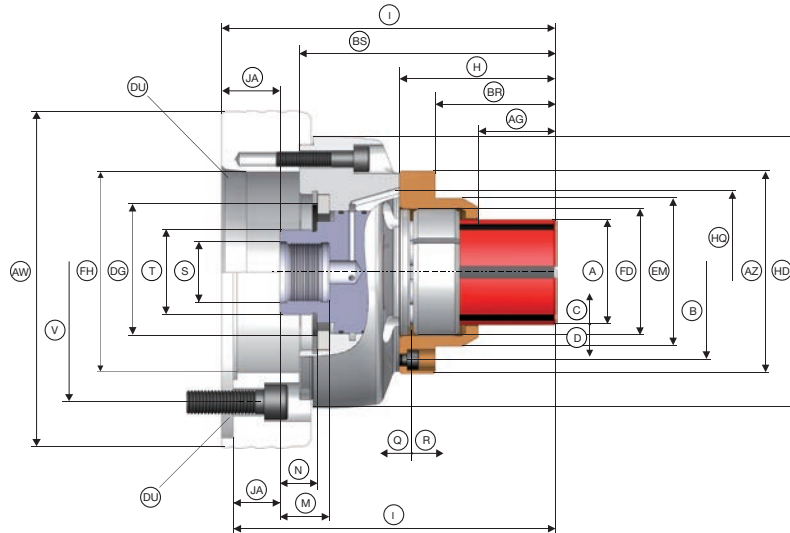


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 0 with flange. Technical data



Size	0								
Clamping range [mm]	A	20 – 28							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	21,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Reception workpiece end-stop	FD	Ø 47 f7							
End-stop outer Ø [mm]	AZ	90							
End-stop outer Ø 2 [mm]	EM	54							
Bolt hole circle end-stop	B	LK Ø 70 [3 x M6]							
Length [mm]	H	58,5							
Length 2 [mm]	BS	108							
Total length [mm]	I	148		152		148			
Depth [mm]	BR	44							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	70							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,5	8,9	9,9	14,7	9,1	9,7	11,5	17

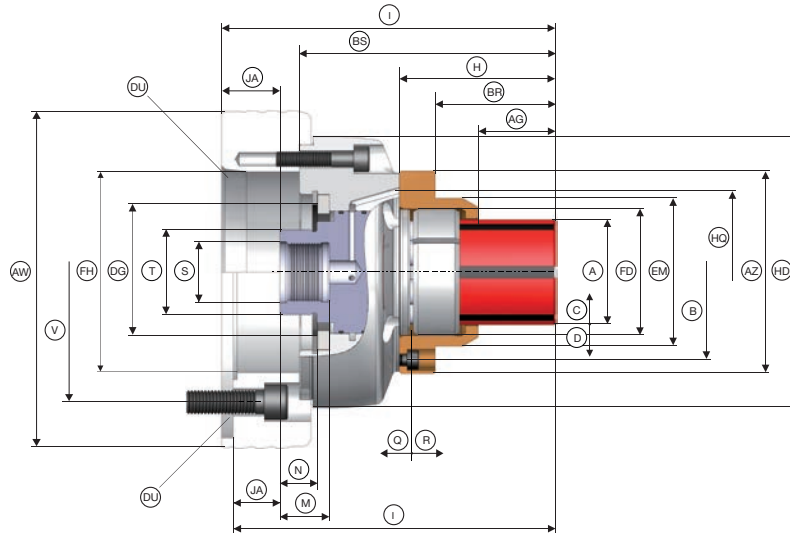


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 1 with flange. Technical data



Size	1								
Clamping range [mm]	A	26 – 38							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		42							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	25,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Reception workpiece end-stop	FD	Ø 55 f7							
End-stop outer Ø [mm]	AZ	90							
End-stop outer Ø 2 [mm]	EM	62							
Bolt hole circle end-stop	B	LK Ø 75 [3 x M6]							
Length [mm]	H	64,5							
Length 2 [mm]	BS	114							
Total length [mm]	I	154		159		154			
Depth [mm]	BR	47							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	70							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,5	8,9	9,9	14,7	9,1	9,7	11,5	17

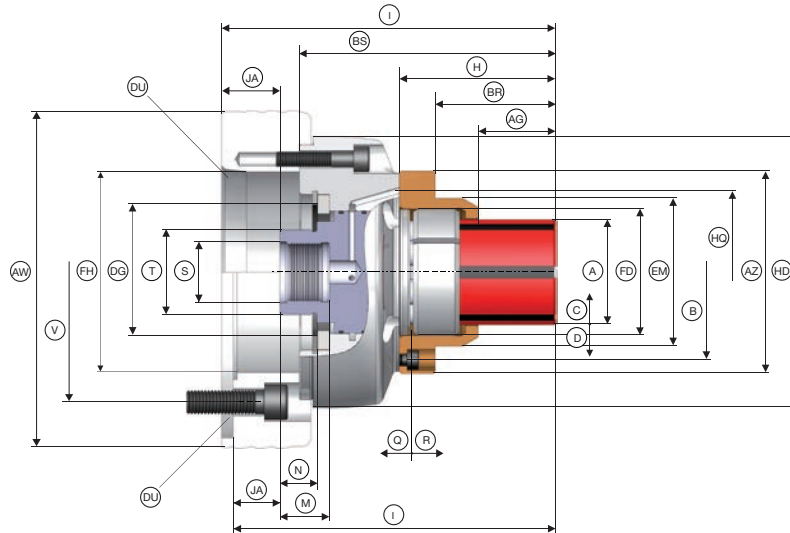


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 2 with flange. Technical data



Size	2								
Clamping range [mm]	A	36 – 54							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		85							
Max. axial drawtube force [pull / push] [kN]		20							
Max. clamping length [mm]	AG	40,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,5							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,5							
Release stroke axial [mm]	R	2							
Reception workpiece end-stop	FD	Ø 65 f7							
End-stop outer Ø [mm]	AZ	104							
End-stop outer Ø 2 [mm]	EM	76							
Bolt hole circle end-stop	B	LK Ø 90 [3 x M6]							
Length [mm]	H	80,5							
Length 2 [mm]	BS	132							
Total length [mm]	I	172		176		172			
Depth [mm]	BR	62							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	84							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		10,4	9,8	10,8	15,6	10	10,6	12,4	17,9

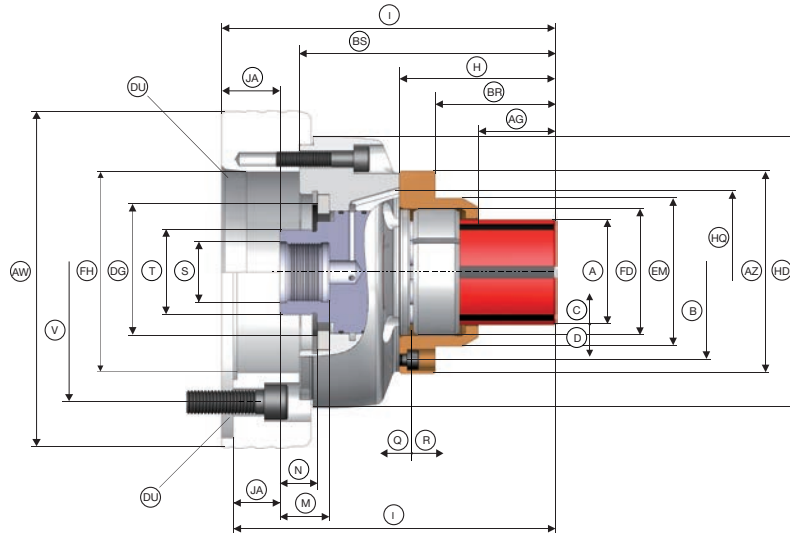
Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396

Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 3 with flange. Technical data



Size	3								
Clamping range [mm]	A	50 – 80							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		105							
Max. axial drawtube force [pull / push] [kN]		25							
Max. clamping length [mm]	AG	44,50							
Reserve stroke in Ø [mm]	D	0,4							
Release stroke in Ø [mm]	C	0,5							
RPM n max. [1/min.]		6000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2,5							
Reception workpiece end-stop	FD	Ø 83 f7							
End-stop outer Ø [mm]	AZ	120							
End-stop outer Ø 2 [mm]	EM	105							
Bolt hole circle end-stop	B	LK Ø 104 [3 x M6]							
Length [mm]	H	87,5							
Length 2 [mm]	BS	140							
Total length [mm]	I	180		184		180			
Depth [mm]	BR	66,50							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	100							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		11,3	10,7	11,7	16,5	10,9	11,5	13,3	18,8

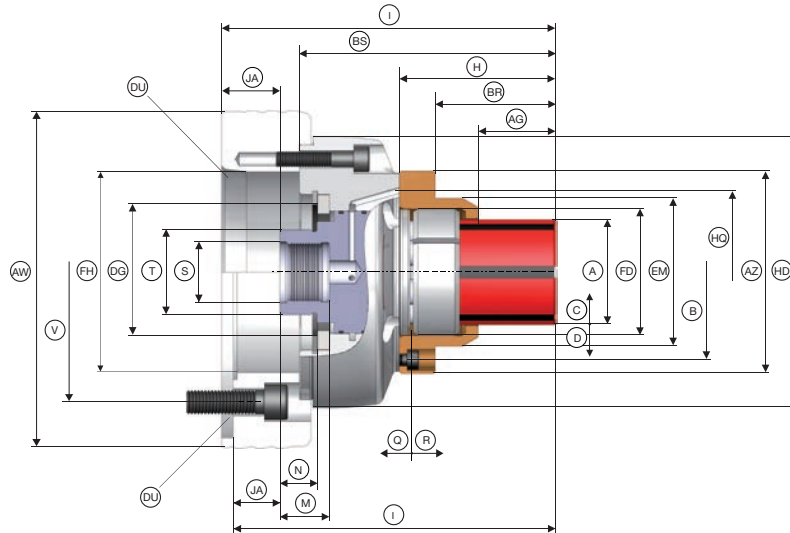


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 4 with flange. Technical data



Size	4									
Clamping range [mm]	A	69 – 100								
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220	
Run-out ≤ [mm]		0,010								
Max. radial clamping force [kN]		150								
Max. axial drawtube force [pull / push] [kN]		35								
Max. clamping length [mm]	AG	52,50								
Reserve stroke in Ø [mm]	D	0,5								
Release stroke in Ø [mm]	C	0,6								
RPM n max. [1/min.]		6000								
Reserve stroke axial [mm]	Q	2,5								
Release stroke axial [mm]	R	3								
Reception workpiece end-stop	FD	Ø 103 f7								
End-stop outer Ø [mm]	AZ	138								
End-stop outer Ø 2 [mm]	EM	124								
Bolt hole circle end-stop	B	LK Ø 124 [3 x M6]								
Length [mm]	H	97,5								
Length 2 [mm]	BS	148,5								
Total length [mm]	I	188,5			192,5		188,5			
Depth [mm]	BR	77,50								
Connecting thread inside	S	M30 x 1,5								
Connecting thread outside	T	M44 x 1,5								
Distance [mm]	JA	30			34		30			
Depth of thread [mm]	M	25,5								
Thread length [mm]	N	19								
Max. drawtube Ø [mm]	DG	54								
Minimum length of DG [mm]		13								
Bore-Ø	FH	61	79,6	103,2	100	77	80	103		
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140			165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139								
Air sensing control bolt hole circle-Ø [mm]	HQ	116								
Air sensing control bore Ø [mm]	KN	3								
Central air sensing connection Ø optional [mm]		12 H7								
Weight [kg]		12,5	11,9	12,9	17,7	12,1	12,7	14,5	20	

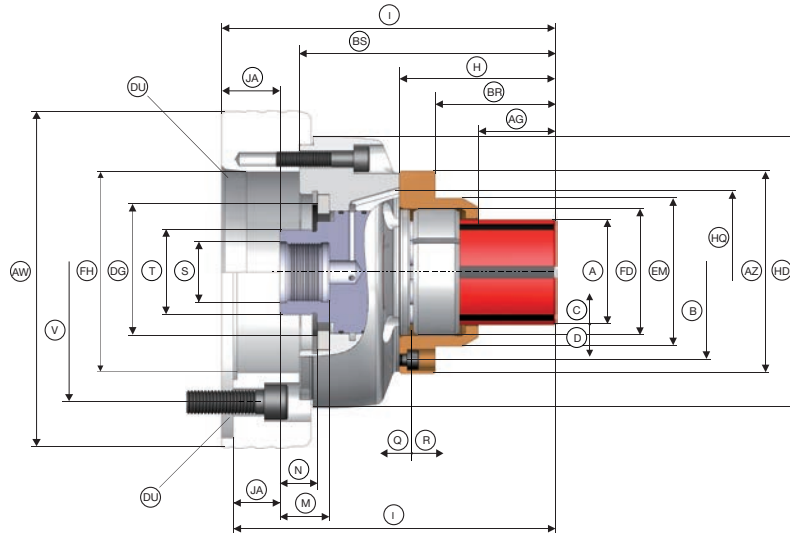
Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396

Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented clamping bushings
- Mounting aid depending on size



MANDO T212 size 5 with flange. Technical data



Size		5		
Clamping range [mm]	A	100 – 130		
Spindle nose	DU	A2-6	A2-8	A2-11
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			170	
Max. axial drawtube force [pull / push] [kN]			40	
Max. clamping length [mm]	AG		53	
Reserve stroke in Ø [mm]	D		0,6	
Release stroke in Ø [mm]	C		0,6	
RPM n max. [1/min.]			5000	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		3	
Reception workpiece end-stop	FD		Ø 140 f7	
End-stop outer Ø [mm]	AZ		195	
End-stop outer Ø 2 [mm]	EM		160	
Bolt hole circle end-stop	B		LK Ø 176 [3 x M8]	
Length [mm]	H		112	
Length 2 [mm]	BS		175	
Total length [mm]	I	238,5	242,5	248,5
Depth [mm]	BR		92	
Connecting thread inside	S		M30 x 1,5	
Connecting thread outside	T		M44 x 1,5	
Distance [mm]	JA	53,5	57,5	63,5
Depth of thread [mm]	M		25,5	
Thread length [mm]	N		19	
Max. drawtube Ø [mm]	DG		118	
Minimum length of DG [mm]			13	
Bore-Ø	FH	103	136	155
Bolt hole circle	V	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 235 [6 x M20]
Outer Ø [mm]	AW	235		280
Outer Ø 2 [mm]	HD		230	
Air sensing control bolt hole circle-Ø [mm]	HQ		170	
Air sensing control bore Ø [mm]	KN		3	
Central air sensing connection Ø optional [mm]			12 H7	
Weight [kg]		40	39	49

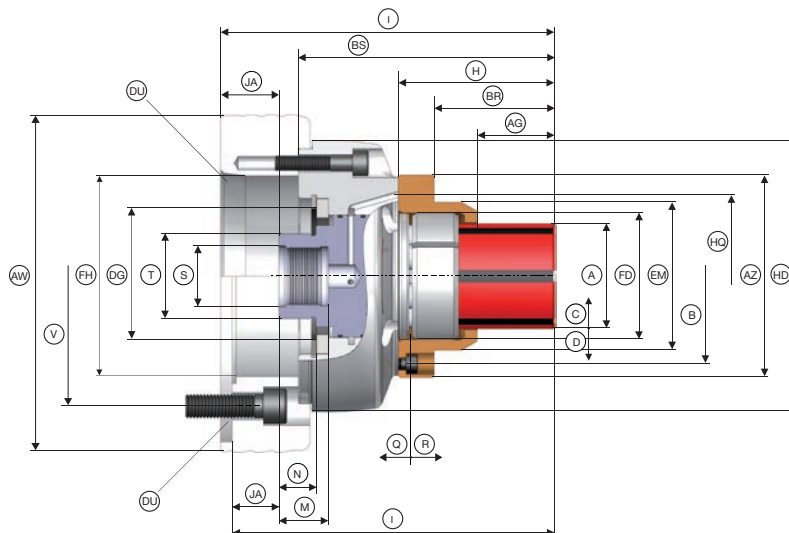


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 6 with flange. Technical data



Size	6			
Clamping range [mm]	A	130 – 160		
Spindle nose	DU	A2-6	A2-8	A2-11
Run-out ≤ [mm]			0,010	
Max. radial clamping force [kN]			170	
Max. axial drawtube force [pull / push] [kN]			40	
Max. clamping length [mm]	AG		61	
Reserve stroke in Ø [mm]	D		0,6	
Release stroke in Ø [mm]	C		0,6	
RPM n max. [1/min.]			4000	
Reserve stroke axial [mm]	Q		3	
Release stroke axial [mm]	R		3	
Reception workpiece end-stop	FD		Ø 164 f7	
End-stop outer Ø [mm]	AZ		226	
End-stop outer Ø 2 [mm]	EM		190	
Bolt hole circle end-stop	B		LK Ø 200 [3 x M8]	
Length [mm]	H		121,5	
Length 2 [mm]	BS		188,5	
Total length [mm]	I	252	256	262
Depth [mm]	BR		87	
Connecting thread inside	S		M30 x 1,5	
Connecting thread outside	T		M44 x 1,5	
Distance [mm]	JA	53,5	57,5	63,5
Depth of thread [mm]	M		25,5	
Thread length [mm]	N		19	
Max. drawtube Ø [mm]	DG		142	
Minimum length of DG [mm]			13	
Bore-Ø	FH	103	136	155
Bolt hole circle	V	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 235 [6 x M20]
Outer Ø [mm]	AW	235		280
Outer Ø 2 [mm]	HD		231	
Air sensing control bolt hole circle-Ø [mm]	HQ		192	
Air sensing control bore Ø [mm]	KN		3	
Central air sensing connection Ø optional [mm]			12 H7	
Weight [kg]		45		55

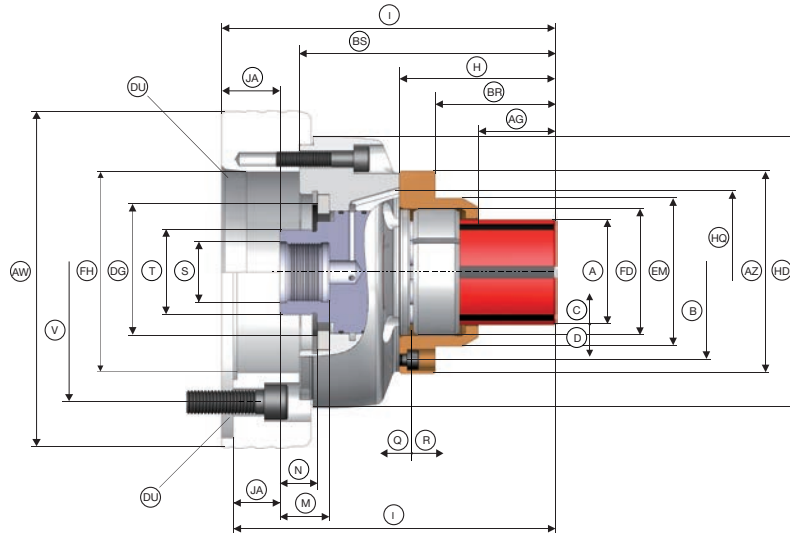


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T212 size 7 with flange. Technical data



Size		7						
Clamping range [mm]		A			160 – 190			
Spindle nose		DU	A2-6		A2-8		A2-11	
Run-out ≤ [mm]					0,010			
Max. radial clamping force [kN]					190			
Max. axial drawtube force [pull / push] [kN]					45			
Max. clamping length [mm]		AG			55			
Reserve stroke in Ø [mm]		D			0,6			
Release stroke in Ø [mm]		C			0,8			
RPM n max. [1/min.]					3200			
Reserve stroke axial [mm]		Q			3			
Release stroke axial [mm]		R			4			
Reception workpiece end-stop		FD			Ø 192 f7			
End-stop outer Ø [mm]		AZ			234			
End-stop outer Ø 2 [mm]		EM			212			
Bolt hole circle end-stop		B			LK Ø 216 [3 x M8]			
Length [mm]		H			115			
Length 2 [mm]		BS			188,5			
Total length [mm]		I	247,5		251,5		257,5	
Depth [mm]		BR			101			
Connecting thread inside		S			M30 x 1,5			
Connecting thread outside		T			M44 x 1,5			
Distance [mm]		JA	53,5		57,5		63,5	
Depth of thread [mm]		M			25,5			
Thread length [mm]		N			19			
Max. drawtube Ø [mm]		DG			142			
Minimum length of DG [mm]					0			
Bore-Ø		FH	103		136		155	
Bolt hole circle		V	LK Ø 133,4 [6 x M12]		LK Ø 171,4 [6 x M16]		LK Ø 235 [6 x M20]	
Outer Ø [mm]		AW	235				280	
Outer Ø 2 [mm]		HD			237			
Air sensing control bolt hole circle-Ø [mm]		HQ			216			
Air sensing control bore Ø [mm]		KN			3			
Central air sensing connection Ø optional [mm]					12 H7			
Weight [kg]			49				58	

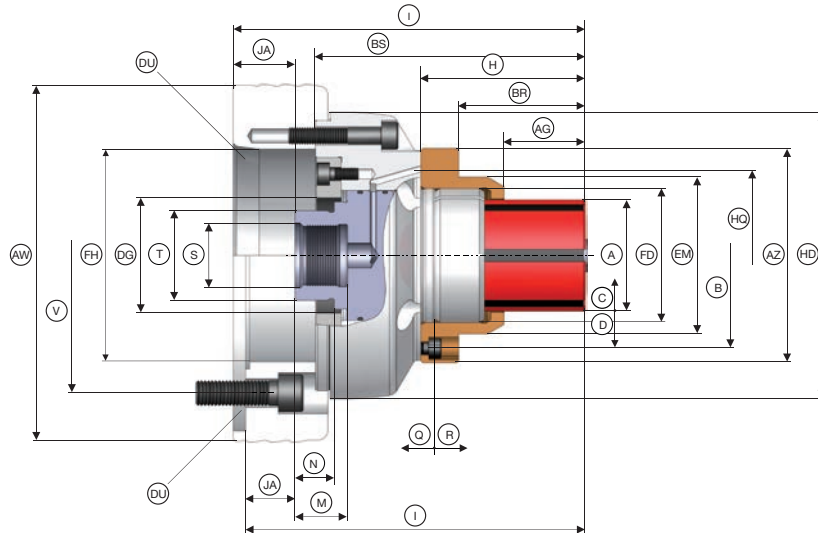


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size XXS with flange. Technical data



Size	XXS								
Clamping range [mm]	A	8 – 13							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,025							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	12,9							
Reserve stroke in Ø [mm]	D	0,2							
Release stroke in Ø [mm]	C	0,2							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	1,5							
Reception workpiece end-stop	FD	Ø 34 f7							
End-stop outer Ø [mm]	AZ	65							
End-stop outer Ø 2 [mm]	EM	41							
Bolt hole circle end-stop	B	LK Ø 53 [3 x M5]							
Length [mm]	H	44							
Length 2 [mm]	BS	96							
Total length [mm]	I	136			140		136		
Depth [mm]	BR	35							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30			34		30		
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	56							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,1	8,5	9,5	14,4	8,7	9,3	11,1	16,6

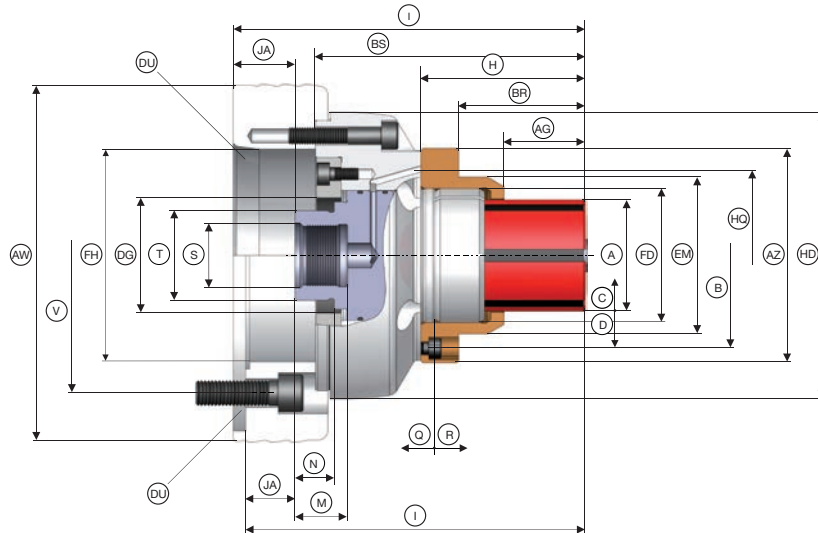


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size XS with flange. Technical data



Size		XS							
Clamping range [mm]	A	13 – 19							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]						0,025			
Max. radial clamping force [kN]						42			
Max. axial compression force [kN]						10			
Max. clamping length [mm]	AG					14,00			
Reserve stroke in Ø [mm]	D					0,3			
Release stroke in Ø [mm]	C					0,4			
RPM n max. [1/min.]						7000			
Reserve stroke axial [mm]	Q					1,50			
Release stroke axial [mm]	R					2,00			
Reception workpiece end-stop	FD					Ø 36 f7			
End-stop outer Ø [mm]	AZ					65			
End-stop outer Ø 2 [mm]	EM					42			
Bolt hole circle end-stop	B					LK Ø 53 [3 x M6]			
Length [mm]	H					47,5			
Length 2 [mm]	BS					99			
Total length [mm]	I		137		141			137	
Depth [mm]	BR					39,5			
Connecting thread inside	S					M30 x 1,5			
Connecting thread outside	T					M44 x 1,5			
Distance [mm]	JA		30		34			30	
Depth of thread [mm]	M					25,5			
Thread length [mm]	N					19			
Max. drawtube Ø [mm]	DG					54			
Minimum length of DG [mm]						13			
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD					139			
Air sensing control bolt hole circle-Ø [mm]	HQ					56			
Air sensing control bore Ø [mm]	KN					3			
Central air sensing connection Ø optional [mm]						12 H7			
Weight [kg]		9	8,4	9,4	14,3	8,6	9,2	11	16,5

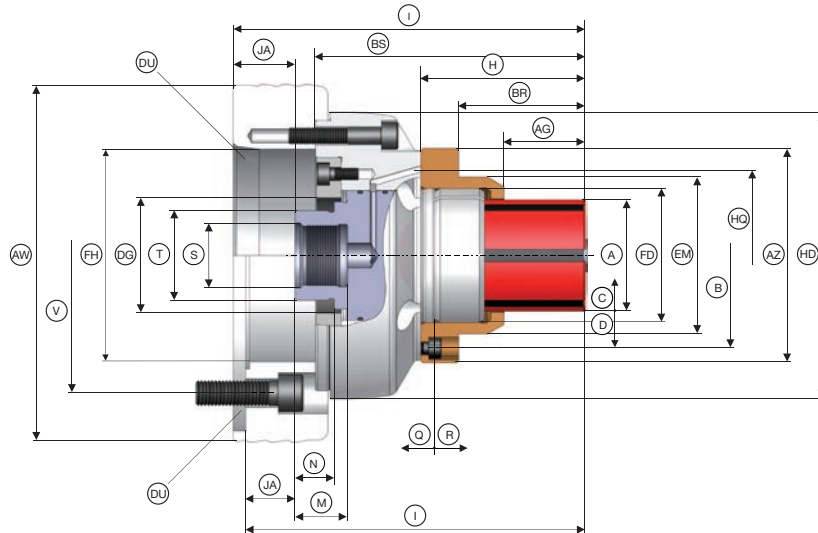


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size S with flange. Technical data



Size	S								
Clamping range [mm]	A	16 – 21							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,025							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	15,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,00							
Reception workpiece end-stop	FD	Ø 39 f7							
End-stop outer Ø [mm]	AZ	70							
End-stop outer Ø 2 [mm]	EM	45							
Bolt hole circle end-stop	B	LK Ø 57 [3 x M6]							
Length [mm]	H	49,5							
Length 2 [mm]	BS	102							
Total length [mm]	I	139		143		139			
Depth [mm]	BR	41,5							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	60							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,2	8,6	9,6	14,5	8,8	9,4	11,2	16,7

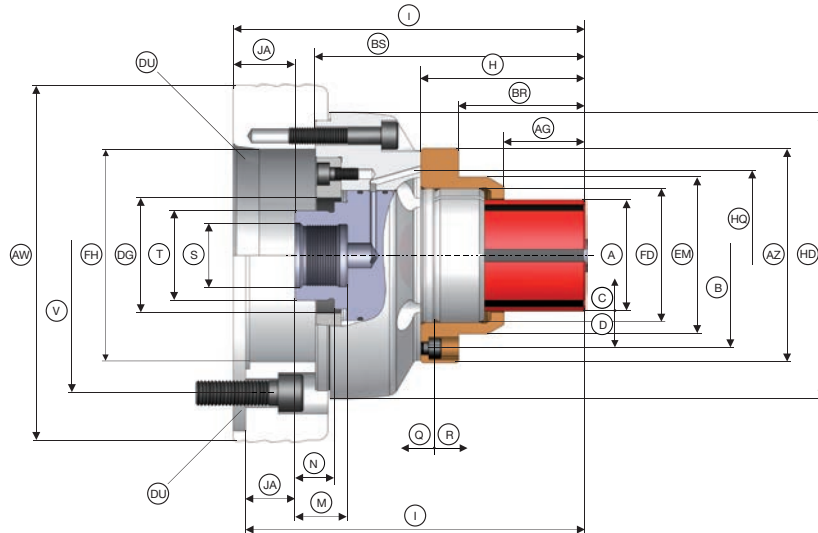


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size 0 with flange. Technical data



Size		0							
Clamping range [mm]		20 – 28							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,015							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	21,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,00							
Reception workpiece end-stop	FD	Ø 47 f7							
End-stop outer Ø [mm]	AZ	90							
End-stop outer Ø 2 [mm]	EM	54							
Bolt hole circle end-stop	B	LK Ø 70 [3 x M6]							
Length [mm]	H	60,5							
Length 2 [mm]	BS	114							
Total length [mm]	I	152		156		152			
Depth [mm]	BR	51,5							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165		140		150	
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	70							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,9	9,3	10,3	15,2	9,5	10,1	11,9	17,4

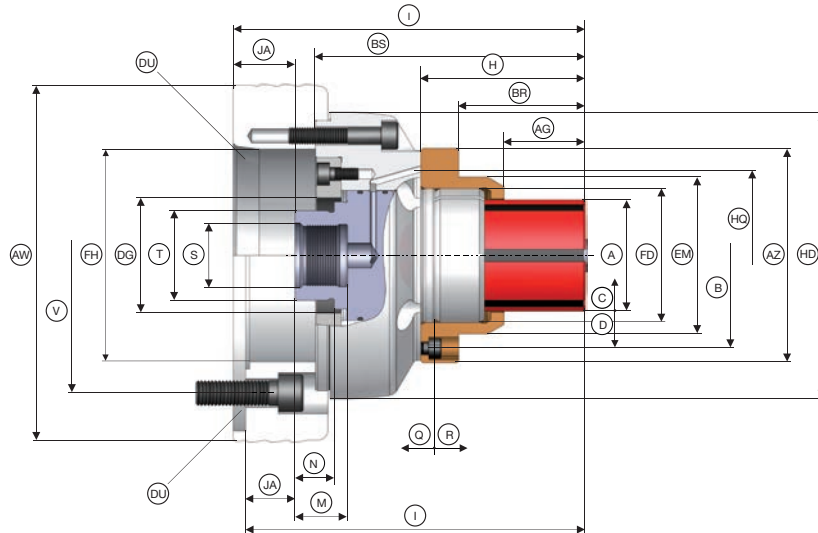


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size 1 with flange. Technical data



Size	1								
Clamping range [mm]	A	26 – 38							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,015							
Max. radial clamping force [kN]		42							
Max. axial compression force [kN]		10							
Max. clamping length [mm]	AG	25,00							
Reserve stroke in Ø [mm]	D	0,3							
Release stroke in Ø [mm]	C	0,4							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	1,50							
Release stroke axial [mm]	R	2,00							
Reception workpiece end-stop	FD	Ø 55 f7							
End-stop outer Ø [mm]	AZ	90							
End-stop outer Ø 2 [mm]	EM	62							
Bolt hole circle end-stop	B	LK Ø 75 [3 x M6]							
Length [mm]	H	66,5							
Length 2 [mm]	BS	117,5							
Total length [mm]	I	156		160		156			
Depth [mm]	BR	57,5							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	133,4	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 103,2 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	70							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		10	9,3	10,3	15,2	9,5	10	12	17,4

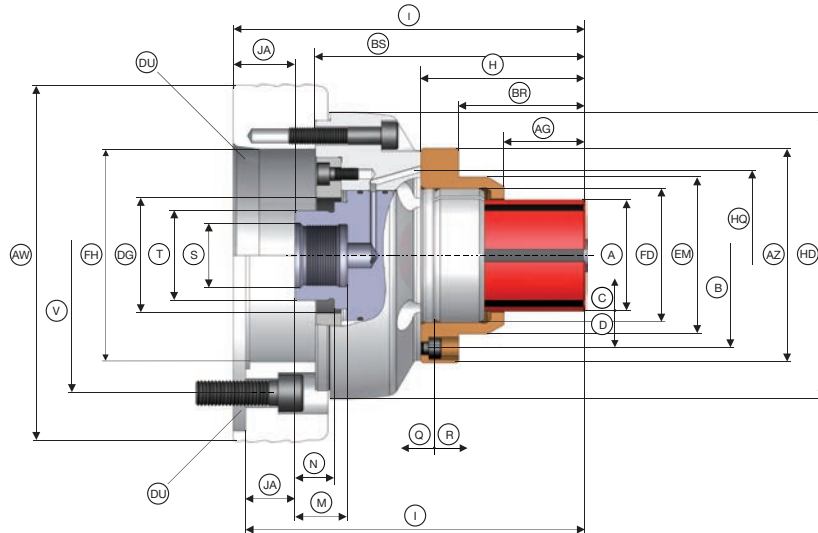


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size 2 with flange. Technical data



Size		2							
Clamping range [mm]		36 – 54							
Spindle nose		A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]	DU					0,015			
Max. radial clamping force [kN]						85			
Max. axial compression force [kN]						20			
Max. clamping length [mm]	AG					40,00			
Reserve stroke in Ø [mm]	D					0,3			
Release stroke in Ø [mm]	C					0,5			
RPM n max. [1/min.]						7000			
Reserve stroke axial [mm]	Q					1,50			
Release stroke axial [mm]	R					2,50			
Reception workpiece end-stop	FD					Ø 65 f7			
End-stop outer Ø [mm]	AZ					104			
End-stop outer Ø 2 [mm]	EM					76			
Bolt hole circle end-stop	B					LK Ø 90 [3 x M6]			
Length [mm]	H					82,5			
Length 2 [mm]	BS					133,5			
Total length [mm]	I		172		176		172		
Depth [mm]	BR					73,5			
Connecting thread inside	S					M30 x 1,5			
Connecting thread outside	T					M44 x 1,5			
Distance [mm]	JA		30		34		30		
Depth of thread [mm]	M					25,5			
Thread length [mm]	N					19			
Max. drawtube Ø [mm]	DG					54			
Minimum length of DG [mm]						13			
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD					139			
Air sensing control bolt hole circle-Ø [mm]	HQ					84			
Air sensing control bore Ø [mm]	KN					3			
Central air sensing connection Ø optional [mm]						12 H7			
Weight [kg]		10,7	10	11	16	10,3	11	12,7	18,2

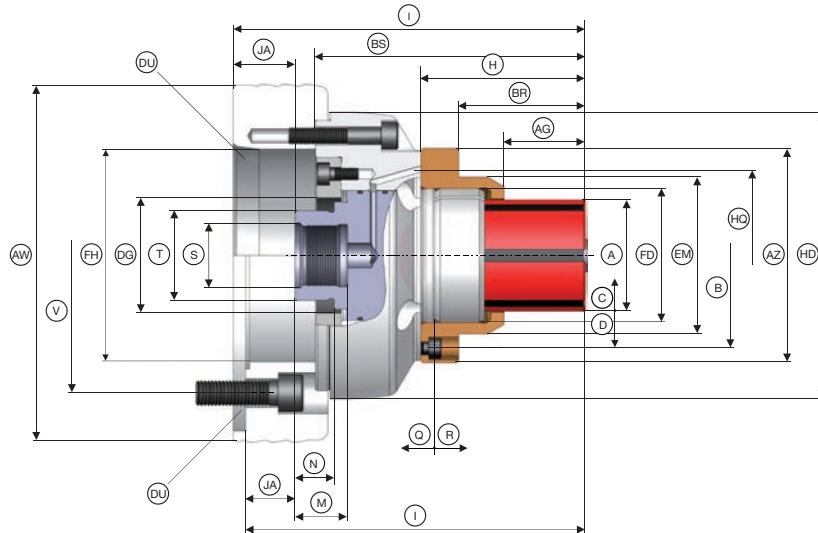


Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size 3 with flange. Technical data



Size		3								
Clamping range [mm]		50 – 80								
Spindle nose	A	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]			0,015							
Max. radial clamping force [kN]			105							
Max. axial compression force [kN]			25							
Max. clamping length [mm]	AG		44,50							
Reserve stroke in Ø [mm]	D		0,4							
Release stroke in Ø [mm]	C		0,5							
RPM n max. [1/min.]			6000							
Reserve stroke axial [mm]	Q		2,00							
Release stroke axial [mm]	R		2,50							
Reception workpiece end-stop	FD		Ø 83 f7							
End-stop outer Ø [mm]	AZ		120							
End-stop outer Ø 2 [mm]	EM		105							
Bolt hole circle end-stop	B		LK Ø 104 [3 x M6]							
Length [mm]	H		89,5							
Length 2 [mm]	BS		141,5							
Total length [mm]	I		179		183		179			
Depth [mm]	BR		80,0							
Connecting thread inside	S		M30 x 1,5							
Connecting thread outside	T		M44 x 1,5							
Distance [mm]	JA		30		34		30			
Depth of thread [mm]	M		25,5							
Thread length [mm]	N		19							
Max. drawtube Ø [mm]	DG		54							
Minimum length of DG [mm]			13							
Bore-Ø	FH		61	79,6	103,2	100	77	80	103	
Bolt hole circle	V		LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW		140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD		139							
Air sensing control bolt hole circle-Ø [mm]	HQ		100							
Air sensing control bore Ø [mm]	KN		3							
Central air sensing connection Ø optional [mm]			12 H7							
Weight [kg]			11,8	11,2	12,2	17	11,4	12	13,8	19,3

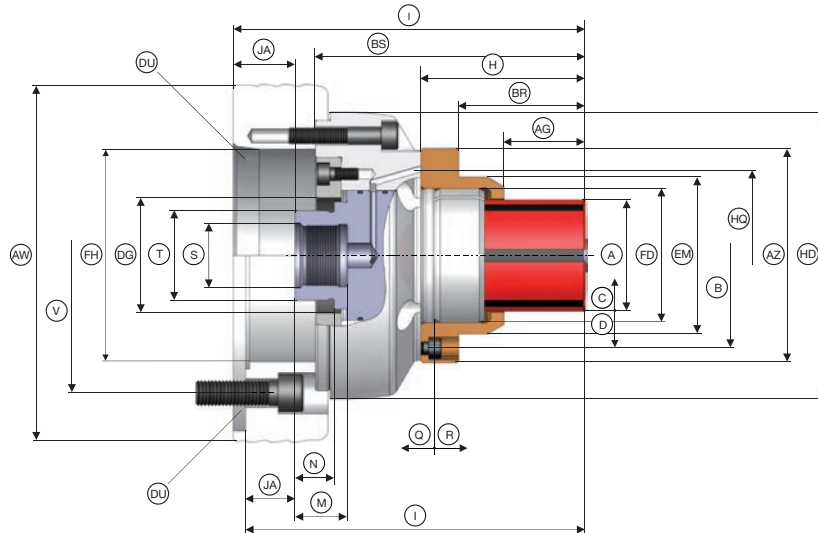
Segmented clamping bushings Page 378	Flanges Page 180	Actuating units Page 235	Accessory overview Page 396

Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



MANDO T812 size 4 with flange. Technical data



Size		4							
Clamping range [mm]		69 – 100							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]						0,015			
Max. radial clamping force [kN]						150			
Max. axial compression force [kN]						35			
Max. clamping length [mm]	AG					52,50			
Reserve stroke in Ø [mm]	D					0,5			
Release stroke in Ø [mm]	C					0,6			
RPM n max. [1/min.]						6000			
Reserve stroke axial [mm]	Q					2,50			
Release stroke axial [mm]	R					3,00			
Reception workpiece end-stop	FD					Ø 103 f7			
End-stop outer Ø [mm]	AZ					138			
End-stop outer Ø 2 [mm]	EM					124			
Bolt hole circle end-stop	B					LK Ø 124 [3 x M6]			
Length [mm]	H					100			
Length 2 [mm]	BS					151,5			
Total length [mm]	I		189		193		189		
Depth [mm]	BR					90,5			
Connecting thread inside	S					M30 x 1,5			
Connecting thread outside	T					M44 x 1,5			
Distance [mm]	JA		30		34		30		
Depth of thread [mm]	M					25,5			
Thread length [mm]	N					19			
Max. drawtube Ø [mm]	DG					54			
Minimum length of DG [mm]						13			
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD					139			
Air sensing control bolt hole circle-Ø [mm]	HQ					116			
Air sensing control bore Ø [mm]	KN					3			
Central air sensing connection Ø optional [mm]						12 H7			
Weight [kg]		13,2	12,6	13,6	18,5	12,8	13,4	15,2	20,7



Scope of delivery

- Mandrel without spindle flange/
without air sensing adapter
- Coupling ring
- Trimming sleeve for SAD segmented
clamping bushings
- Mounting aid depending on size



Order overview. Flanges for MANDO mandrels

Size	Figure	Spindle nose DU	Flange height [mm] AP	Interface X	Outer Ø [mm] AW	Bolt hole circle V	In stock	Order no.
XXS – 4		A2-4	40	Ø 131	140	LK Ø 82,6 [3 x M10]	✓	2099/0003
		A2-5				LK Ø 104,8 [6 x M10]	✓	2099/0002
		A2-6			165	LK Ø 133,4 [6 x M12]	✓	2099/0001
		A2-8	44		210	LK Ø 171,4 [6 x M16]	✓	2099/0004
		AP120	40		140	LK Ø 104,8 [6 x M10]	✓	2099/0005
		AP140			150		✓	2099/0006
		AP170			180	LK Ø 133,4 [6 x M12]	✓	2099/0007
		AP220			230	LK Ø 171,4 [6 x M16]	✓	2099/0008
5 – 7		A2-6	63,5	Ø 219	235	LK Ø 133,4 [6 x M12]	✓	2099/0015
		A2-8	67,5			LK Ø 171,4 [6 x M16]	✓	2099/0016
		A2-11	73,5		280	LK Ø 235 [6 x M20]	✓	2099/0017

Flanges size 5 – 7 AP upon request.
Machine spindle standard DIN 55026.



MANDO G

The best choice for gear cutting





Clamping solutions for the gear-cutting sector are unique and have very special requirements. Consequently, it is not easy to find the suitable clamping device, particularly in the case of part variation and smaller lot sizes. The conventional solution is to use fixtures that are more or less effective.

However, this is now history. With the MANDO G211 you are relying on a standard segmented mandrel. You profit from in-stock segmented clamping bushings. The rigid and narrow mandrel with optimized tool run-out contour is ideal for use in gear cutting applications. It can also be used for gear shaping or grinding. Three end-stop levels that are placed with different proximity to the workpiece make it possible to use individual workpiece end-stops. Also a coolant connection ensures process reliability.



Whether you design the machine connection on your own, or whether you want a complete solution from us extending to the quick change-over system, in every case you profit from radial clamping with pull-back effect – and this incredibly increases the rigid clamping. Therefore you have complete control of accuracy and vibration.

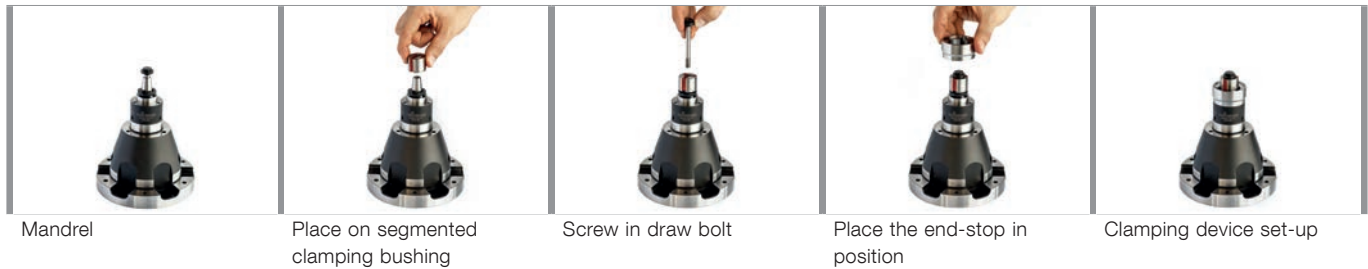
Key advantages

- Standard segmented mandrel with slim interference contour
- Rigid radial clamping with pull-back effect
- Large clamping range and vibration dampening due to vulcanized clamping elements
- Three end-stop levels
- Integrated flushing channels

MANDO G in use



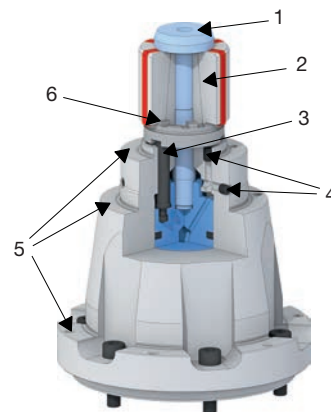
Insert segmented clamping bushing [MANDO G211]



MANDO G211 in detail

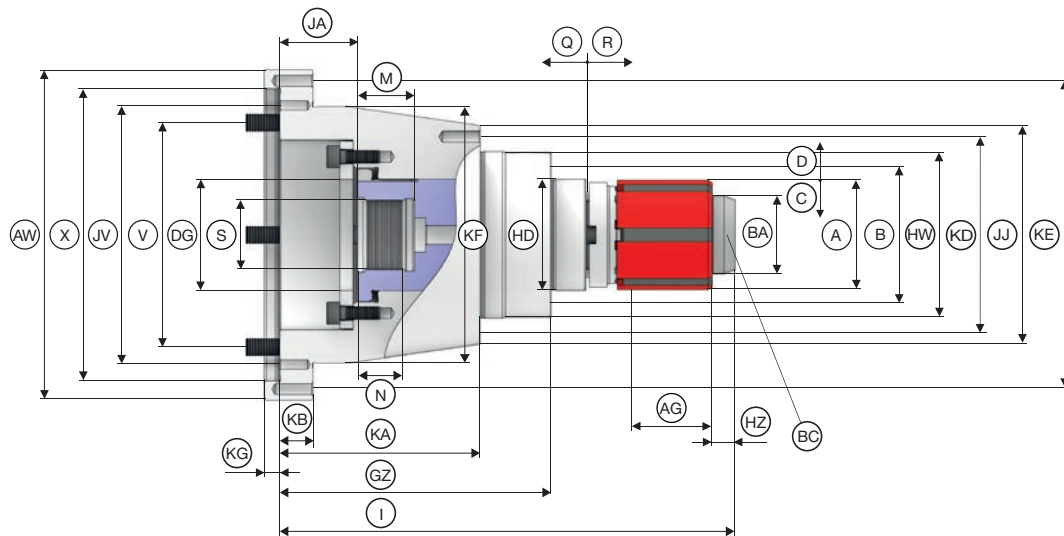
Designation

- 1 Draw bolt [with safeguard to prevent unscrewing when in open position]
- 2 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC]
- 3 Integrated ejector pins for forced opening of the clamping
- 4 Three flush holes to prevent contamination
- 5 Mounting possibility for end-stops
- 6 Torsional safety lock of segmented clamping bushing





MANDO G211. Technical data and order overview



Size		0	1	2	3	4
Clamping range [mm]	A	20 – 28	26 – 38	36 – 54	50 – 80	69 – 120
Run-out ≤ [mm]		0,010				
Max. radial clamping force [kN]		42		85	105	150
Max. axial drawtube force [pull / push] [kN]		10		20	25	35
Max. clamping length [mm]	AG	22	26	43	49	59
Reserve stroke in Ø [mm]	D	0,3		0,4		0,5
Release stroke in Ø [mm]	C	0,4		0,5		0,6
RPM n max. [1/min.]		600				
Reserve stroke axial [mm]	Q	1,5			2	2,5
Release stroke axial [mm]	R	2		2,5		3
Max. actuating torque [Nm]	BC	10	20	25	55	
Draw bolt Ø [mm]	BA	19	25	35	49	68
Draw bolt head height [mm]	HZ	7,5	11			16
Bolt hole circle end-stop	B	LK Ø 42 [3 x M4]	LK Ø 50 [3 x M4]	LK Ø 60 [3 x M4]	LK Ø 75 [3 x M4]	
Bolt hole circle end-stop 2	KD	LK Ø 65 [3 x M6]	LK Ø 72 [3 x M6]	LK Ø 88 [3 x M6]	LK Ø 102 [3 x M6]	LK Ø 88 [3 x M5]
Bolt hole circle end-stop 3	KE	LK Ø 138 [3 x M6]				
Total length [mm]	I	171	178,5	192,5	198,5	213
Connecting thread inside	S	M30 x 1,5				
Distance [mm]	JA	25				
Depth of thread [mm]	M	25,5				
Thread length [mm]	N	19				
Max. drawtube Ø [mm]	DG	50			60	
Minimum length of DG [mm]		13				
Interface	X	Ø 131 H7				
Bolt hole circle	V	LK Ø 116 [6 x M8]				
Bolt hole circle 2	JV	LK Ø 116 [6 x M5]				
Outer Ø [mm]	AW	148				
Outer Ø 2 [mm]	HD	32 f8	38 f8	50 f8	62 f8	75 f8
Outer Ø 3 [mm]	HW	50 f8	58 f8	75 f8	85 f8	
Outer Ø 4 [mm]	JJ	75	82	98	114	115
Outer Ø 5 [mm]	KF	115 f8				
End-stop height [mm]	GZ	125		120		
End-stop height 2 [mm]	KA	90			70	90
End-stop height 3 [mm]	KB	15				
Fitting depth [mm]	KG	7				
Weight [kg]		5,9		7,5	7,7	9,7
In stock		✓	✓	✓	✓	✓
Order no.		10837/0001	10837/0002	10837/0003	10837/0004	10837/0005

Customer-specific flanges and drawtube adapters available upon request.

Segmented clamping bushings Page 378	Actuating units Page 235	Accessory overview Page 396

Scope of delivery

- Mandrel without spindle flange
- Draw bolt



MAXXOS

The hexagonal, super-strong mandrel





MAXXOS T211 is a mandrel with a hexagonal pyramid shape instead of a round taper – perfect for demanding and reliable process manufacturing. Through the hexagonal clamping pyramid, maximum transmission forces can be realized. The segmented clamping bushing with the hexagon socket sits on the clamping pyramid with an absolute positive fit, which enables maximum machining capacity with less vibration and thereby less tool wear. The lubrication, combined with its leak-tightness ensures an extremely constant production flow and therefore maximum reliability. By the way, our segmented clamping bushings offer a factory-standard run-out accuracy of $\leq 10 \mu\text{m}$. If you need even greater precision, there are two additional levels of run-out quality to choose from. Even a run-out accuracy of $\leq 2 \mu\text{m}$ is possible upon request.

Overall the mandrel covers a clamping diameter range from 18 to 100 mm. The clamping ranges of the respective sizes are designed to overlap. As a rule – depending on the clamping diameter – you can choose from two to three different mandrel sizes. The larger mandrel always means more stability and rigidity, the smaller mandrel can cover a greater quantity of smaller workpieces if necessary.

Those who place more value on process reliability and optimum torque transmissions are very happy with the MAXXOS T211.

MAXXOS mandrel with hexagonal pyramid shape reduces your costs!



Key advantages

- I.D. clamping mandrel for clamping diameter 18 mm to 100 mm, in stock
- High transferable torques and holding forces
- Reduced tool wear through high rigidity
- Run-out accuracy $\leq 0.01 \text{ mm} / 0.007 \text{ mm}$ possible
- Run-out accuracy $\leq 0.002 \text{ mm}$ possible upon request
- Resistant to contamination due to its hexagonal pyramid shape
- Reliable manufacturing process

Stationary clamping devices

Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

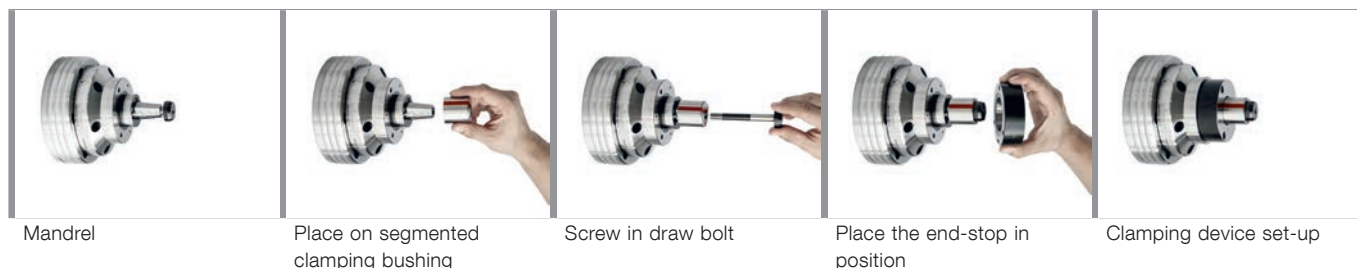
Special solutions

Clamping elements / Accessories

Multi spindles



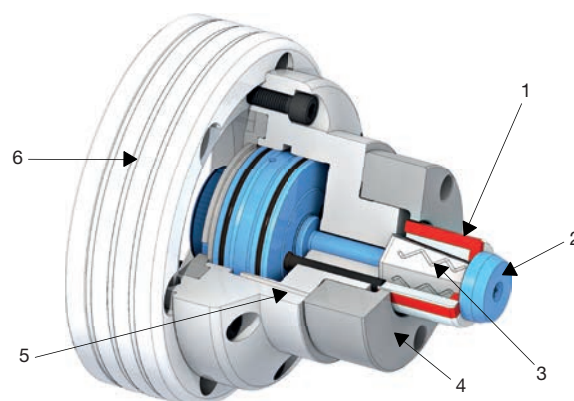
Insert segmented clamping bushing [MAXXOS T211]



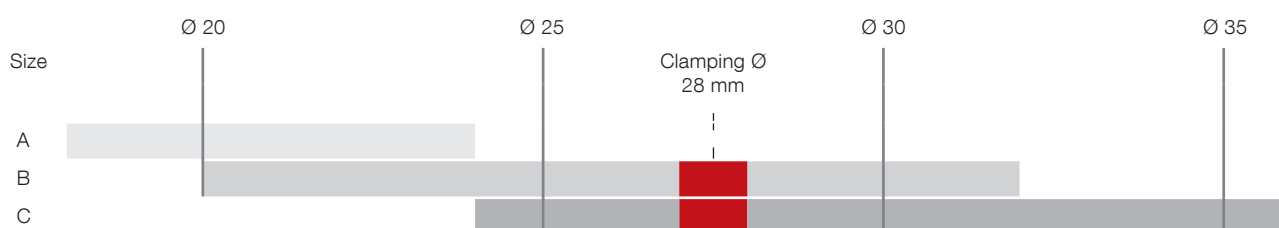
MAXXOS T211 in detail

Designation

- 1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC] with positioning
- 2 Draw bolt [with safeguard to prevent unscrewing when in open position]
- 3 Lubricating grooves, for optimal holding power
- 4 End-stop
- 5 Prepared for air sensing control
- 6 Spindle flange suitable for all standard mandrel sizes



Overlapping clamping ranges of the different mandrel sizes



Example of the right selection of the mandrel size

Clamping diameter 28 mm:

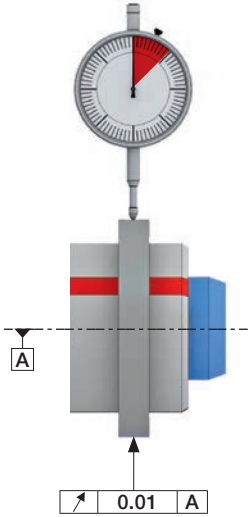
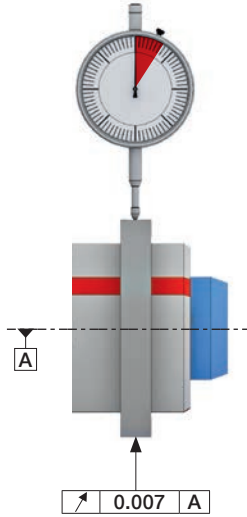
- Condition: flexibility for additional workpieces with smaller clamping diameters →
- Condition: higher process reliability due to greater rigidity and holding power →

Size B

Size C



Max. run-out accuracy of the segmented clamping bushing

		
Variant	Standard	Premium
Run-out	≤ 10 μm	≤ 7 μm
Description	Measured on a ground run-out control ring in accordance with the HAINBUCH standard	

Order overview. MAXXOS mandrels

Size	Clamping range [mm]	In stock	Order no.
A	18 – 24	✓	10918/0001
B	20 – 32	✓	10918/0002
C	24 – 39	✓	10918/0003
D	32 – 50	✓	10918/0004
E	39 – 68	✓	10918/0005
F	50 – 100	✓	10918/0006

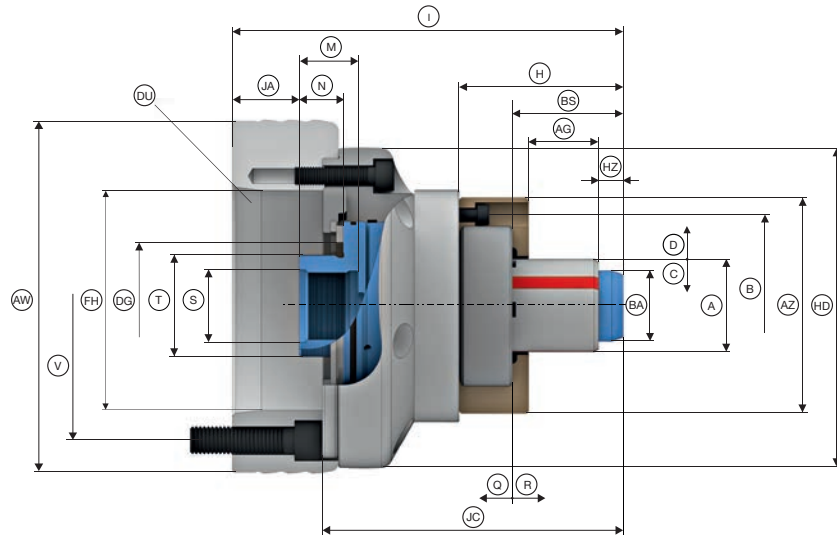
Mandrels without spindle flange.

Scope of delivery

- Mandrel without spindle flange/without air sensing adapter
- Draw bolt



MAXXOS T211 size A with flange. Technical data

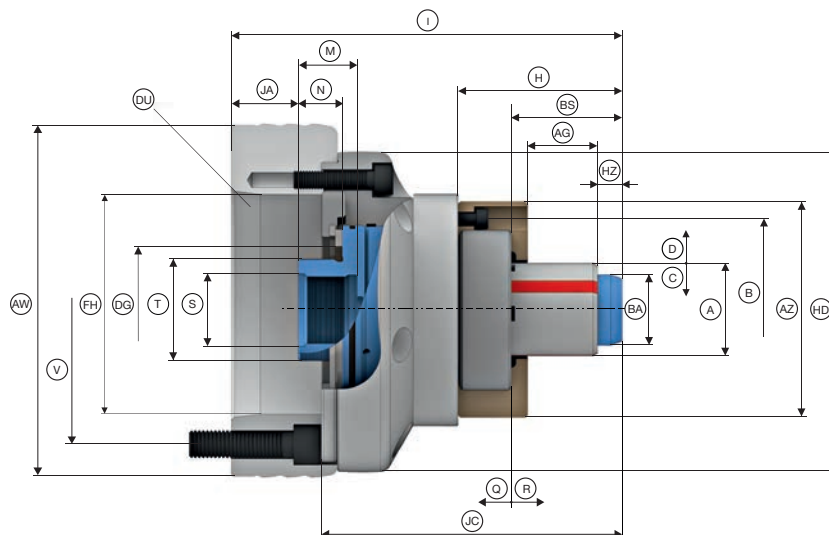


Size	A								
Clamping range [mm]	A	18 – 24							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		27							
Max. axial drawtube force [pull / push] [kN]		7,5							
Max. clamping length [mm]	AG	20							
Reserve stroke in Ø [mm]	D	0,26							
Release stroke in Ø [mm]	C	0,18							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2							
Max. actuating torque [Nm]	BC	7							
Draw bolt Ø [mm]	BA	17							
Draw bolt head height [mm]	HZ	7,5							
Reception workpiece end-stop	FD	Ø 32 f7							
End-stop outer Ø [mm]	AZ	65							
Bolt hole circle end-stop	B	LK Ø 50 [3 x M6]							
Length [mm]	H	40							
Length 2 [mm]	BS	32,5							
Length 3 [mm]	JC	100							
Total length [mm]	I	140		144		140			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	58							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		8,5	10,7	12,4	13,6	8,1	8,7	10,5	16,1

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



MAXXOS T211 size B with flange. Technical data

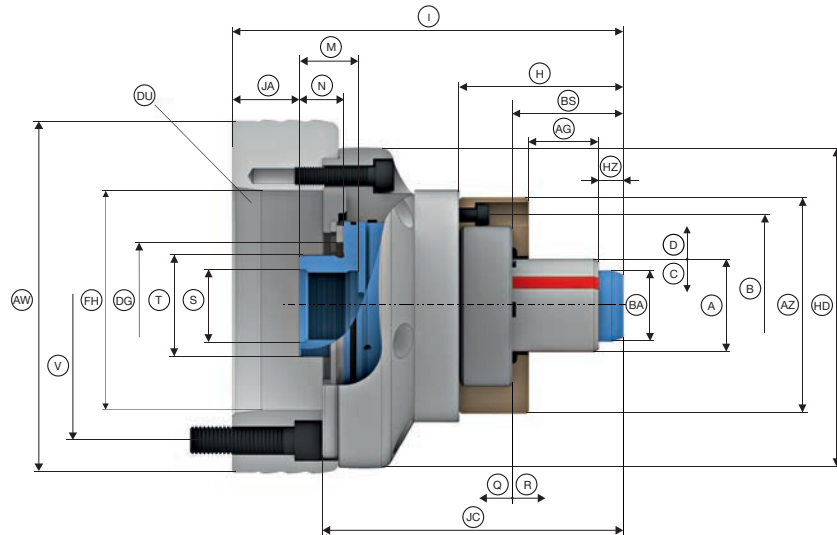


Size	B								
Clamping range [mm]	A	20 – 32							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		36							
Max. axial drawtube force [pull / push] [kN]		10							
Max. clamping length [mm]	AG	22,5							
Reserve stroke in Ø [mm]	D	0,26							
Release stroke in Ø [mm]	C	0,17							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2							
Max. actuating torque [Nm]	BC	10							
Draw bolt Ø [mm]	BA	19							
Draw bolt head height [mm]	HZ	7,5							
Reception workpiece end-stop	FD	Ø 32 f7							
End-stop outer Ø [mm]	AZ	65							
Bolt hole circle end-stop	B	LK Ø 50 [3 x M6]							
Length [mm]	H	40							
Length 2 [mm]	BS	32,5							
Length 3 [mm]	JC	100							
Total length [mm]	I	140							
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30							
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	54							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	64							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		8,9	11,1	12,8	14,0	8,5	9,1	10,9	16,5

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



MAXXOS T211 size C with flange. Technical data

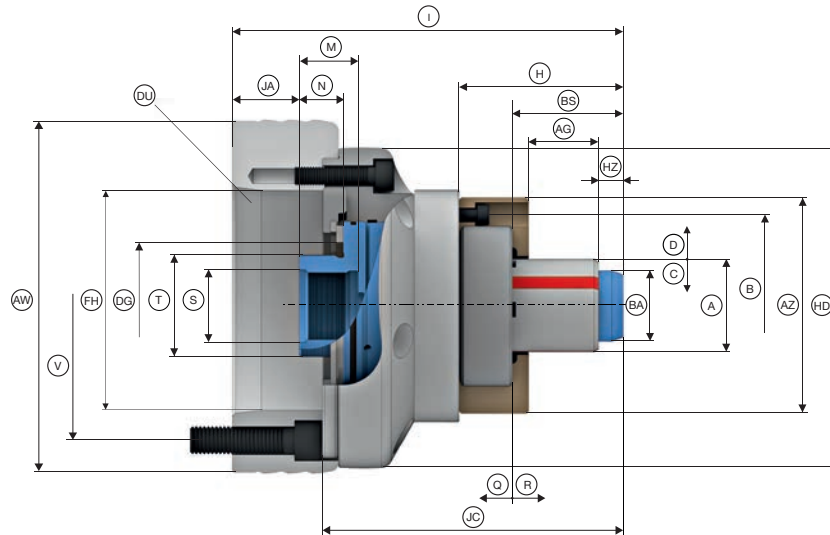


Size	C									
Clamping range [mm]	A	24 – 39								
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220	
Run-out ≤ [mm]		0,010								
Max. radial clamping force [kN]		51								
Max. axial drawtube force [pull / push] [kN]		16								
Max. clamping length [mm]	AG	24								
Reserve stroke in Ø [mm]	D	0,4								
Release stroke in Ø [mm]	C	0,26								
RPM n max. [1/min.]		7000								
Reserve stroke axial [mm]	Q	2								
Release stroke axial [mm]	R	2								
Max. actuating torque [Nm]	BC	15								
Draw bolt Ø [mm]	BA	23								
Draw bolt head height [mm]	HZ	11								
Reception workpiece end-stop	FD	Ø 41 f7								
End-stop outer Ø [mm]	AZ	69								
Bolt hole circle end-stop	B	LK Ø 55 [3 x M6]								
Length [mm]	H	53,5								
Length 2 [mm]	BS	40								
Length 3 [mm]	JC	110								
Total length [mm]	I	150		154		150				
Connecting thread inside	S	M30 x 1,5								
Connecting thread outside	T	M44 x 1,5								
Distance [mm]	JA	30		34		30				
Depth of thread [mm]	M	25,5								
Thread length [mm]	N	19								
Max. drawtube Ø [mm]	DG	54								
Minimum length of DG [mm]		13								
Bore-Ø	FH	61	79,6	103,2	100	77	80	103		
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	
Outer Ø [mm]	AW	140		165		140		150	180	230
Outer Ø 2 [mm]	HD	139								
Air sensing control bolt hole circle-Ø [mm]	HQ	64								
Air sensing control bore Ø [mm]	KN	3								
Central air sensing connection Ø optional [mm]		12 H7								
Weight [kg]		8,6	10,8	12,5	13,7	8,2	8,8	10,6	16,2	

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



MAXXOS T211 size D with flange. Technical data

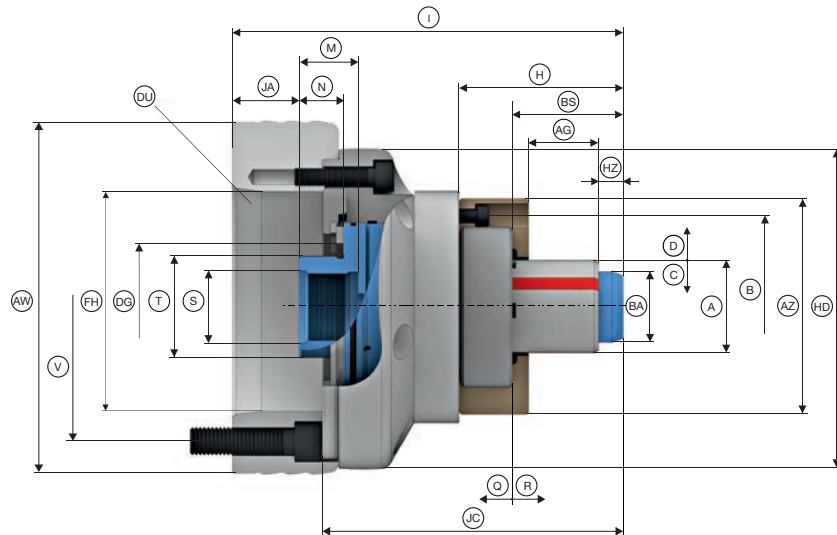


Size	D								
Clamping range [mm]	A	32 – 50							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		70							
Max. axial drawtube force [pull / push] [kN]		22							
Max. clamping length [mm]	AG	35,3							
Reserve stroke in Ø [mm]	D	0,4							
Release stroke in Ø [mm]	C	0,3							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2,5							
Max. actuating torque [Nm]	BC	20							
Draw bolt Ø [mm]	BA	31							
Draw bolt head height [mm]	HZ	11,2							
Reception workpiece end-stop	FD	Ø 50 f7							
End-stop outer Ø [mm]	AZ	93							
Bolt hole circle end-stop	B	LK Ø 78 [3 x M6]							
Length [mm]	H	71							
Length 2 [mm]	BS	51,5							
Length 3 [mm]	JC	130							
Total length [mm]	I	170		174		170			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	62,5							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	82							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,3	11,5	13,3	14,4	8,9	9,5	11,3	16,9

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



MAXXOS T211 size E with flange. Technical data

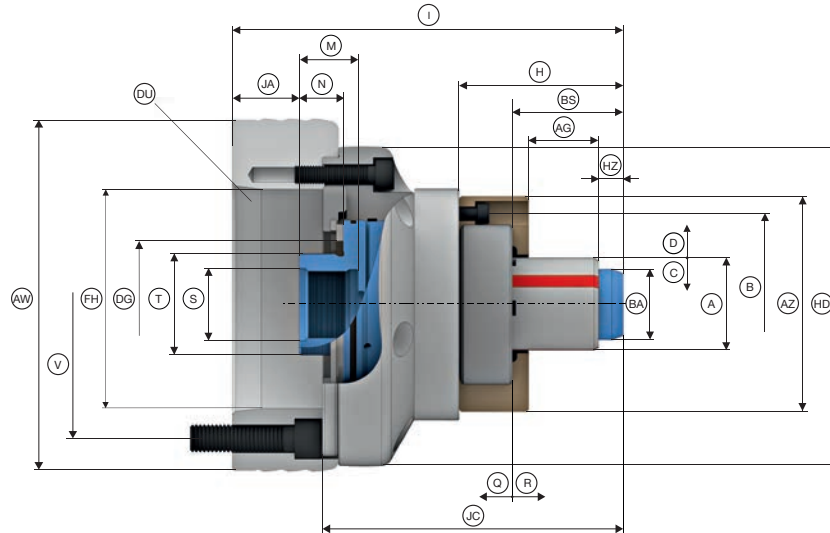


Size	E								
Clamping range [mm]	A	39 – 68							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		86							
Max. axial drawtube force [pull / push] [kN]		27							
Max. clamping length [mm]	AG	45,3							
Reserve stroke in Ø [mm]	D	0,4							
Release stroke in Ø [mm]	C	0,3							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2,5							
Max. actuating torque [Nm]	BC	25							
Draw bolt Ø [mm]	BA	38							
Draw bolt head height [mm]	HZ	11,2							
Reception workpiece end-stop	FD	Ø 65 f7							
End-stop outer Ø [mm]	AZ	96							
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]							
Length [mm]	H	78							
Length 2 [mm]	BS	61,5							
Length 3 [mm]	JC	140							
Total length [mm]	I	180		184		180			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	62,5							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165		210		140	150
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	84							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		9,9	12,1	13,9	15	9,5	10,1	11,9	17,5

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



MAXXOS T211 size F with flange. Technical data

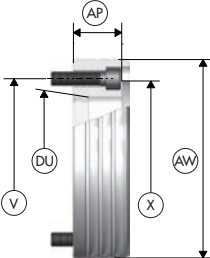
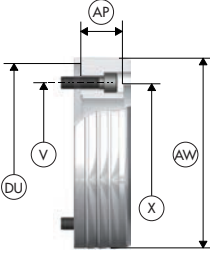


Size	F								
Clamping range [mm]	A	50 – 100							
Spindle nose	DU	A2-4	A2-5	A2-6	A2-8	AP120	AP140	AP170	AP220
Run-out ≤ [mm]		0,010							
Max. radial clamping force [kN]		143							
Max. axial drawtube force [pull / push] [kN]		45							
Max. clamping length [mm]	AG	45,3							
Reserve stroke in Ø [mm]	D	0,4							
Release stroke in Ø [mm]	C	0,3							
RPM n max. [1/min.]		7000							
Reserve stroke axial [mm]	Q	2							
Release stroke axial [mm]	R	2,5							
Max. actuating torque [Nm]	BC	55							
Draw bolt Ø [mm]	BA	49							
Draw bolt head height [mm]	HZ	11,7							
Reception workpiece end-stop	FD	Ø 65 f7							
End-stop outer Ø [mm]	AZ	96							
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]							
Length [mm]	H	78							
Length 2 [mm]	BS	62							
Length 3 [mm]	JC	140							
Total length [mm]	I	180		184		180			
Connecting thread inside	S	M30 x 1,5							
Connecting thread outside	T	M44 x 1,5							
Distance [mm]	JA	30		34		30			
Depth of thread [mm]	M	25,5							
Thread length [mm]	N	19							
Max. drawtube Ø [mm]	DG	62,5							
Minimum length of DG [mm]		13							
Bore-Ø	FH	61	79,6	103,2	100	77	80	103	
Bolt hole circle	V	LK Ø 82,6 [3 x M10]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]		LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Outer Ø [mm]	AW	140		165	210	140	150	180	230
Outer Ø 2 [mm]	HD	139							
Air sensing control bolt hole circle-Ø [mm]	HQ	84							
Air sensing control bore Ø [mm]	KN	3							
Central air sensing connection Ø optional [mm]		12 H7							
Weight [kg]		10,2	12,4	14,2	15,3	9,8	10,4	12,2	17,8

Segmented clamping bushings Page 384	Flanges Page 196	Actuating units Page 235	Accessory overview Page 396



Flanges for MAXXOS mandrels

Size	Figure	Spindle nose DU	Flange height [mm] AP	Interface X	Outer Ø [mm] AW	Bolt hole circle V	In stock	Order no.
A – F		A2-4	40	Ø 131	140	LK Ø 82,6 [3 x M10]	✓	2099/0003
		A2-5				LK Ø 104,8 [6 x M10]	✓	2099/0002
		A2-6			165	LK Ø 133,4 [6 x M12]	✓	2099/0001
		A2-8	44		210	LK Ø 171,4 [6 x M16]	✓	2099/0004
		AP120	40		140	LK Ø 104,8 [6 x M10]	✓	2099/0005
		AP140			150		✓	2099/0006
		AP170			180	LK Ø 133,4 [6 x M12]	✓	2099/0007
		AP220			230	LK Ø 171,4 [6 x M16]	✓	2099/0008

Machine spindle standard DIN 55026.

MANDRELS

Machine-specific mandrels



Machine-specific mandrels

Standard or machine specific, which mandrel fits?

In 90 % of all cases, you will find what you are looking for with our standard mandrels, that fit for the following brands, such as:

- Biglia
- Daewoo
- Doosan
- Emco
- Gildemeister
- MAG Boehringer
- MAG Hessapp
- Mazak
- Miyano
- Monforts
- Mori Seiki
- Nakamura
- Okuma
- Scherer
- Spinner
- Takamaz
- Weiler
- Weisser
- and other machine manufacturers

For certain lathes we have designed special mandrels that take the connection or other equipment features of the respective machine into account. You will find a selection to the right, such as:

- LEHMANN rotary indexing tables

Of course, we still have much more in the product line. Simply ask us about it.

LEHMANN

MANDO T211 mandrel for pl Lehmann rotary indexing tables. Pull-back / with draw bolt

Size	Type	Segmented clamping bushings	Spindle nose	In stock	Order no.
0	510	sb100r	HSK63	-	10914/0001
1	520	sb210r	A2-5	-	10914/0002
2	520	sb120r	A2-5	-	10914/0003
3	530	sb130r	A2-8	-	10914/0004
4	530	sb140r	A2-8	-	10914/0005

Incl. drawtube adapter and flange for direct assembly on the rotary indexing table.

MANDO T212 mandrel for pl Lehmann rotary indexing tables. Pull-back / without draw bolt

Size	Type	Segmented clamping bushings	Spindle nose	In stock	Order no.
XXS	507	sb2xxsr	HSK63	-	10915/0001
XS	507	sb2xsr	HSK63	-	10915/0002
S	510	sb2sr	HSK63	-	10915/0003
0	510	sb200r	HSK63	-	10915/0004
1	520	sb210r	A2-5	-	10915/0005
2	520	sb220r	A2-5	-	10915/0006
3	530	sb230r	A2-8	-	10915/0007
4	530	sb240r	A2-8	-	10915/0008

Incl. drawtube adapter and flange for direct assembly on the rotary indexing table.

MANDO T812 mandrel for pl Lehmann rotary indexing tables. Deadlength / without draw bolt

Size	Type	Segmented clamping bushings	Spindle nose	In stock	Order no.
XXS	507	sb2xxsr	HSK63	-	10916/0001
XS	507	sb2xsr	HSK63	-	10916/0002
S	510	sb2sr	HSK63	-	10916/0003
0	510	sb200r	HSK63	-	10916/0004
1	520	sb210r	A2-5	-	10916/0005
2	530	sb220r	A2-6	-	10916/0006
3	530	sb230r	A2-8	-	10916/0007
4	530	sb240r	A2-8	-	10916/0008

Incl. drawtube adapter and flange for direct assembly on the rotary indexing table.

Overview

Find what's important fast



Stationary clamping devices

	Manual stationary chuck MANOK	204
	Manual stationary chuck MANOK plus	208
	Hydraulic stationary chuck HYDROK	218
	Mandrel actuating units ms dock / hs dock	228

PRODUCTS

Stationary clamping devices

Stationary standard clamping devices in overview

	MANOK	MANOK plus	HYDROK
			
Description	Manual stationary chuck	Manual stationary chuck with adaptation possibility	Hydraulic stationary chuck with adaptation possibility
Sizes	42, 52, 65, 80, 100	52, 65	SE 40, 65, 100 / RD 32, 42, 52, 65, 80, 100
Clamping range of all sizes [mm]	3 – 100	3 – 65	3 – 100
Variant	RD [round]	SE [hexagonal], RD [round]	SE [hexagonal], RD [round]
Advantages	■ Easy set-up ■ Sensitive manual clamping is possible ■ Ideal for 5-sided machining ■ Clamping is possible with workpiece end-stop or front end-stop	■ Also available in a CFRP light-weight design ■ Sensitive manual clamping is possible ■ Workpiece stabilization through axial draw force applied against the workpiece end-stop ■ Ideal for 5-sided machining	■ Ideal for automated clamping ■ Angular contour requires less space ■ Multiple clamping made possible in the smallest space ■ Ideal for 5-sided machining
Clamping elements	 Clamping head RD	 Clamping head SE  Clamping head RD	 Clamping head SE  Clamping head RD
Adaptations	 Magnet module RD [Adaptation for magnetic clamping]	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Magnet module SE / RD [Adaptation for magnetic clamping]	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Magnet module SE / RD [Adaptation for magnetic clamping]
	 Page 204	 Page 208	 Page 218

PRODUCTS

Stationary clamping devices

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements /
Accessories

Multi spindles

Actuating unit ms dock and hs dock



Actuating unit for stationary
mandrel clamping

XXS – 7 / A – F

8 – 200

Manual, hydraulic

- Mandrels can be used on machining center
- ms dock rotating for lathes without clamping cylinder
- Manual / hydraulic mandrel actuation
- Ideal for 5-sided machining



MANDO T211
[Mandrel with draw bolt]



MANDO T212
[Mandrel without draw bolt]



MANDO T812
[Deadlength mandrel without draw bolt]



MANDO G211
[Mandrel for gear cutting,
for example with draw bolt]



MAXXOS T211
[Mandrel for the utmost
accuracy, with draw bolt]


Page 228



MANOK

Small but powerful



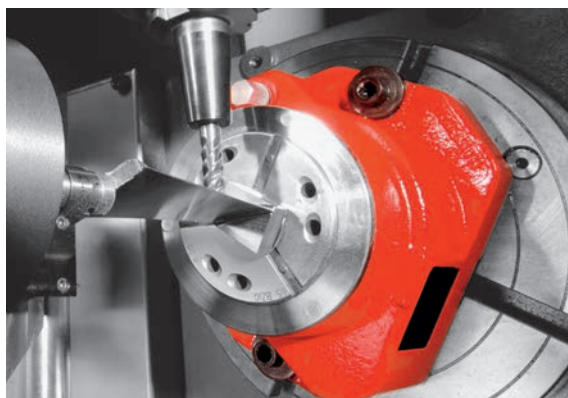


STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK

It isn't just the price-performance ratio of MANOK that is impressive. With its incredible holding power, precision and rigidity, MANOK has already surprised many users who never would have imagined that this kind of quality could be found in a manual clamping device. In addition, you can also mount an end-stop to the MANOK in no time at all: Simply fasten the inside end-stop directly onto your machine tool table or mount a front end-stop on the face of the clamping taper. That's it!

MANOK is not only practical and economical, but it is also extremely versatile. For instance, the integrated actuation lever makes this possible by functioning as an additional force accumulator and acts as an anti-vibration device during milling.



Key advantages

- Easy set-up
- Sensitive manual clamping is possible
- Ideal for 5-sided machining
- Clamping is possible with workpiece end-stop or front end-stop
- Absolute versatile implementation on machining centers, measuring machines, slotters, broaching machines, drilling machines, laser marking machines etc.
- Workpiece stabilization through axial draw force applied against the workpiece end-stop

MANOK manual stationary chuck in use.
Photo: OEM Berthold Hermle AG

STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK



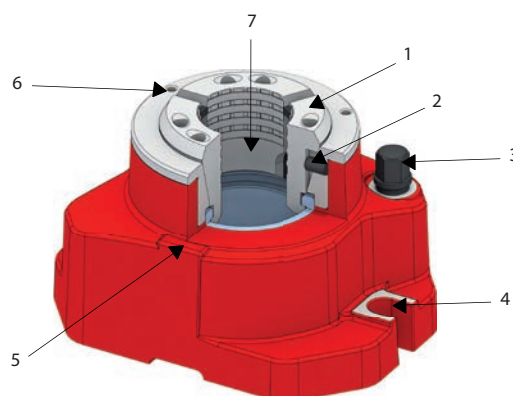
Clamping head change-over [approx. 10 sec.]



Manual stationary chuck MANOK in detail

Designation

- 1 Clamping head with hardened steel segments joined in a vulcanization process
- 2 Torsional safety lock of the clamping head
- 3 Manual actuation via hexagonal nut
- 4 Mounting groove
- 5 Supporting surface for additional holding clamps
- 6 Reception for front end-stop
- 7 Full passage available

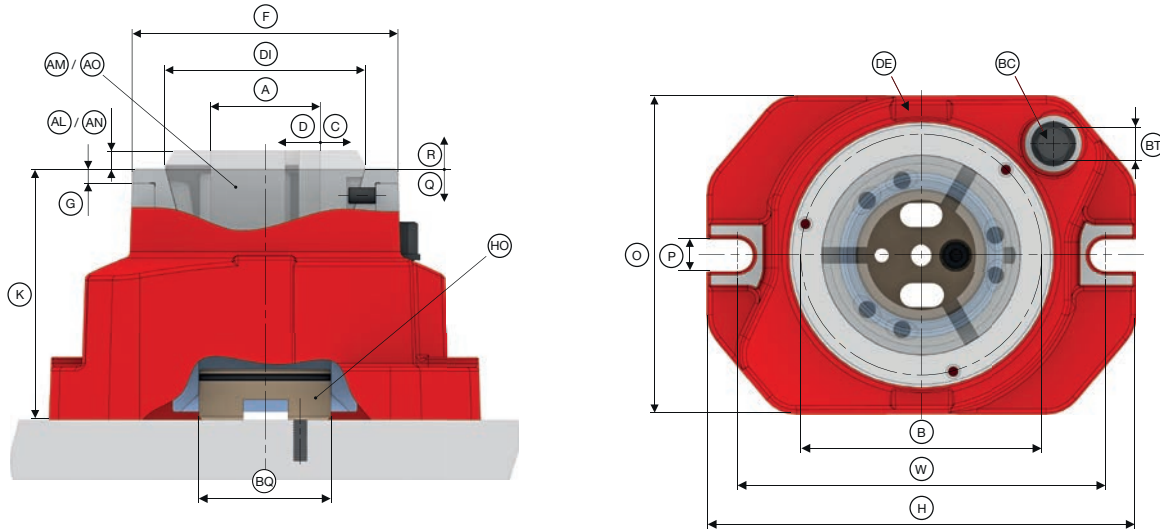




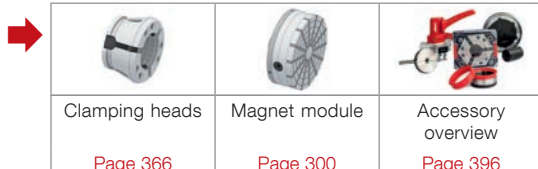
STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK

Manual stationary chuck MANOK. Technical data and order overview



Size		42	52	65	80	100
Clamping range [mm]	A	3 – 42	3 – 52	3 – 65	4 – 80	15 – 100
Repeatability [mm]				0,010		
Max. radial clamping force [kN]		80	90	105	115	150
Max. axial drawtube force [pull / push] [kN]		35	40	45	50	65
Max. actuating torque [Nm]	BC	50	60	70	75	80
Bolt hole distance [mm]	W		184			236
Release stroke in Ø [mm]	C			0,6		2
Reserve stroke in Ø [mm]	D			1		1,5
Reserve stroke axial [mm]	Q			2		3
Release stroke axial [mm]	R		2,5		5	
Location front end-stop	F		Ø 132 f7		Ø 178 f7	
Centering length [mm]	G		7		11,5	
Bolt hole circle end-stop	B		LK Ø 120 [3 x M6]		LK Ø 165 [3 x M6]	
Ø Capacity [mm]	BQ	56		66	80,5	102
Length [mm]	H		214		264	
Overall height [mm]	K		124		140	
Width [mm]	O		159		210	
Screw connection width [mm]	P		16		16,6	
Clamping edge height [mm]	DE		81		93	
Wrench size [SW]	BT			17		
Head Ø [mm]	DI		80	99,5	115	144,5
Clamping head serrated	AM	SK 42 BZI	SK 52 BZI	SK 65 BZI	SK 80 BZI	SK 100 BZ
Clamping head protrusion length serrated [mm]	AL	9	4	9	4	0
Clamping head smooth	AO	SK 42 BZIG	SK 52 BZIG	SK 65 BZIG	SK 80 BZIG	SK 100 BZG
Clamping head protrusion length smooth [mm]	AN			4		0
Workpiece end-stop	HO			available as accessory		
Weight [kg]		14,3	14,1	12,9	22,3	21,6
In stock		✓	✓	✓	✓	✓
Order no.		1201/0007	1201/0006	1201/0005	1201/0010	1201/0002



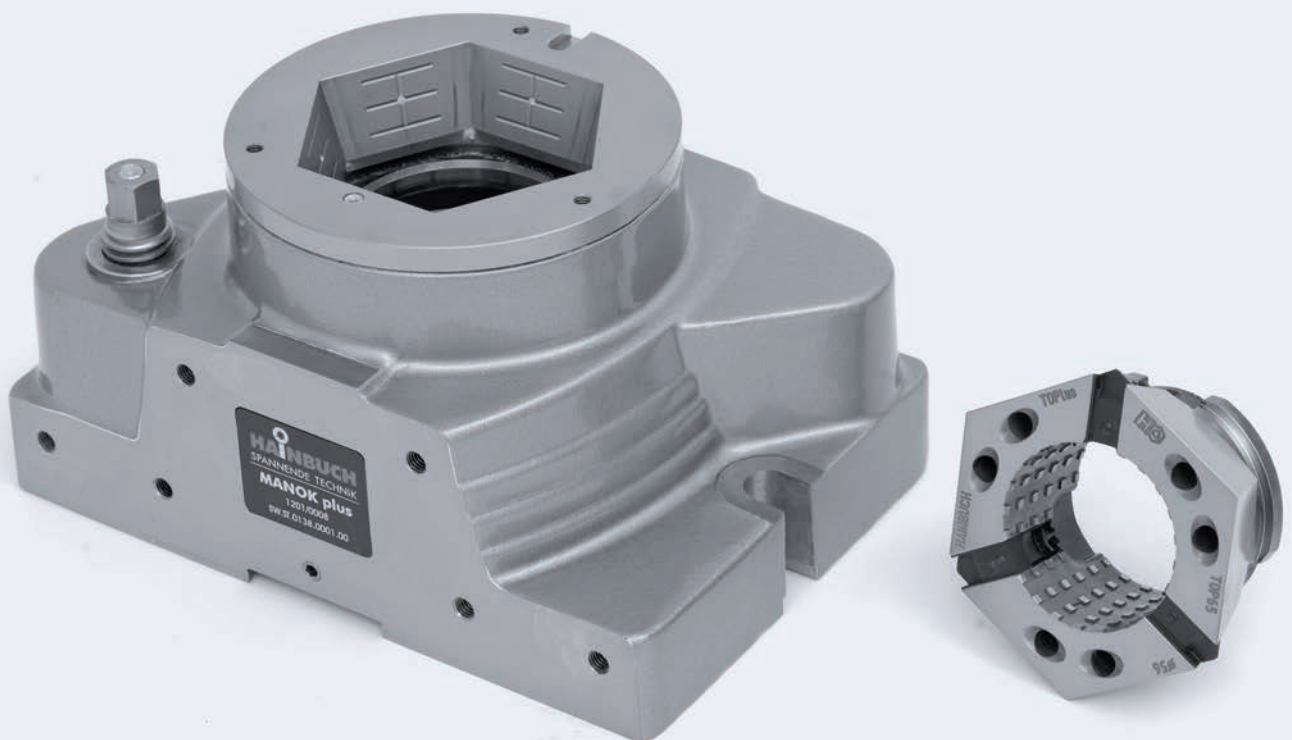
Scope of delivery

- Stationary chuck
- Actuation tool



MANOK plus

Incredibly versatile





STATIONARY CLAMPING DEVICES

Manual stationary chuck **MANOK plus**

MANOK plus, the extended variant of our manual MANOK stationary chuck differs through use of adaptation elements. For example, many more clamping possibilities are available to you in combination with the MANDO Adapt mandrel-in-chuck or the jaw module for even larger clamping diameters.

And most recent: Due to the optional lightweight CFRP design, with the MANOK plus CFK you can save half of the weight. The lightweighters are easy to set-up and particularly well-suited for milling machines and machining centers with small load weights. Plus they protect machine components, which ultimately helps the machine accuracy. When loading manually or with a handling system, often the only possible solution is a lightweight stationary chuck.



Key advantages

- Also available in a CFRP lightweight design
- Sensitive manual clamping is possible
- Workpiece stabilization through axial draw force applied against the workpiece end-stop
- Ideal for 5-sided machining
- Adaptation devices possible [modular system]

MANOK plus manual stationary chuck in use

STATIONARY CLAMPING DEVICES

Manual stationary chuck **MANOK plus**



MANOK plus at a glance

	MANOK plus CFK	MANOK plus
		
Description	Hand-actuated lightweight clamping device	Manual stationary chuck
Variant	SE [hexagonal] / RD [round]	SE [hexagonal] / RD [round]
Advantages	■ Made of carbon fiber ■ As much as 60 % lighter than the standard model	■ Lateral set-up on optional baseplate is possible
Clamping elements	 Clamping head SE  Clamping head RD	 Clamping head SE  Clamping head RD
Adaptations	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Magnet module SE / RD [Adaptation for magnetic clamping]	 MANDO Adapt T211 SE / RD [Mandrel-in-clamping-device, with draw bolt]  MANDO Adapt T212 SE / RD [Mandrel-in-clamping-device, without draw bolt]  Jaw module SE / RD [Adaptation for jaw clamping]  Magnet module SE / RD [Adaptation for magnetic clamping]

Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T211 [approx. 1 min.]





STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus

Change-over to mandrel adaptation T212 [approx. 1 min.]



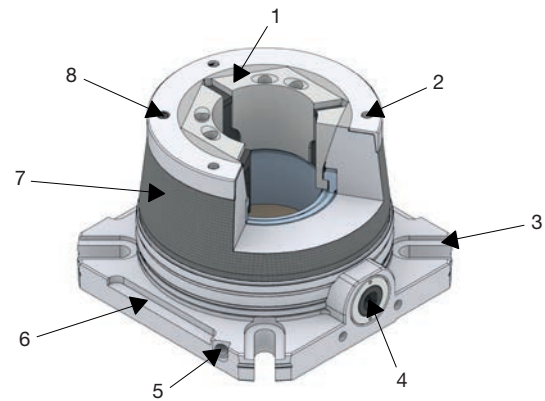
Change-over to jaw module [approx. 2 min.]



Manual stationary chuck MANOK plus CFK SE in detail

Designation

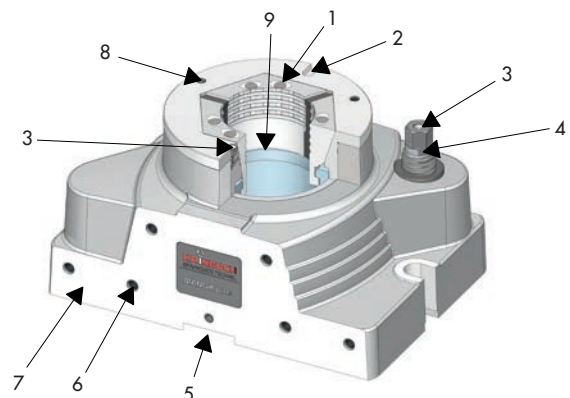
- 1 Clamping head with hexagonal geometry for optimal chuck seal and greater clamping force
- 2 Reception for front end-stop
- 3 Mounting groove
- 4 Manual actuation
- 5 Clamping screw for base end-stop
- 6 Supporting surface for additional holding clamps
- 7 Chuck body made of carbon fiber
- 8 Grease nipple



Manual stationary chuck MANOK plus SE in detail

Designation

- 1 Clamping head with hexagonal geometry for optimal chuck seal and greater clamping force
- 2 Reception for front end-stop with guide groove for radial alignment
- 3 Central grease nipple, optimal draw-in force due to perfect lubrication
- 4 Manual actuation via hexagonal nut
- 5 Guide groove for table alignment
- 6 Thread for mounting end-stops or for horizontal clamping set-up
- 7 Ground surface for horizontal set-up
- 8 Reception for front end-stop
- 9 Full passage after removal of the base end-stop that is accessible from the outside



STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus



Order overview.

Manual stationary chuck MANOK plus CFK SE / RD

				Clamping elements and adaptations				
Product line	Size	Order no.	In stock					
SE	52	10567/0002	✓	✓	✓	✓		✓
	65	10567/0003	✓	✓	✓	✓	✓	✓
Product line	Size	Order no.	In stock	Clamping head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	Jaw module RD	Magnet module RD
				Page 366	Page 260	Page 266	Page 286	Page 300
RD	52	10565/0002	✓	✓	✓	✓		✓
	65	10565/0003	✓	✓	✓	✓	✓	✓

Detailed technical data follows.

Order overview.

Manual stationary chuck MANOK plus SE / RD

				Clamping elements and adaptations				
Product line	Size	Order no.	In stock					
SE	65	1201/0009	✓	✓	✓	✓	✓	✓
Product line	Size	Order no.	In stock	Clamping head RD	MANDO Adapt T211 RD	MANDO Adapt T212 RD	Jaw module RD	Magnet module RD
				Page 366	Page 260	Page 266	Page 286	Page 300
RD	65	1201/0008	✓	✓	✓	✓	✓	✓

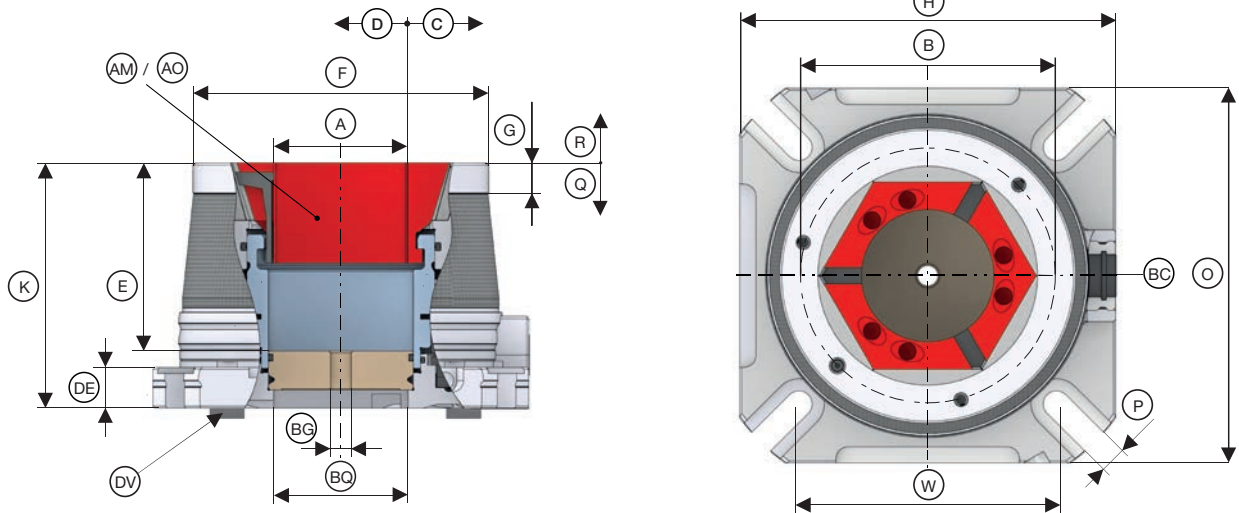
Detailed technical data follows.



STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus

Manual stationary chuck MANOK plus CFK SE. Technical data



Product line		SE	
Size		52	65
Clamping range [mm]	A	3 – 52	3 – 65
Repeatability [mm]		0,010	
Max. radial clamping force [kN]		108	120
Max. axial drawtube force [pull / push] [kN]		40	45
Max. actuating torque [Nm]	BC	75	90
Release stroke in Ø [mm]	C	0,6	
Reserve stroke in Ø [mm]	D	1	
Reserve stroke axial [mm]	Q	2	
Release stroke axial [mm]	R	2,5	
Location front end-stop	F	Ø 125 f7	Ø 145 f7
Centering length [mm]	G	15	
Bolt hole circle end-stop	B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]
End-stop depth [mm]	E	90	92
End-stop thread size [M]	BG	10	12
Ø Capacity [mm]	BQ	53	66
Length [mm]	H	161	184
Overall height [mm]	K	115	120
Width [mm]	O	161	184
Screw connection width [mm]	P	13	
Clamping edge height [mm]	DE	15	
Bolt hole distance [mm]	W	120	126
Groove seat	DV	14 H7	20 H7
Clamping head serrated	AM	TOP 52	TOP 65
Clamping head smooth	AO	TOP 52 G	TOP 65 G
Weight [kg]		7	10,3
In stock		✓	✓
Order no.		10567/0002	10567/0003



Clamping heads Page 358	Adaptations I.D. clamping Page 240	Adaptations jaw clamping Page 286	Magnet module Page 300	Accessory overview Page 396

Scope of delivery

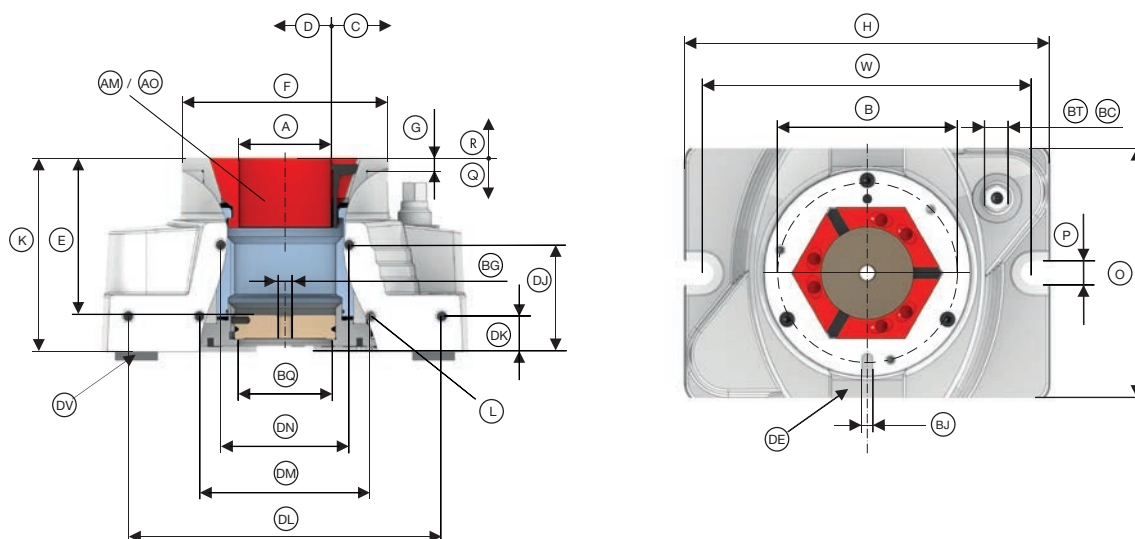
- Stationary chuck
- Base end-stop
- Actuation tool

STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus



Manual stationary chuck MANOK plus SE. Technical data



Product line		SE
Size		65
Clamping range [mm]	A	3 – 65
Repeatability [mm]		0,010
Max. radial clamping force [kN]		120
Max. axial drawtube force [pull / push] [kN]		45
Max. actuating torque [Nm]	BC	100
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5
Location front end-stop	F	Ø 145 f7
Centering length [mm]	G	9
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]
Groove width [mm]	BJ	8 H7
End-stop depth [mm]	E	110
End-stop thread size [M]	BG	12
Ø Capacity [mm]	BQ	65
Length [mm]	H	257
Overall height [mm]	K	136
Width [mm]	O	175
Screw connection width [mm]	P	17
Clamping edge height [mm]	DE	95
Thread size [M]	L	8
Screw-on height 1 [mm]	DJ	75
Screw-on height 2 [mm]	DK	25
Screw connection spacing 1 [mm]	DL	220
Screw connection spacing 2 [mm]	DM	120
Screw connection spacing 3 [mm]	DN	90
Bolt hole distance [mm]	W	232
Groove seat	DV	20 H7
Wrench size [SW]	BT	17
Clamping head serrated	AM	TOP 65
Clamping head smooth	AO	TOP 65 G
Weight [kg]		23,5
In stock		✓
Order no.		1201/0009



				
Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Magnet module	Accessory overview
Page 358	Page 240	Page 286	Page 300	Page 396

Scope of delivery

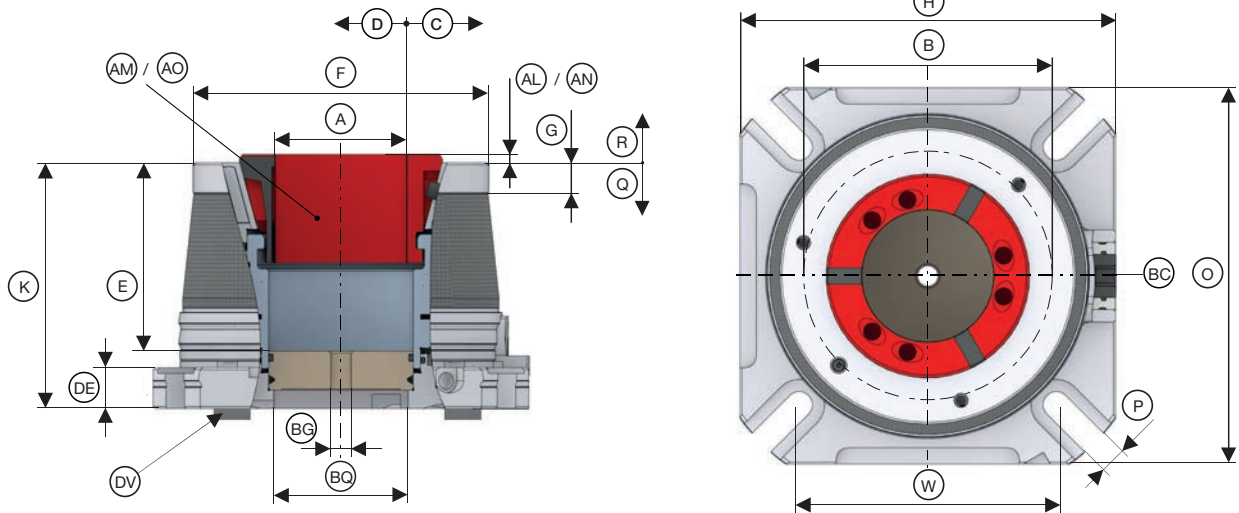
- Stationary chuck
- Base end-stop
- Actuation tool



STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus

Manual stationary chuck MANOK plus CFK RD. Technical data



Product line	RD	
Size	52	65
Clamping range [mm]	A 3 – 52	3 – 65
Repeatability [mm]	0,010	
Max. radial clamping force [kN]	94	105
Max. axial drawtube force [pull / push] [kN]	40	45
Max. actuating torque [Nm]	BC 75	90
Release stroke in Ø [mm]	C 0,6	
Reserve stroke in Ø [mm]	D 1	
Reserve stroke axial [mm]	Q 2	
Release stroke axial [mm]	R 2,5	
Location front end-stop	F Ø 125 f7	Ø 145 f7
Centering length [mm]	G 15	
Bolt hole circle end-stop	B LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]
End-stop depth [mm]	E 90	92
End-stop thread size [M]	BG 10	12
Ø Capacity [mm]	BQ 53	66
Length [mm]	H 161	184
Overall height [mm]	K 115	120
Width [mm]	O 161	184
Screw connection width [mm]	P 13	
Clamping edge height [mm]	DE 15	
Bolt hole distance [mm]	W 120	126
Groove seat	DV 14 H7	20 H7
Clamping head serrated	AM SK 52 BZI	
Clamping head protrusion length serrated [mm]	AL 4	9
Clamping head smooth	AO SK 52 BZIG	SK 65 BZIG
Clamping head protrusion length smooth [mm]	AN 4	
Weight [kg]	7	10,3
In stock	✓	✓
Order no.	10565/0002	10565/0003



Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Magnet module	Accessory overview
Page 366	Page 240	Page 286	Page 300	Page 396

Scope of delivery

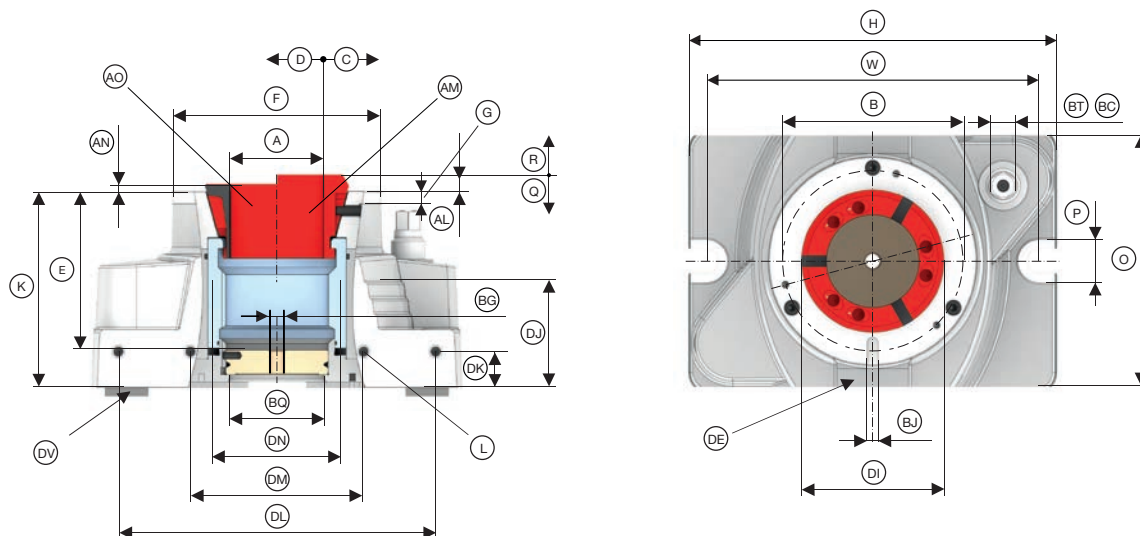
- Stationary chuck
- Base end-stop
- Actuation tool

STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus



Manual stationary chuck MANOK plus RD. Technical data



Product line		RD
Size		65
Clamping range [mm]	A	3 – 65
Repeatability [mm]		0,010
Max. radial clamping force [kN]		105
Max. axial drawtube force [pull / push] [kN]		45
Max. actuating torque [Nm]	BC	100
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Reserve stroke axial [mm]	Q	2
Release stroke axial [mm]	R	2,5
Location front end-stop	F	Ø 145 f7
Centering length [mm]	G	9
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]
Groove width [mm]	BJ	8 H7
End-stop depth [mm]	E	110
End-stop thread size [M]	BG	12
Ø Capacity [mm]	BQ	65
Length [mm]	H	257
Overall height [mm]	K	136
Width [mm]	O	175
Screw connection width [mm]	P	17
Clamping edge height [mm]	DE	96
Thread size [M]	L	8
Screw-on height 1 [mm]	DJ	75
Screw-on height 2 [mm]	DK	25
Screw connection spacing 1 [mm]	DL	220
Screw connection spacing 2 [mm]	DM	120
Screw connection spacing 3 [mm]	DN	90
Bolt hole distance [mm]	W	232
Groove seat	DV	20 H7
Wrench size [SW]	BT	17
Head Ø [mm]	DI	99,5
Clamping head serrated	AM	SK 65 BZI
Clamping head protrusion length serrated [mm]	AL	9
Clamping head smooth	AO	SK 65 BZIG
Clamping head protrusion length smooth [mm]	AN	4
Weight [kg]		23,5
In stock		✓
Order no.		1201/0008



Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Magnet module	Accessory overview
Page 366	Page 240	Page 286	Page 300	Page 396

Scope of delivery

- Stationary chuck
- Base end-stop
- Actuation tool

STATIONARY CLAMPING DEVICES

Manual stationary chuck MANOK plus

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements /
Accessories

Multi spindles



HYDROK

Convincing in performance





STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck **HYDROK**

5-axis machining or rational multiple clamping – with HYDROK we offer a hydraulically actuated stationary chuck that provides even more implementation possibilities. Depending on size – you can use it with all clamping device adaptations, such as the MANDO Adapt mandrel-in-clamping device or with the jaw module. So you can completely rely on the intelligent HAINBUCH modular system, even for your stationary clamping device.

The smallest of the group: HYDROK 40 SE and 32 RD. Their modular base plates can be easily fitted together and enable multiple clampings with incredible holding forces in the most confined spaces. And with an additional tandem cylinder you can even generate the full clamping force with a weaker hydraulic unit.



Key advantages

- Ideal for automated clamping
- Angular contour requires less space
- Multiple clamping made possible in the smallest space
- Ideal for 5-sided machining
- Clamping is possible with workpiece end-stop or front end-stop
- Adaptation devices possible [modular system]

HYDROK hydraulic stationary chuck in use

STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK



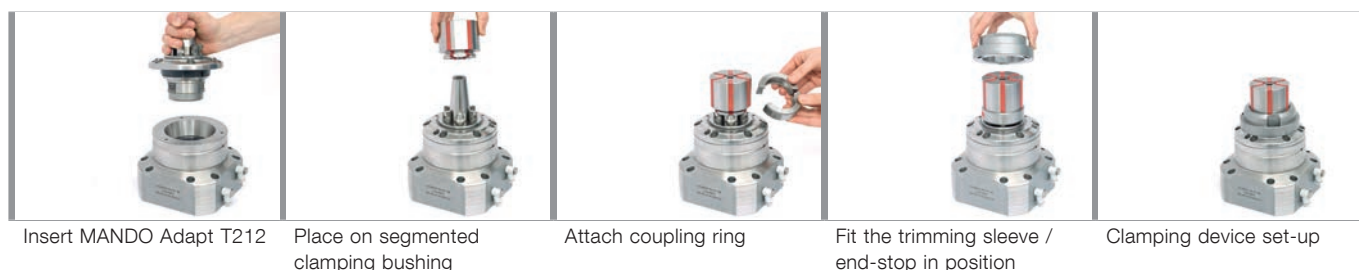
Clamping head change-over [approx. 10 sec.]



Change-over to mandrel adaptation T211 [approx. 1 min.]



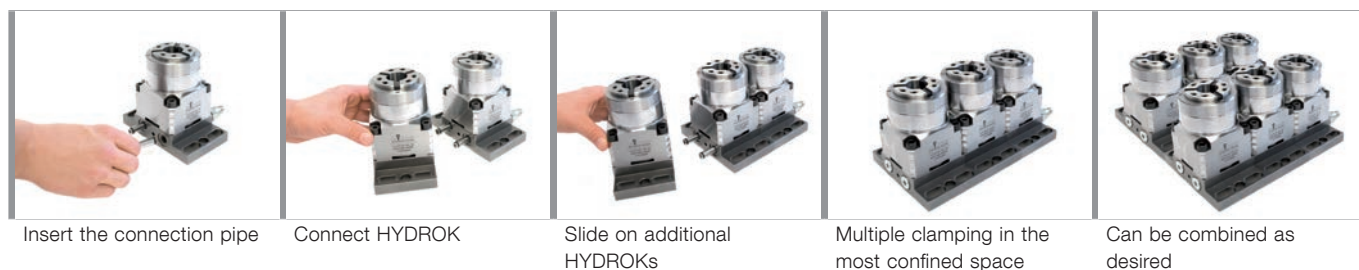
Change-over to mandrel adaptation T212 [approx. 1 min.]



Change-over to jaw module [approx. 2 min.]



Multiple clamping with HYDROK 32 RD [HYDROK 40 SE is similar]





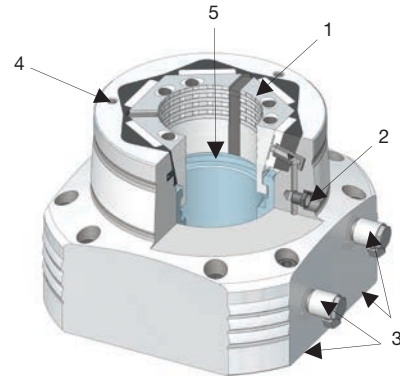
STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK

HYDROK SE in detail

Designation

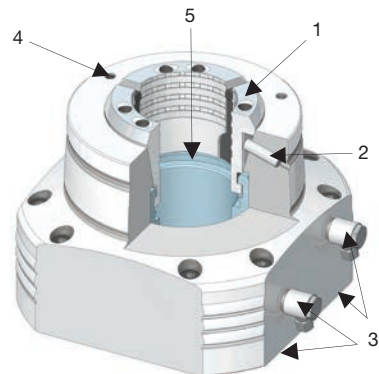
- 1 Clamping head with hexagonal geometry for optimal chuck seal and greater clamping force
- 2 Central grease nipple, optimum tool life and holding power due to perfect lubrication
- 3 Side and/or bottom hydraulic connections available
- 4 Reception for front end-stop
- 5 Full passage available



HYDROK RD in detail

Designation

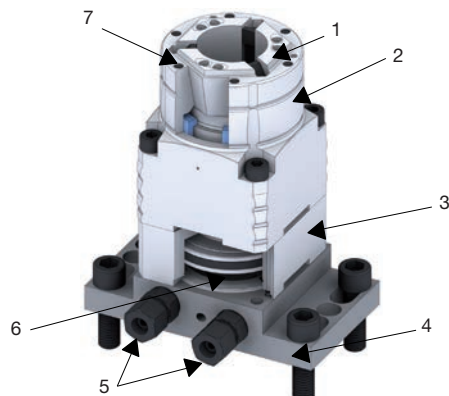
- 1 Clamping head with hardened steel segments joined in a vulcanization process
- 2 Torsional safety lock of the clamping head
- 3 Side and/or bottom hydraulic connections available
- 4 Reception for front end-stop
- 5 Full passage available



HYDROK SE size 40 in detail

Designation

- 1 Clamping head with hexagonal geometry for optimal chuck seal and greater clamping force
- 2 HYDROK SE 40
- 3 Tandem cylinder, insert at low actuation pressure [optional]
- 4 Modular base plate, several adaptation possibilities for multiple clamping [optional]
- 5 Hydraulic connections
- 6 Location for depth end-stop
- 7 Reception for front end-stop



Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK



HYDROK RD size 32 in detail

Designation	
1 Clamping head with hardened steel segments joined in a vulcanization process 2 HYDROK RD 32 3 Tandem cylinder, insert at low actuation pressure [optional] 4 Modular base plate, several adaptation possibilities for multiple clamping [optional] 5 Hydraulic connections 6 Location for depth end-stop 7 Torsional safety lock of the clamping head 8 Reception for front end-stop	

Order overview. Hydraulic stationary chuck HYDROK SE

				Clamping elements and adaptations				
Product line	Size	Order no.	In stock	 Clamping head SE Page 358	 MANDO Adapt T211 SE Page 244	 MANDO Adapt T212 SE Page 250	 Jaw module SE Page 286	 Magnet module SE Page 300
SE	40	1121/0031	✓	✓				
	52	1121/0030	✓	✓	✓	✓		✓
	65	1121/0002	✓	✓	✓	✓	✓	✓
	100	1121/0008	✓	✓	✓	✓	✓	✓

Detailed technical data follows.

Order overview. Hydraulic stationary chuck HYDROK RD

				Clamping elements and adaptations				
Product line	Size	Order no.	In stock	 Clamping head RD Page 366	 MANDO Adapt T211 RD Page 260	 MANDO Adapt T212 RD Page 266	 Jaw module RD Page 286	 Magnet module RD Page 300
RD	32	1121/0029	✓	✓				
	42	1121/0003	✓	✓	✓	✓		
	52	1121/0004	✓	✓	✓	✓		✓
	65	1121/0001	✓	✓	✓	✓	✓	✓
	80	1121/0005	✓	✓	✓	✓	✓	✓
	100	1121/0006	✓	✓	✓	✓	✓	✓

Detailed technical data follows.

Scope of delivery

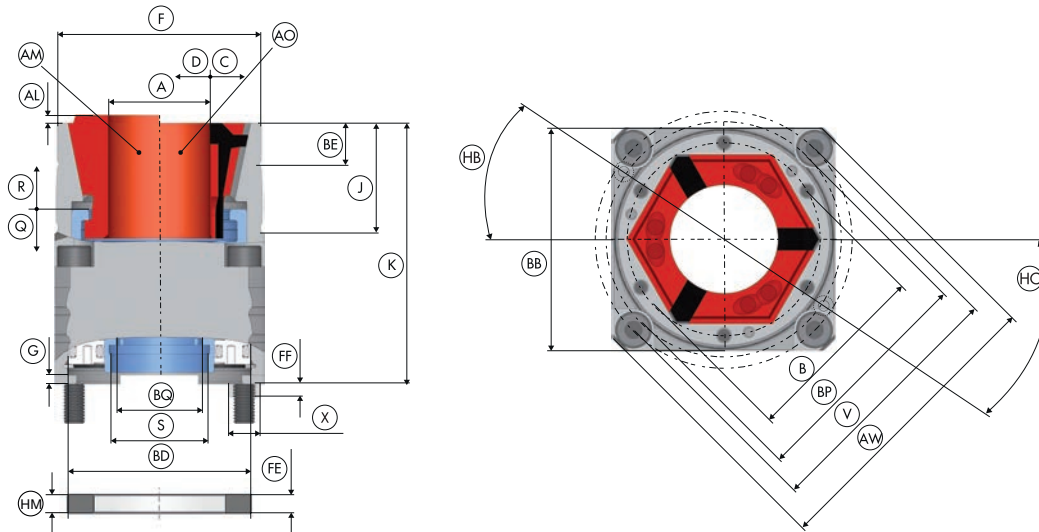
- Stationary chuck



STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK

HYDROK SE size 40. Technical data



Product line	SE
Size	40
Clamping range [mm]	A 3 – 40
Repeatability [mm]	0,010
Max. axial drawtube force [pull / push] [kN]	27
Max. radial clamping force [kN]	75
Max. actuating pressure [bar]	110
Release stroke in Ø [mm]	C 0,5
Reserve stroke in Ø [mm]	D 0,8
Reserve stroke axial [mm]	Q 2
Release stroke axial [mm]	R 2
Location front end-stop	F Ø 78 f7
Length flange location [mm]	BE 14
Bolt hole circle end-stop	B LK Ø 69 [3 x M4]
Ø Capacity [mm]	BQ 33
Height [mm]	J 42,5
Overall height [mm]	K 100
Outer variant [mm]	BB 79,8
Connecting position [mm]	BP 82
Outer Ø [mm]	AW 106 h7
Bolt hole circle	V LK Ø 92 [4 x M8]
Clamping via base plate [°]	HB 33
Release via base plate [°]	HC 33
Clamping head serrated	AM TOP 40
Clamping head protrusion length serrated [mm]	AL 3
Clamping head smooth	AO TOP 40 G
Centering height 1 [mm]	FE 7
Centering height 2 [mm]	FF 5
Interface	X Ø 12 H7
Flange location	BD Ø 70 H7/g7
Connecting thread inside	S M38 x 1
Centering length [mm]	G 5
Installation depth [mm]	HM 5 +0,05
Weight [kg]	2,79
In stock	✓
Order no.	1121/0031

Through adaptation of the tandem cylinder to HYDROK 40 SE, the maximum clamping force of 75 kN can be achieved, even at 43 bar.

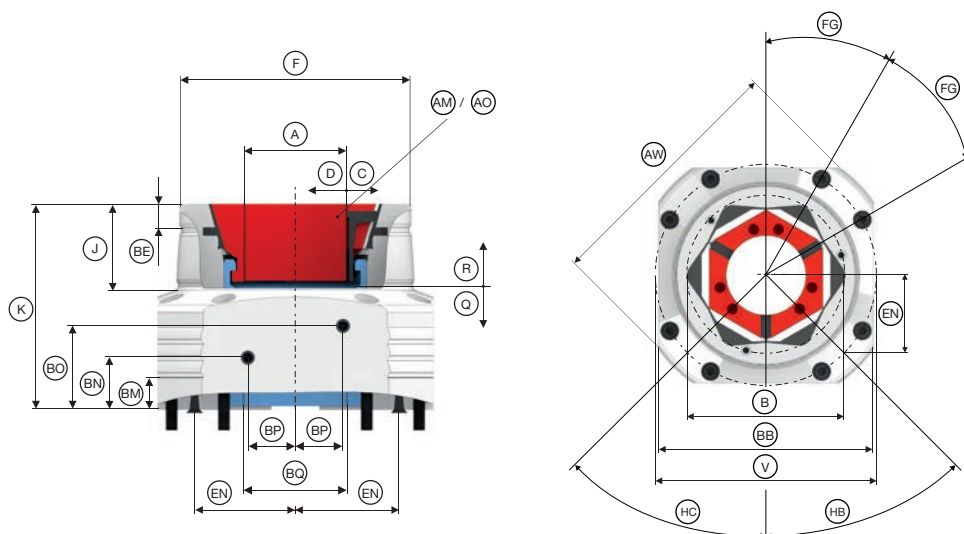


STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK



HYDROK SE size 52 - 100. Technical data



Product line		SE		
Size		52	65	100
Clamping range [mm]	A	3 – 52	3 – 65	15 – 100
Repeatability [mm]			0,010	
Max. axial drawtube force [pull / push] [kN]		35	45	65
Max. radial clamping force [kN]		91	120	172
Max. actuating pressure [bar]			40	
Release stroke in Ø [mm]	C		0,6	2
Reserve stroke in Ø [mm]	D		1	1,5
Reserve stroke axial [mm]	Q	2	2,15	3
Release stroke axial [mm]	R		2,5	5
Location front end-stop	F	Ø 125 f7	Ø 145 f7	Ø 215 f7
Length flange location [mm]	BE	9,5	12,5	15,5
Bolt hole circle end-stop	B	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 180 [3 x M8]
Ø Capacity [mm]	BQ	53	66	108
Height [mm]	J	39,6	54	55
Overall height [mm]	K	120	130	140
Outer variant [mm]	BB	154	174	230
Release	BN	38,1 [1/8"]	33,00 [1/8"]	38,9 [1/8"]
Clamping	BO	57,2 [1/8"]	53,00 [1/8"]	63 [1/8"]
Connecting position [mm]	BP	25		30
Fluid connection 1 [mm]	EN	55,5	63,6	84,9
Outer Ø [mm]	AW	175 f6	210 f6	270 f6
Bolt hole circle	V	LK Ø 157 [8 x M8]	LK Ø 180 [8 x M8]	LK Ø 240 [8 x M8]
Mounting seat fit length [mm]	BM		20	
Angle position [°]	FG		30	
Clamping via base plate [°]	HB		45	
Release via base plate [°]	HC		45	
Clamping head serrated	AM	TOP 52	TOP 65	TOP 100
Clamping head smooth	AO	TOP 52 G	TOP 65 G	TOP 100 G
Weight [kg]		12	14,5	26
In stock		✓	✓	✓
Order no.		1121/0030	1121/0002	1121/0008

Please note: At adaptation size 52 the adaptation for jaw clamping cannot be used.

Size 100 is also available in lightweight design [14 kg].

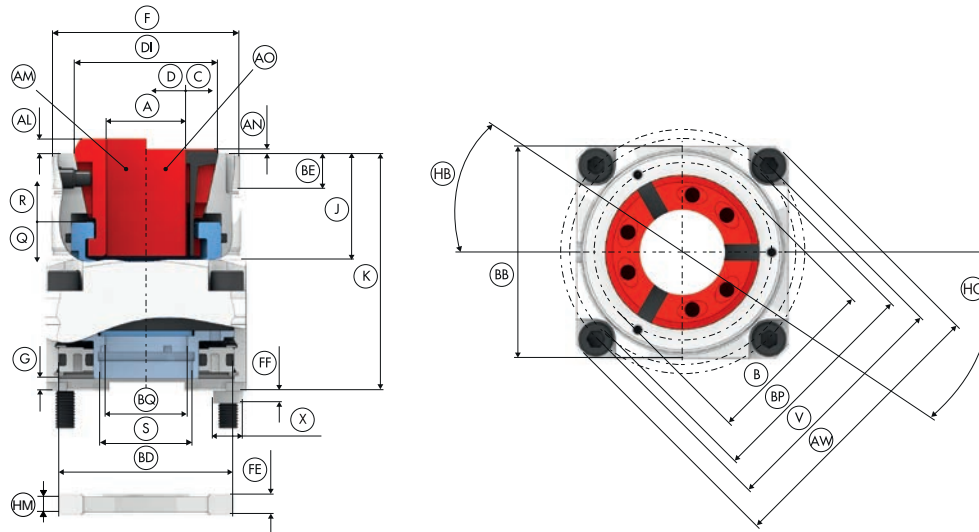
Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Magnet module	Accessory overview
Page 358	Page 240	Page 286	Page 300	Page 396



STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK

HYDROK RD size 32. Technical data



Product line		RD
Size		32
Clamping range [mm]	A	3 – 32
Repeatability [mm]		0,010
Max. axial drawtube force [pull / push] [kN]		25
Max. radial clamping force [kN]		70
Max. actuating pressure [bar]		100
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	1
Reserve stroke axial [mm]	Q	2,5
Release stroke axial [mm]	R	3
Location front end-stop	F	Ø 75 f7
Length flange location [mm]	BE	15
Bolt hole circle end-stop	B	LK Ø 67 [3 x M4]
Ø Capacity [mm]	BQ	33
Height [mm]	J	42
Overall height [mm]	K	95
Outer variant [mm]	BB	79,8
Connecting position [mm]	BP	82
Outer Ø [mm]	AW	106 h7
Bolt hole circle	V	LK Ø 92 [4 x M8]
Clamping via base plate [°]	HB	33
Release via base plate [°]	HC	33
Head Ø [mm]	DI	58
Clamping head serrated	AM	SK 32 BZI
Clamping head protrusion length serrated [mm]	AL	6
Clamping head smooth	AO	SK 32 BZIG
Clamping head protrusion length smooth [mm]	AN	3
Centering height 1 [mm]	FE	7
Centering height 2 [mm]	FF	5
Interface	X	Ø 12 H7
Flange location	BD	Ø 70 H7/g7
Connecting thread inside	S	M38 x 1
Centering length [mm]	G	5
Installation depth [mm]	HM	5 +0,05
Weight [kg]		2,69
In stock		✓
Order no.		1121/0029

By adapting the tandem cylinder on the HYDROK 32 the maximum clamping force of 70 kN can be reached already at 50 bar.



Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

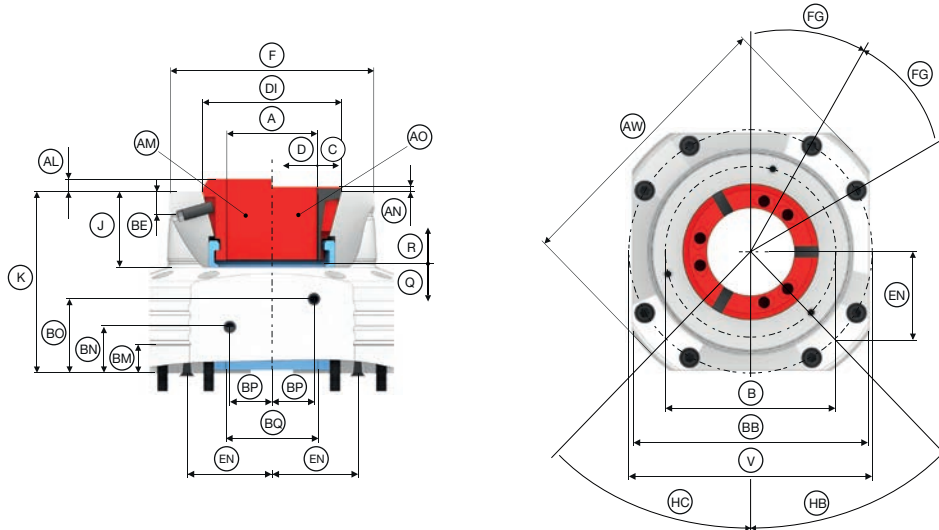
Multi spindles

STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK



HYDROK RD size 42 - 100. Technical data



Product line		RD				
Size		42	52	65	80	100
Clamping range [mm]	A	3 – 42	3 – 52	3 – 65	5 – 80	15 – 100
Repeatability [mm]		0,010				
Max. axial drawtube force [pull / push] [kN]		35		45	50	65
Max. radial clamping force [kN]		80		105	115	150
Max. actuating pressure [bar]		40				
Release stroke in Ø [mm]	C	0,6				
Reserve stroke in Ø [mm]	D	1				
Reserve stroke axial [mm]	Q	2				
Release stroke axial [mm]	R	2,5				
Location front end-stop	F	Ø 125 f7				
Length flange location [mm]	BE	7,4				
Bolt hole circle end-stop	B	LK Ø 107 [3 x M6]				
Ø Capacity [mm]	BQ	47	53	66	81	108
Height [mm]	J	39				
Overall height [mm]	K	120				
Outer variant [mm]	BB	154				
Release	BN	38,1 [1/8"]				
Clamping	BO	57,2 [1/8"]				
Connecting position [mm]	BP	25				
Fluid connection 1 [mm]	EN	55,5				
Outer Ø [mm]	AW	175 f6				
Bolt hole circle	V	LK Ø 157 [8 x M8]				
Mounting seat fit length [mm]	BM	20				
Angle position [°]	FG	30				
Clamping via base plate [°]	HB	45				
Release via base plate [°]	HC	45				
Head Ø [mm]	DI	80				
Clamping head serrated	AM	SK 42 BZI	SK 52 BZI	SK 65 BZI	SK 80 BZI	SK 100 BZ
Clamping head protrusion length serrated [mm]	AL	9	4	9	4	
Clamping head smooth	AO	SK 42 BZIG	SK 52 BZIG	SK 65 BZIG	SK 80 BZIG	SK 100 BZG
Clamping head protrusion length smooth [mm]	AN	4				
Weight [kg]		12		15	17,5	29
In stock		✓	✓	✓	✓	✓
Order no.		1121/0003	1121/0004	1121/0001	1121/0005	1121/0006

Please note: At adaptation size 42 and 52 the jaw module cannot be used.

Size 100 is also available in lightweight design [14 kg].

Clamping heads	Adaptations I.D. clamping	Adaptations jaw clamping	Magnet module	Accessory overview
Page 366	Page 240	Page 286	Page 300	Page 396

STATIONARY CLAMPING DEVICES

Hydraulic stationary chuck HYDROK

Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements /
Accessories

Multi spindles

Actuating units

Use MANDO / MAXXOS segmented mandrels stationary



STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Complete machining made easy: You cannot only use our MANDO and MAXXOS segmented mandrels on the lathe, you can also use them in stationary mode. Simply screw the mandrel onto the ms dock [manually actuated] or hs dock [hydraulically actuated] and you can clamp your workpiece from the inside, stationary mode. Precise, without vibration and with minimum set-up effort. The extremely wear-resistant segmented clamping bushing of case-hardened chromium-nickel-steel with the rubber between the segments, especially developed by HAINBUCH, makes it possible. The hand-actuated ms dock in conjunction with stationary MANDO or MAXXOS segmented mandrels is ideal for machining centers, measuring machines, radial drill presses, parallel and angle plate clampings or for clamping on dividing heads. hs dock is an absolute powerhouse that enables

hydraulic implementation of MANDO or MAXXOS segmented mandrels on machining centers. Media supply can be freely selected. It is actuated either from the side or via a base plate from below. Perfect when automation is involved.

The rotating ms dock version is applicable for max. rpm of 1/min. on turning and grinding machines.

Key advantages

- Mandrels can be used on machining center
- ms dock rotating for lathes without clamping cylinder
- Manual / hydraulic mandrel actuation
- Ideal for 5-sided machining
- Clamping range $\varnothing$ 8 – 200 mm



ms dock mandrel actuating unit in use



hs dock mandrel actuating unit in use

STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Actuating units at a glance

	ms dock	hs dock
		
Description	Manual actuating unit	Hydraulic actuating unit
Variant		Hydraulic clamping, hydraulic release; hydraulic clamping with spring support, hydraulic release
Advantages	■ Manual actuation – a clamping cylinder is not required ■ Sensitive manual clamping is possible	■ Hydraulic actuation ■ Ideal for automated clamping ■ Can be combined as desired for multiple clamping
Adaptations	 MANDO T211 [Mandrel with draw bolt]  MANDO T212 [Mandrel without draw bolt]  MANDO T812 [Deadlength mandrel without draw bolt]  MANDO G211 [Mandrel for gear cutting, for example with draw bolt]  MAXXOS T211 [Mandrel for the utmost accuracy, with draw bolt]	 MANDO T211 [Mandrel with draw bolt]  MANDO T212 [Mandrel without draw bolt]  MANDO T812 [Deadlength mandrel without draw bolt]  MANDO G211 [Mandrel for gear cutting, for example with draw bolt]  MAXXOS T211 [Mandrel for the utmost accuracy, with draw bolt]

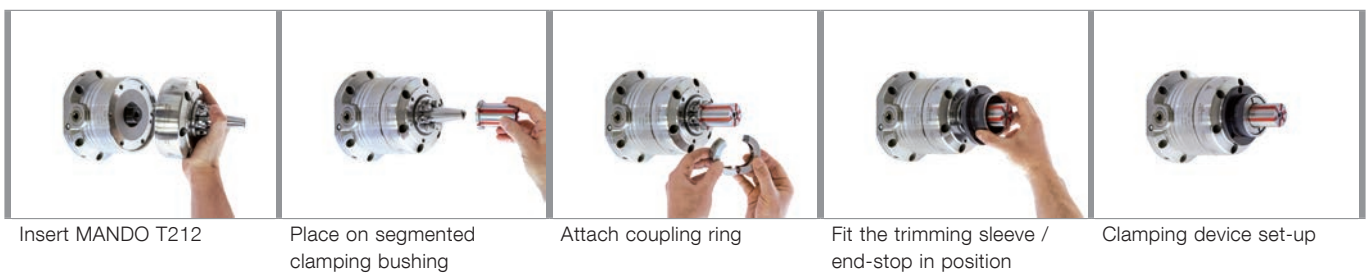
STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

ms dock: Assembly mandrel adaptation MANDO T212 / T812 [1 – 2 min.]



ms dock rotating: Assembly mandrel adaptation MANDO T212 [1 – 2 min.]



hs dock: Assembly mandrel adaptation MANDO T212 / T812 [1 – 2 min.]



Stationary
clamping devices

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Actuating unit ms dock in detail

Designation	
1 Connecting thread for clamping device actuation 2 Central grease nipple, optimal draw-in force due to perfect lubrication 3 Actuating screw 4 Screw slots for mounting 5 Supporting surface for additional holding clamps 6 Interface with cylindrical fit	

Actuating unit hs dock in detail

Designation	
1 Connecting thread for clamping device actuation 2 Ø for location in the base plate 3 Connections on the side or base to release the clamping 4 Supporting surface for additional holding clamps 5 Connections on the side or base to actuate the clamping 6 Mounting screws 7 Interface with cylindrical fit	

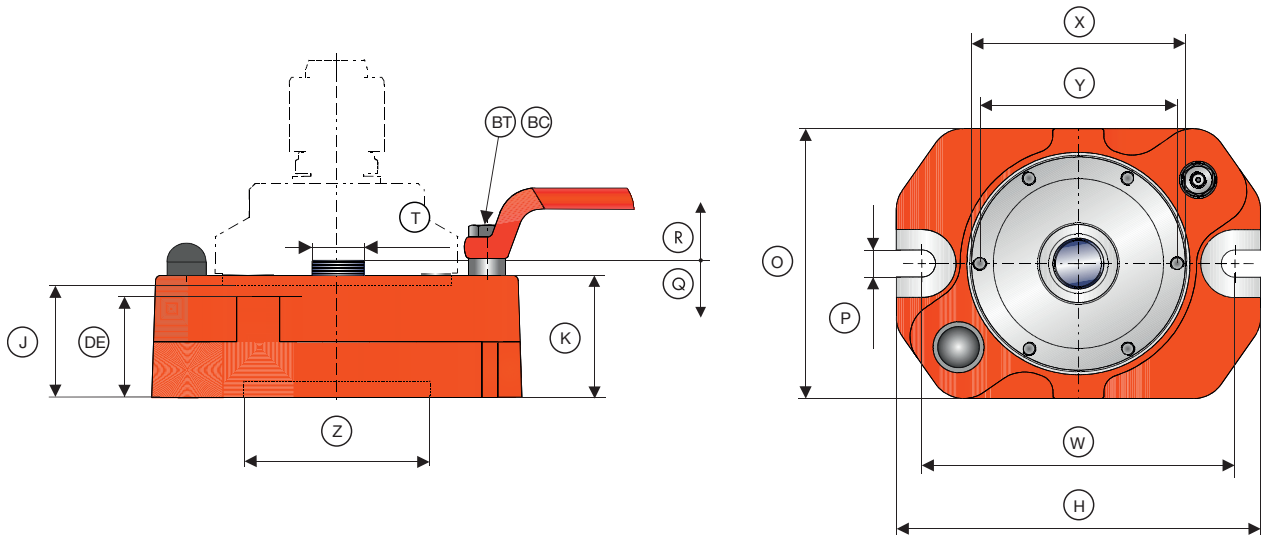
Mandrel actuating unit ms dock rotating in detail

Designation	
1 Interface with cylindrical fit 2 Connecting thread for clamping device actuation 3 Manual actuation via socket wrench	

STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Actuating unit ms dock. Technical data and order overview



Product	ms dock	
Size	XXS – 4 / A – F	5 – 7
Max. axial drawtube force [pull / push] [kN]	35	40
Max. actuating torque [Nm] BC	55	70
Reserve stroke axial [mm] Q	4	
Release stroke axial [mm] R	3	
Interface X	Ø 131 H6	Ø 219 H6
Interface hole circle Y	LK Ø 116 [6 x M8]	LK Ø 192 [6 x M10]
Connecting thread outside T	M30 x 1,5	
Wrench size [SW] BT	17	
Length [mm] H	214	310
Height [mm] J	76	96
Overall height [mm] K	82	109
Width [mm] O	159	245
Centering edge [mm] Z	122	179,5
Screw connection width [mm] P	17	
Clamping edge height [mm] DE	70	92
Bolt hole distance [mm] W	184	280
Weight [kg]	12	36
In stock	✓	✓
Order no.	2084/0001	2084/0002



Mandrels	Accessory overview
Page 146	Page 396

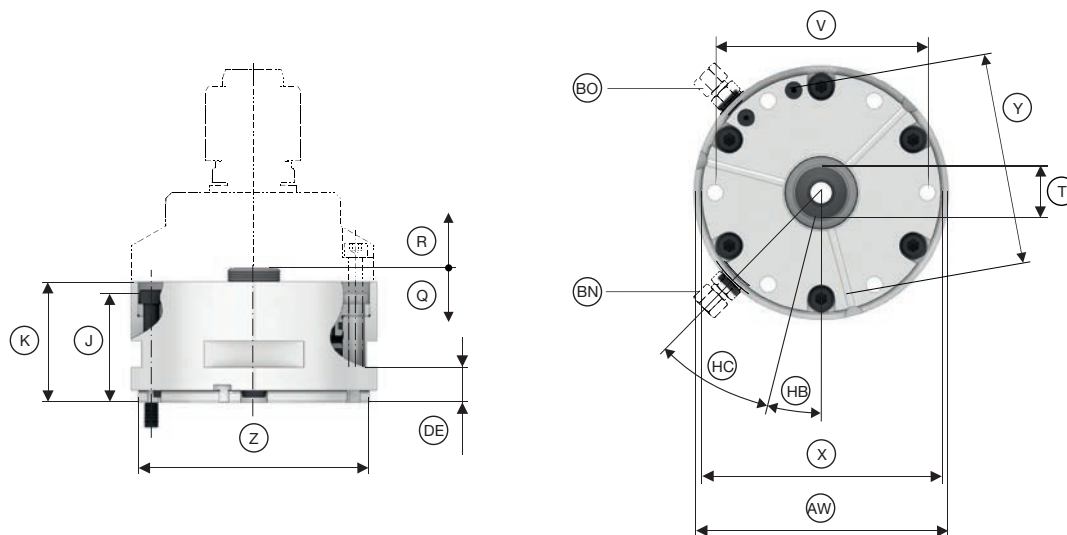
Scope of delivery

- Mandrel actuating unit
- Actuation tool

STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Actuating unit hs dock. Technical data and order overview



Product	hs dock			
Size	XXS – 4 / A – F		5 – 7	
Variant	Without spring	With spring	Without spring	With spring
Max. axial drawtube force [pull / push] [kN]	35		45	
Max. actuating pressure [bar]	56	44	51	47
Max. release pressure [bar]	56		51	
Spring draw force axial [kN]	4		4	
Spring release pressure [bar]	12		8	
Reserve stroke axial [mm]	Q 3,5	1,5	3,5	1,5
Release stroke axial [mm]	R 4	2	4	2
Interface	X	Ø 131 H6	Ø 219 H6	
Interface hole circle	Y	LK Ø 116 [6 x M8]	LK Ø 192 [6 x M10]	
Connecting thread outside	T	M30 x 1,5		
Height [mm]	J	62		
Overall height [mm]	K	68,5		76
Outer Ø [mm]	AW	139		230
Bolt hole circle	V	LK Ø 116 [6 x M8]		LK Ø 192 [6 x M10]
Centering edge [mm]	Z	131		219
Clamping edge height [mm]	DE	20		
Release	BN	[1/8"]		
Clamping	BO	[1/8"]		
Release via base plate [°]	HC	30		33
Clamping via base plate [°]	HB	15		13,5
Weight [kg]		9		18
In stock		✓		-
Order no.	3023/0001	3023/0002	3023/0003	3023/0004



Mandrels	Accessory overview
Page 146	Page 396

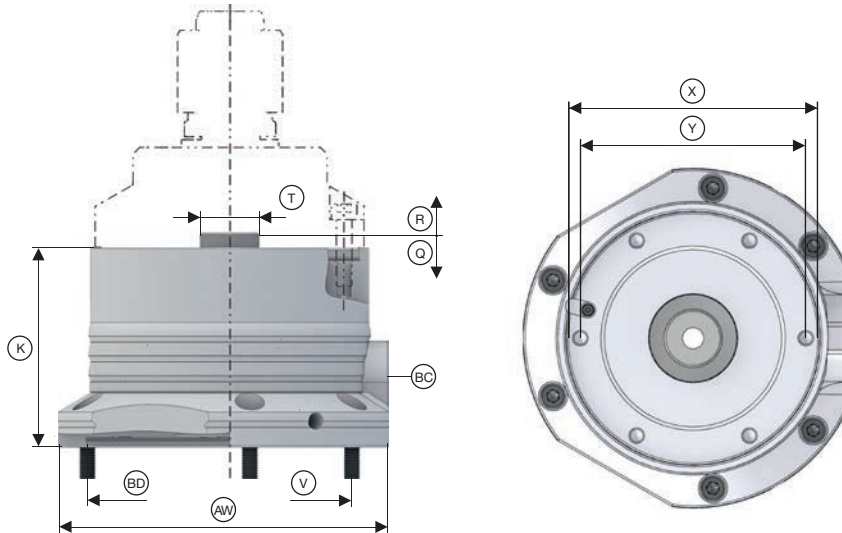
Scope of delivery

- Mandrel actuating unit

STATIONARY CLAMPING DEVICES

Mandrel actuating units ms dock / hs dock

Actuating unit ms dock rotating. Technical data and order overview



Size	XXS – 4 / A – F	
Max. axial drawtube force [pull / push] [kN]	35	
Max. actuating torque [Nm]	BC	62
RPM n max. [1/min.]		7000
Interface	X	Ø 131 H6
Interface hole circle	Y	LK Ø 116 [6 x M8]
Flange location	BD	Ø 145 H5
Overall height [mm]	K	101
Connecting thread outside	T	M30 x 1,5
Reserve stroke axial [mm]	Q	3
Release stroke axial [mm]	R	3
Outer Ø [mm]	AW	174
Bolt hole circle	V	LK Ø 156 [6 x M8]
Weight [kg]		12
In stock		✓
Order no.		10835/0001

Please note: Only pull-back mandrels [T211, T212, and G211] can be used.

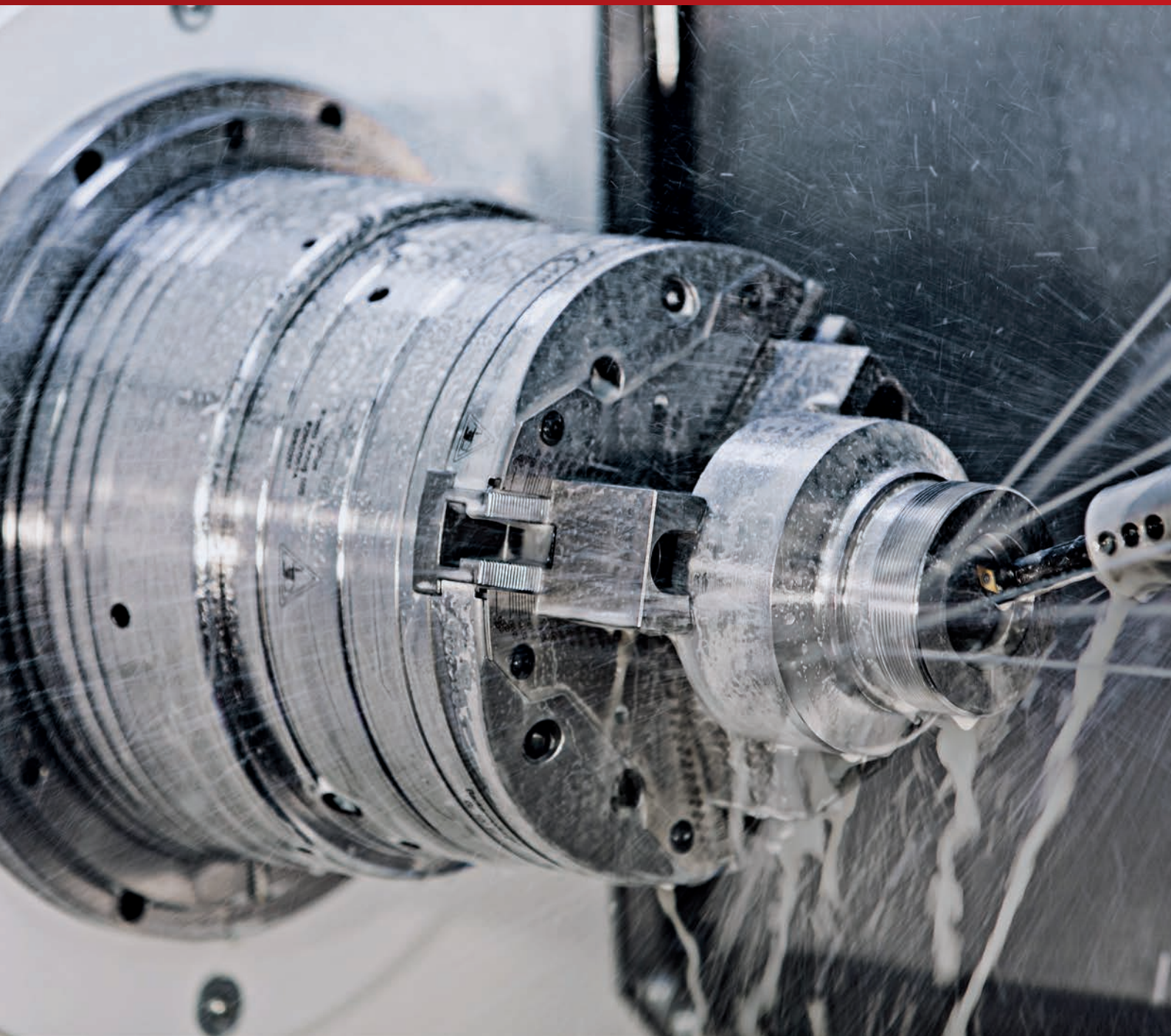
		
Mandrels	Flanges	Accessory overview
Page 146	Page 432	Page 396

Scope of delivery

- Mandrel actuating unit
- Actuation tool

Overview

Find what's important fast



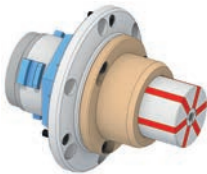
Adaptation clamping devices

	MANDO Adapt [mandrel adaptation]	240
	Jaw module	286
	Face driver / morse taper adaptation	292
	Magnet module	300

PRODUCTS

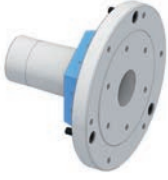
Adaptation clamping devices

Adaptation clamping devices at a glance

	MANDO Adapt	Jaw module	Face driver adaptation
			
Description	Adaptation for I.D. clamping	Adaptation for jaw clamping	Adaptation for clamping between centers
Sizes	XXS, XS, S, 0, 1, 2, 3, 4, 5, 6, 7	145, 215	42, 52, 65, 80, 100
Clamping range of all sizes [mm]	8 – 190	25 – 209	–
Variant	SE [hexagonal], RD [round]	SE [hexagonal], RD [round]	SE [hexagonal], RD [round]
Advantages	- Extremely fast conversion without detachment of the basic clamping device [1 – 2 min.] - Large clamping range and vibration dampening due to vulcanized clamping elements - Standard segmented clamping bushings and workpiece end-stops for machining to size available	- Jaw clamping with a HAINBUCH chuck or stationary chuck - Enlarged clamping range of the basic clamping device - Machining between the jaws is possible [milling or drilling] - Deadlength clamping - Optimal lubrication and less sensitive to contamination thanks to lubricating system - New: more convenient assembly mechanism	- Spring-loaded center - Hard metal face driver - Assembly in 1 minute without alignment
	 Page 240	 Page 286	 Page 292

PRODUCTS

Adaptation clamping devices

Morse taper adaptation	Magnet module
	
Adaptation to the MK4 reception	Adaptation for magnetic clamping
42, 52, 65, 80, 100	52, 65, 100
–	–
SE [hexagonal], RD [round]	SE [hexagonal], RD [round]
■ Adaptation possibility via morse taper ■ Assembly in 1 minute without alignment ■ Self-centering of the adaptation in the chuck ≤ 0.003 mm	■ End face axial clamping via neodymium magnet ■ High face-run change-over accuracy ■ High holding force of 140 N/cm² ■ Assembly in 30 seconds without having to align ■ Low maintenance because it is resistant to contamination
 Page 292	 Page 300



MANDO Adapt

Mandrel-in-clamping-device





ADAPTATION CLAMPING DEVICES **MANDO Adapt [mandrel adaptation]**

Change-over from O.D. clamping to perfect I.D. clamping, without changing the clamping device? No problem with MANDO Adapt. Place the mandrel in the mounted clamping device, tighten three screws and lock the mandrel in the clamping device. In this process the mandrel engages in the coupling of the clamping device via a sophisticated mechanism, where otherwise the clamping head engages. MANDO Adapt is attractive with extreme rigidity and precision. For rotating products, run-out of 0.005 mm between chuck taper and mandrel taper can be achieved. For stationary clamping devices repeatability of 0.003 mm is possible. And best of all, this can be accomplished without adjusting.

HAINBUCH: Ingeniously simple and effective!



Key advantages

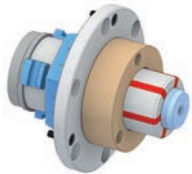
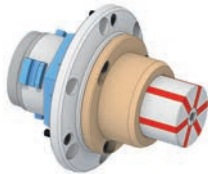
- Extremely fast conversion without detachment of the basic clamping device [1 – 2 min.]
- Large clamping range and vibration dampening due to vulcanized clamping elements
- Standard segmented clamping bushings and work-piece end-stops for machining to size available

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



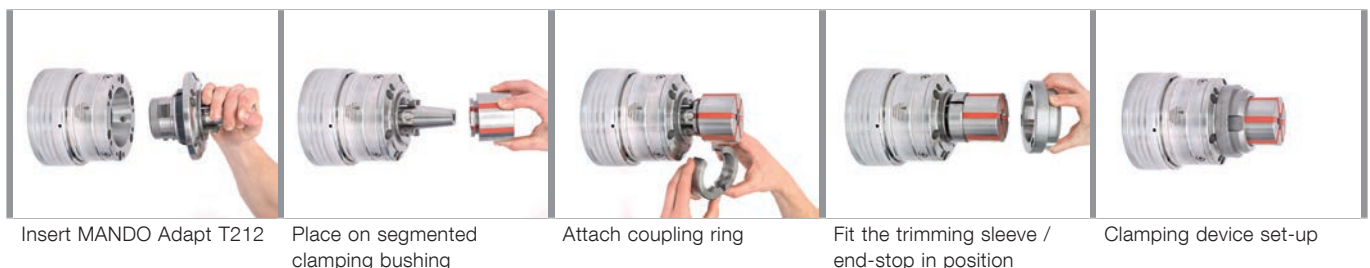
MANDO Adapt at a glance

	MANDO Adapt T211	MANDO Adapt T212	MANDO Adapt T812
			
Description	Mandrel-in-clamping-device, with draw bolt / pull-back	Mandrel-in-clamping-device, without draw bolt / pull-back	Mandrel-in-clamping-device, without draw bolt / deadlength
Sizes	0, 1, 2, 3, 4	XXS, XS, S, 0, 1, 2, 3, 4, 5, 6, 7	XS, S, 0, 1, 2, 3, 4
Clamping range of all sizes [mm]	20 – 120	8 – 190	13 – 100
Variant	SE [hexagonal], RD [round]	SE [hexagonal], RD [round]	RD [round]
Actuation	Draw	Draw	Pressure </td
Advantages	- Workpiece stabilization through axial draw force applied against the workpiece end-stop - Less expensive segmented clamping bushings and end-stops compared to MANDO T212	- Workpiece stabilization through axial draw force applied against the workpiece end-stop - Clamping without draw bolt, consequently ideal for blind bores	- Radial clamping, without pullback – ideal for pick-off the main spindle - Clamping without draw bolt, consequently ideal for blind bores

Change-over to mandrel adaptation T211 [approx. 1 min.]



Change-over to mandrel adaptation T212 [approx. 1 min.]





MANDO Adapt T211 SE in detail

Designation	
1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC] 2 End-stop 3 Draw bolt 4 CENTREX system for μm-precise used without adjustment 5 Coupling: Mandrel locks automatically when the draw bolt is screwed in 6 Mounting screws for quick change-over 7 Integrated, and thus optimal forced release of the clamping 8 Torsional safety lock of segmented clamping bushing	

MANDO Adapt T212 SE in detail

Designation	
1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC] 2 High rigidity due to one-piece crown coupling with integrated entrainment of the segmented clamping bushing 3 Coupling ring for fast changing of the segmented clamping bushing 4 CENTREX system for μm-precise used without adjustment 5 Coupling: Mandrel is locked via separate key 6 Mounting screws for quick change-over 7 End-stop	

MANDO Adapt T812 RD in detail

Designation	
1 Vulcanized segmented clamping bushing made of case-hardened steel [60 HRC] 2 End-stop 3 Coupling ring for fast changing of the segmented clamping bushing 4 Bayonet coupling 5 Mounting screws for quick change-over 6 CENTREX system for μm-precise used without adjustment	

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T211 SE. Order overview

Suitable for



Size	Clamping range [mm]	Adap-tation size	Suitable for	Order no.	In stock	TOPlus mini pull-back Page 18	TOPlus combi pull-back Page 36	TOPlus modular Page 36	TOROK SE Page 114	HYDROK SE Page 218	MANOK plus SE Page 208
0	20 – 28	52	TOPlus mini	10818/0001	-	✓					
			all except TOPlus mini	2523/0014	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10818/0004	✓	✓					
			all except TOPlus mini	2523/0017	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10818/0009	✓	✓					
			all except TOPlus mini	2523/0022	✓		✓	✓	✓	✓	✓
1	26 – 38	52	TOPlus mini	10818/0002	-	✓					
			all except TOPlus mini	2523/0015	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10818/0005	✓	✓					
			all except TOPlus mini	2523/0018	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10818/0010	✓	✓					
			all except TOPlus mini	2523/0023	✓		✓	✓	✓	✓	✓
2	36 – 54	52	TOPlus mini	10818/0003	-	✓					
			all except TOPlus mini	2523/0016	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10818/0006	✓	✓					
			all except TOPlus mini	2523/0019	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10818/0011	✓	✓					
			all except TOPlus mini	2523/0024	✓		✓	✓	✓	✓	✓
3	50 – 80	65	TOPlus mini	10818/0007	✓	✓					
			all except TOPlus mini	2523/0020	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10818/0012	✓	✓					
			all except TOPlus mini	2523/0025	✓		✓	✓	✓	✓	✓
4	69 – 120	65	TOPlus mini	10818/0008	✓	✓					
			all except TOPlus mini	2523/0021	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10818/0013	✓	✓					
			all except TOPlus mini	2523/0026	✓		✓	✓	✓	✓	✓

Detailed technical data follows.

Scope of delivery

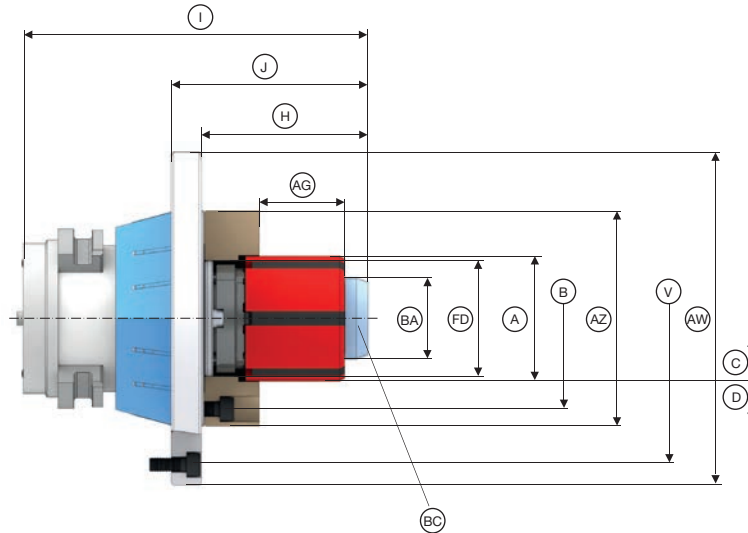
- Adaptation mandrel
- Draw bolt



ADAPTATION CLAMPING DEVICES

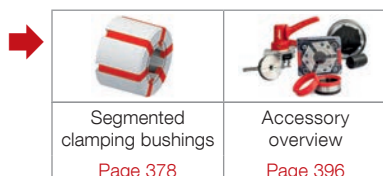
MANDO Adapt [mandrel adaptation]

MANDO Adapt T211 SE. Technical data



Size	0					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	20 – 28				
Run-out ≤ [mm]		0,010				
Max. radial clamping force [kN]		42				
Max. axial drawtube force [pull / push] [kN]		10				
Max. clamping length [mm]	AG	22				
Release stroke in Ø [mm]	C	0,4				
Reserve stroke in Ø [mm]	D	0,3				
Range / recommended workpiece tolerance [mm]		± 0,25				
RPM n max. [1/min.]		7000	6000		5000	
Max. actuating torque [Nm]	BC	10				
Draw bolt Ø [mm]	BA	19				
Reception workpiece end-stop	FD	Ø 32 f7				
End-stop outer Ø [mm]	AZ	65				
Bolt hole circle end-stop	B	LK Ø 50 [3 x M6]				
Length [mm]	H	42,3	42		41,5	
Total length [mm]	I	94	119		94	
Height [mm]	J	55				
Bolt hole circle	V	LK Ø 105 [3 x M8]	LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	119	125	129	144	183
Weight [kg]		3	4		9	
In stock		-	✓	✓	✓	✓
Order no.		10818/0001	2523/0014	10818/0004	2523/0017	10818/0009
						2523/0022

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

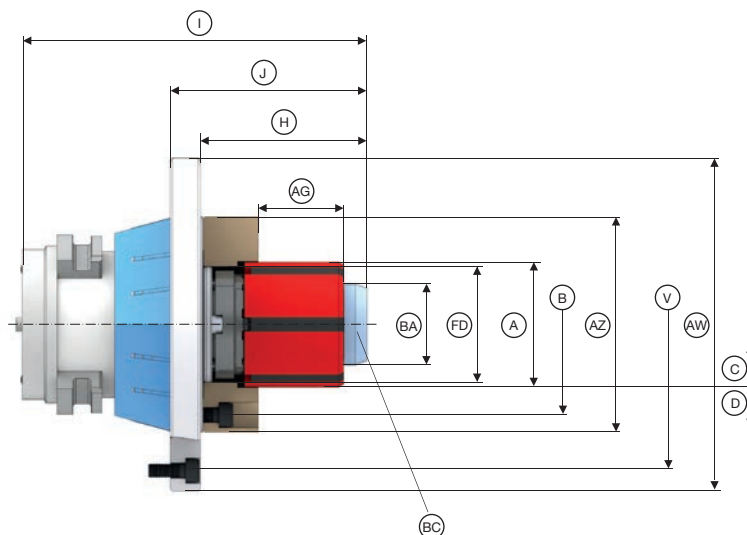
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

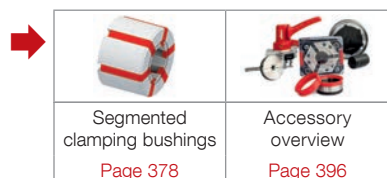


MANDO Adapt T211 SE. Technical data



Size	1					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		26 – 38			
Run-out ≤ [mm]			0,010			
Max. radial clamping force [kN]			42			
Max. axial drawtube force [pull / push] [kN]			10			
Max. clamping length [mm]	AG		26			
Release stroke in Ø [mm]	C		0,4			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
RPM n max. [1/min.]	7000		6000		5000	
Max. actuating torque [Nm]	BC		20			
Draw bolt Ø [mm]	BA		25			
Reception workpiece end-stop	FD		Ø 41 f7			
End-stop outer Ø [mm]	AZ		69			
Bolt hole circle end-stop	B		LK Ø 55 [3 x M6]			
Length [mm]	H		52		40	
Total length [mm]	I		119		139	
Height [mm]	J		65			
Bolt hole circle	V	LK Ø 105 [3 x M8]	LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	119	125	129	144	183
Weight [kg]		3		4		9
In stock		-	✓	✓	✓	✓
Order no.		10818/0002	2523/0015	10818/0005	2523/0018	10818/0010
						2523/0023

CENTREX interface repeatability ≤ 0.003 mm.

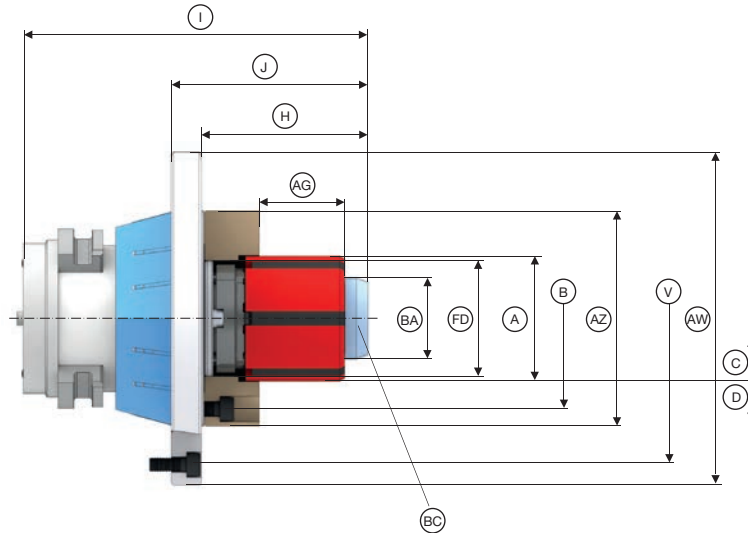




ADAPTATION CLAMPING DEVICES

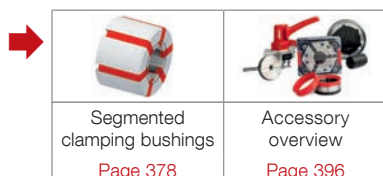
MANDO Adapt [mandrel adaptation]

MANDO Adapt T211 SE. Technical data



Size	2					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	36 – 54				
Run-out ≤ [mm]		0,010				
Max. radial clamping force [kN]		85				
Max. axial drawtube force [pull / push] [kN]		20				
Max. clamping length [mm]	AG	43				
Release stroke in Ø [mm]	C	0,4				
Reserve stroke in Ø [mm]	D	0,3				
Range / recommended workpiece tolerance [mm]		± 0,25				
RPM n max. [1/min.]		7000	6000		5000	
Max. actuating torque [Nm]	BC	25				
Draw bolt Ø [mm]	BA	35				
Reception workpiece end-stop	FD	Ø 50 f7				
End-stop outer Ø [mm]	AZ	93				
Bolt hole circle end-stop	B	LK Ø 78 [3 x M6]				
Length [mm]	H	71				
Total length [mm]	I	139	159			
Height [mm]	J	85				
Bolt hole circle	V	LK Ø 105 [3 x M8]	LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	119	125	129	144	183
Weight [kg]		3	4		10	
In stock		-	✓	✓	✓	✓
Order no.		10818/0003	2523/0016	10818/0006	2523/0019	10818/0011
						2523/0024

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

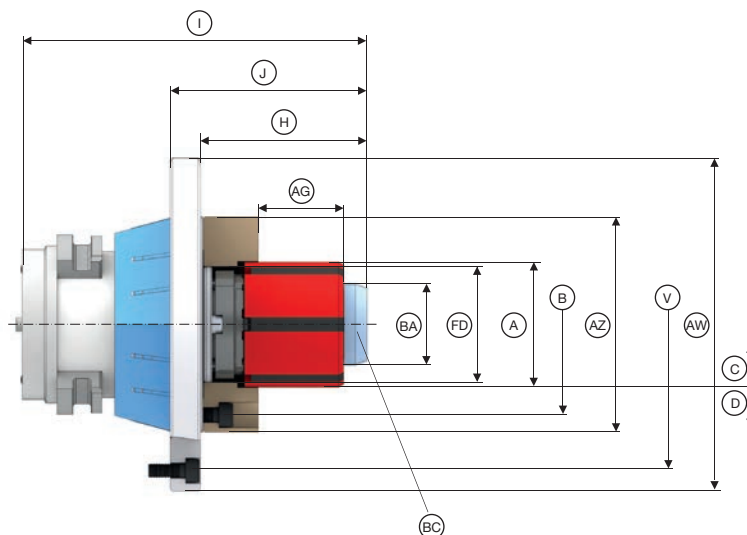
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T211 SE. Technical data



Size	3			
Adaptation size	65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	50 – 80		
Run-out ≤ [mm]		0,010		
Max. radial clamping force [kN]		105		
Max. axial drawtube force [pull / push] [kN]		25		
Max. clamping length [mm]	AG	49		
Release stroke in Ø [mm]	C	0,5		
Reserve stroke in Ø [mm]	D	0,4		
Range / recommended workpiece tolerance [mm]		± 0,35		
RPM n max. [1/min.]	6000		5000	
Max. actuating torque [Nm]	BC	55		
Draw bolt Ø [mm]	BA	49		
Reception workpiece end-stop	FD	Ø 65 f7		
End-stop outer Ø [mm]	AZ	96		
Bolt hole circle end-stop	B	LK Ø 80 [3 x M6]		
Length [mm]	H	68		78
Total length [mm]	I	159		169
Height [mm]	J	78		95
Bolt hole circle	V	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	129	144	183
Weight [kg]		5		10
In stock		✓	✓	✓
Order no.		10818/0007	2523/0020	10818/0012
				2523/0025

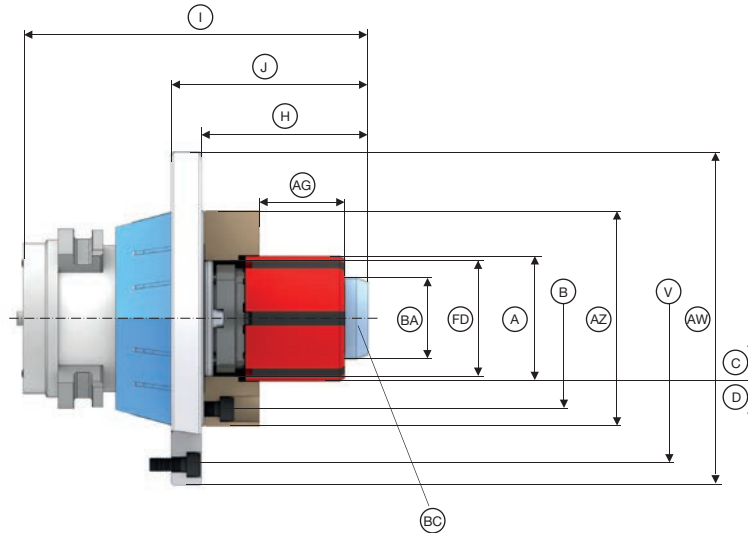
CENTREX interface repeatability ≤ 0.003 mm.





ADAPTATION CLAMPING DEVICES MANDO Adapt [mandrel adaptation]

MANDO Adapt T211 SE. Technical data



Size	4			
Adaptation size	65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	69 – 120		
Run-out ≤ [mm]		0,010		
Max. radial clamping force [kN]		150		
Max. axial drawtube force [pull / push] [kN]		35		
Max. clamping length [mm]	AG	59		
Release stroke in Ø [mm]	C	0,6		
Reserve stroke in Ø [mm]	D	0,5		
Range / recommended workpiece tolerance [mm]		± 0,4		
RPM n max. [1/min.]		6000		5000
Max. actuating torque [Nm]	BC	55		
Draw bolt Ø [mm]	BA	68		
Reception workpiece end-stop	FD	Ø 78 f7		
End-stop outer Ø [mm]	AZ	120		
Bolt hole circle end-stop	B	LK Ø 90 [3 x M6]		
Length [mm]	H	80		
Total length [mm]	I	174		184
Height [mm]	J	110		
Bolt hole circle	V	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	129	144	183
Weight [kg]		5		11
In stock		✓	✓	✓
Order no.		10818/0008	2523/0021	10818/0013
				2523/0026

CENTREX interface repeatability ≤ 0.003 mm.

For size 4, clamping range 101 – 120 mm, a max. speed of 4200 RPM applies.



Segmented
clamping bushings
Page 378

Accessory
overview
Page 396

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 SE. Order overview

Suitable for



Size	Clamping range [mm]	Adap-tation size	Suitable for	Order no.	In stock	TOPlus mini pull-back Page 18	TOPlus combi pull-back Page 36	TOPlus modular Page 36	TOROK SE Page 114	HYDROK SE Page 218	MANOK plus SE Page 208
XXS	8 – 13	52	TOPlus mini	10821/0001	-	✓					
			all except TOPlus mini	2526/0040	-		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0007	✓	✓					
			all except TOPlus mini	2526/0048	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0015	-	✓					
			all except TOPlus mini	2526/0056	-		✓	✓	✓	✓	✓
XS	13 – 19	52	TOPlus mini	10821/0002	-	✓					
			all except TOPlus mini	2526/0039	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0008	✓	✓					
			all except TOPlus mini	2526/0047	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0016	✓	✓					
			all except TOPlus mini	2526/0055	✓		✓	✓	✓	✓	✓
S	16 – 21	52	TOPlus mini	10821/0003	-	✓					
			all except TOPlus mini	2526/0038	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0009	✓	✓					
			all except TOPlus mini	2526/0046	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0017	✓	✓					
			all except TOPlus mini	2526/0054	✓		✓	✓	✓	✓	✓
0	20 – 28	52	TOPlus mini	10821/0004	-	✓					
			all except TOPlus mini	2526/0037	-		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0010	✓	✓					
			all except TOPlus mini	2526/0045	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0018	✓	✓					
			all except TOPlus mini	2526/0053	✓		✓	✓	✓	✓	✓



ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 SE. Order overview

Size	Clamping range [mm]	Adap-tation size	Suitable for	Order no.	In stock	Suitable for					
											
1	26 – 38	52	TOPlus mini	10821/0005	-	✓					
			all except TOPlus mini	2526/0036	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0011	✓	✓					
			all except TOPlus mini	2526/0044	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0019	✓	✓					
			all except TOPlus mini	2526/0052	✓		✓	✓	✓	✓	✓
2	36 – 54	52	TOPlus mini	10821/0006	-	✓					
			all except TOPlus mini	2526/0035	✓		✓	✓	✓	✓	✓
		65	TOPlus mini	10821/0012	✓	✓					
			all except TOPlus mini	2526/0043	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0020	✓	✓					
			all except TOPlus mini	2526/0051	✓		✓	✓	✓	✓	✓
3	50 – 80	65	TOPlus mini	10821/0013	✓	✓					
			all except TOPlus mini	2526/0042	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0021	✓	✓					
			all except TOPlus mini	2526/0050	✓		✓	✓	✓	✓	✓
4	69 – 100	65	TOPlus mini	10821/0014	✓	✓					
			all except TOPlus mini	2526/0041	✓		✓	✓	✓	✓	✓
		100	TOPlus mini	10821/0022	✓	✓					
			all except TOPlus mini	2526/0049	✓		✓	✓	✓	✓	✓

Detailed technical data follows.

Scope of delivery

- Adaptation mandrel
- Coupling ring
- Mounting aid depending on size

Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

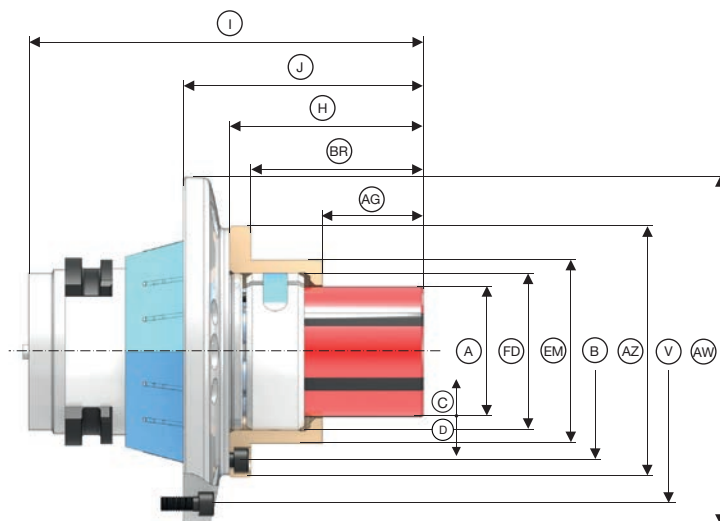
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 SE. Technical data



Size	XXS					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		8 – 13			
Run-out ≤ [mm]			0,020			
Release stroke in Ø [mm]	C		0,2			
Reserve stroke in Ø [mm]	D		0,2			
Range / recommended workpiece tolerance [mm]			± 0,15			
Max. clamping length [mm]	AG		12,9			
Max. axial drawtube force [pull / push] [kN]			10			
Max. radial clamping force [kN]			42			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 34 f7			
Bolt hole circle end-stop	B		LK Ø 53 [3 x M5]			
End-stop outer Ø [mm]	AZ		65			
Depth [mm]	BR		36,5			
End-stop outer Ø 2 [mm]	EM		41			
Length [mm]	H		45,5			
Total length [mm]	I		128		139	
Height [mm]	J		64,5		65,5	
Bolt hole circle	V LK Ø 105 [3 x M8]		LK Ø 112 [3 x M8]		LK Ø 160 [3 x M8]	
Outer Ø [mm]	AW 119		129		183	
Weight [kg]	3		4		10	
In stock	-		✓		-	
Order no.	10821/0001		10821/0007		10821/0015	
	2526/0040		2526/0048		2526/0056	

Please note: The maximum clamping length [AG] varies from 6 to 12.9 mm depending on the clamping diameter.
CENTREX interface repeatability ≤ 0.003 mm.

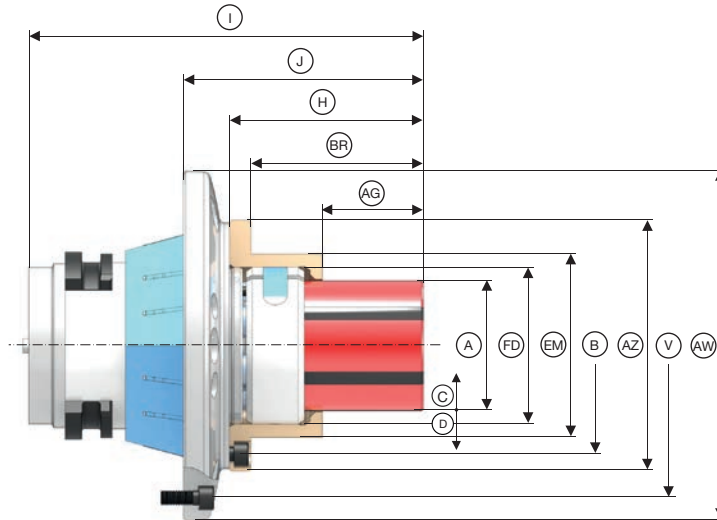




ADAPTATION CLAMPING DEVICES

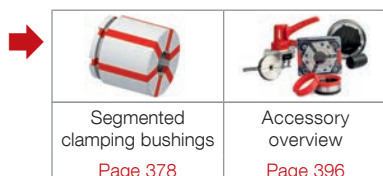
MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 SE. Technical data



Size	XS					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		13 – 19			
Run-out ≤ [mm]			0,020			
Release stroke in Ø [mm]	C		0,4			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
Max. clamping length [mm]	AG		14			
Max. axial drawtube force [pull / push] [kN]			10			
Max. radial clamping force [kN]			42			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 36 f7			
Bolt hole circle end-stop	B		LK Ø 53 [3 x M5]			
End-stop outer Ø [mm]	AZ		65			
Depth [mm]	BR		36,5			
End-stop outer Ø 2 [mm]	EM		42			
Length [mm]	H		45,5			
Total length [mm]	I		125		139,5	
Height [mm]	J		71		65,5	
Bolt hole circle	V		LK Ø 105 [3 x M8]		LK Ø 160 [3 x M8]	
Outer Ø [mm]	AW		119		125	
Weight [kg]			3		4	
In stock			✓		✓	
Order no.	10821/0002		2526/0039		10821/0016	

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

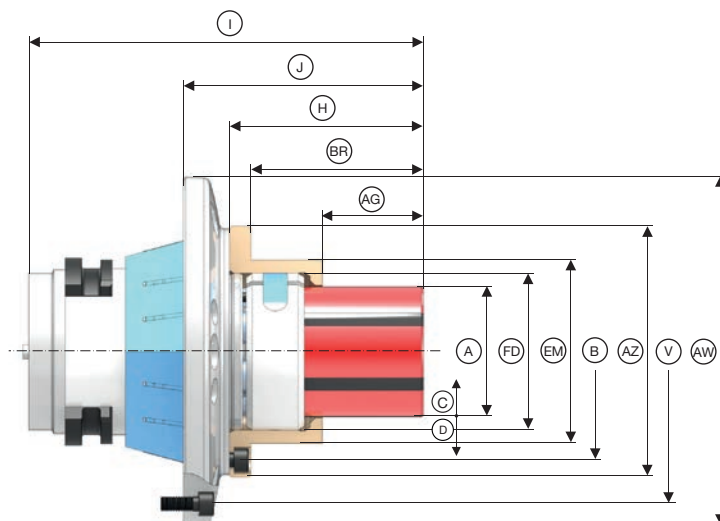
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

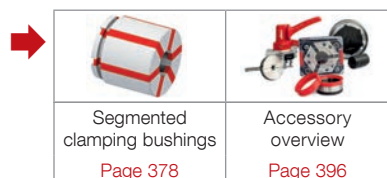


MANDO Adapt T212 SE. Technical data



Size	S					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		16 – 21			
Run-out ≤ [mm]			0,020			
Release stroke in Ø [mm]	C		0,4			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
Max. clamping length [mm]	AG		15			
Max. axial drawtube force [pull / push] [kN]			10			
Max. radial clamping force [kN]			42			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 39 f7			
Bolt hole circle end-stop	B		LK Ø 57 [3 x M5]			
End-stop outer Ø [mm]	AZ		70			
Depth [mm]	BR		38			
End-stop outer Ø 2 [mm]	EM		45			
Length [mm]	H		47,5			
Total length [mm]	I		130		141,5	
Height [mm]	J		66,5		67,5	
Bolt hole circle	V LK Ø 105 [3 x M8]		LK Ø 112 [3 x M8]		LK Ø 160 [3 x M8]	
Outer Ø [mm]	AW 119		129		183	
Weight [kg]	3		4		10	
In stock	-		✓		✓	
Order no.	10821/0003		2526/0038		10821/0017	

CENTREX interface repeatability ≤ 0.003 mm.

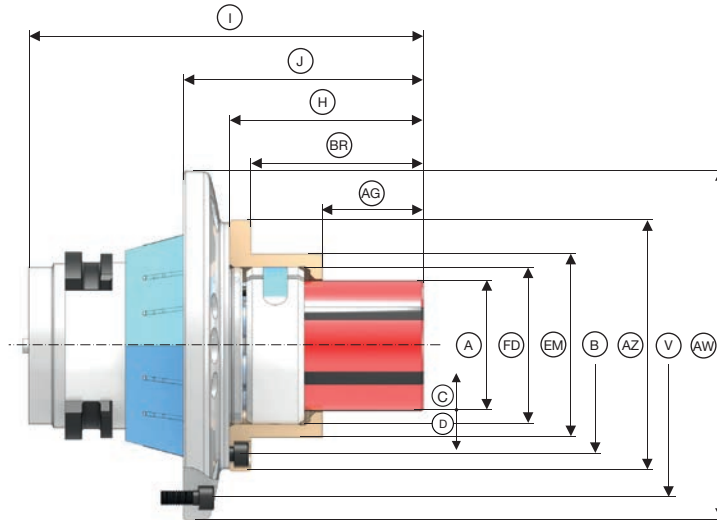




ADAPTATION CLAMPING DEVICES

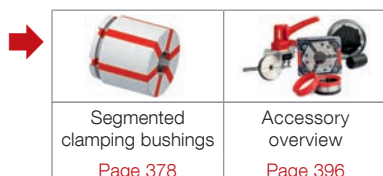
MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 SE. Technical data



Size	0					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		20 – 28			
Run-out ≤ [mm]			0,010			
Release stroke in Ø [mm]	C		0,4			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
Max. clamping length [mm]	AG		21			
Max. axial drawtube force [pull / push] [kN]			10			
Max. radial clamping force [kN]			42			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 47 f7		Ø 42 f7	
Bolt hole circle end-stop	B		LK Ø 70 [3 x M6]			
End-stop outer Ø [mm]	AZ		90			
Depth [mm]	BR		44			
End-stop outer Ø 2 [mm]	EM		54			
Length [mm]	H		58,5			
Total length [mm]	I		138		157	
Height [mm]	J		84		78,5	
Bolt hole circle	V LK Ø 105 [3 x M8]		LK Ø 112 [3 x M8]		LK Ø 160 [3 x M8]	
Outer Ø [mm]	AW 119		129		183	
Weight [kg]	4		5		11	
In stock	-		✓		✓	
Order no.	10821/0004		2526/0037		10821/0018	
			10821/0010		2526/0045	
					2526/0053	

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

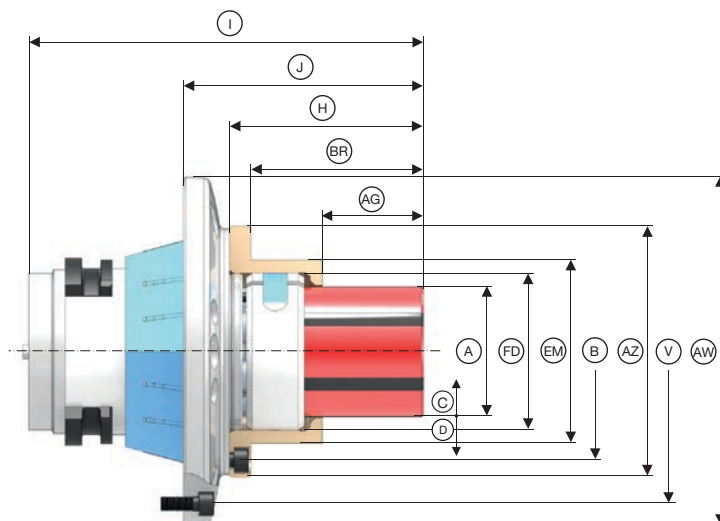
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

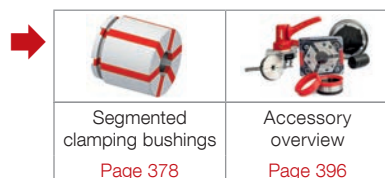


MANDO Adapt T212 SE. Technical data



Size	1					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		26 – 38			
Run-out ≤ [mm]			0,010			
Release stroke in Ø [mm]	C		0,4			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
Max. clamping length [mm]	AG		25			
Max. axial drawtube force [pull / push] [kN]			10			
Max. radial clamping force [kN]			42			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 55 f7			
Bolt hole circle end-stop	B		LK Ø 75 [3 x M6]			
End-stop outer Ø [mm]	AZ		90			
Depth [mm]	BR		47			
End-stop outer Ø 2 [mm]	EM		62			
Length [mm]	H		64,5			
Total length [mm]	I		139		158,5	
Height [mm]	J		85		84,5	
Bolt hole circle	V		LK Ø 105 [3 x M8]	LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]
Outer Ø [mm]	AW		119	125	129	145
Weight [kg]			4		11	
In stock			-		✓	
Order no.	10821/0005		2526/0036		10821/0019	

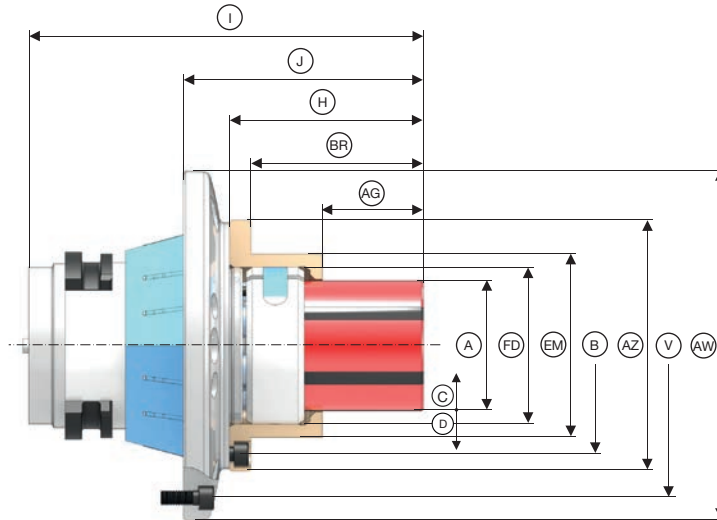
CENTREX interface repeatability ≤ 0.003 mm.





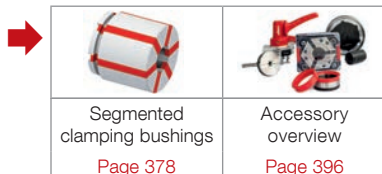
ADAPTATION CLAMPING DEVICES MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 SE. Technical data



Size	2					
Adaptation size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A		36 – 54			
Run-out ≤ [mm]			0,010			
Release stroke in Ø [mm]	C		0,5			
Reserve stroke in Ø [mm]	D		0,3			
Range / recommended workpiece tolerance [mm]			± 0,25			
Max. clamping length [mm]	AG		40			
Max. axial drawtube force [pull / push] [kN]			20			
Max. radial clamping force [kN]			85			
RPM n max. [1/min.]	7000		6000		5000	
Reception workpiece end-stop	FD		Ø 65 f7			
Bolt hole circle end-stop	B		LK Ø 90 [3 x M6]			
End-stop outer Ø [mm]	AZ		104			
Depth [mm]	BR		62			
End-stop outer Ø 2 [mm]	EM		76			
Length [mm]	H		80,5			
Total length [mm]	I		155		174,5	
Height [mm]	J		101		100,5	
Bolt hole circle	V		LK Ø 105 [3 x M8]		LK Ø 160 [3 x M8]	
Outer Ø [mm]	AW		119		183	
Weight [kg]			4		11	
In stock			✓		✓	
Order no.	10821/0006		2526/0035		10821/0020	

CENTREX interface repeatability ≤ 0.003 mm.



Segmented clamping bushings
Page 378

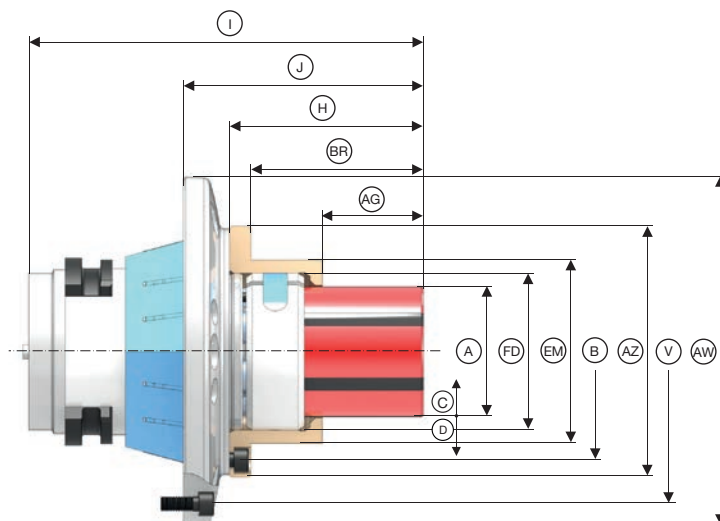
Accessory overview
Page 396

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

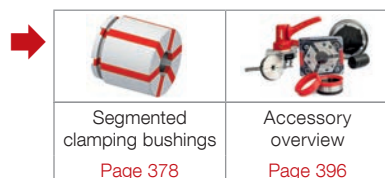


MANDO Adapt T212 SE. Technical data



Size	3			
Adaptation size	65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	50 – 80		
Run-out ≤ [mm]		0,010		
Release stroke in Ø [mm]	C	0,5		
Reserve stroke in Ø [mm]	D	0,4		
Range / recommended workpiece tolerance [mm]		± 0,35		
Max. clamping length [mm]	AG	44,5		
Max. axial drawtube force [pull / push] [kN]		25		
Max. radial clamping force [kN]		105		
RPM n max. [1/min.]	6000		5000	
Reception workpiece end-stop	FD	Ø 83 f7		
Bolt hole circle end-stop	B	LK Ø 104 [3 x M6]		
End-stop outer Ø [mm]	AZ	120		
Depth [mm]	BR	66,5		
End-stop outer Ø 2 [mm]	EM	105		
Length [mm]	H	87,5		
Total length [mm]	I	173	181,5	
Height [mm]	J	106,5	107,5	
Bolt hole circle	V	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	129	145	183
Weight [kg]		6	12	215
In stock		✓	✓	✓
Order no.		10821/0013	2526/0042	10821/0021
				2526/0050

CENTREX interface repeatability ≤ 0.003 mm.

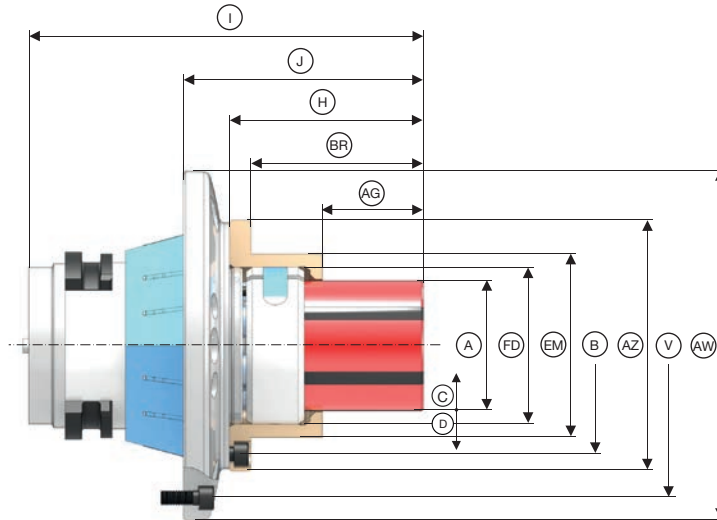




ADAPTATION CLAMPING DEVICES

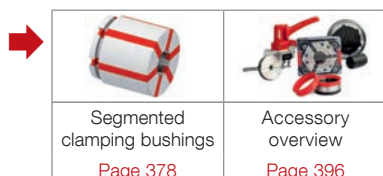
MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 SE. Technical data



Size	4			
Adaptation size	65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Clamping range [mm]	A	69 – 100		
Run-out ≤ [mm]		0,010		
Release stroke in Ø [mm]	C	0,5		
Reserve stroke in Ø [mm]	D	0,5		
Range / recommended workpiece tolerance [mm]		± 0,35		
Max. clamping length [mm]	AG	52,5		
Max. axial drawtube force [pull / push] [kN]		35		
Max. radial clamping force [kN]		150		
RPM n max. [1/min.]		6000		
Reception workpiece end-stop	FD	Ø 103 f7		
Bolt hole circle end-stop	B	LK Ø 124 [3 x M6]		
End-stop outer Ø [mm]	AZ	138		
Depth [mm]	BR	77,5		
End-stop outer Ø 2 [mm]	EM	124		
Length [mm]	H	97,5		
Total length [mm]	I	180,5		
Height [mm]	J	116,5		
Bolt hole circle	V	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]
Outer Ø [mm]	AW	129	145	183
Weight [kg]		8	14	215
In stock		✓	✓	✓
Order no.		10821/0014	2526/0041	10821/0022

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T211 RD. Order overview

					Suitable for					
										
Size	Clamping range [mm]	Adaptation size	Order no.	In stock	SPANNTOP mini pull-back Page 52	SPANNTOP nova combi pull-back Page 72	SPANNTOP nova modular Page 72	TOROK RD Page 114	HYDROK RD Page 218	MANOK plus RD Page 208
0	20 – 28	42	2521/0025	✓						
		52	2521/0019	✓						
		65	2521/0011	✓	✓	✓	✓	✓	✓	✓
		80	2521/0001	✓						
		100	2521/0010	✓						
1	26 – 38	42	2521/0027	-						
		52	2521/0020	✓						
		65	2521/0012	✓	✓	✓	✓	✓	✓	✓
		80	2521/0002	✓						
		100	2521/0006	✓						
2	36 – 54	42	2521/0026	-						
		52	2521/0021	✓						
		65	2521/0013	✓	✓	✓	✓	✓	✓	✓
		80	2521/0003	✓						
		100	2521/0007	✓						
3	50 – 80	65	2521/0014	✓						
		80	2521/0004	✓	✓	✓	✓	✓	✓	✓
		100	2521/0008	✓						
4	69 – 120	65	2521/0015	✓						
		80	2521/0005	✓	✓	✓	✓	✓	✓	✓
		100	2521/0009	✓						

Detailed technical data follows.

Scope of delivery

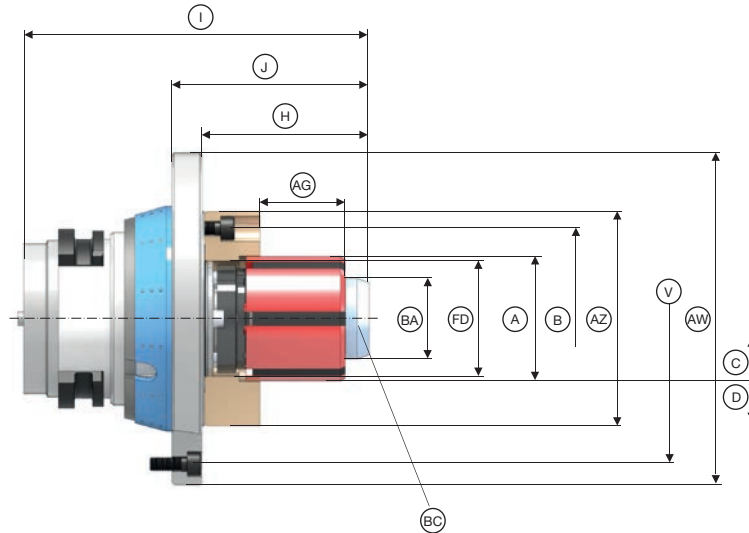
- Adaptation mandrel
- Draw bolt



ADAPTATION CLAMPING DEVICES

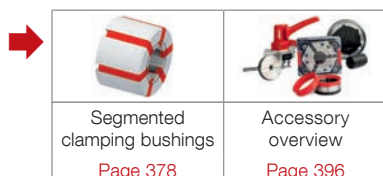
MANDO Adapt [mandrel adaptation]

MANDO Adapt T211 RD. Technical data



Size	0				
Adaptation size	42	52	65	80	100
Clamping range [mm] A	20 – 28				
Run-out ≤ [mm]	0,010				
Max. radial clamping force [kN]	42				
Max. axial drawtube force [pull / push] [kN]	10				
Max. clamping length [mm] AG	22				
Release stroke in Ø [mm] C	0,4				
Reserve stroke in Ø [mm] D	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
RPM n max. [1/min.]	7000		6000	5500	5000
Max. actuating torque [Nm] BC	10				
Draw bolt Ø [mm] BA	19				
Reception workpiece end-stop FD	Ø 32 f7				
End-stop outer Ø [mm] AZ	65				
Bolt hole circle end-stop B	LK Ø 50 [3 x M6]				
Length [mm] H	40,8		40		
Total length [mm] I	106	109	119		129
Height [mm] J	55				
Bolt hole circle V	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm] AW	125		144	160	215
Weight [kg]	4		5	6	11
In stock	✓	✓	✓	✓	✓
Order no.	2521/0025	2521/0019	2521/0011	2521/0001	2521/0010

CENTREX interface repeatability ≤ 0.003 mm.



Segmented clamping bushings
Page 378

Accessory overview
Page 396

Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

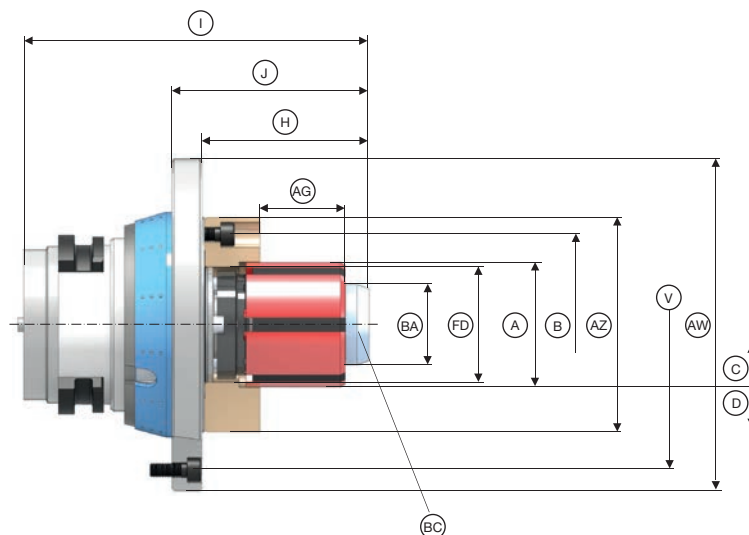
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T211 RD. Technical data



Size	1				
Adaptation size	42	52	65	80	100
Clamping range [mm] A	26 – 38				
Run-out ≤ [mm]	0,010				
Max. radial clamping force [kN]	42				
Max. axial drawtube force [pull / push] [kN]	10				
Max. clamping length [mm] AG	25,4	26			
Release stroke in Ø [mm] C	0,4				
Reserve stroke in Ø [mm] D	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
RPM n max. [1/min.]	7000	6000		5500	5000
Max. actuating torque [Nm] BC	20				
Draw bolt Ø [mm] BA	25				
Reception workpiece end-stop FD	Ø 41 f7				
End-stop outer Ø [mm] AZ	69				
Bolt hole circle end-stop B	LK Ø 55 [3 x M6]				
Length [mm] H	51,8		51		
Total length [mm] I	116	119	129		139
Height [mm] J	65				
Bolt hole circle V	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm] AW	125		144	160	215
Weight [kg]	4		5	6	11
In stock	-	✓	✓	✓	✓
Order no.	2521/0027	2521/0020	2521/0012	2521/0002	2521/0006

CENTREX interface repeatability ≤ 0.003 mm.

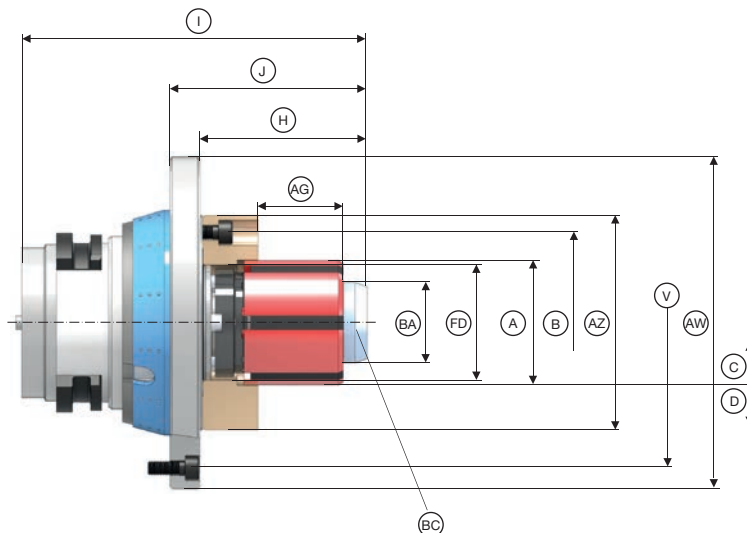




ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

MANDO Adapt T211 RD. Technical data



Size	2				
Adaptation size	42	52	65	80	100
Clamping range [mm]	A	36 – 54			
Run-out ≤ [mm]		0,010			
Max. radial clamping force [kN]		85			
Max. axial drawtube force [pull / push] [kN]		20			
Max. clamping length [mm]	AG	43	42,4	43	
Release stroke in Ø [mm]	C	0,5			
Reserve stroke in Ø [mm]	D	0,3			
Range / recommended workpiece tolerance [mm]		± 0,25			
RPM n max. [1/min.]		7000	6000	5500	5000
Max. actuating torque [Nm]	BC	25			
Draw bolt Ø [mm]	BA	35			
Reception workpiece end-stop	FD	Ø 50 f7			
End-stop outer Ø [mm]	AZ	96			
Bolt hole circle end-stop	B	LK Ø 78 [3 x M6]			
Length [mm]	H	71,3	71		
Total length [mm]	I	136	139	149	159
Height [mm]	J	85			
Bolt hole circle	V	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]
Outer Ø [mm]	AW	125	144	160	215
Weight [kg]		2,5	3	5	11
In stock		-	✓	✓	✓
Order no.		2521/0026	2521/0021	2521/0013	2521/0003
					2521/0007

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

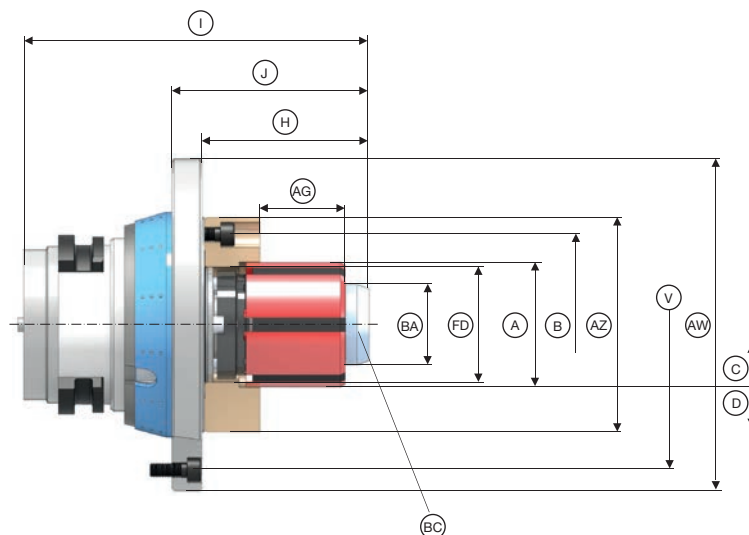
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T211 RD. Technical data



Size	3		
Adaptation size	65	80	100
Clamping range [mm] A	50 – 80		
Run-out ≤ [mm]	0,010		
Max. radial clamping force [kN]	105		
Max. axial drawtube force [pull / push] [kN]	25		
Max. clamping length [mm] AG	49		
Release stroke in Ø [mm] C	0,5		
Reserve stroke in Ø [mm] D	0,4		
Range / recommended workpiece tolerance [mm]	± 0,35		
RPM n max. [1/min.]	6000	5500	5000
Max. actuating torque [Nm] BC	55		
Draw bolt Ø [mm] BA	49		
Reception workpiece end-stop FD	Ø 65 f7		
End-stop outer Ø [mm] AZ	100		
Bolt hole circle end-stop B	LK Ø 80 [3 x M6]		
Length [mm] H	78		
Total length [mm] I	159		169
Height [mm] J	95		
Bolt hole circle V	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm] AW	144	160	215
Weight [kg]	5	6	11
In stock	✓	✓	✓
Order no.	2521/0014	2521/0004	2521/0008

CENTREX interface repeatability ≤ 0.003 mm.



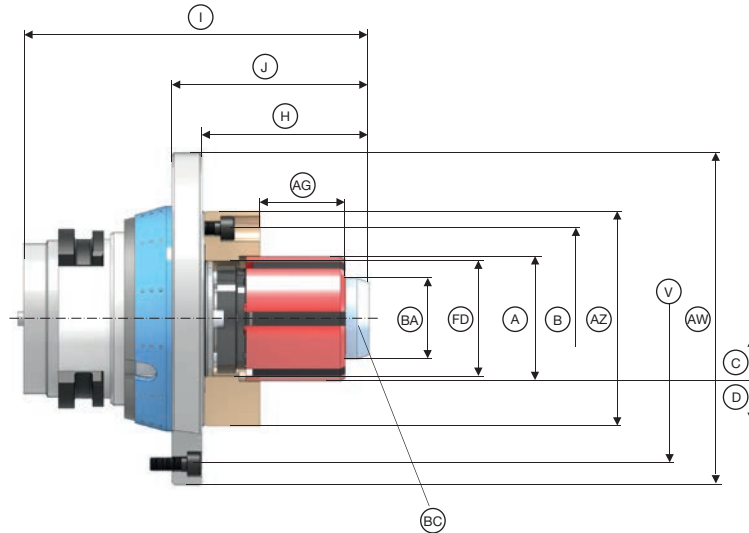
Segmented clamping bushings Page 378	Accessory overview Page 396



ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

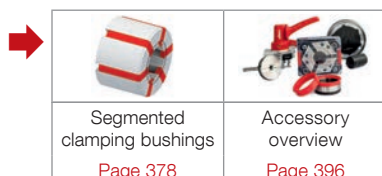
MANDO Adapt T211 RD. Technical data



Size	4		
Adaptation size	65	80	100
Clamping range [mm] A	69 – 120		
Run-out ≤ [mm]	0,010		
Max. radial clamping force [kN]	150		
Max. axial drawtube force [pull / push] [kN]	35		
Max. clamping length [mm] AG	59		
Release stroke in Ø [mm] C	0,6		
Reserve stroke in Ø [mm] D	0,5		
Range / recommended workpiece tolerance [mm]	± 0,4		
RPM n max. [1/min.]	6000	5500	5000
Max. actuating torque [Nm] BC	55		
Draw bolt Ø [mm] BA	68		
Reception workpiece end-stop FD	Ø 78 f7		
End-stop outer Ø [mm] AZ	100		
Bolt hole circle end-stop B	LK Ø 90 [3 x M6]		
Length [mm] H	95		
Total length [mm] I	174		184
Height [mm] J	110		
Bolt hole circle V	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm] AW	144	160	215
Weight [kg]	6	8	11
In stock	✓	✓	✓
Order no.	2521/0015	2521/0005	2521/0009

CENTREX interface repeatability ≤ 0.003 mm.

For size 4, clamping range 101 – 120 mm, a max. speed of 4200 RPM applies.



Adaptation clamping devices

Measuring technology / Automation

Quick change-over systems

Special solutions

Clamping elements / Accessories

Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 RD. Order overview

					Suitable for					
										
Size	Clamping range [mm]	Adaptation size	Order no.	In stock	SPANNTOP mini pull-back Page 52	SPANNTOP nova combi pull-back Page 72	SPANNTOP nova modular Page 72	TOROK RD Page 114	HYDROK RD Page 218	MANOK plus RD Page 208
XXS	8 – 13	42	2524/0042	-						
		52	2524/0043	-						
		65	2524/0044	✓	✓	✓	✓	✓	✓	✓
		80	2524/0045	-						
		100	2524/0046	-						
XS	13 – 19	42	2524/0041	✓						
		52	2524/0008	✓						
		65	2524/0014	✓	✓	✓	✓	✓	✓	✓
		80	2524/0022	✓						
		100	2524/0030	✓						
S	16 – 21	42	2524/0037	✓						
		52	2524/0009	✓						
		65	2524/0015	✓	✓	✓	✓	✓	✓	✓
		80	2524/0023	✓						
		100	2524/0031	✓						
0	20 – 28	42	2524/0038	✓						
		52	2524/0010	✓						
		65	2524/0016	✓	✓	✓	✓	✓	✓	✓
		80	2524/0024	✓						
		100	2524/0032	✓						
1	26 – 38	42	2524/0040	✓						
		52	2524/0011	✓						
		65	2524/0017	✓	✓	✓	✓	✓	✓	✓
		80	2524/0025	✓						
		100	2524/0033	✓						
2	36 – 54	42	2524/0039	✓						
		52	2524/0012	✓						
		65	2524/0018	✓	✓	✓	✓	✓	✓	✓
		80	2524/0026	✓						
		100	2524/0034	✓						
3	50 – 80	65	2524/0019	✓						
		80	2524/0027	✓	✓	✓	✓	✓	✓	✓
		100	2524/0035	✓						
		125	2524/0047	-						
4	69 – 100	65	2524/0020	✓						
		80	2524/0028	✓	✓	✓	✓	✓	✓	✓
		100	2524/0036	✓						
		125	2524/0048	-						
5	100 – 130	125	2524/0049	✓		✓	✓			
6	130 – 160	125	2524/0050	-		✓	✓			
7	160 – 190	125	2524/0051	✓		✓	✓			

Detailed technical data below.

Please note: SPANNTOP nova 125 is only compatible with MANDO Adapt manufactured in 2015 or later.

Scope of delivery

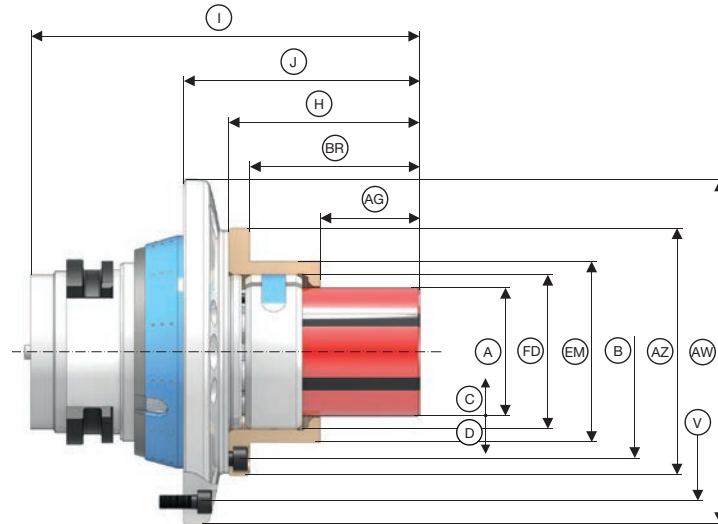
- Adaptation mandrel
- Coupling ring
- Mounting aid depending on size



ADAPTATION CLAMPING DEVICES

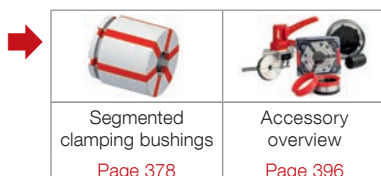
MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 RD. Technical data



Size	XXS				
Adaptation size	42	52	65	80	100
Clamping range [mm]	8 – 13				
Run-out ≤ [mm]	0,020				
Release stroke in Ø [mm]	0,2				
Reserve stroke in Ø [mm]	0,2				
Range / recommended workpiece tolerance [mm]	± 0,15				
Max. clamping length [mm]	12,9				
Max. axial drawtube force [pull / push] [kN]	10				
Max. radial clamping force [kN]	42				
RPM n max. [1/min.]	7000		6000	5500	5000
Reception workpiece end-stop	Ø 34 f7				
Bolt hole circle end-stop	LK Ø 53 [3 x M5]				
End-stop outer Ø [mm]	65				
Depth [mm]	36,5				
End-stop outer Ø 2 [mm]	41				
Length [mm]	45,5				
Total length [mm]	125		128	125	139
Height [mm]	71		64,5	61	65,5
Bolt hole circle	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm]	125		145	160	215
Weight [kg]	3		4	5	10
In stock	-	-	✓	-	-
Order no.	2524/0042	2524/0043	2524/0044	2524/0045	2524/0046

Please note: The maximum clamping length [AG] varies from 6 to 12.9 mm depending on the clamping diameter.
CENTREX interface repeatability ≤ 0.003 mm.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

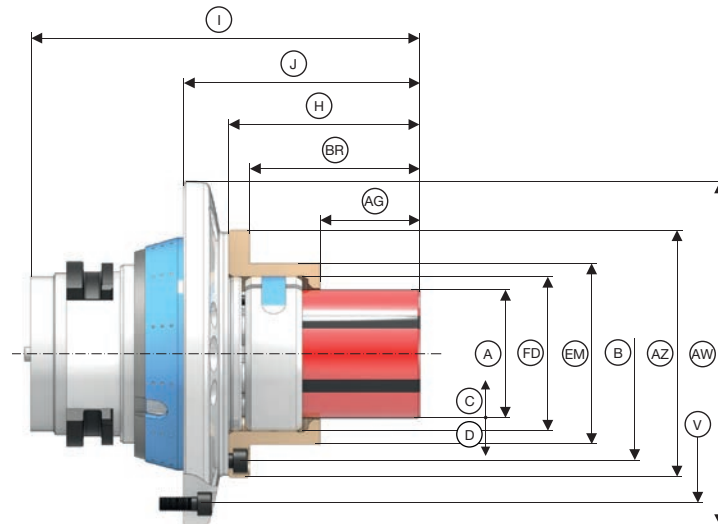
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

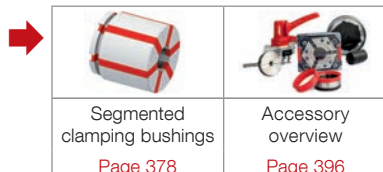


MANDO Adapt T212 RD. Technical data



Size	XS				
Adaptation size	42	52	65	80	100
Clamping range [mm]	13 – 19				
Run-out ≤ [mm]	0,020				
Release stroke in Ø [mm]	0,4				
Reserve stroke in Ø [mm]	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
Max. clamping length [mm]	14				
Max. axial drawtube force [pull / push] [kN]	10				
Max. radial clamping force [kN]	42				
RPM n max. [1/min.]	7000		6000	5500	5000
Reception workpiece end-stop	Ø 36 f7				
Bolt hole circle end-stop	LK Ø 53 [3 x M5]				
End-stop outer Ø [mm]	65				
Depth [mm]	36,5				
End-stop outer Ø 2 [mm]	42				
Length [mm]	45,5				
Total length [mm]	122	125	135,8	125	140
Height [mm]	71		64,5	61	66
Bolt hole circle	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm]	125		145	160	215
Weight [kg]	3		4	5	10
In stock	✓		✓	✓	✓
Order no.	2524/0041	2524/0008	2524/0014	2524/0022	2524/0030

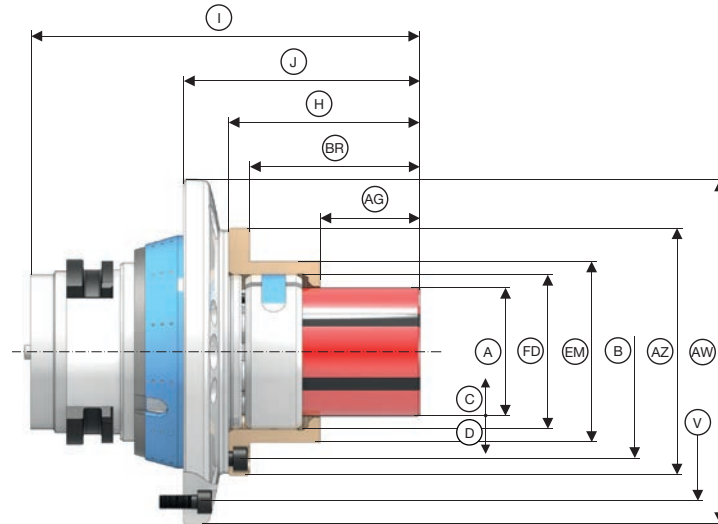
CENTREX interface repeatability ≤ 0.003 mm.





ADAPTATION CLAMPING DEVICES MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 RD. Technical data



Size	S				
Adaptation size	42	52	65	80	100
Clamping range [mm]	A				
Run-out ≤ [mm]	16 – 21				
Release stroke in Ø [mm]	C				
Reserve stroke in Ø [mm]	D				
Range / recommended workpiece tolerance [mm]	± 0,25				
Max. clamping length [mm]	AG				
Max. axial drawtube force [pull / push] [kN]	10				
Max. radial clamping force [kN]	42				
RPM n max. [1/min.]	7000				
Reception workpiece end-stop	FD				
Bolt hole circle end-stop	B				
End-stop outer Ø [mm]	AZ				
Depth [mm]	BR				
End-stop outer Ø 2 [mm]	EM				
Length [mm]	H				
Total length [mm]	I				
Height [mm]	J				
Bolt hole circle	V				
Outer Ø [mm]	AW				
Weight [kg]	3				
In stock	✓				
Order no.	2524/0037	2524/0009	2524/0015	2524/0023	2524/0031

CENTREX interface repeatability ≤ 0.003 mm.



Segmented clamping bushings
Page 378

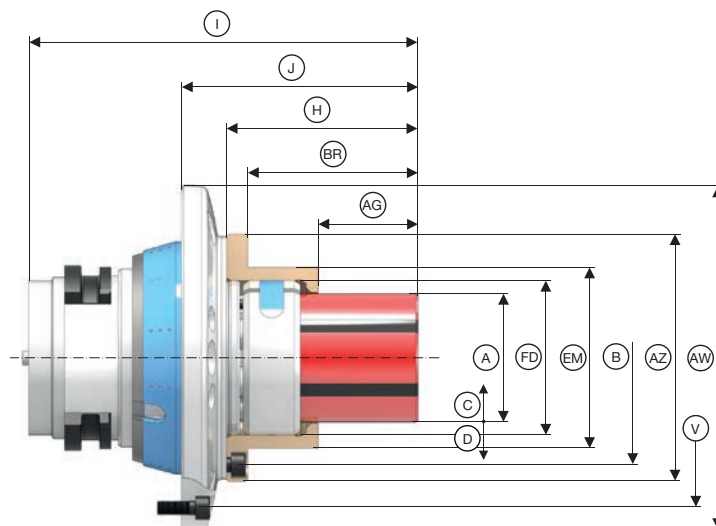
Accessory overview
Page 396

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

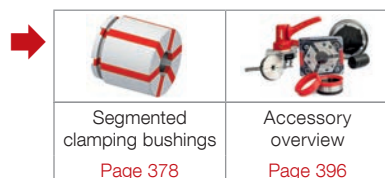


MANDO Adapt T212 RD. Technical data



Size	0				
Adaptation size	42	52	65	80	100
Clamping range [mm] A	20 – 28				
Run-out ≤ [mm]	0,010				
Release stroke in Ø [mm] C	0,4				
Reserve stroke in Ø [mm] D	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
Max. clamping length [mm] AG	21				
Max. axial drawtube force [pull / push] [kN]	10				
Max. radial clamping force [kN]	42				
RPM n max. [1/min.]	7000		6000	5500	5000
Reception workpiece end-stop FD	Ø 47 f7				
Bolt hole circle end-stop B	LK Ø 70 [3 x M6]				
End-stop outer Ø [mm] AZ	90				
Depth [mm] BR	44				
End-stop outer Ø 2 [mm] EM	54				
Length [mm] H	58,5				
Total length [mm] I	135	138	141,5	138	152,5
Height [mm] J	84		77,5	74	78,5
Bolt hole circle V	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm] AW	125		145	160	215
Weight [kg]	4		5	6	11
In stock	✓		✓	✓	✓
Order no.	2524/0038	2524/0010	2524/0016	2524/0024	2524/0032

CENTREX interface repeatability ≤ 0.003 mm.

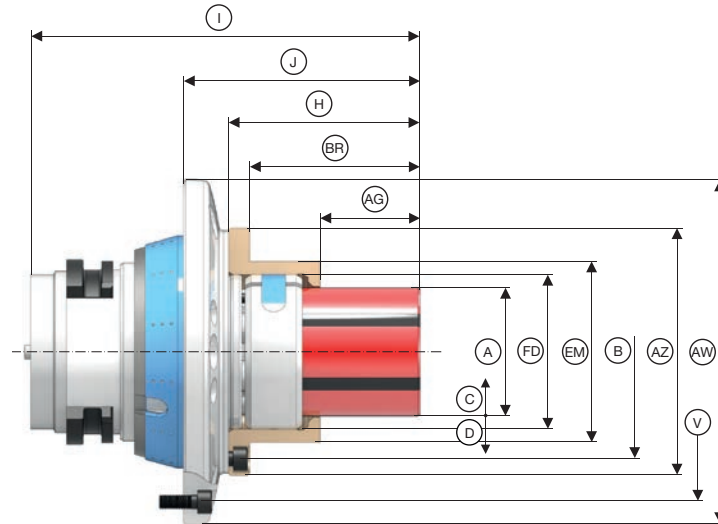




ADAPTATION CLAMPING DEVICES

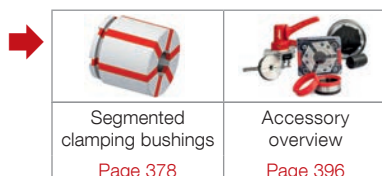
MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 RD. Technical data



Size	1				
Adaptation size	42	52	65	80	100
Clamping range [mm]	A				
Run-out ≤ [mm]	26 – 38				
	0,010				
Release stroke in Ø [mm]	C				
	0,4				
Reserve stroke in Ø [mm]	D				
	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
Max. clamping length [mm]	AG				
	25				
Max. axial drawtube force [pull / push] [kN]	10				
Max. radial clamping force [kN]	42				
RPM n max. [1/min.]	7000				
	6000				
Reception workpiece end-stop	FD				
	Ø 55 f7				
Bolt hole circle end-stop	B				
	LK Ø 75 [3 x M6]				
End-stop outer Ø [mm]	AZ				
	90				
Depth [mm]	BR				
	47				
End-stop outer Ø 2 [mm]	EM				
	62				
Length [mm]	H				
	64,5				
Total length [mm]	I				
	136	139	147,5	146,5	158,5
Height [mm]	J				
	85	83,5	80	84,5	
Bolt hole circle	V				
	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]	
Outer Ø [mm]	AW				
	125	145	160	215	
Weight [kg]	4				
	5	6	11		
In stock	✓				
Order no.	2524/0040	2524/0011	2524/0017	2524/0025	2524/0033

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

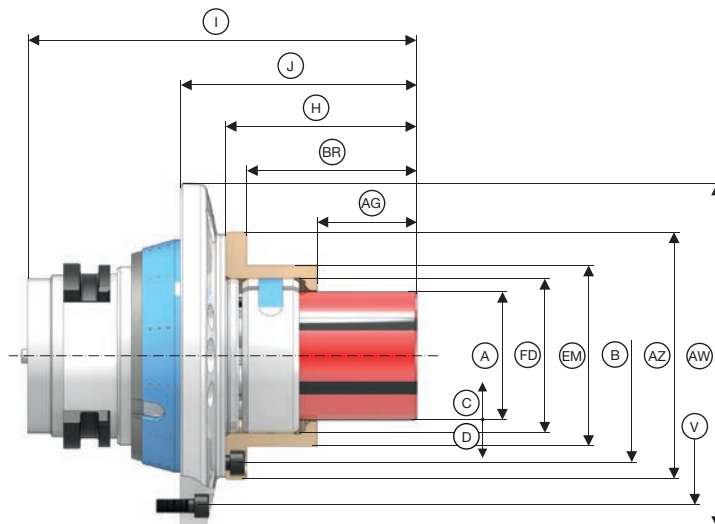
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 RD. Technical data



Size	2				
Adaptation size	42	52	65	80	100
Clamping range [mm]	36 – 54				
Run-out ≤ [mm]	0,010				
Release stroke in Ø [mm]	0,5				
Reserve stroke in Ø [mm]	0,3				
Range / recommended workpiece tolerance [mm]	± 0,25				
Max. clamping length [mm]	40				
Max. axial drawtube force [pull / push] [kN]	20				
Max. radial clamping force [kN]	85				
RPM n max. [1/min.]	7000		6000	5500	5000
Reception workpiece end-stop	Ø 65 f7				
Bolt hole circle end-stop	LK Ø 90 [3 x M6]				
End-stop outer Ø [mm]	104				
Depth [mm]	62				
End-stop outer Ø 2 [mm]	76				
Length [mm]	80,5				
Total length [mm]	152	155	163,5	160	174,5
Height [mm]	101		99,5	94	100,5
Bolt hole circle	LK Ø 107 [3 x M6]		LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M6]
Outer Ø [mm]	125		145	160	215
Weight [kg]	2,5	3	6		
In stock	✓	✓	✓	✓	✓
Order no.	2524/0039	2524/0012	2524/0018	2524/0026	2524/0034

CENTREX interface repeatability ≤ 0.003 mm.

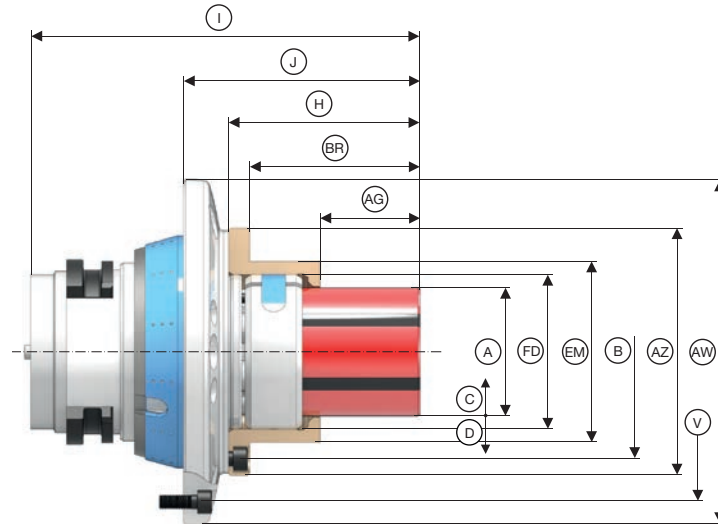




ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

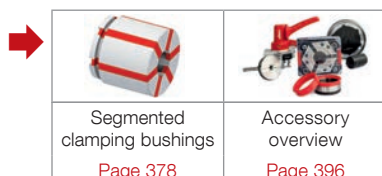
MANDO Adapt T212 RD. Technical data



Size	3			
Adaptation size	65	80	100	125
Clamping range [mm]	50 – 80			
Run-out ≤ [mm]	0,010			
Release stroke in Ø [mm]	0,5			
Reserve stroke in Ø [mm]	0,4			
Range / recommended workpiece tolerance [mm]	± 0,35			
Max. clamping length [mm]	44,5			
Max. axial drawtube force [pull / push] [kN]	25			
Max. radial clamping force [kN]	105			
RPM n max. [1/min.]	6000	5500	5000	3200
Reception workpiece end-stop	Ø 83 f7			
Bolt hole circle end-stop	LK Ø 104 [3 x M6]			
End-stop outer Ø [mm]	120			
Depth [mm]	66,5			
End-stop outer Ø 2 [mm]	104	105	104	105
Length [mm]	87,5			
Total length [mm]	170,5	168,5	181,5	200
Height [mm]	106,5	102	107,50	120
Bolt hole circle	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]	LK Ø 208,5 [6 x M8]
Outer Ø [mm]	145	160	215	221,5
Weight [kg]	5	6	11	25
In stock	✓	✓	✓	-
Order no.	2524/0019	2524/0027	2524/0035	2524/0047

CENTREX interface repeatability ≤ 0.003 mm.

Dimensions for adaptation size 125 under reservation.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

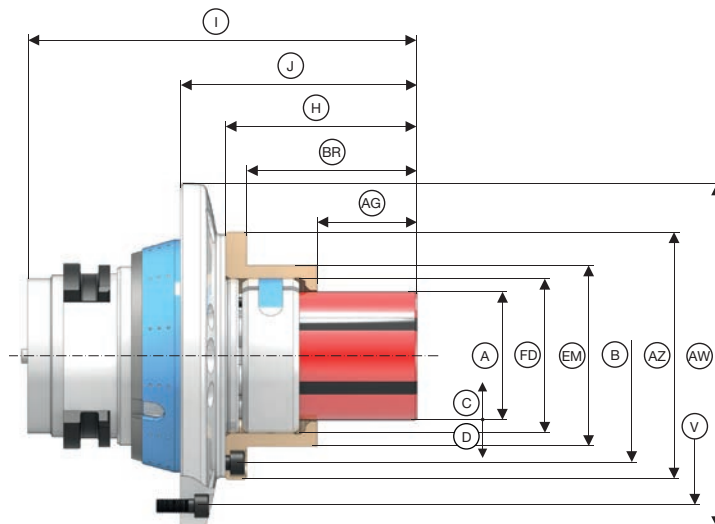
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 RD. Technical data

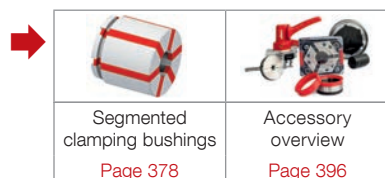


Size	4			
Adaptation size	65	80	100	125
Clamping range [mm]	A	69 – 100		
Run-out ≤ [mm]		0,010		
Release stroke in Ø [mm]	C	0,5	0,6	0,7
Reserve stroke in Ø [mm]	D	0,4	0,5	0,6
Range / recommended workpiece tolerance [mm]		± 0,35	± 0,4	
Max. clamping length [mm]	AG	52,5		
Max. axial drawtube force [pull / push] [kN]		35		
Max. radial clamping force [kN]		150		
RPM n max. [1/min.]		6000	5500	5000
Reception workpiece end-stop	FD	Ø 103 f7		
Bolt hole circle end-stop	B	LK Ø 124 [3 x M6]		
End-stop outer Ø [mm]	AZ	138		
Depth [mm]	BR	77,5		82,5
End-stop outer Ø 2 [mm]	EM	124		
Length [mm]	H	97,5		
Total length [mm]	I	180,5	176	191,5
Height [mm]	J	116,5	112	117,5
Bolt hole circle	V	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Outer Ø [mm]	AW	145	160	215
Weight [kg]		8	9	14
In stock		✓	✓	✓
Order no.		2524/0020	2524/0028	2524/0036
				2524/0048

CENTREX interface repeatability ≤ 0.003 mm.

Dimensions for adaptation size 125 under reservation.

Please note: SPANNTOP nova 125 is only compatible with MANDO Adapt manufactured in 2015 or later.

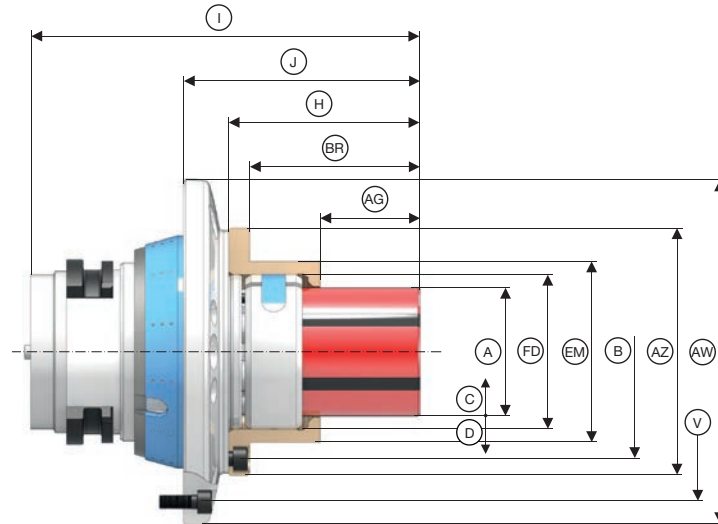




ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 RD. Technical data

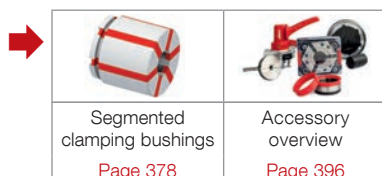


Size	5	
Adaptation size	125	
Clamping range [mm]	A	100 – 130
Run-out ≤ [mm]		0,010
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	0,6
Range / recommended workpiece tolerance [mm]		± 0,5
Max. clamping length [mm]	AG	53
Max. axial drawtube force [pull / push] [kN]		40
Max. radial clamping force [kN]		170
RPM n max. [1/min.]		3200
Reception workpiece end-stop	FD	Ø 140 f7
Bolt hole circle end-stop	B	LK Ø 176 [3 x M8]
End-stop outer Ø [mm]	AZ	195
Depth [mm]	BR	92,5
End-stop outer Ø 2 [mm]	EM	160
Length [mm]	H	112
Total length [mm]	I	218
Height [mm]	J	140
Bolt hole circle	V	LK Ø 208,5 [6 x M8]
Outer Ø [mm]	AW	228
Weight [kg]		30
In stock		✓
Order no.		2524/0049

CENTREX interface repeatability ≤ 0.003 mm.

Dimensions for adaptation size 125 under reservation.

Please note: SPANNTOP nova 125 is only compatible with MANDO Adapt manufactured in 2015 or later.

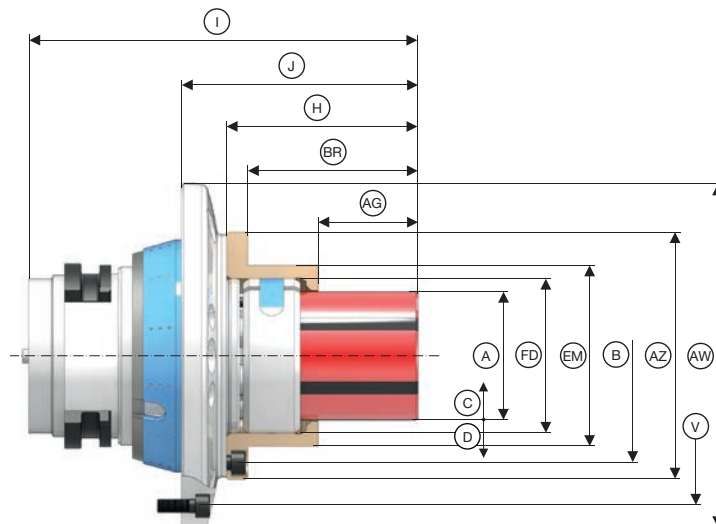


ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T212 RD. Technical data



Size	6	
Adaptation size	125	
Clamping range [mm]	A	130 – 160
Run-out ≤ [mm]		0,010
Release stroke in Ø [mm]	C	0,6
Reserve stroke in Ø [mm]	D	0,6
Range / recommended workpiece tolerance [mm]		± 0,5
Max. clamping length [mm]	AG	61
Max. axial drawtube force [pull / push] [kN]		35
Max. radial clamping force [kN]		150
RPM n max. [1/min.]		3200
Reception workpiece end-stop	FD	Ø 164 f7
Bolt hole circle end-stop	B	LK Ø 200 [3 x M8]
End-stop outer Ø [mm]	AZ	226
Depth [mm]	BR	102
End-stop outer Ø 2 [mm]	EM	190
Length [mm]	H	121,5
Total length [mm]	I	230
Height [mm]	J	150
Bolt hole circle	V	LK Ø 208,5 [6 x M8]
Outer Ø [mm]	AW	226
Weight [kg]		35
In stock		-
Order no.		2524/0050

CENTREX interface repeatability ≤ 0.003 mm.

Dimensions for adaptation size 125 under reservation.

Please note: SPANNTOP nova 125 is only compatible with MANDO Adapt manufactured in 2015 or later.



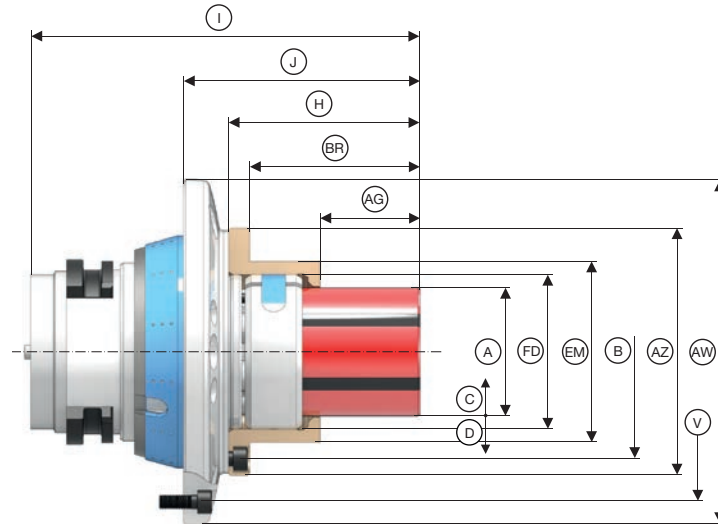
Segmented clamping bushings	Accessory overview
Page 378	Page 396



ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

MANDO Adapt T212 RD. Technical data

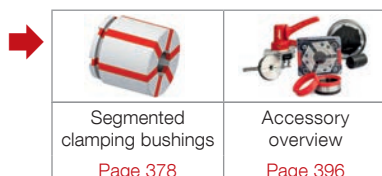


Size	7	
Adaptation size	125	
Clamping range [mm]	A	160 – 190
Run-out ≤ [mm]		0,010
Release stroke in Ø [mm]	C	0,8
Reserve stroke in Ø [mm]	D	0,6
Range / recommended workpiece tolerance [mm]		± 0,5
Max. clamping length [mm]	AG	73
Max. axial drawtube force [pull / push] [kN]		40
Max. radial clamping force [kN]		170
RPM n max. [1/min.]		3200
Reception workpiece end-stop	FD	Ø 192 f7
Bolt hole circle end-stop	B	LK Ø 216 [3 x M8]
End-stop outer Ø [mm]	AZ	234
Depth [mm]	BR	101
End-stop outer Ø 2 [mm]	EM	212
Length [mm]	H	115
Total length [mm]	I	223
Height [mm]	J	145
Bolt hole circle	V	LK Ø 208,5 [6 x M8]
Outer Ø [mm]	AW	234
Weight [kg]		40
In stock		✓
Order no.		2524/0051

CENTREX interface repeatability ≤ 0.003 mm.

Dimensions for adaptation size 125 under reservation.

Please note: SPANNTOP nova 125 is only compatible with MANDO Adapt manufactured in 2015 or later.



ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T812 RD. Order overview

Suitable for



Size	Clamping range [mm]	Adaptation size	Order no.	In stock	SPANNTOP mini deadlength Page 52	SPANNTOP nova combi deadlength Page 72
XS	13 – 19	42/52	10561/0021	-	✓	✓
		65	10561/0022	-		
		80	10561/0014	-		
S	16 – 21	42/52	10561/0002	-	✓	✓
		65	10561/0023	-		
		80	10561/0015	-		
0	20 – 28	42/52	10561/0024	-	✓	✓
		65	10561/0025	✓		
		80	10561/0016	-		
1	26 – 38	42/52	10561/0026	-	✓	✓
		65	10561/0027	✓		
		80	10561/0028	-		
2	36 – 54	42/52	10561/0005	-	✓	✓
		65	10561/0029	✓		
		80	10561/0030	-		
3	50 – 80	42/52	10561/0006	-	✓	✓
		65	10561/0031	✓		
		80	10561/0032	-		
4	69 – 100	65	10561/0033	-	✓	✓
		80	10561/0020	-		

Detailed technical data follows. Adaptation size 100 under reservation.

Scope of delivery

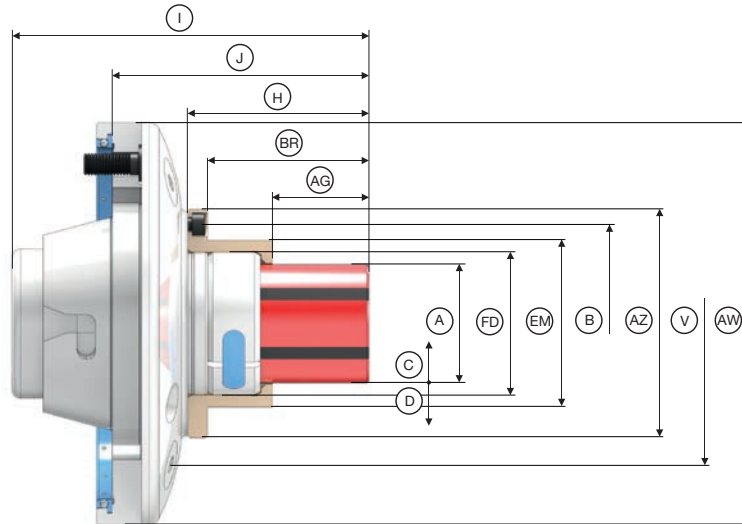
- Adaptation mandrel
- Support sleeve for SAD segmented clamping bushings
- Assembly wrench



ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

MANDO Adapt T812 RD. Technical data



Size	XS			
Adaptation size	42/52	65	80	
Clamping range [mm]	A	13 – 19		
Run-out ≤ [mm]		0,025		
Release stroke in Ø [mm]	C	0,4		
Reserve stroke in Ø [mm]	D	0,3		
Range / recommended workpiece tolerance [mm]		± 0,25		
Max. clamping length [mm]	AG	14		
Max. axial compression force [kN]		10		
Max. radial clamping force [kN]		42		
RPM n max. [1/min.]		7000	6000	5500
Reception workpiece end-stop	FD	Ø 36 f7		
Bolt hole circle end-stop	B	LK Ø 53 [3 x M5]		
End-stop outer Ø [mm]	AZ	65		
Depth [mm]	BR	39,5		
End-stop outer Ø 2 [mm]	EM	42		
Length [mm]	H	47,5		
Total length [mm]	I	122,5	127,5	
Height [mm]	J	81,7		
Bolt hole circle	V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]	LK Ø 160 [3 x M10]
Outer Ø [mm]	AW	170	186	205
Weight [kg]		7	8	10
In stock		-	-	-
Order no.		10561/0021	10561/0022	10561/0014

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

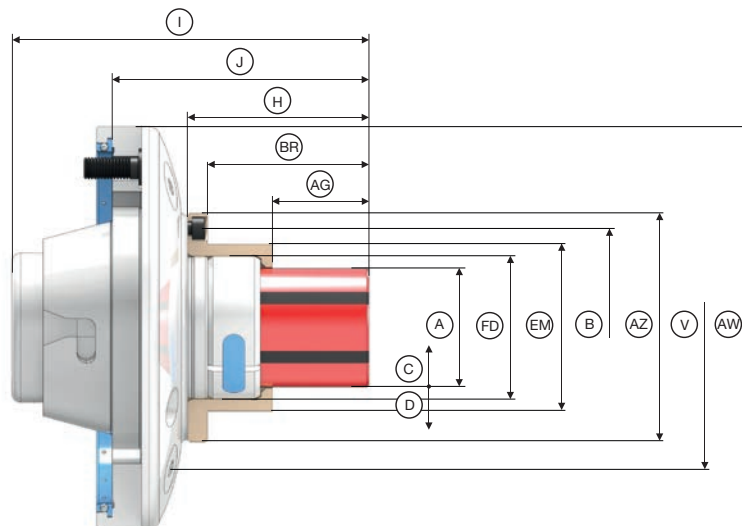
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]

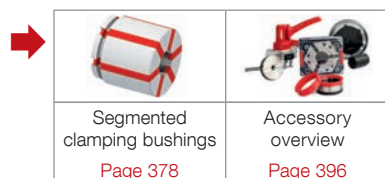


MANDO Adapt T812 RD. Technical data



Size	S		
Adaptation size	42/52	65	80
Clamping range [mm] A	16 – 21		
Run-out ≤ [mm]	0,025		
Release stroke in Ø [mm] C	0,4		
Reserve stroke in Ø [mm] D	0,3		
Range / recommended workpiece tolerance [mm]	± 0,25		
Max. clamping length [mm] AG	15		
Max. axial compression force [kN]	10		
Max. radial clamping force [kN]	42		
RPM n max. [1/min.]	7000	6000	5500
Reception workpiece end-stop FD	Ø 39 f7		
Bolt hole circle end-stop B	LK Ø 57 [3 x M5]		
End-stop outer Ø [mm] AZ	70		
Depth [mm] BR	41,5		
End-stop outer Ø 2 [mm] EM	45		
Length [mm] H	49,5		
Total length [mm] I	124,5	129,5	
Height [mm] J	83,5	83,7	83,5
Bolt hole circle V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]	LK Ø 160 [3 x M10]
Outer Ø [mm] AW	170	186	205
Weight [kg]	7	8	10
In stock	-	-	-
Order no.	10561/0002	10561/0023	10561/0015

CENTREX interface repeatability ≤ 0.003 mm.

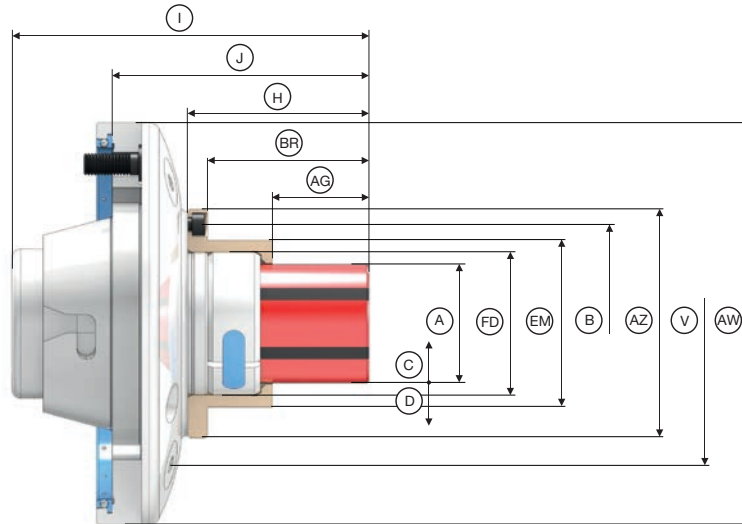




ADAPTATION CLAMPING DEVICES

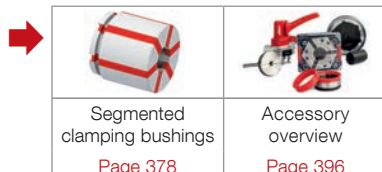
MANDO Adapt [mandrel adaptation]

MANDO Adapt T812 RD. Technical data



Size	0			
Adaptation size	42/52	65	80	
Clamping range [mm]	A	20 – 28		
Run-out ≤ [mm]		0,015		
Release stroke in Ø [mm]	C	0,4		
Reserve stroke in Ø [mm]	D	0,3		
Range / recommended workpiece tolerance [mm]		± 0,25		
Max. clamping length [mm]	AG	21		
Max. axial compression force [kN]		10		
Max. radial clamping force [kN]		42		
RPM n max. [1/min.]		7000	6000	5500
Reception workpiece end-stop	FD	Ø 47 f7		
Bolt hole circle end-stop	B	LK Ø 70 [3 x M6]		
End-stop outer Ø [mm]	AZ	90		
Depth [mm]	BR	51,5		
End-stop outer Ø 2 [mm]	EM	54		
Length [mm]	H	60,5		
Total length [mm]	I	135,5	140,5	
Height [mm]	J	94,7		
Bolt hole circle	V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]	LK Ø 160 [3 x M10]
Outer Ø [mm]	AW	170	186	205
Weight [kg]		8	9	11
In stock		-	✓	-
Order no.		10561/0024	10561/0025	10561/0016

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

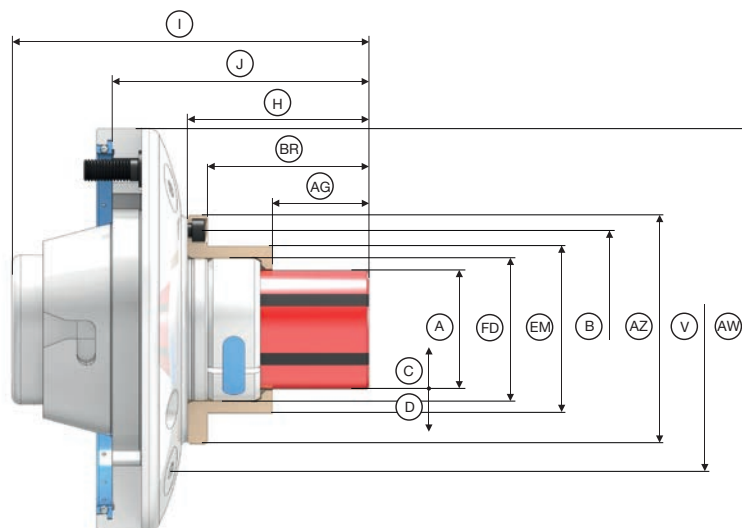
Multi spindles

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T812 RD. Technical data



Size	1		
Adaptation size	42/52	65	80
Clamping range [mm]	26 – 38		
Run-out ≤ [mm]	0,015		
Release stroke in Ø [mm]	C	0,4	0,5
Reserve stroke in Ø [mm]	D	0,3	0,4
Range / recommended workpiece tolerance [mm]	± 0,25	± 0,35	
Max. clamping length [mm]	AG	25	
Max. axial compression force [kN]		10	
Max. radial clamping force [kN]		42	
RPM n max. [1/min.]	7000	6000	5500
Reception workpiece end-stop	FD	Ø 55 f7	
Bolt hole circle end-stop	B	LK Ø 75 [3 x M6]	
End-stop outer Ø [mm]	AZ	90	
Depth [mm]	BR	57,5	
End-stop outer Ø 2 [mm]	EM	62	
Length [mm]	H	66,5	
Total length [mm]	I	140,5	145,5
Height [mm]	J	99,7	
Bolt hole circle	V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]
Outer Ø [mm]	AW	170	186
Weight [kg]		8	9
In stock		-	✓
Order no.	10561/0026	10561/0027	10561/0028

CENTREX interface repeatability ≤ 0.003 mm.



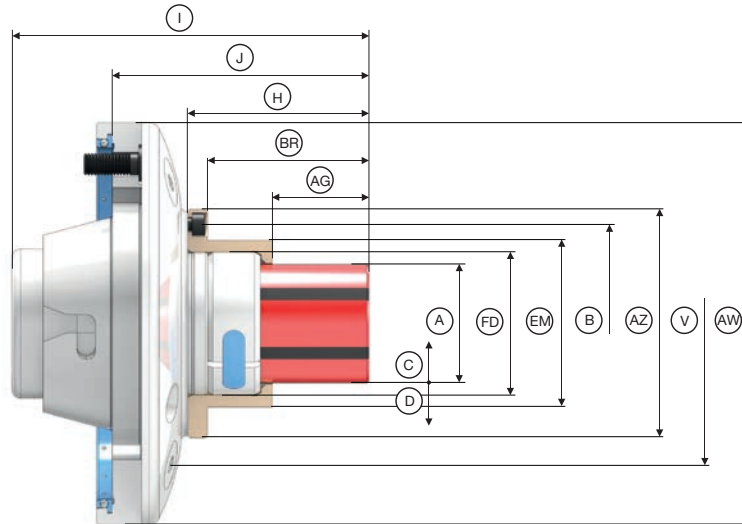
Segmented clamping bushings	Accessory overview
Page 378	Page 396



ADAPTATION CLAMPING DEVICES

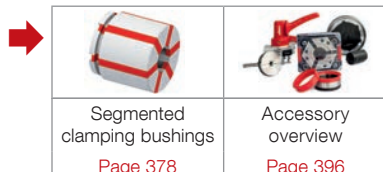
MANDO Adapt [mandrel adaptation]

MANDO Adapt T812 RD. Technical data



Size	2		
Adaptation size	42/52	65	80
Clamping range [mm]	36 – 54		
Run-out ≤ [mm]	0,015		
Release stroke in Ø [mm]	C	0,4	0,5
Reserve stroke in Ø [mm]	D	0,3	0,4
Range / recommended workpiece tolerance [mm]	± 0,25		
Max. clamping length [mm]	AG	40	
Max. axial compression force [kN]		20	
Max. radial clamping force [kN]		85	
RPM n max. [1/min.]	7000	6000	5500
Reception workpiece end-stop	FD	Ø 65 f7	
Bolt hole circle end-stop	B	LK Ø 90 [3 x M6]	
End-stop outer Ø [mm]	AZ	104	
Depth [mm]	BR	73,5	
End-stop outer Ø 2 [mm]	EM	75	
Length [mm]	H	82,5	
Total length [mm]	I	157,5	162,5
Height [mm]	J	122	
Bolt hole circle	V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]
Outer Ø [mm]	AW	170	186
Weight [kg]		9	10
In stock		-	✓
Order no.	10561/0005	10561/0029	10561/0030

CENTREX interface repeatability ≤ 0.003 mm.



Segmented
clamping bushings
Page 378

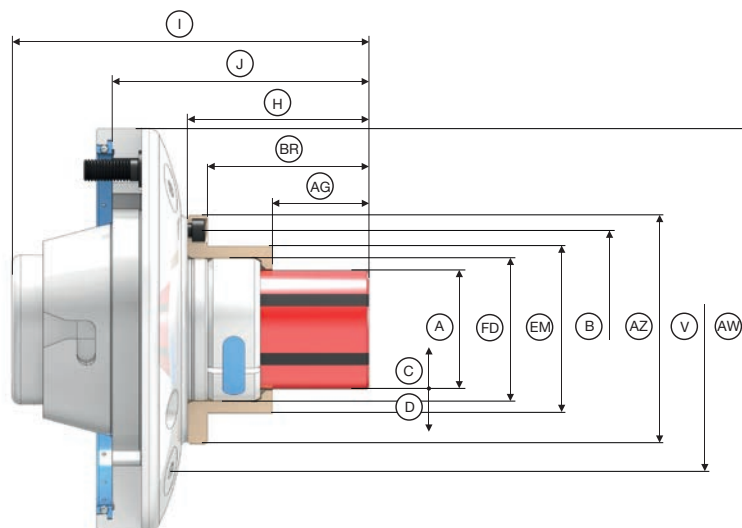
Accessory
overview
Page 396

ADAPTATION CLAMPING DEVICES

MANDO Adapt [mandrel adaptation]



MANDO Adapt T812 RD. Technical data



Size	3		
Adaptation size	42/52	65	80
Clamping range [mm] A	50 – 80		
Run-out ≤ [mm]	0,015		
Release stroke in Ø [mm] C	0,5		
Reserve stroke in Ø [mm] D	0,4		
Range / recommended workpiece tolerance [mm]	± 0,35		
Max. clamping length [mm] AG	44,5		
Max. axial compression force [kN]	25		
Max. radial clamping force [kN]	105		
RPM n max. [1/min.]	7000	6000	5500
Reception workpiece end-stop FD	Ø 83 f7		
Bolt hole circle end-stop B	LK Ø 104 [3 x M6]		
End-stop outer Ø [mm] AZ	120		
Depth [mm] BR	80,0		
End-stop outer Ø 2 [mm] EM	93		
Length [mm] H	89,5		
Total length [mm] I	164,5	169,5	
Height [mm] J	123,7		
Bolt hole circle V	LK Ø 125 [3 x M10]	LK Ø 145 [3 x M10]	LK Ø 160 [3 x M10]
Outer Ø [mm] AW	170	186	205
Weight [kg]	9	11	12
In stock	-	✓	-
Order no.	10561/0006	10561/0031	10561/0032

CENTREX interface repeatability ≤ 0.003 mm.



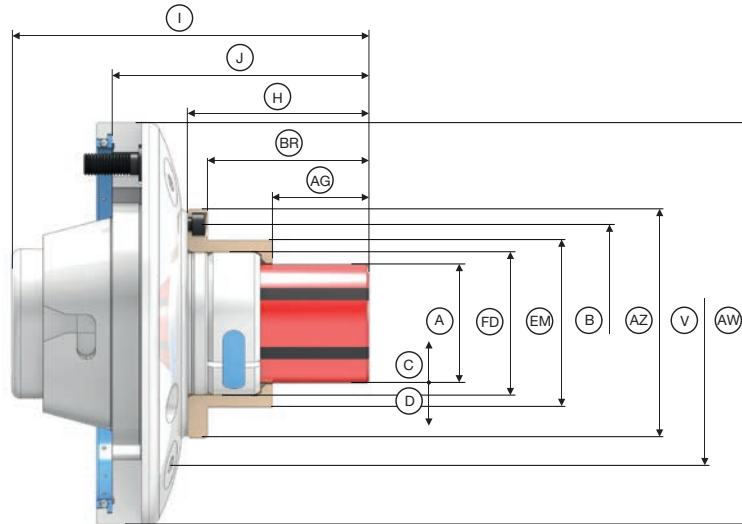
Segmented clamping bushings Page 378	Accessory overview Page 396



ADAPTATION CLAMPING DEVICES

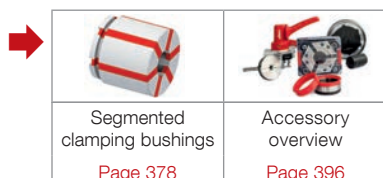
MANDO Adapt [mandrel adaptation]

MANDO Adapt T812 RD. Technical data



Size	4		
Adaptation size	65		80
Clamping range [mm]	A		
Run-out ≤ [mm]	69 – 100		
Release stroke in Ø [mm]	C		
Reserve stroke in Ø [mm]	D		
Range / recommended workpiece tolerance [mm]	± 0,35		
Max. clamping length [mm]	AG		
Max. axial compression force [kN]	52,5		
Max. radial clamping force [kN]	35		
RPM n max. [1/min.]	150		
Reception workpiece end-stop	FD		
Bolt hole circle end-stop	B		
End-stop outer Ø [mm]	AZ		
Depth [mm]	BR		
End-stop outer Ø 2 [mm]	EM		
Length [mm]	H		
Total length [mm]	I		
Height [mm]	J		
Bolt hole circle	V		
Outer Ø [mm]	AW		
Weight [kg]	12		
In stock	-		
Order no.	10561/0033		

CENTREX interface repeatability ≤ 0.003 mm.



Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

Special solutions

Clamping elements/
Accessories

Multi spindles



Jaw module

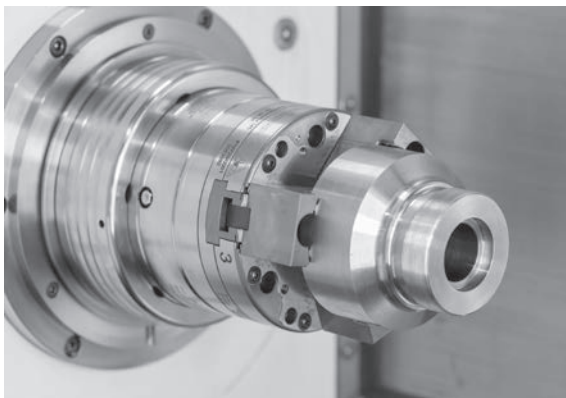
Always the right solution





With the jaw module in our HAINBUCH modular system, you always have the right clamping device. More than 80 % of workpieces are covered with the small jaw module. For larger workpieces, you can change-over within 2 minutes to the large jaw module.

Do you need a full through-bore? Do you want to implement workpiece clamping with the pull-back effect? If so, it's all possible! The basic unit, into which the jaw module is inserted into, is a HAINBUCH chuck or stationary chuck. If necessary, clamping heads or mandrels may also be inserted.



Key advantages

- Jaw clamping with a HAINBUCH chuck or stationary chuck
- Enlarged clamping range of the basic clamping device
- Machining between the jaws is possible [milling or drilling]
- Deadlength clamping
- Optimal lubrication and less sensitive to contamination thanks to lubricating system
- New: more convenient assembly mechanism

Jaw module on the machine

ADAPTATION CLAMPING DEVICES

Jaw module



Change-over to jaw module [approx. 2 min.]



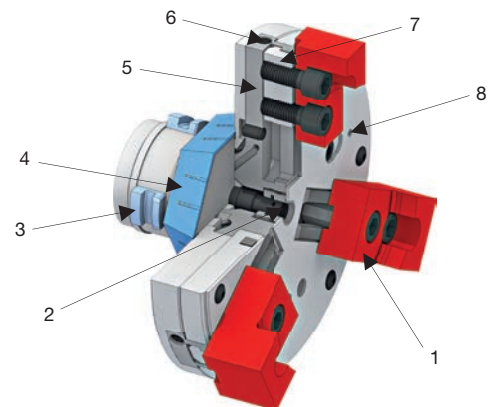
Change-over to jaw module [approx. 2 min.]



Jaw module SE in detail

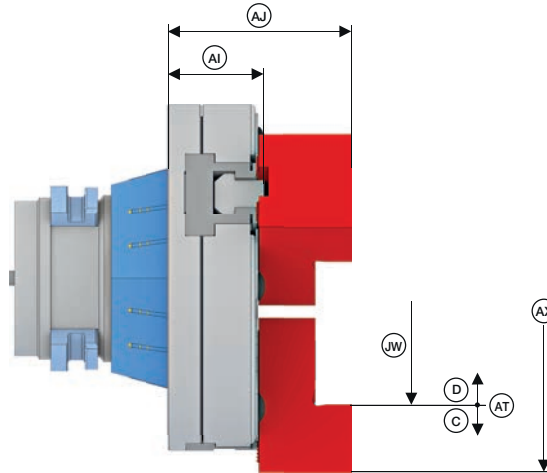
Designation

- 1 Adjustable top jaws with fine serration
- 2 Locking screw
- 3 Coupling
- 4 CENTREX system for μm -precise used without adjustment
- 5 Master jaw
- 6 Grease nipple
- 7 T-slot nut
- 8 Indicator for the clamping reserve





Jaw module SE. Technical data and order overview



Product line		SE		
Adaptation size		65		100
Size		145	215	
Run-out ≤ [mm]		0,020		
Clamping range [mm]	JW	see overview top jaws		
RPM n max. [1/min.]		5000	3000	
Max. actuating force when boring the jaws [kN]		45		
Max. axial drawtube force [pull / push] [kN]		45		
Max. radial clamping force [kN]		60		
Release stroke in Ø [mm]	C	2,2	5	
Reserve stroke in Ø [mm]	D	1,6	2,5	
Stroke per jaw [mm]	AT	1,9	3,8	
Gear cutting type		1,5 x 60° [serration]		
Swing Ø	AX	~149	~220	
Length without jaws [mm]	AI	37,5		
Length with jaws [mm]	AJ	77		
Weight [kg]		6,3	11,3	14,5
In stock		✓	✓	✓
Order no.		10720/0004	10720/0005	10720/0006

Run-out of ≤ 0.020 mm is only ensured with re-machined soft jaws.

Mounting precision for rotating clamping devices: Run-out of 0.005 mm can be achieved between chuck and the jaw module. Run-out errors on the chuck must be taken into consideration. Mounting repeatability of stationary clamping devices is 0.003 mm on the jaw module.

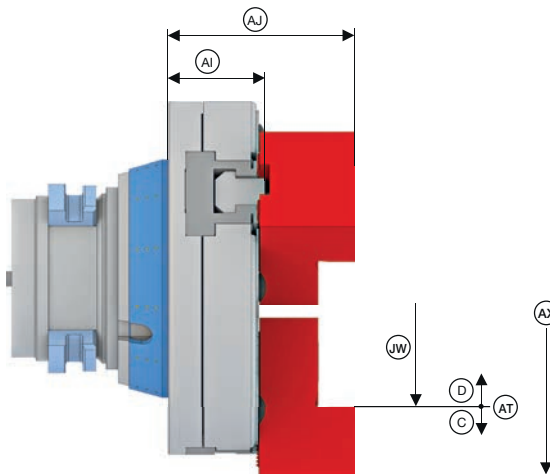


Scope of delivery

- Jaw module
- T-slot nuts
- Storage box



Jaw module RD. Technical data and order overview



Product line	RD			
Adaptation size	65		80	100
Size	145	215		
Run-out ≤ [mm]	0,020			
Clamping range [mm] JW	see overview top jaws			
RPM n max. [1/min.]	5000	3000		
Max. actuating force when boring the jaws [kN]	45			
Max. axial drawtube force [pull / push] [kN]	45			
Max. radial clamping force [kN]	60			
Release stroke in Ø [mm] C	2,2		5	
Reserve stroke in Ø [mm] D	1,6		2,5	
Stroke per jaw [mm] AT	1,9		3,8	
Gear cutting type	1,5 x 60° [serration]			
Swing Ø AX	~149	~220		
Length without jaws [mm] AI	37,5	40		37,5
Length with jaws [mm] AJ	77	80		77
Weight [kg]	6,3	11,3	12,6	14,5
In stock	✓	✓	✓	✓
Order no.	10721/0005	10721/0006	10721/0007	10721/0008

Run-out of ≤ 0.020 mm is only ensured with re-machined soft jaws.

Mounting precision for rotating clamping devices: Run-out of 0.005 mm can be achieved between chuck and the jaw module. Run-out errors on the chuck must be taken into consideration. Mounting repeatability of stationary clamping devices is 0.003 mm on the jaw module.



Jaws

Page 389

Scope of delivery

- Jaw module
- T-slot nuts
- Storage box

ADAPTATION CLAMPING DEVICES

Jaw module

Adaptation
clamping devices

Measuring tech-
nology / Automation

Quick change-
over systems

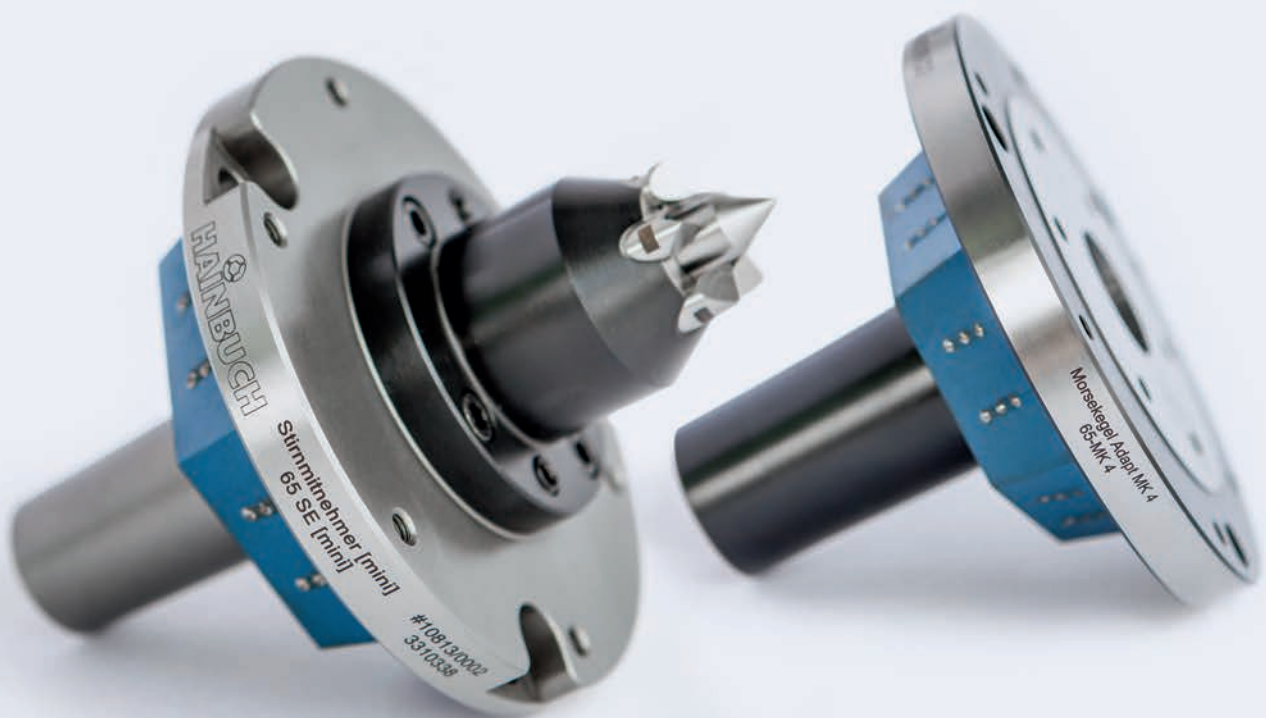
Special solutions

Clamping elements /
Accessories

Multi spindles



Face driver / morse taper adaptation





ADAPTATION CLAMPING DEVICES

Face driver / morse taper adaptation

Machine your workpiece over its entire length between centers with the face driver adaptation. First, this increases run-out. Second, it shapes and positions tolerances. And third, the face driver can be quickly mounted.

With the morse taper adaptation you have even more flexibility. Whether face driver, fixed center, a manually activated mandrel, or even tools – with this adaptation you can insert anything that can be adapted into the morse taper connection. Thus, you have the possibility of extending your chuck within seconds.

The CENTREX quick change-over interface that is integrated in both adaptations makes it possible. Assembly without having to align is possible, and with a repeatability of ≤ 0.003 mm on the interface.

Key advantages

- Tremendous flexibility
- Self-centering of the adaptation in the chuck ≤ 0.003 mm
- Extremely fast conversion without disassembling the chuck [1 min.]



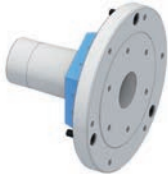
Face driver adaptation on the machine

ADAPTATION CLAMPING DEVICES

Face driver / morse taper adaptation



Face driver / morse taper

	Face driver adaptation	Morse taper adaptation
		
Description	Adaptation for clamping between centers	Adaptation to the MK4 reception
Sizes	42, 52, 65, 80, 100	42, 52, 65, 80, 100
Clamping range of all sizes [mm]	–	–
Variant	SE [hexagonal], RD [round]	SE [hexagonal], RD [round]
Advantages	■ Spring-loaded center ■ Hard metal face driver ■ Assembly in 1 minute without alignment	■ Adaptation possibility via morse taper ■ Assembly in 1 minute without alignment ■ Self-centering of the adaptation in the chuck ≤ 0.003 mm

Change-over to face driver [approx. 1 min.]



Clamping device with clamping head

Remove clamping head and workpiece end-stop

Insert face driver

Secure face driver

Clamping device set-up

Change-over to morse taper [approx. 1 min.]



Remove clamping head and workpiece end-stop

Insert morse taper

Secure morse taper

Insert center

Clamping device set-up

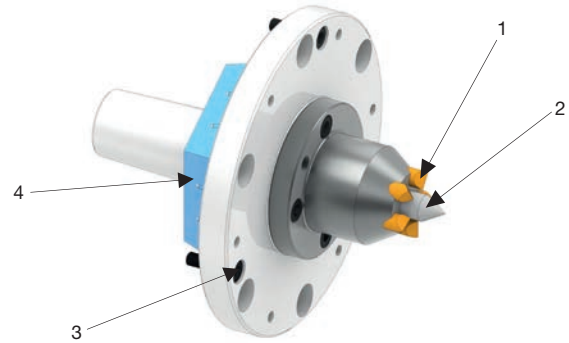


ADAPTATION CLAMPING DEVICES Face driver / morse taper adaptation

Face driver SE in detail

Designation

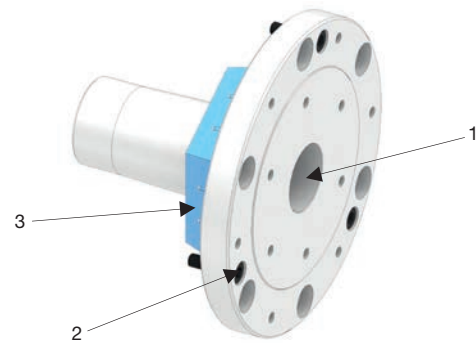
- 1 Hard metal face driver
- 2 Spring-loaded center
- 3 Mounting screws
- 4 CENTREX system for μm -precise used without adjustment



Morse taper SE in detail

Designation

- 1 Morse taper size 4
- 2 Mounting screws
- 3 CENTREX system for μm -precise used without adjustment

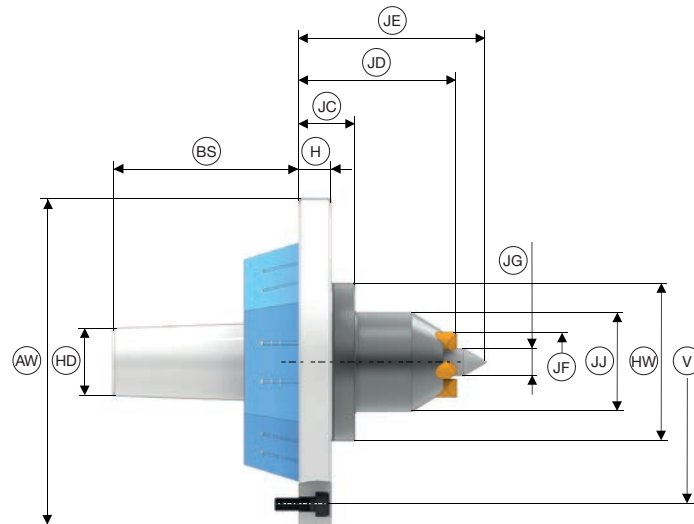


ADAPTATION CLAMPING DEVICES

Face driver / morse taper adaptation



Face driver adaptation SE. Technical data and order overview



Product line	SE						
Size	52		65		100		
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	
Run-out ≤ [mm]	0,010						
RPM n max. [1/min.]	7000		6000		5000		
Length [mm]	H	14,5					
Length 2 [mm]	BS	69,3	82,3		83,3		
Length 3 [mm]	JC	25					
Length 4 [mm]	JD	56	70		81,5		
Length 5 [mm]	JE	63,5	83		101		
Outer Ø [mm]	AW	119	125	129	145	183	215
Outer Ø 2 [mm]	HD	30					
Outer Ø 3 [mm]	HW	52	70		86		
Outer Ø 4 [mm]	JJ	29	44		60		
Driving pin-Ø	JF	20	31		45		
Center-Ø	JG	6	12		20		
Bolt hole circle	V	LK Ø 105 [3 x M8]	LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]	LK Ø 180 [3 x M8]
Weight [kg]	2,3		3,6		7,7		
In stock	-	✓	✓	✓	-	✓	
Order no.	10813/0001	10658/0006	10813/0002	10658/0007	10813/0003	10658/0008	

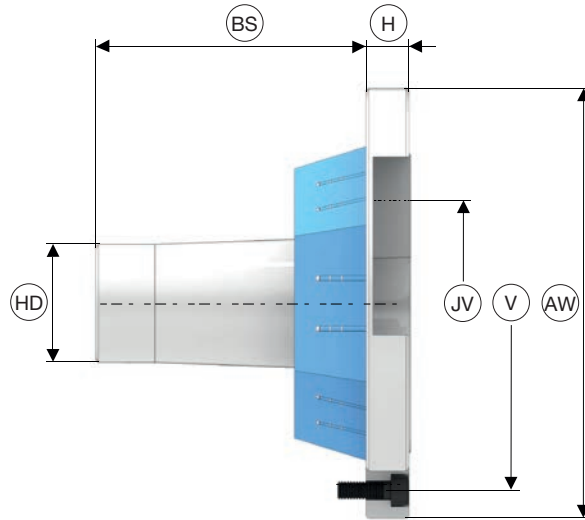
Mounting accuracy for rotating clamping devices: Run-out ≤ 0.005 mm can be achieved between chuck taper and mandrel taper.
Run-out errors on the chuck must be taken into consideration.



ADAPTATION CLAMPING DEVICES

Face driver / morse taper adaptation

Morse taper adaptation [MK4] SE. Technical data and order overview



Product line	SE					
Size	52		65		100	
Suitable for	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini	TOPlus mini	all except TOPlus mini
Run-out ≤ [mm]	0,010					
RPM n max. [1/min.]	7000		6000		5000	
Length [mm]	H		14,5			
Length 2 [mm]	BS		91			
Outer Ø [mm]	AW		145		183	
Outer Ø 2 [mm]	HD		40			
Bolt hole circle	V	LK Ø 105 [3 x M8] LK Ø 107 [3 x M6]	LK Ø 112 [3 x M8]	LK Ø 126 [3 x M6]	LK Ø 160 [3 x M8]	LK Ø 180 [3 x M8]
Bolt hole circle 2	JV	LK Ø 60 [6 x M6]		LK Ø 77 [6 x M6]		LK Ø 80 [6 x M6]
Weight [kg]	2,0		2,8		6,0	
In stock	-		✓		-	
Order no.	10814/0001	10662/0006	10814/0002	10662/0007	10814/0003	10662/0008

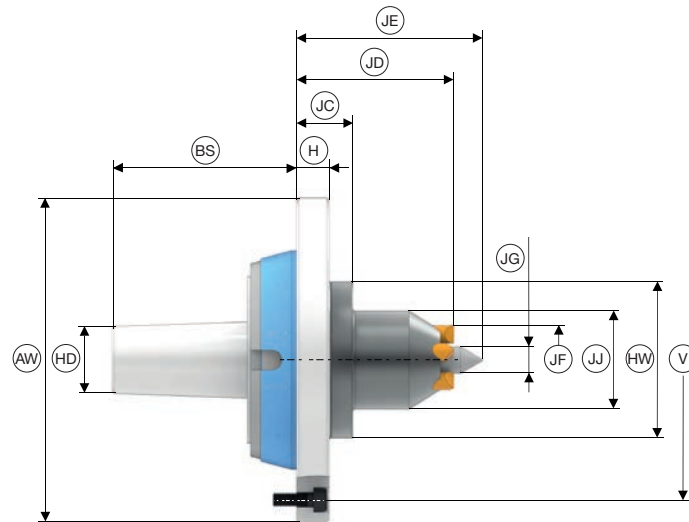
Mounting accuracy for rotating clamping devices: Run-out ≤ 0.005 mm can be achieved between chuck taper and mandrel taper.
Run-out errors on the chuck must be taken into consideration.

ADAPTATION CLAMPING DEVICES

Face driver / morse taper adaptation



Face driver adaptation RD. Technical data and order overview



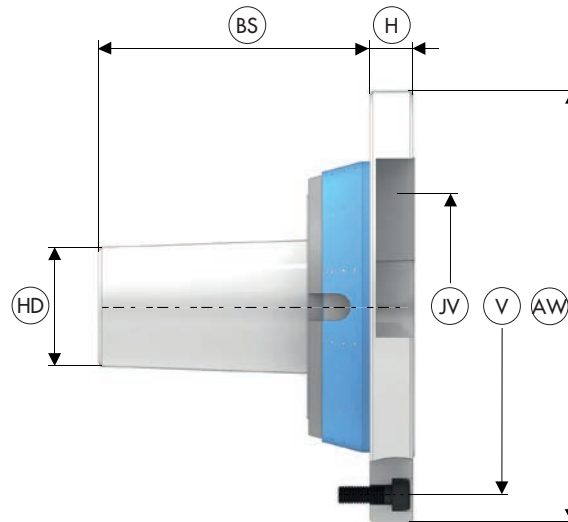
Product line	RD			
Size	42/52	65	80	100
Run-out ≤ [mm]			0,010	
RPM n max. [1/min.]	7000	6000	5500	5000
Length [mm] H			14,5	
Length 2 [mm] BS	69,3	82,3		83,3
Length 3 [mm] JC			25	
Length 4 [mm] JD	56	70		81,5
Length 5 [mm] JE	63,5	83		101
Outer Ø [mm] AW	125	145	160	215
Outer Ø 2 [mm] HD			30	
Outer Ø 3 [mm] HW	52	70		86
Outer Ø 4 [mm] JJ	29	44		60
Driving pin-Ø JF	20	31		45
Center-Ø JG	6	12		20
Bolt hole circle V	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Weight [kg]	2,4	3,4	4,6	6,0
In stock	✓	✓	✓	✓
Order no.	10659/0001	10659/0003	10659/0004	10659/0005

Mounting accuracy for rotating clamping devices: Run-out ≤ 0.005 mm can be achieved between chuck taper and mandrel taper.
Run-out errors on the chuck must be taken into consideration.



ADAPTATION CLAMPING DEVICES Face driver / morse taper adaptation

Morse taper adaptation [MK4] RD. Technical data and order overview



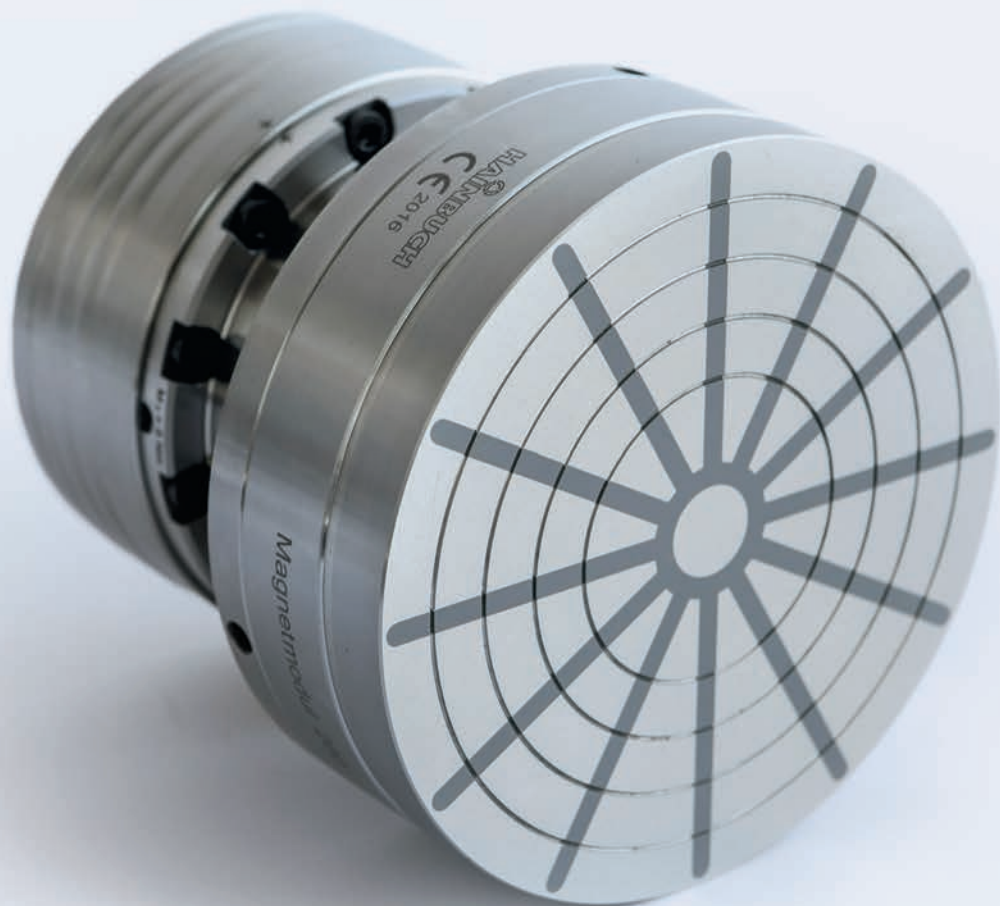
Product line	RD			
Size	42/52	65	80	100
Run-out ≤ [mm]	0,010			
RPM n max. [1/min.]	7000	6000	5500	5000
Length [mm]	14,5			
Length 2 [mm]	91			
Outer Ø [mm]	125	145	160	215
Outer Ø 2 [mm]	40			
Bolt hole circle	LK Ø 107 [3 x M6]	LK Ø 126 [3 x M6]	LK Ø 139 [3 x M6]	LK Ø 180 [3 x M8]
Bolt hole circle 2	LK Ø 60 [6 x M6]	LK Ø 80 [6 x M6]		
Weight [kg]	2,0	2,7	3,5	5,7
In stock	✓	✓	✓	✓
Order no.	10666/0001	10666/0003	10666/0004	10666/0005

Mounting accuracy for rotating clamping devices: Run-out ≤ 0.005 mm can be achieved between chuck taper and mandrel taper.
Run-out errors on the chuck must be taken into consideration.



Magnet module

Adaptation for magnetic clamping





In daily use you are optimally equipped with the TOPlus or SPANNTOP chucks. There are always components that are difficult to clamp due to their contour. Or deformed through radial clamping. This requires an axial chuck with fast set-up.

The solution is the HAINBUCH magnet module. With the magnet module you can clamp components axially on a neodymium magnet. The HAINBUCH magnet module is set-up in only 30 seconds. Your basic clamping device is already mounted. You exchange the clamping head that is included in delivery. When clamping, the magnetic clamping device is pulled onto the flat contact area of your basic clamping device. If, after initial installation, the magnet module is planed flat and the install position is marked, a face change-over accuracy of 2 µm can be achieved. The workpiece itself is clamped by hand on the magnet.



Key advantages

- End face axial clamping via neodymium magnet
- High face-run change-over accuracy
- High holding force of 140 N/cm²
- Assembly in 30 seconds without having to align
- Low maintenance because it is resistant to contamination

Magnet module in use

ADAPTATION CLAMPING DEVICES

Magnet module



Change-over to magnet module [approx. 30 sec.]



Change-over to magnet module [approx. 30 sec.]



Magnet module in detail

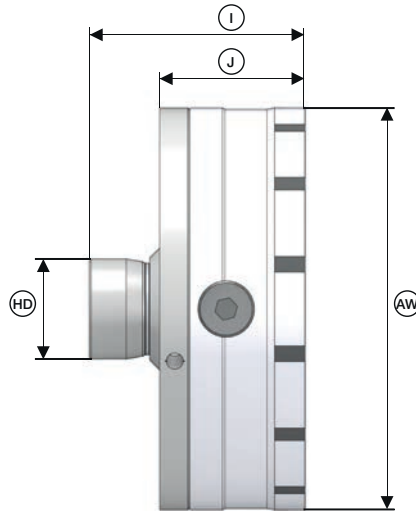
Designation	
1 Magnet module 2 Thread for transport lug 3 Actuating screw for the magnet 4 Magnet module clamping head	

Scope of delivery

- Magnet module
- Clamping head for magnet module
- Storage box



Magnet module starter-set. Technical data and order overview



Product line	SE			RD			
Size	52	65	100	52	65	80	100
Size – magnet module				200			
Clamping force [N/cm²]				140			
RPM n max. [1/min.]				2500			
Min. draw force axial [kN]				10			
Total length [mm]	I				72		
Height [mm]	J				55		
Outer Ø [mm]	AW				200		
Outer Ø 2 [mm]	HD				52		
Weight [kg]				18			
In stock	✓	✓	✓	✓	✓	✓	✓
Order no.	10824/0001	10824/0002	10824/0003	10825/0001	10825/0002	10825/0003	10825/0004

Please note: The magnet module is only suitable for modular and pull-back clamping devices.

Clamping head for magnet module. For use of an existing magnet module on a different chuck size.

Product line	Size	In stock	Order no.
SE	52	✓	10824/2001
	65	✓	10824/2002
	100	✓	10824/2003
RD	52	✓	10825/2001
	65	✓	10825/2002
	80	✓	10825/2003
	100	✓	10825/2004

TESTit

Measuring clamping force directly at the clamping position



TEST AND MEASURING TECHNOLOGY

TESTit clamping force measuring device

A regular check of clamping force is vital for a safe, precise, and productive process. Do you manufacture at the highest possible metal removal rates? Perhaps your clamping device can do more than you think! Those who face tough competition can no longer afford to manufacture with »theoretical clamping forces«. Nevertheless the DIN EN 1550 requires that static clamping force measurement must be performed by the manufacturer at regular intervals.

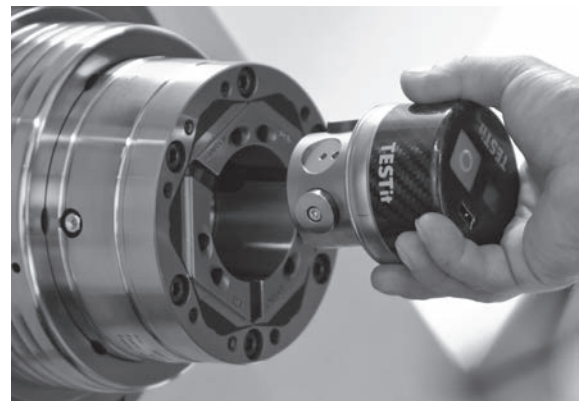
In practical applications the holding power for solid components must be extremely strong. On the other hand, increasingly thin-walled and sensitive workpieces that are already close to the finished contour, forged, or deep-drawn are being processed completely on a machine. If something is clamped too strongly, a sensitive part can be deformed. Only by precisely measuring the clamping force can you increase your metal removal rates, work faster, and more cost effectively.

With TESTit you are on the safe side!



Key advantages

- Clamping force measurement for O.D. and I.D. clamping
- Can be used rotating [under RPM] and for stationary applications
- Data transmission via bluetooth® to a tablet
- Lithium rechargeable battery for more than 5 hours of operating time
- Software for visualization and archiving of the measurement data [only available together with the starter-set]



TESTit for O.D. clamping in use



Jaw chuck B-Top3 and TESTit in use



Mandrel MANDO and TESTit in use

TESTit clamping force measuring device**TESTit models**

	O.D. clamping I	O.D. clamping II	I.D. clamping
			
Sizes	AS18	AS32, AS65	IS28, IS50, IS70
Description	Clamping force measurement of O.D. clamping devices with a round clamping surface	Clamping force measurement of O.D. clamping devices with a round clamping surface or two opposing clamping surfaces	Clamping force measurement of I.D. clamping devices with a round clamping surface
Use	■ Clamping heads and collets ■ 3-jaw chuck	■ Clamping heads and collets ■ 3-jaw chuck ■ 2-jaw chuck ■ Vise	■ Segmented clamping bushings
Software	HAINBUCH measurement and archiving software	HAINBUCH measurement and archiving software	HAINBUCH measurement and archiving software

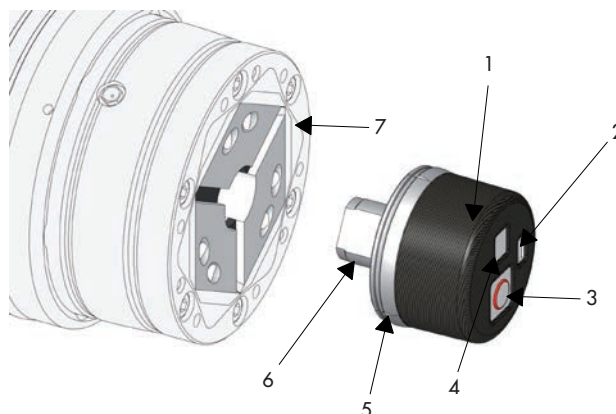
TEST AND MEASURING TECHNOLOGY

TESTit clamping force measuring device

TESTit for O.D. clamping I [AS18] in detail

Designation

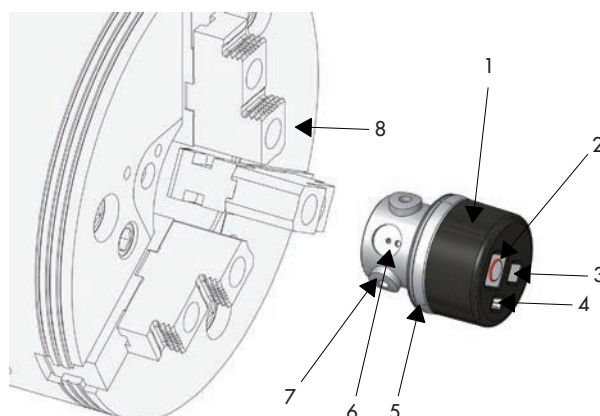
- 1 TESTit clamping force measuring device
- 2 USB-outlet for charging of the battery
- 3 On-/Off-Switch with operating light
- 4 Battery display in percentage
- 5 Marking for positioning
- 6 Measuring segment [3 x 120° offset]
- 7 Chuck with standard clamping head [smooth bore]



TESTit for O.D. clamping II [AS32, AS65] in detail

Designation

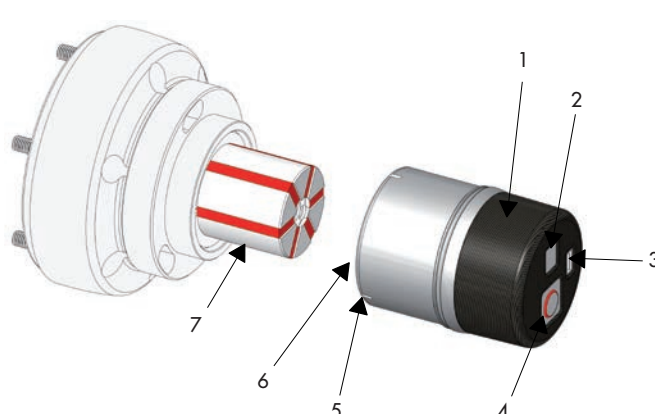
- 1 TESTit clamping force measuring device
- 2 On-/Off-Switch with operating light
- 3 Battery display in percentage
- 4 USB-outlet for charging of the battery
- 5 Marking for positioning
- 6 Measuring segment for 2-jaw-clamping force measurement [2 x 180°]
- 7 Measuring segment [3 x 120° offset]
- 8 3-jaw chuck with standard jaws [smooth bore]



TESTit for I.D. clamping [IS28, IS50 and IS70] in detail

Designation

- 1 TESTit clamping force measuring device
- 2 Battery display in percentage
- 3 USB-outlet for charging of the battery
- 4 On-/Off-Switch with operating light
- 5 Marking for positioning
- 6 Measuring segment [3 x 120° offset]
- 7 Mandrel with standard segmented clamping bushing [smooth clamping surface]



TEST AND MEASURING TECHNOLOGY

TESTit clamping force measuring device

Order overview. Clamping force measurement device for O.D. clamping

Variant	Size	In stock	Order no.
TESTit starter set	AS18	✓	10608/0007
	AS32	✓	10608/0014
	AS65	✓	10608/0009
TESTit single unit	AS18	✓	10607/0001
	AS32	✓	10607/0007
	AS65	✓	10607/0003

Please note: Tablet is equipped with an English operating system. For order numbers tablet with a German operating system, see the German catalogue.

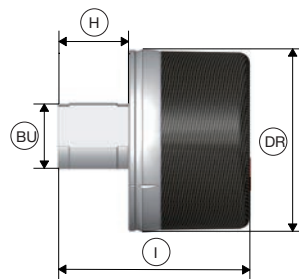
Scope of delivery starter set

- TESTit clamping force measuring device
- Display device
- Measurement and archiving software
- Case

Scope of delivery single unit

- TESTit clamping force measuring device

TESTit for O.D. clamping. Technical data



Size	AS18	AS32	AS65
Clamping Ø [mm] BU	18	32	65
Max. clamping force measuring range [3 measuring points] [kN]	80	140	225
Max. clamping force measuring range [2 measuring points] [kN]		90	150
RPM n max. [1/min.]	10000	8000	6000
Total length [mm] I	82	84	92
Outer Ø [mm] DR		78	
Length [mm] H	30	28	36

With use of 2 plug gauges, TESTit AS32 and AS65 is also suitable for implementation with vises.

Plug gauge

Product	Suitable for	Clamping Ø [mm]	Application	In stock	Order no.
Plug gauge	AS32	32	For 2-point clamping force measurement	✓	10635/0006
		42	For 3-point clamping force measurement	✓	10635/0005
		52		✓	10635/0007
		65		✓	10635/0008
	AS65	65	For 3- and 2-point clamping force measurement	✓	10635/0009
		80		✓	10635/0001
		100		✓	10635/0002
		120		✓	10635/0003
				✓	10635/0004

TEST AND MEASURING TECHNOLOGY

TESTit clamping force measuring device

Order overview. Clamping force measurement for I.D. clamping

Variant	Size	In stock	Order no.
TESTit starter set	IS28	✓	10608/0010
	IS50	✓	10608/0011
	IS70	✓	10608/0012
TESTit single unit	IS28	✓	10607/0004
	IS50	✓	10607/0005
	IS70	✓	10607/0006

Please note: Tablet is equipped with an English operating system. For order numbers tablet with a German operating system, see the German catalogue.

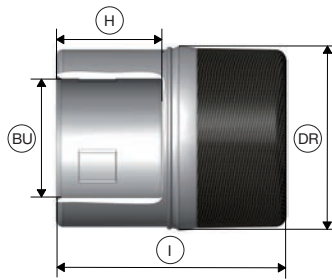
Scope of delivery starter set

- TESTit clamping force measuring device
- Display device
- Measurement and archiving software
- Case

Scope of delivery single unit

- TESTit clamping force measuring device

TESTit for I.D. clamping. Technical data



Size		IS28	IS50	IS70
Clamping Ø [mm]	BU	28	50	70
Max. clamping force measuring range [3 measuring points] [kN]		100	200	240
RPM n max. [1/min.]		7000		6000
Total length [mm]	I	90	98	103
Outer Ø [mm]	DR	78		98
Length [mm]	H	35	45	50

The Digital Future



Automation

The increasing individualization of products, extending to efficient production of batch size 1, ensures massive rethinking in manufacturing planning. Machines and equipment must be flexible, and ideally they should automate themselves, as well as autonomously test the quality that they produce. The machine operator still wants to be informed as soon as the process is outside of the defined limits.

This is reason enough for HAINBUCH to make itself strong in this area. Workholding technology is the heart-piece in every machining operation: it directly touches the workpiece and has a major influence on accuracy, surface quality, profitable processes, and set-up optimizations.

Our solutions not only ensure an economic benefit, combined with the highest operational reliability, they also offload and support the employees that work directly at the machine.



Automatic clamping head and
workpiece end-stop change-over 312



Intelligent chuck TOPlus IQ 313

Automated changing of clamping head and workpiece end-stop



Automated changing of clamping head and workpiece end-stop

Did you know that the classic clamping head change-over by hand can also be executed with automation via robot, gantry or directly with the machine spindle?

The great thing is: the workpiece end-stop is also set-up in this process. After all, setting up a new workpiece diameter without a suitable end-stop would only be an incomplete set-up procedure.

The solution with a robot or gantry:

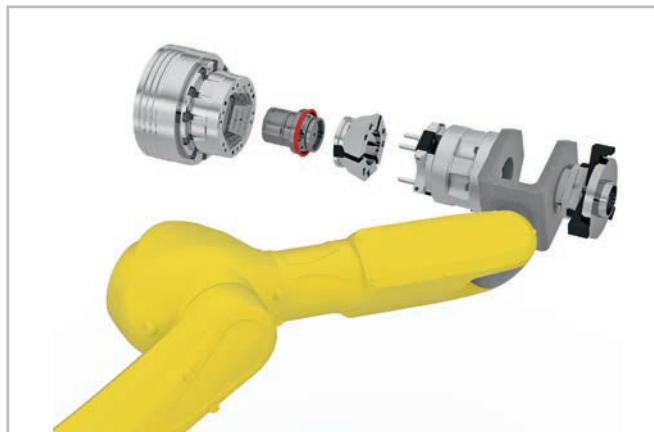
The robot gripper in the form of a pneumatic changing fixture takes the right clamping head including the workpiece end-stop from the set-up magazine. Within seconds it sets up the chuck in a reliable process for the workpiece that will be machined next. Thanks to our clever mechanics the workpiece to be processed can be clamped and processed directly after set-up. The automation effort is minimal; on the other hand the machine flexibility is maximal.

Key advantages

- A standardized, reasonably-priced automation solution that has proven its value for years
- Unattended set-up and manufacturing of different clamping diameters and lengths
- Robust mechanisms ensure smooth, automated set-up procedures via robot or gantry
- Available in the TOPlus and SPANNTOP model
- Can also be used for machining centers and vertical lathes

Your benefits

- Increases productivity, as unattended manufacturing is possible
- Increases quality and ensures consistent results
- Spares the machine operator the necessity of a non-ergonomic work posture



Exploded view [chuck, workpiece end-stop, clamping head, and changing fixture]



Robot setting up the chuck



TOPlus IQ

Today virtually nothing happens without »thinking interactively«. TOPlus IQ is an intelligent chuck that constantly measures the actual clamping force on the workpiece with sophisticated, integrated sensor technology. The measured data is relayed via contactless transmission of data and energy directly to the machine controller where it is analyzed. The controller executes a target value comparison, and if required messages are displayed or a correction is initiated.

Even an in-line workpiece dimension check is possible, directly at each clamping, thanks to integrated measuring sensor technology. The temperature close to the workpiece is also determined to enable temperature compensation. Sensors in the system determine whether the workpiece is positioned plane-parallel on the workpiece end-stop.



Condition monitoring on the machine controller

Key advantages

- Collet chuck with integrated, intelligent measurement technology
- Permanent, ongoing, electronic, real time clamping force measurement and change analysis under rotation
- In-line measurement of the clamping diameter [acc 1/100 mm] for comparison with the workpiece tolerance
- Electronic workpiece contact check without complex media piping

Your benefits

- Increases machine availability and process capability
- Ensures as-needed maintenance intervals
- Can avoid workpiece deformation or uncontrolled loss of workpiece
- Detects deviations and reduces up and downstream measuring processes, as well as scrap parts
- Enables condition monitoring, also for traceability in accordance with DIN EN 1550

Overview

Find what's important fast



Quick change-over systems

	centroteX / capteX / mandoteX	316
	CENTREX pallet system	336

Quick change-over

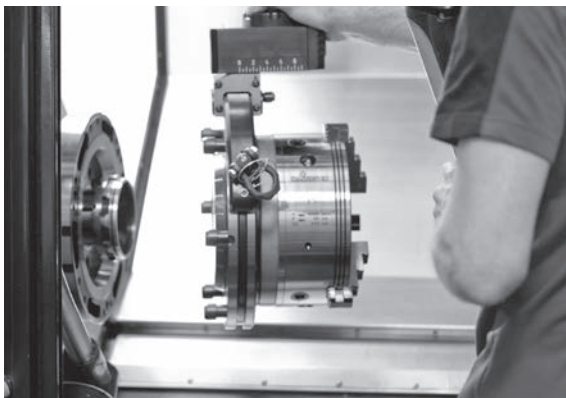
High speed clamping device change-over



It is practical that HAINBUCH quick change-over systems nearly fit on every machine. It's even better that you can change the clamping device in just 30 seconds [capteX], thus earn money more quickly. With fast setup devices such as: capteX, centroteX and mandoteX, you can manufacture with job-orientation. And you can do it with a change-over accuracy of as much as <0.002 mm on the interface. Unbelievable, isn't it?

However, our three high-speed solutions have even more to offer: Your machine downtimes are shortened, production times increase accordingly, and the quick change-over systems also pay for themselves with sensational savings on the entire line. What is the difference between this and clamping solutions mounted on the machine? There is virtually no difference! In terms of quality, rigidity and precision, the quick change-over interfaces easily keep up.

Get the competitive advantages of quick change-over.



Key advantages

- Clamping device quick change-over system
- Dramatic reduction in clamping device change-over times
- Repeatability between machine adapter and clamping device adapter ≤ 0.002 mm – without alignment
- Machine-overlapping utilization of clamping devices
- Power actuation or fluid actuation of the clamping devices are possible
- For easier handling, Monteq mounting aid can be implemented for heavy clamping devices

Chuck change-over with centroteX interface

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

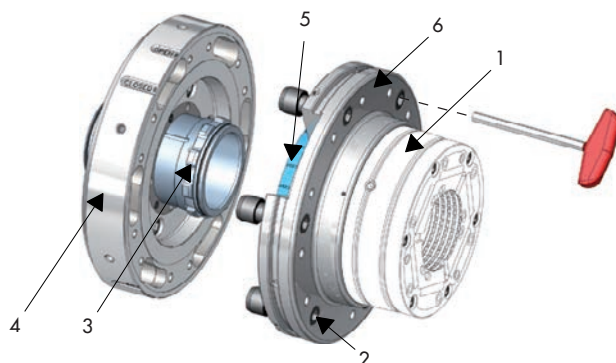
centroteX / capteX / mandoteX in overview

	centroteX standard	centroteX	capteX D	capteX B	mandoteX
					
Description	Standardized, cheaper quick change-over interface with an extensive clamping device assortment	Quick change-over interface customized to your machine	Quick change-over interface customized to your machine	Quick change-over interface customized to your machine	Standardized quick change-over interface especially for mandrels MANDO T211 / 212 size XXS - 4, and MAXXOS T211
Clamping device actuation	Power	Power or fluid	Power	Power or fluid	Power
Locking	Axial	Axial	Radial	Radial	Axial
Max. clamping device Ø	260 mm	500 mm	300 mm	300 mm	139 mm
Ø Capacity	Depends upon spindle	Depends upon spindle	≤ 52 mm	None	None
Max. RPM	Determined by clamping device	Determined by clamping device	4000 1/min.	Determined by clamping device	Determined by mandrel
Change-over time	Approx. 5 min.	Approx. 5 min.	Approx. 0.5 - 3 min.	Approx. 0.5 - 3 min.	Approx. 1 min.
Advantages	■ In stock ■ Large selection of standard clamping devices ■ Bayonet coupling	■ Quick change-over also of clamping devices with Ø > 300 mm ■ Bayonet coupling	■ Clamping and torsional safety each via a screw ■ Bayonet coupling ■ With through-bore	■ Clamping and torsional safety each via a screw ■ No bayonet coupling [can be mounted without rotary movement]	■ In stock ■ Large selection of standard clamping devices ■ Bayonet coupling
	 Page 321	 Upon request	 Upon request	 Upon request	 Page 331

centroteX / centroteX standard in detail

Designation

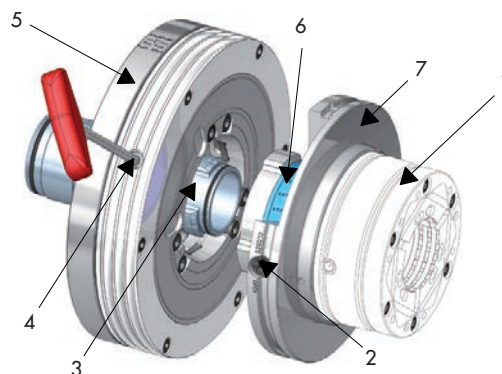
- 1 Clamping device
- 2 Rapid action screw
- 3 Bayonet coupling
- 4 Machine adapter
- 5 CENTREX centering unit
- 6 Clamping device adapter



capteX D in detail

Designation

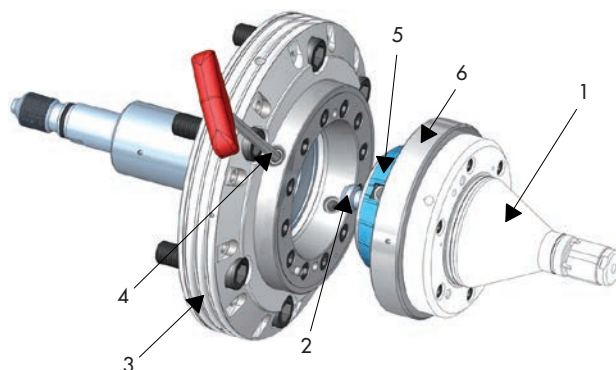
- 1 Clamping device
- 2 Torsional safety
- 3 Bayonet coupling
- 4 Locking screw
- 5 Machine adapter
- 6 CENTREX centering unit
- 7 Clamping device adapter



capteX B in detail

Designation

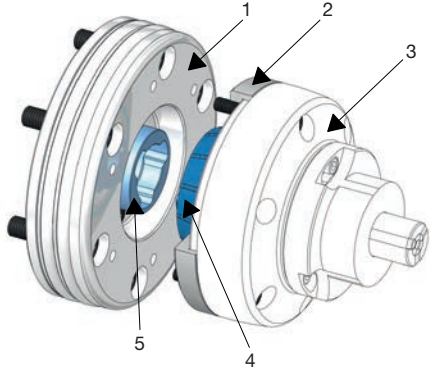
- 1 Clamping device
- 2 Rapid action
- 3 Machine adapter
- 4 Locking screw
- 5 CENTREX centering unit
- 6 Clamping device adapter



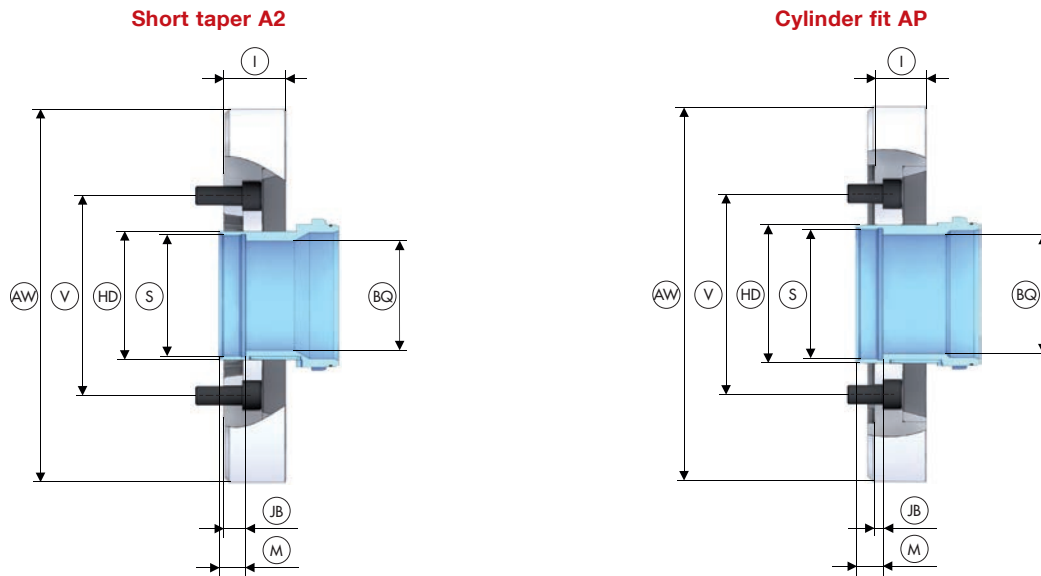
QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

mandoteX in detail

Designation	
1 Machine adapter 2 Clamping device adapter 3 Mandrel [not included in the standard scope of delivery] 4 CENTREX system for μm-precise use without adjustment 5 Bayonet coupling	 An exploded view diagram of the mandoteX system components. The diagram shows five parts: 1. Machine adapter (a large flange with multiple mounting holes), 2. Clamping device adapter (a smaller flange with a central hole), 3. Mandrel (a long, thin cylindrical rod), 4. CENTREX system (a blue, ring-shaped component with internal teeth), and 5. Bayonet coupling (a small, cylindrical component). The parts are arranged in a way that shows how they fit together, with arrows indicating the assembly direction.

centroteX standard size M. Machine adapter with short taper / cylinder fit



Spindle nose	DU	A2-6			A2-8			AP170	AP220
Outer Ø 2 [mm]	HD	73 g7	76 g7	85 g7	91 g7	101 g7	110 g7	100 g7	129 g7
Ø Capacity [mm]	BQ	53	58	68	75	84	94	78	105,5
Repeatability [mm]		0,005							
Outer Ø [mm]	AW	320							
Connecting thread inside	S	M66 x 1,5	M70 x 1,5	M79 x 1,5	M85 x 1,5	M95 x 1,5	M105 x 1,5	M85 x 1,5	M116 x 2
Depth of thread [mm]	M	23							
Thread position in the front end-stop [mm]	JB	10			19			26	31
Bolt hole circle	V	LK Ø 133,4 [6 x M12]			LK Ø 171,4 [6 x M16]			LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]
Total length [mm]	I	46			53			39	44
Weight [kg]		22	21	22	25	24		21	22
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10687/0003	10687/0002	10687/0001	10687/0007	10687/0006	10687/0005	10687/0009	10687/0011

Machine spindle standard DIN 55026.

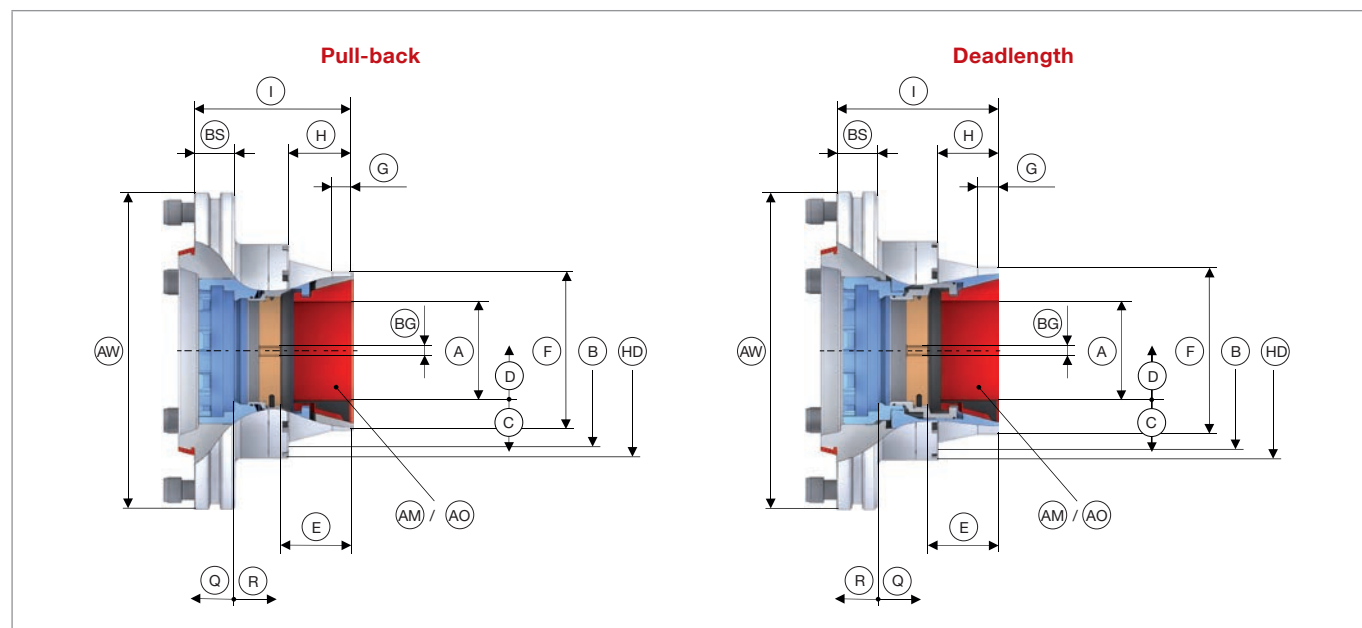
Scope of delivery

- Machine adapter
- Bayonet coupling

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

centroteX standard size M. Clamping device adapter + TOPlus mini

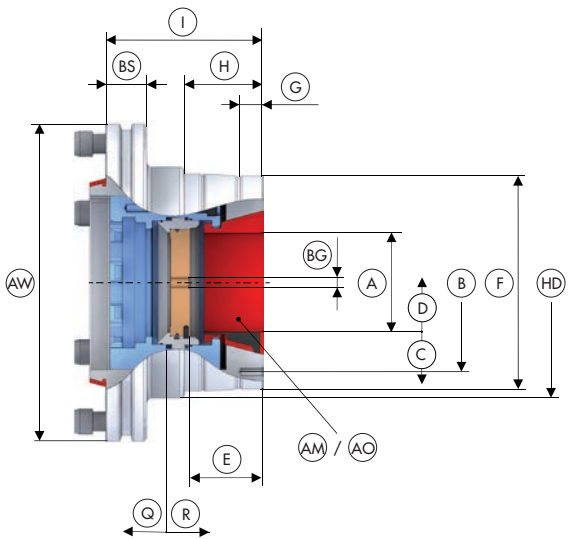
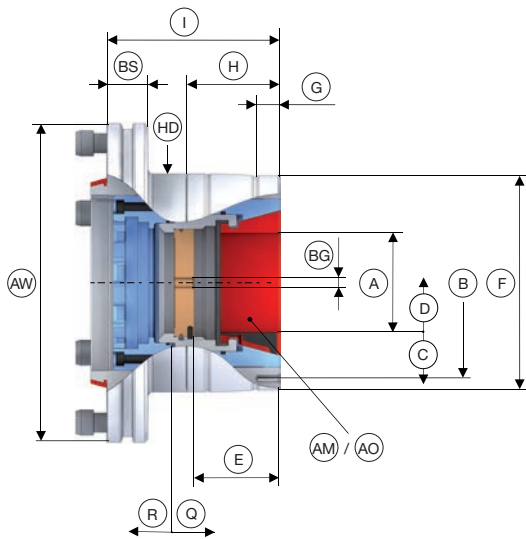


Variant	Pull-back		Deadlength	
Size	65	100	65	100
Max. radial clamping force [kN]	120	172	120	172
Max. axial drawtube force [pull / push] [kN]	45	65		
Max. axial compression force [kN]			45	65
RPM n max. [1/min.]	6000	5000	6000	5000
Clamping range [mm]	A	3 – 65	3 – 65	15 – 100
Release stroke in Ø [mm]	C	0,6	0,6	2
Reserve stroke in Ø [mm]	D	1,0	1,0	1,5
Range / recommended workpiece tolerance [mm]		± 0,5	± 0,5	± 1,0
End-stop depth [mm]	E	54	54	74
End-stop thread size [M]	BG	12		
Location front end-stop	F	Ø 129 f7	Ø 137 f7	Ø 191 f7
Centering length [mm]	G	20		22
Bolt hole circle end-stop	B	LK Ø 112 [3 x M5]	LK Ø 154 [3 x M6]	LK Ø 208 [3 x M6]
Length [mm]	H	49	50	64
Length 2 [mm]	BS	41		
Total length [mm]	I	134,5	136	166
Reserve stroke axial [mm]	Q	2	2	3
Release stroke axial [mm]	R	2,5	2,5	5
Clamping head serrated	AM	TOP 65	TOP 65	TOP 100
Clamping head smooth	AO	TOP 65 G	TOP 65 G	TOP 100 G
Outer Ø [mm]	AW	320		
Outer Ø 2 [mm]	HD	167	170	220
Weight [kg]		29	29	43
In stock		✓	✓	✓
Order no.		10693/0001	10694/0003	10694/0004

Scope of delivery

- Clamping device adapter
- Chuck

centroteX standard size M. Clamping device adapter + TOPlus

		Combi pull-back		Combi deadlength	
					
Variant		Combi pull-back		Combi deadlength	
Size		65	100	65	100
Max. radial clamping force [kN]		120	172	120	172
Max. axial drawtube force [pull / push] [kN]		45	65		
Max. axial compression force [kN]				45	65
RPM n max. [1/min.]		6000	5000	6000	5000
Clamping range [mm]	A	3 – 65	15 – 100	3 – 65	15 – 100
Release stroke in Ø [mm]	C	0,6	2,0	0,6	2
Reserve stroke in Ø [mm]	D	1,0	1,5	1	1,5
Range / recommended workpiece tolerance [mm]		± 0,5	± 1,0	± 0,5	± 1
End-stop depth [mm]	E	63,5	73	65	85,5
End-stop thread size [M]	BG	12			
Location front end-stop	F	Ø 145 f7	Ø 215 f7	Ø 160 f7	Ø 215 f7
Centering length [mm]	G	20	23	17	23
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]	LK Ø 180 [3 x M8]	LK Ø 141 [3 x M6]	LK Ø 192 [3 x M8]
Length [mm]	H	66	78,5	71,5	94
Length 2 [mm]	BS	41			
Total length [mm]	I	154	161,5	148,5	173
Reserve stroke axial [mm]	Q	2	3	2	3
Release stroke axial [mm]	R	2,5	5	2,5	5
Clamping head serrated	AM	TOP 65	TOP 100	TOP 65	TOP 100
Clamping head smooth	AO	TOP 65 G	TOP 100 G	TOP 65 G	TOP 100 G
Outer Ø [mm]	AW	320			
Outer Ø 2 [mm]	HD	167	233	170	219
Weight [kg]		31	45	33	48
In stock		✓	✓	✓	✓
Order no.		10691/0001	10691/0002	10692/0001	10692/0002

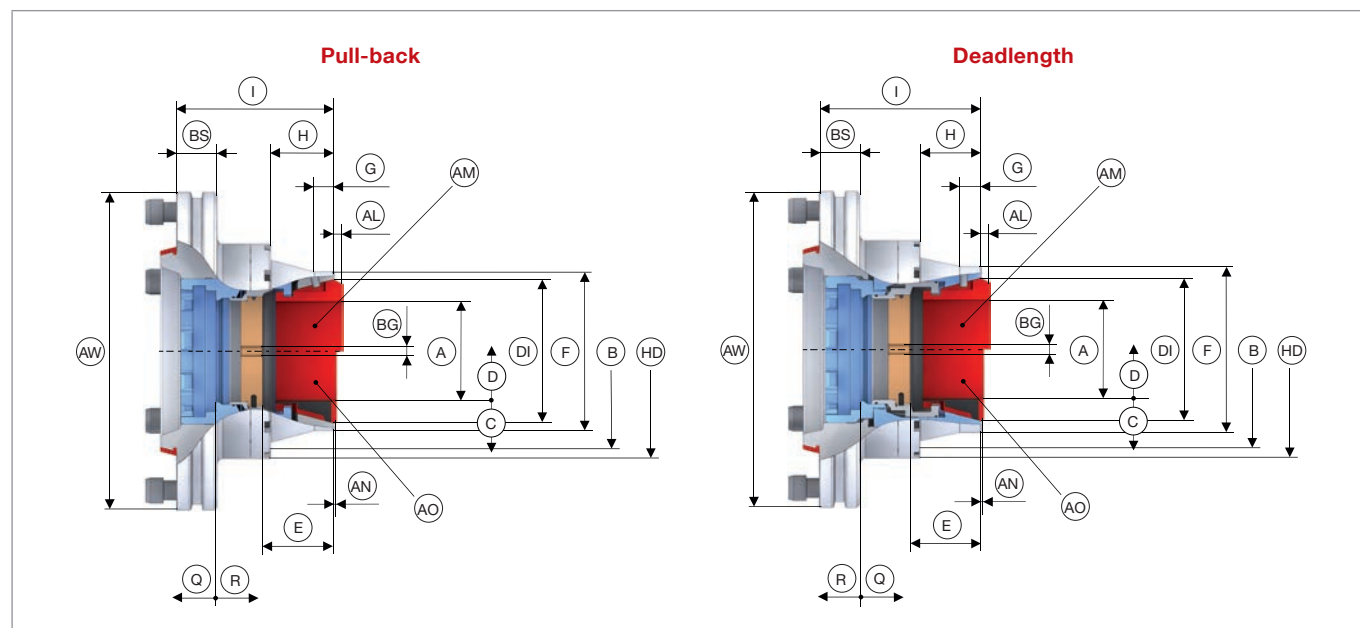
Scope of delivery

- Clamping device adapter
- Chuck

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

centroteX standard size M. Clamping device adapter + SPANNTOP mini

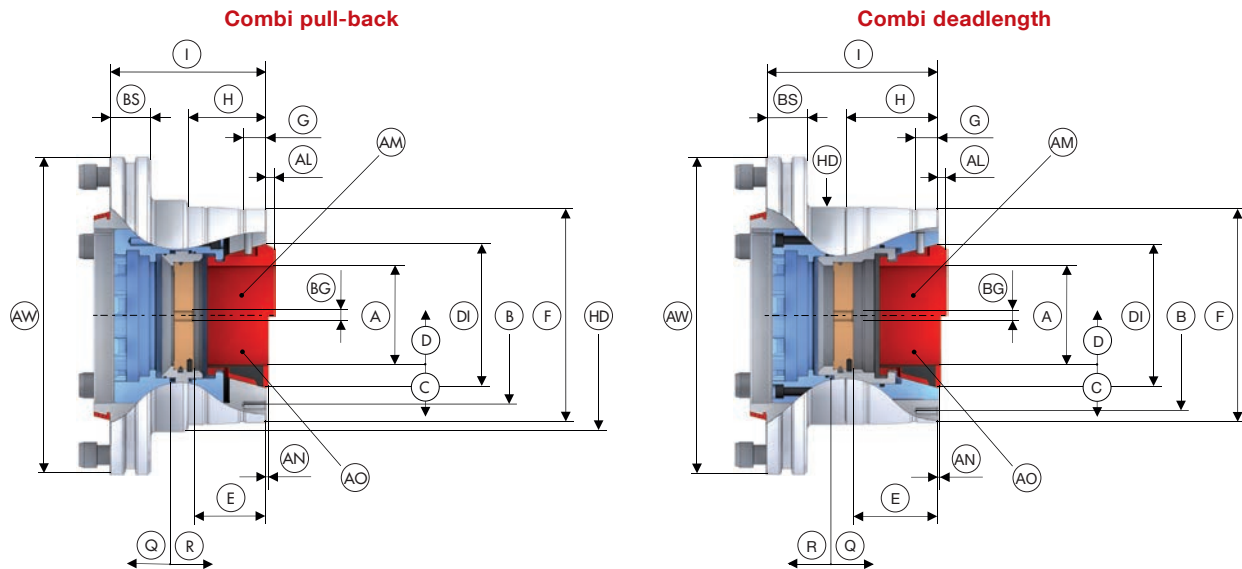


Variant	Pull-back		Deadlength	
Size	65	100	65	100
Max. radial clamping force [kN]	105	150	105	150
Max. axial drawtube force [pull / push] [kN]	45	65		
Max. axial compression force [kN]			45	64
RPM n max. [1/min.]	6000	5000	6000	5000
Clamping range [mm]	A 3 – 65	15 – 100	A 3 – 65	15 – 100
Release stroke in Ø [mm]	C 0,6	2,0	C 0,6	2
Reserve stroke in Ø [mm]	D 1,0	1,5	D 1,0	1,5
Range / recommended workpiece tolerance [mm]	± 0,5	± 1,0	± 0,5	± 1,0
End-stop depth [mm]	E 54	72	E 54	74
End-stop thread size [M]	BG 12		BG 12	
Location front end-stop	F Ø 111 f7	Ø 160 f7	F Ø 119 f7	Ø 168 f7
Centering length [mm]	G 20		G 22	
Bolt hole circle end-stop	B LK Ø 148 [3 x M5]	LK Ø 200 [3 x M5]	B LK Ø 145 [9 x M6]	LK Ø 208 [3 x M6]
Length [mm]	H 47	64	H 50	64
Length 2 [mm]	BS 41		BS 41	
Total length [mm]	I 134,5	159	I 136	166
Reserve stroke axial [mm]	Q 2	3	Q 2	3
Release stroke axial [mm]	R 2,5	5	R 2,5	5
Clamping head serrated	AM SK 65 BZI	SK 100 BZ	AM SK 65 BZI	SK 100 BZ
Clamping head protrusion length serrated [mm]	AL 9		AL 9	
Clamping head smooth	AO SK 65 BZIG	SK 100 BZG	AO SK 65 BZIG	SK 100 BZG
Clamping head protrusion length smooth [mm]	AN 4		AN 4	
Head Ø [mm]	DI 99,5	144,5	DI 99,5	144,5
Outer Ø [mm]	AW 320		AW 320	
Outer Ø 2 [mm]	HD 167	216	HD 170	220
Weight [kg]	28	39	28	40,5
In stock	✓	✓	✓	✓
Order no.	10707/0001	10707/0002	10708/0003	10708/0004

Scope of delivery

- Clamping device adapter
- Chuck

centroteX standard size M. Clamping device adapter + SPANNTOP nova



Variant	Combi pull-back		Combi deadlength	
Size	65	100	65	100
Max. radial clamping force [kN]	105	150	105	150
Max. axial drawtube force [pull / push] [kN]	45	65		
Max. axial compression force [kN]			45	65
RPM n max. [1/min.]	6000	5000	6000	5000
Clamping range [mm]	A	3 – 65	3 – 65	15 – 100
Release stroke in Ø [mm]	C	0,6	0,6	2
Reserve stroke in Ø [mm]	D	1,0	1	1,5
Range / recommended workpiece tolerance [mm]		± 0,5	± 0,5	± 1
End-stop depth [mm]	E	63,5	65	85,5
End-stop thread size [M]	BG	12		
Location front end-stop	F	Ø 145 f7	Ø 160 f7	Ø 215 f7
Centering length [mm]	G	17	17	20
Bolt hole circle end-stop	B	LK Ø 126 [3 x M6]	LK Ø 141 [3 x M6]	LK Ø 192 [3 x M8]
Length [mm]	H	66	71,5	94
Length 2 [mm]	BS	41		
Total length [mm]	I	151	148,5	173
Reserve stroke axial [mm]	Q	2	2	3
Release stroke axial [mm]	R	2,5	2,5	5
Clamping head serrated	AM	SK 65 BZI	SK 65 BZI	SK 100 BZ
Clamping head protrusion length serrated [mm]	AL	9	9	
Clamping head smooth	AO	SK 65 BZIG	SK 65 BZIG	SK 100 BZG
Clamping head protrusion length smooth [mm]	AN	4	4	
Head Ø [mm]	DI	99,5	99,5	
Outer Ø [mm]	AW	320		
Outer Ø 2 [mm]	HD	167	170	219
Weight [kg]		31	33	48
In stock		✓	✓	✓
Order no.		10689/0001	10690/0001	10690/0002

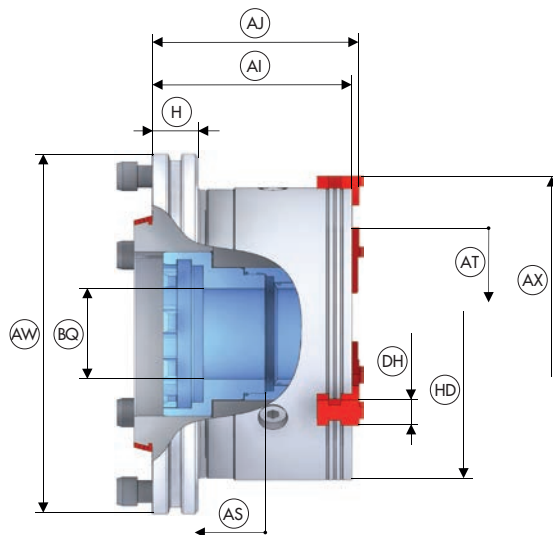
Scope of delivery

- Clamping device adapter
- Chuck

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

centroteX standard size M. Clamping device adapter + jaw chuck B-Top



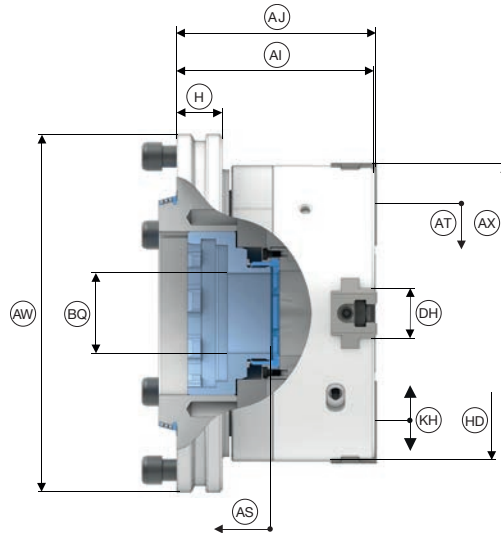
Size		165	260	315
Max. radial clamping force [kN]		41	115	160
Max. axial drawtube force [pull / push] [kN]		30	65	90
RPM n max. [1/min.]		6000	4000	3600
Stroke per jaw [mm]	AT	5,9	8,2	8,6
Jaw width [mm]	DH	20	26	32
Piston stroke [mm]	AS	20	28	
Swing Ø	AX	191,4	315	375,4
Length [mm]	H	41		
Outer Ø [mm]	AW	320		
Outer Ø 2 [mm]	HD	165	260	315
Length without jaws [mm]	AI	159,3	177,3	201,6
Length with jaws [mm]	AJ	164,7	183,5	212,3
Ø Capacity [mm]	BQ	43	81	104
Weight [kg]		38	73	103
In stock		✓	✓	✓
Order no.		10688/0002	10688/0001	10688/0003

For size 315 please note: With machine spindles > A2-8 / AP220 we recommend that your machine builder checks the max. spindle bearing load.

Scope of delivery

- Clamping device adapter
- Chuck
- Master jaws
- Jaw release wrench
- Assembly wrench for revolving threaded ring [260 / 315]

centroteX standard size M. Clamping device adapter + InoFlex VT



Size	165	260	315
Variant	VT		
Max. radial clamping force [kN]	52	125	150
Max. axial drawtube force [pull / push] [kN]	20	50	60
RPM n max. [1/min.]	5000	3750	2800
Stroke per jaw [mm] AT	3,3	5,0	5,5
Jaw width [mm] DH	32	40	
Piston stroke [mm] AS	15	22	24
Swing Ø AX	178	274	326
Length [mm] H		41	
Outer Ø [mm] AW		320	
Outer Ø 2 [mm] HD	168	264	315
Length without jaws [mm] AI	154,9	177	200
Length with jaws [mm] AJ	156,9	179	202
Ø Capacity [mm] BQ	46	72	91
Ausgleichshub pro Backe [mm] KH	2,3	4	4,5
Weight [kg]	37	70	106
In stock	✓	✓	✓
Order no.	10901/0001	10901/0002	10901/0003

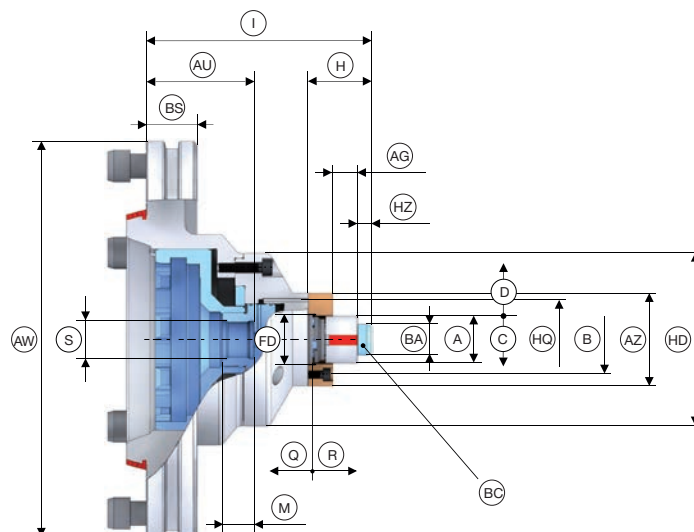
Scope of delivery

- Clamping device adapter
- Chuck
- Top jaws, soft
- Jaw release wrench
- Assembly wrench for revolving threaded ring
- Cartridge grease [OKS 265]

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

centroteX standard size M. Clamping device adapter + mandrel MANDO T211



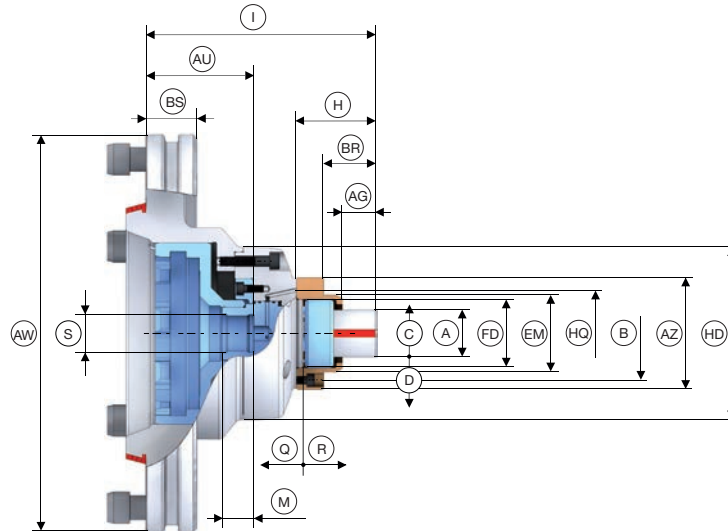
Size		0	1	2	3	4
Clamping range [mm]	A	20 – 28	26 – 38	36 – 54	50 – 80	69 – 120
Max. radial clamping force [kN]		42		85	105	150
Max. axial drawtube force [pull / push] [kN]		10		20	25	35
Max. clamping length [mm]	AG	22	26	43	49	59
RPM n max. [1/min.]			7000		6000	
Draw bolt Ø [mm]	BA	19	25	35	49	68
Draw bolt head height [mm]	HZ	7,5		11		16
Reserve stroke in Ø [mm]	D		0,25		0,35	0,4
Release stroke in Ø [mm]	C		0,25		0,35	0,4
Reserve stroke axial [mm]	Q		1,5		2	2,5
Release stroke axial [mm]	R		2		2,5	3
Reception workpiece end-stop	FD	Ø 32 f7	Ø 41 f7	Ø 50 f7	Ø 65 f7	Ø 78 f7
Bolt hole circle end-stop	B	LK Ø 50 [3 x M6]	LK Ø 55 [3 x M6]	LK Ø 78 [3 x M6]	LK Ø 80 [3 x M6]	LK Ø 90 [3 x M6]
End-stop outer Ø [mm]	AZ	65	69	93	96	100
Length [mm]	H	40	51	71	78	95
Length 2 [mm]	BS			41		
Total length [mm]	I	171,5	181,5	201,5	211,5	226,5
Outer Ø [mm]	AW			320		
Outer Ø 2 [mm]	HD			139		
Connecting thread inside	S			M30 x 1,5		
Depth of thread [mm]	M			27		
Position in clamped position [mm]	AU			87		
Air sensing control bolt hole circle-Ø [mm]	HQ	64		76	78	91
Air sensing control bore Ø [mm]	KN			3		
Central air system connection Ø [mm]				12		
Max. actuating torque [Nm]	BC	10	20	25	55	
Weight [kg]			29		30	31
In stock		✓	✓	✓	✓	✓
Order no.		10695/0001	10695/0002	10695/0003	10695/0004	10695/0005

For size 4, clamping range 101 - 120 mm, a max. speed of 4200 RPM applies.

Scope of delivery

- Clamping device adapter
- Mandrel without air sensing adapter
- Draw bolt

centroteX standard size M. Clamping device adapter + mandrel MANDO T212



Size		XXS	XS	S	0	1	2	3	4
Clamping range [mm]	A	8 – 13	13 – 19	16 – 21	20 – 28	26 – 38	36 – 54	50 – 80	69 – 100
Max. radial clamping force [kN]		42					85	105	150
Max. axial drawtube force [pull / push] [kN]		10					20	25	35
Max. clamping length [mm]	AG	8,2	15		21	25	40	44,5	52,5
Reserve stroke in Ø [mm]	D	0,2			0,25			0,35	0,4
Release stroke in Ø [mm]	C	0,2			0,25			0,35	0,4
RPM n max. [1/min.]		7000					6000		
Reserve stroke axial [mm]	Q			1,5				2	2,5
Release stroke axial [mm]	R	1,5		2			2,5		3
Reception workpiece end-stop	FD	Ø 34 f7	Ø 36 f7	Ø 39 f7	Ø 47 f7	Ø 55 f7	Ø 65 f7	Ø 83 f7	Ø 103 f7
Bolt hole circle end-stop	B	LK Ø 53 [3 x M5]		LK Ø 57 [3 x M5]	LK Ø 70 [3 x M6]	LK Ø 75 [3 x M6]	LK Ø 90 [3 x M6]	LK Ø 104 [3 x M6]	LK Ø 124 [3 x M6]
End-stop outer Ø [mm]	AZ	65		70		90	104	120	138
End-stop outer Ø 2 [mm]	EM	41	42	45	54	62	76	105	124
Length [mm]	H	45,5		47,5	58,5	64,5	80,5	87,5	97,5
Length 2 [mm]	BS				41				
Depth [mm]	BR	36,5		38	44	47	62	66,5	77,5
Total length [mm]	I	172	166,5	168,5	179,5	185,5	211,5		220
Outer Ø [mm]	AW				320				
Outer Ø 2 [mm]	HD				139				
Connecting thread inside	S				M30 x 1,5				
Depth of thread [mm]	M				27				
Position in clamped position [mm]	AU				87				
Air sensing control bolt hole circle-Ø [mm]	HQ	56		60	70		84	100	116
Air sensing control bore Ø [mm]	KN				3				
Central air system connection Ø [mm]					12				
Weight [kg]			29		30		31	32	33
In stock		✓	✓	✓	✓	✓	✓	✓	✓
Order no.		10696/0001	10696/0002	10696/0003	10696/0004	10696/0005	10696/0006	10696/0007	10696/0008

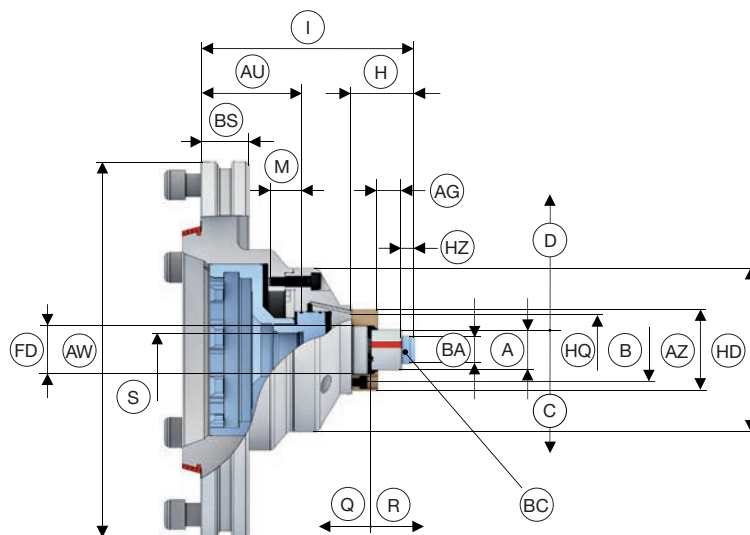
Scope of delivery

- Clamping device adapter
- Mandrel without air sensing adapter
- Coupling ring
- Mounting aid depending on size

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

centroteX standard size M. Clamping device adapter + mandrel MAXXOS T211

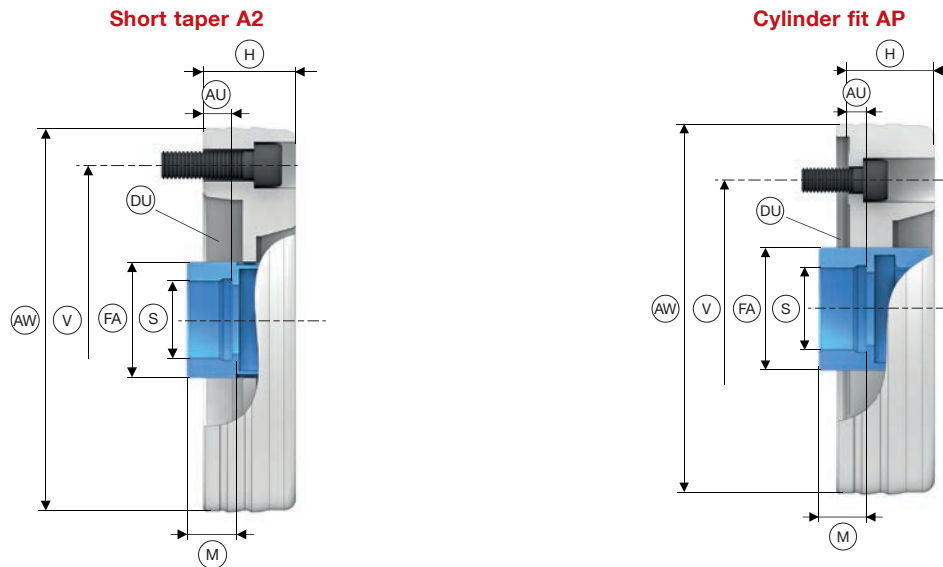


Size		A	B	C	D	E	F
Clamping range [mm]	A	18 – 24	20 – 32	24 – 39	32 – 50	39 – 68	50 – 100
Max. radial clamping force [kN]		27	42	51	70	86	143
Max. axial drawtube force [pull / push] [kN]		7,5	10	16	22	27	45
Max. clamping length [mm]	AG	20	22,5	24	35,3	45,3	
RPM n max. [1/min.]		7000					
Draw bolt Ø [mm]	BA	17	19	23	31	38	49
Draw bolt head height [mm]	HZ	7,5		11		11,2	11,7
Reserve stroke in Ø [mm]	D	0,26		0,4			
Release stroke in Ø [mm]	C	0,18	0,17	0,26	0,3		
Reserve stroke axial [mm]	Q	2					
Release stroke axial [mm]	R	2				2,5	
Reception workpiece end-stop	FD	Ø 32 f7		Ø 55 f7	Ø 50 f7	Ø 65 f7	
Bolt hole circle end-stop	B	LK Ø 50 [3 x M6]		LK Ø 41 [3 x M6]	LK Ø 78 [3 x M6]	LK Ø 80 [3 x M6]	
End-stop outer Ø [mm]	AZ	65		69	93	96	
Length [mm]	H	40		53,5	71	78	
Length 2 [mm]	BS	32,5		40	51,5	61,5	62
Total length [mm]	I	171,5	172	181,5	201,5	211,5	
Outer Ø [mm]	AW	320					
Outer Ø 2 [mm]	HD	139					
Connecting thread inside	S	M30 x 1,5					
Depth of thread [mm]	M	25,5					
Position in clamped position [mm]	AU	87					
Air sensing control bolt hole circle-Ø [mm]	HQ	58	64		82	84	
Air sensing control bore Ø [mm]	KN	3					
Central air system connection Ø [mm]		12					
Max. actuating torque [Nm]	BC	7	10	15	20	25	55
Weight [kg]		28,5	29	28,5	29,2	30	
In stock		✓	✓	✓	✓	✓	✓
Order no.		10925/0001	10925/0002	10925/0003	10925/0004	10925/0005	10925/0006

Scope of delivery

- Clamping device adapter
- Mandrel without air sensing adapter
- Draw bolt

mandoteX. Machine adapter with short taper / cylinder fit



Spindle nose	DU	A2-5	A2-6	A2-8	AP140	AP170
Length [mm]	H	40			35	
Connecting thread inside	S	M35 x 1,5				
Depth of thread [mm]	M	19,5				
Position in clamped position [mm]	AU	14			9	
Outer Ø 2 [mm]	FA	50				
Repeatability [mm]		0,003				
Bolt hole circle	V	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]	LK Ø 171,4 [6 x M16]	LK Ø 104,8 [6 x M10]	LK Ø 133,4 [6 x M12]
Outer Ø [mm]	AW	150	165	235	150	180
In stock		✓	✓	✓	✓	✓
Order no.		10646/0001	10646/0002	10646/0004	10646/0003	10646/0005

Machine spindle standard DIN 55026.

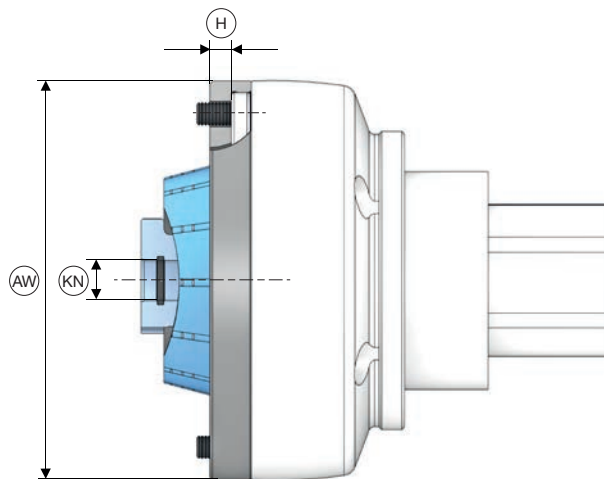
Scope of delivery

- Machine adapter
- Bayonet coupling

QUICK CHANGE-OVER SYSTEMS

centroteX / capteX / mandoteX

mandoteX. Clamping device adapter

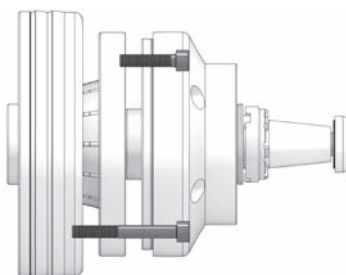


Size	MANDO XXS – 4 / MAXXOS A – F	
Clamping range [mm]	A	8 – 120
Length [mm]	H	10
Air sensing control bore Ø [mm]	KN	14
Outer Ø [mm]	AW	139
In stock		✓
Order no.		10645/0001

Scope of delivery

- Clamping device adapter
- Bayonet coupling

Mounting screws mandoteX



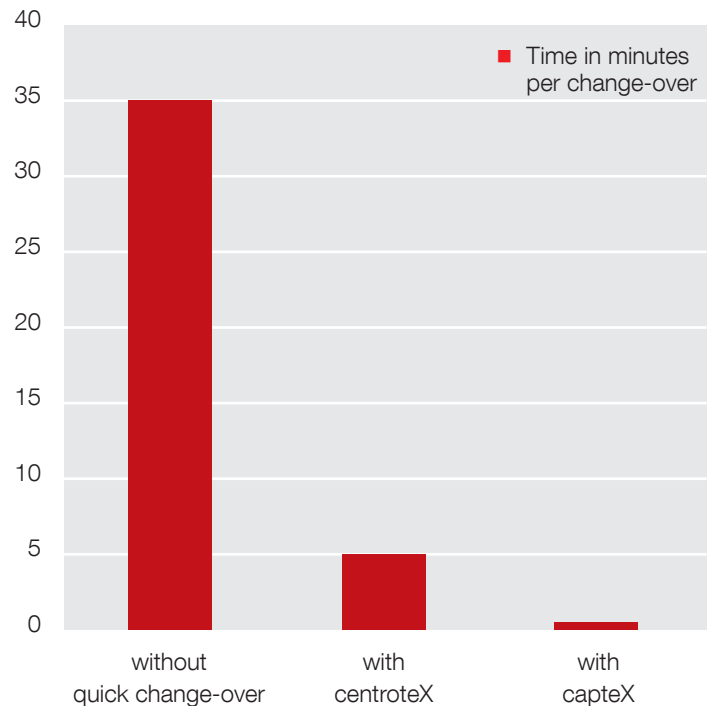
Product	Suitable for	Scope of delivery	In stock	Order no.
Mounting screws	MANDO T211 size 0 – 3 MAXXOS T211 size A – F	3 x M8x30-1, 3 x M8x45-1	✓	11084/0001
	MANDO T211 size 4 MANDO T212 size XXS – 2	3 x M8x35-1, 3 x M8x50-1	✓	11084/0002
	MANDO T212 size 3	3 x M8x45-1, 3 x M8x60-1	✓	11084/0003
	MANDO T212 size 4	3 x M8x50-1, 3 x M8x65-1	✓	11084/0004

QUICK CHANGE-OVER SYSTEMS centroteX / capteX / mandoteX

Savings possibilities

Initial conditions:

- 1 x clamping device change-over / day
- Conventional clamping device change-over incl. adjustment = 35 minutes
- Clamping device change-over with centroteX = 5 minutes
- Clamping device change-over with capteX = 0.5 minutes
- Hourly rate, including machine: 60.00 EUR



Clamping device change	Costs per month	Costs per year	Savings per year*
without quick change-over interface	752.50 EUR [35 min. x 21.5 workdays]	9,030.00 EUR [752.50 EUR x 12 months]	–
with centroteX quick change-over interface	107.50 EUR [5 min. x 21.5 workdays]	1,290.00 EUR [107.50 EUR x 12 months]	7,740.00 EUR + an additional 129 work hours [= 16 shifts]
with capteX quick change-over interface	10.75 EUR [0.5 min. x 21.5 workdays]	129.00 EUR [10.75 EUR x 12 months]	8,900.00 EUR + an additional 148 work hours [= 18 shifts]

*Based on one change-over per day. The more the change-overs the greater the savings!



Accessories: Monteq mounting aid

Now a practical support is available for everyone who must set-up heavy clamping devices: The Monteq chuck mounting aid for the centroteX quick change-over system. With the Monteq mounting aid, alignment and handling are easy. Thanks to the spring-loaded bearing arrangement the clamping device can even be lifted by hand, the swiveling holder makes it easy to lock the clamping device in the machine-side bayonet, and with an adjustable screw the clamping device can be adjusted onto the spindle.

Key advantages

- Easy and safe handling of heavy clamping devices
- Short changing times thanks to quick-acting screws
- The clamping device is not suspended diagonally

Monteq in detail

Designation	
1 Weight transference 2 Swivel mechanism 3 Rapid-action	

Product	Description	In stock	Order no.
Monteq mounting aid	For fast, easy, safe, and accurate centroteX M clamping device mounting	✓	10682/0001

QUICK CHANGE-OVER SYSTEMS **centroteX / capteX / mandoteX**



Accessories: Storage container

Quick change-over of the clamping device starts with optimal preparation. With our practical storage container you always have everything right at hand. Your clamping devices are safely stored and thus maintain their accuracy.

Key advantages

- All clamping devices are immediately on hand
- Safe storage maintains accuracy and prevents contamination
- The storage container is optimally configured for your clamping devices

[The storage container may vary from the image.]

QUICK CHANGE-OVER SYSTEMS
CENTREX pallet system

CENTREX

Technology that centers



QUICK CHANGE-OVER SYSTEMS

CENTREX pallet system

Tiny spheres, enormous effect. CENTREX positioning and centering element has been a standard component of HAINBUCH modular solutions for years. The simple taper-bushing design is found in classics, such as the MANDO Adapt mandrel adaptation, as well as in the capteX and centroteX quick change-over systems.

The HAINBUCH pallet systems also quickly find their center thanks to CENTREX. Designed for heavy-duty handling and extremely high repeatability. The absolute zero point maintains its self-centering almost perfectly, even under thermal expansion. CENTREX is not influenced by swarf or chips. The biggest advantage: It is completely separated from the draw-in mechanism and thus it is extremely precise - even at high draw-in forces.

Key advantages

- Manual pallet system
- Extremely high repeatability (≤ 0.003 mm)
- Self-centering even under thermal expansion
- The draw-in force is not transmitted to the centering, since it is separated from the draw-in mechanism
- Insensitive to swarf and chips



Can you really say no to this?

Set-up time



- Change clamping devices in seconds
- Use all your clamping devices on every machine with minimal set-up time
- Job-oriented utilization of clamping devices
- External set-up – increase machine runtime and higher machine output

THE SOLUTION:
CENTREX pallet systems

Machine run-time

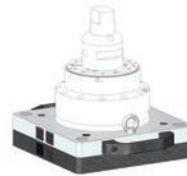


Productivity

QUICK CHANGE-OVER SYSTEMS

CENTREX pallet system

CENTREX pallet system



Description	Solid mounting of the pallets with rapid-action screws on the base plate. No additional actuating medium.
Advantages	■ Easy manual actuation ■ No peripherals, easy maintenance
Draw-in mechanism	120 kN draw-in force – 2,5 times higher than regular conventional clamping systems
Actuation	4 manual actuated quick-acting screws on the top side of the pallet
Material base plate	Mineral cast
Material change pallets	Mineral cast, aluminum, aluminum in lightweight design
Application	Machining of solid components with maximum rigidity
Rotation	Yes

Clamping device change-over with CENTREX pallet system



Disassembling the pallet

Removal of the pallet

Select the appropriate
pallet

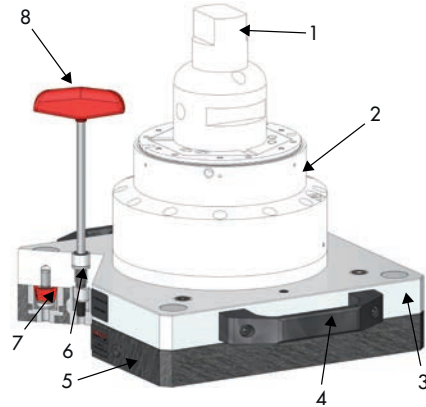
Install the selected pallet

CENTREX centering
elements

CENTREX pallet system in detail

Designation

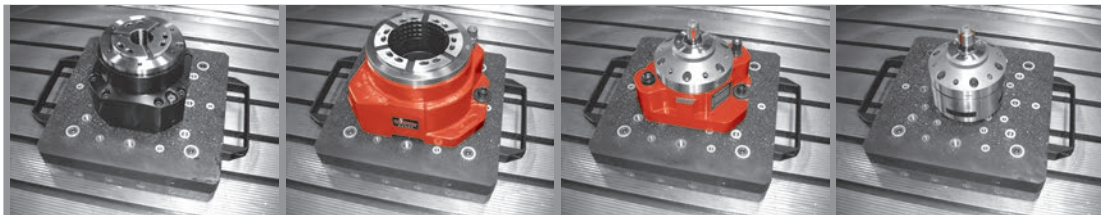
- 1 Workpiece
- 2 Clamping device
- 3 CENTREX aluminum pallet or mineral cast pallet
- 4 Handle
- 5 CENTREX base plate
- 6 Rapid action screw
- 7 CENTREX centering element [≤ 0.003 mm]
- 8 Allen wrench for actuating the rapid action screw



Order overview

Variant	Product	Parallelism [mm]	Material	Weight [kg]	In stock	Order no.
CENTREX pallet system	Base plate	0,01	Mineral cast	12	✓	1206/0001
	HAINBUCH pallet system			15	✓	1207/0001
	Hole-grid pallet			13	✓	1207/0003
	Aluminum pallet	0,1	Aluminum	14	✓	1207/0002

HAINBUCH clamping device pallet with different clamping devices



Pallet + hydraulic stationary chuck

Pallet + MANOK [manual stationary chuck]

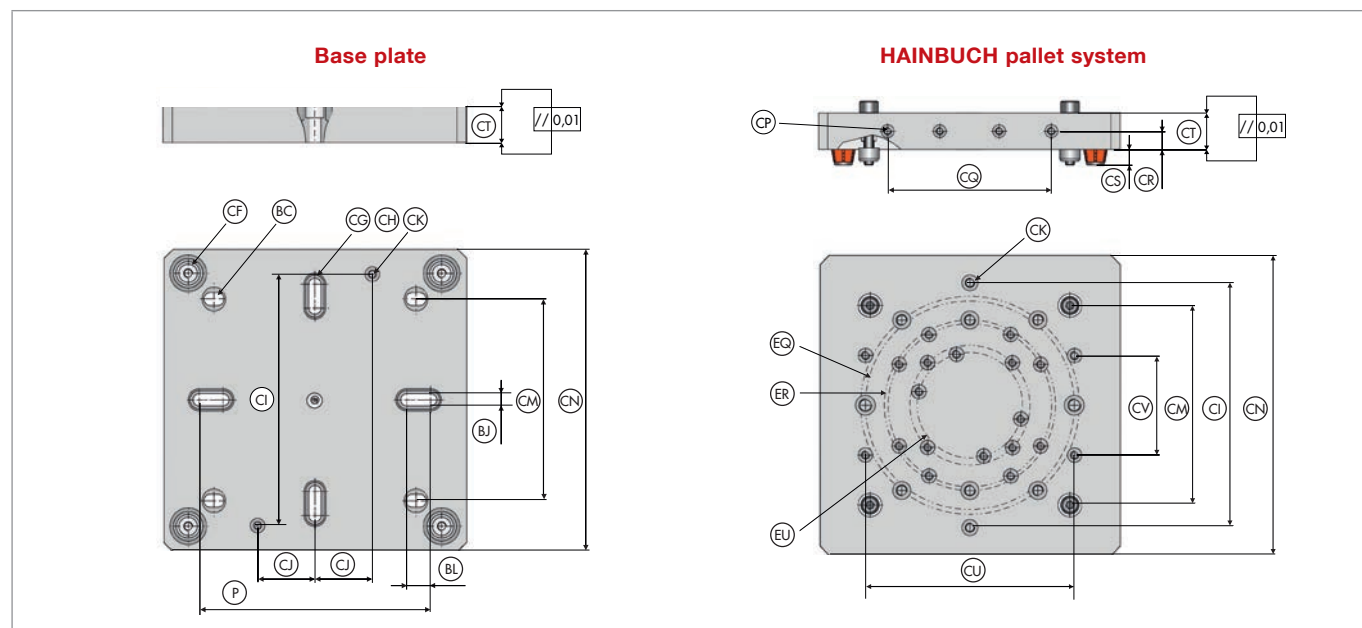
Pallet + MANDO + ms dock [manually actuated mandrel]

Pallet + MANDO + hs dock [hydraulically actuated mandrel]

QUICK CHANGE-OVER SYSTEMS

CENTREX pallet system

Base plate / HAINBUCH pallet system. Technical data



Product		Base plate	HAINBUCH pallet system
Outer dimensions [square]	CN	330 x 330	
Repeatability [mm]		0,003	
Bushings	CF	Positioning element bushing [4 x]	
Plate thickness [mm]	CT	40	
Distance of the ring nut thread in the x-direction [mm]	CJ	53,5	
Distance of the ring nut thread in the y-direction [mm]	CI	276	270
Ring nut thread	CK	M10 [2 x]	
Distance of the quick change unit [mm]	CM	220 x 220	
Screw connection width [mm]	P	252	
Grooves [mm]	BL	46 [4 x]	
Groove width [mm]	BJ	13,5	
Mounting slots for T-groove table with groove spacing [mm]	CG	63; 80; 100	
Mounting slots for hole-grid machine tables with hole spacing [mm]	CH	40; 50; 100	
Max. actuating torque [Nm]	BC	59	
Spacing handle bores [mm]	CQ		160
Handle bore height [mm]	CR		20
Handle fastening	CP		M 8 [4 x]
Centering taper height [mm]	CS		17
Hole spacing in x [mm]	CU		230
Hole spacing in y [mm]	CV		110
Bolt hole circle for MANOK plus	EQ		LK Ø 230 [2 x M14]
Bolt hole circle for MANOK / ms dock	ER		LK Ø 188 [2 x M12]
Bolt hole circle for hs dock	EU		LK Ø 116 [4 x M8]
Weight [kg]		12	15
In stock		✓	✓
Order no.		1206/0001	1207/0001

Scope of delivery base plate

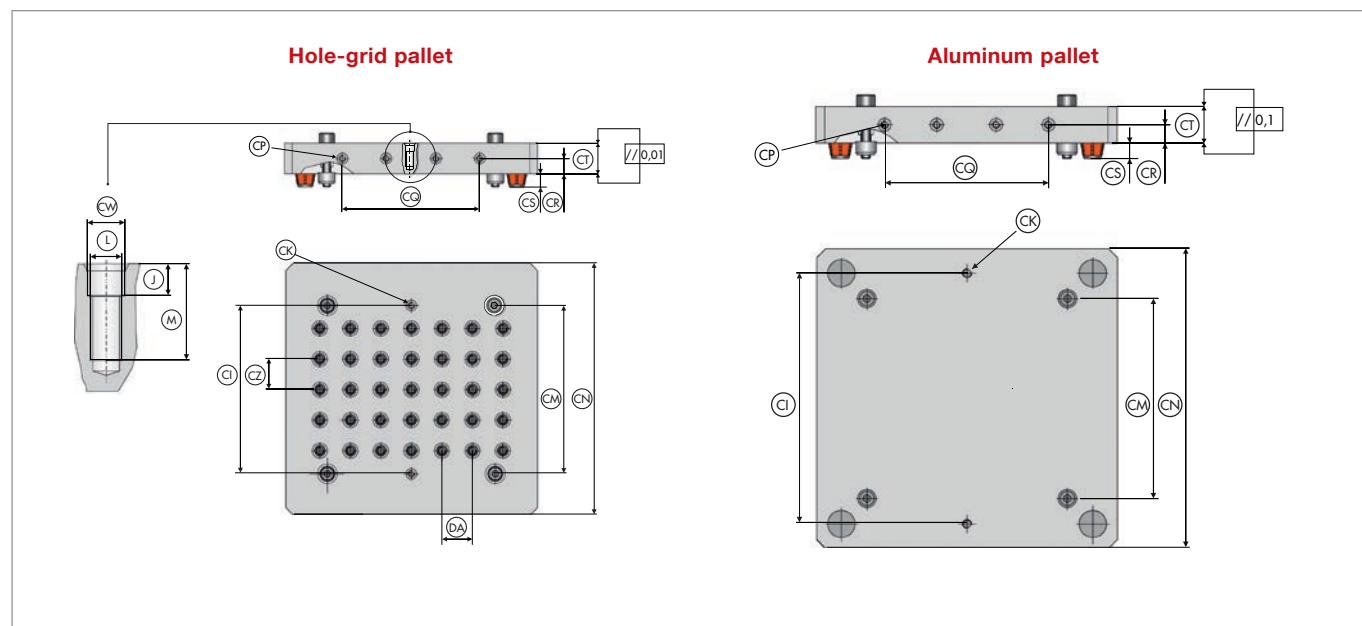
- Base plate

Scope of delivery HAINBUCH pallet system

- Pallet
- 2 handles

QUICK CHANGE-OVER SYSTEMS CENTREX pallet system

Hole-grid pallet / aluminum pallet. Technical data



Product		Hole-grid pallet	Aluminum pallet
Outer dimensions [square]	CN	330 x 330	
Repeatability [mm]		0,003	
Plate thickness [mm]	CT	40	
Distance of the ring nut thread in the y-direction [mm]	CI	220	276
Ring nut thread	CK	M10 [2 x]	
Spacing handle bores [mm]	CQ	160	
Handle bore height [mm]	CR	20	
Handle fastening	CP	M 8 [8 x]	M 8 [4 x]
Distance of the quick change unit [mm]	CM	220 x 220	
Centering taper height [mm]	CS	17	
Grid spacing in the x-direction [mm]	DA	40	
Grid spacing in the y-direction [mm]	CZ	40	
Countersink Ø	CW	Ø 12 f7	
Height [mm]	J	10	
Thread size [M]	L	10	
Depth of thread [mm]	M	26	
Weight [kg]		13	14
In stock		✓	✓
Order no.		1207/0003	1207/0002

Scope of delivery

- Pallet
- 2 handles

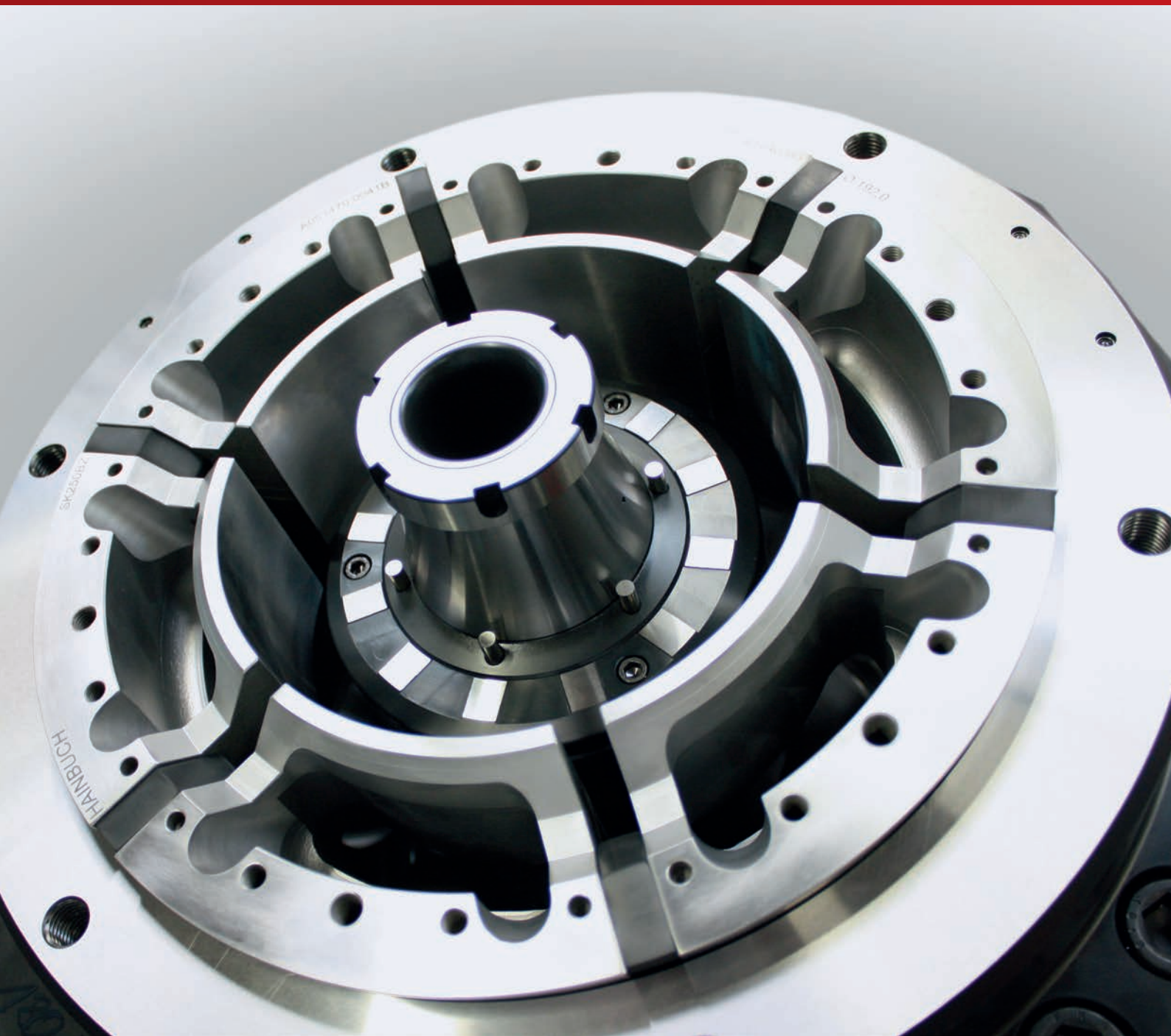
Quick change-over systems

Special solutions

Clamping elements/
Accessories

Multi spindles

Special clamping solutions



When standard clamping devices reach their limits, our designers will find the right solution for you. Our designers also develop a solution that is precisely tailored for the most particular requirement. Our experts push the technology to its limits, prefer to leave the beaten paths, think outside of the box, and approach their work with passion, enthusiasm, and inventiveness. The result: an innovative, creative, and naturally a completely customized special chuck in the usual HAINBUCH quality.

Key advantages

- Custom solutions optimally tailored to your requirements
- Optimized manufacturing processes
- State-of-the-art manufacturing possibilities due to the latest clamping device technology

SPECIAL SOLUTIONS

Special chucks



SPANNTOP 2x2

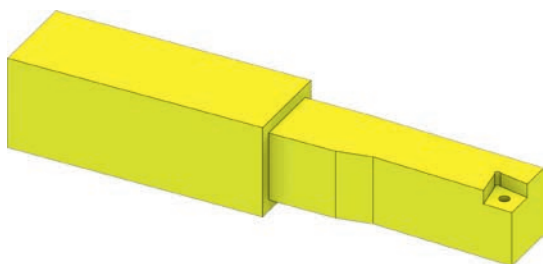
- Secure clamping of rectangular/square profiles with uniform transmission of clamping force from all 4 sides
- Tolerance compensation ± 1.0 mm in width and height
- Standard clamping heads can be used for clamping round material as well
- Rigid clamping from 4 sides

Challenge

Workpiece
Clamping task
Machining

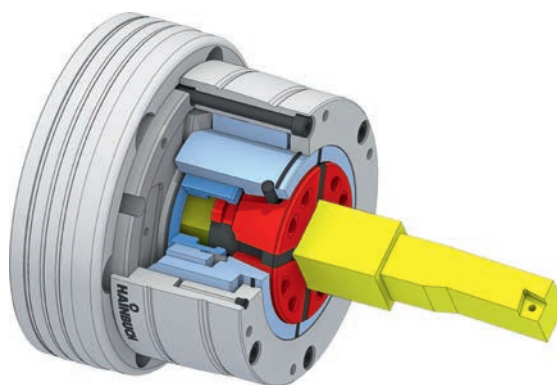
Tool holder
4-sided clamping from the outside
Milling of the shank and of the head

- Better workpiece surface
- More rigid clamping



Results / customer benefits

- Better workpiece surfaces in every machining plane
- Higher feed rates



SAVINGS

- Clamping time is reduced by approx. 10 %
- Tool life is extended by 5 %



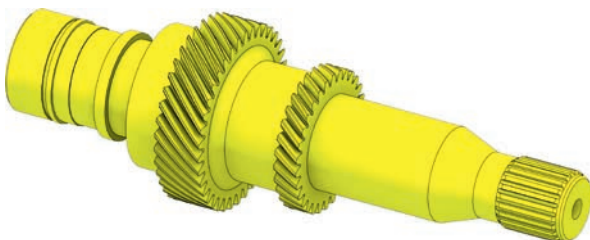
Shaft chuck

- For roughing operations, shafts are clamped with extreme rigidity by the clamping head
- Clamping between centers with the integrated face driver ensures a run-out under 5 µm for finish machining

Challenge

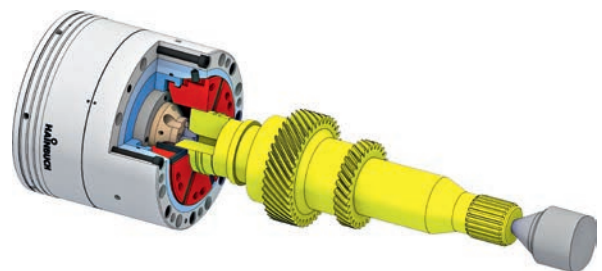
Workpiece Thin shaft
Clamping task With clamping head and between centers
Machining Roughing and finish machining in a single process

- Finishing between centers
- Highest concentricity between centers



Results / customer benefits

- Higher speeds and feed rates thanks to extremely forceful clamping
- Run-outs between centers are achieved with process reliability



SAVINGS

- 2 clamping set-ups reduced to only one set-up
- The workpiece is produced approx. 8 % faster and though saving process time

SPECIAL SOLUTIONS

Special chucks



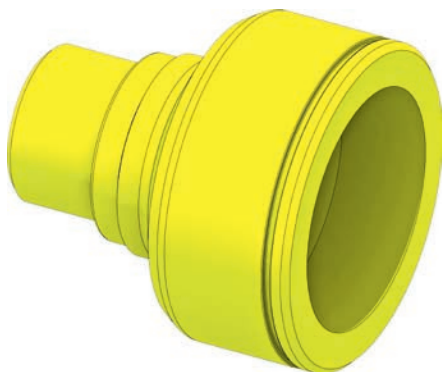
TALEMENT chuck

- Almost deformation-free clamping of thin-walled workpieces
- Major formal defects are compensated
- Air actuation
- Can be combined with powerful actuation of the clamping head

Challenge

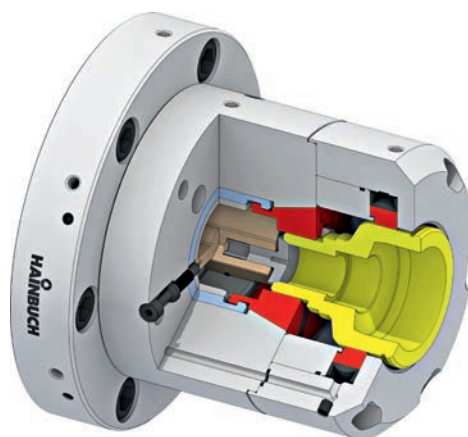
Workpiece CV joint
Clamping task O.D. clamping
Machining Hard machining

- Rigid support at the machining point
- Position errors of the axis of clamping relative to the support axis are compensated
- Form-compensating support



Results / customer benefits

- After hardening, the workpiece remains unmachined on the support surface
- One complete manufacturing process is eliminated



SAVINGS

- Elimination of the work cycle »hard turning of the bell outer Ø« → Savings: approx. 25 seconds per part
- Increased tool life from 800 to 1,200 workpieces → Savings: approx 30 % of tool costs



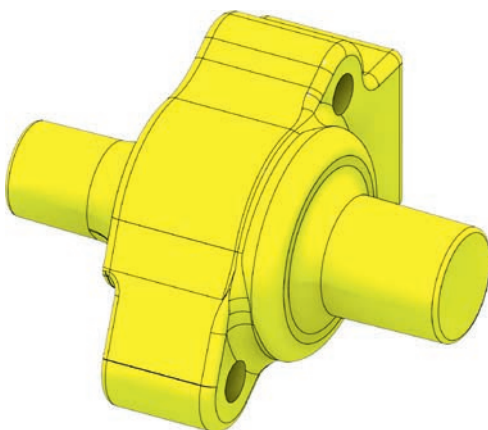
Segmented clamping bushing chuck

- Segmented clamping bushing chuck with balance compensation for significantly unbalanced workpieces
- High dimensional tolerance compensation on the blanks

Challenge

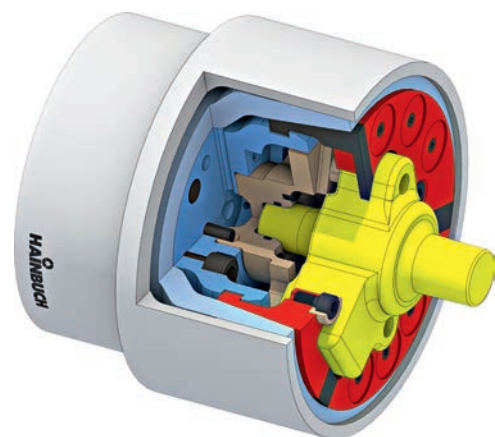
Workpiece Casting
Clamping task O.D. clamping of a blank
Machining Turning and drilling

- Centrifugally stable clamping even at high RPM
- Integrated balancing system



Results / customer benefits

- Thanks to the enclosing clamping device the workpiece remains securely in the clamped position in spite of high RPM
- Highest clamping forces
- Large radial clamping strokes



SAVINGS

- Manufacturing with process reliability
- Scrap reduced to »0«

SPECIAL SOLUTIONS

Special chucks



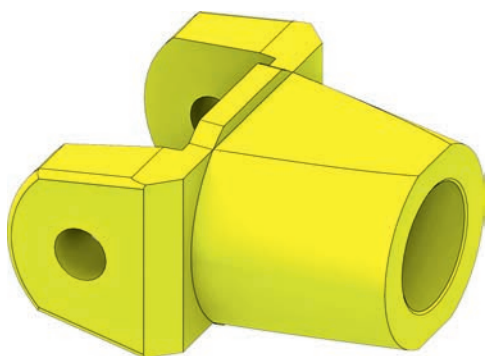
2x2 bolt chuck, centric clamping

- Bolt chuck for raw part centering of a rectangular profile in both axes
- Chip-proof clamping device for mass production

Challenge

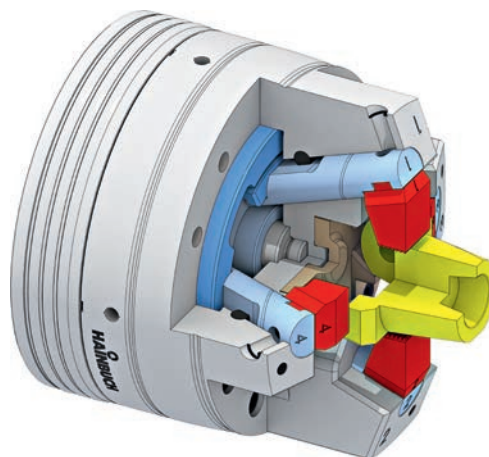
Workpiece **Fork-head**
Clamping task **O.D. clamping**
Machining **Turning**

- Compensation of the blank tolerances of 1.5 mm in both clamping directions
- Interrupted cut during turning



Results / customer benefits

- Low-maintenance clamping device
- Stable and rigid clamping
- Different profiles can be set-up easily



SAVINGS

- The inexpensive pre-process remains the same
- Easy handling of the finished part for further processing thanks to extremely precise symmetry on the component



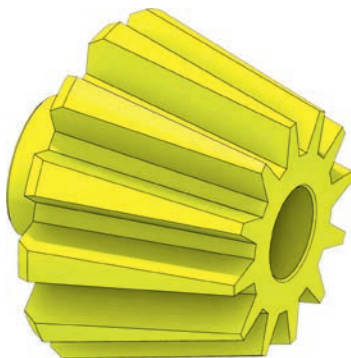
Mandrel for gear cutting machines

- Slim mandrel for gear cutting machines
- Workpiece specific interference contour with maximum clamping rigidity

Challenge

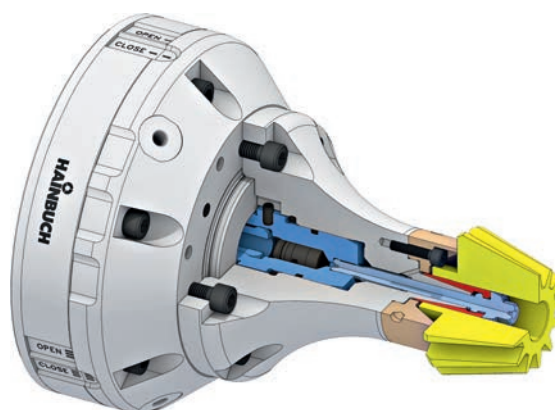
Workpiece Bevel gear
Clamping task I.D. clamping
Machining Gear hobbing

- Generate the maximum clamping forces in the smallest installation space
- Maximum rigidity
- Suitable for mass production



Results / customer benefits

- Stable and reliable process for gear manufacturing
- Large opening stroke to ensure secure loading



SAVINGS

- Tool life is extended by 5 %
- Manufacturing with process reliability



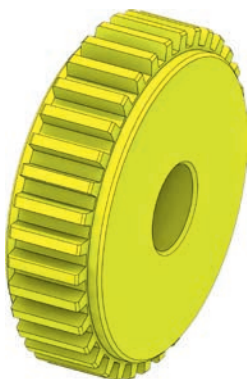
Micro mandrel

- Mandrel for I.D. clamping of extremely small diameters [starts at 5.5 mm]
- Fast change-over to other clamping $\varnothing$ is possible

Challenge

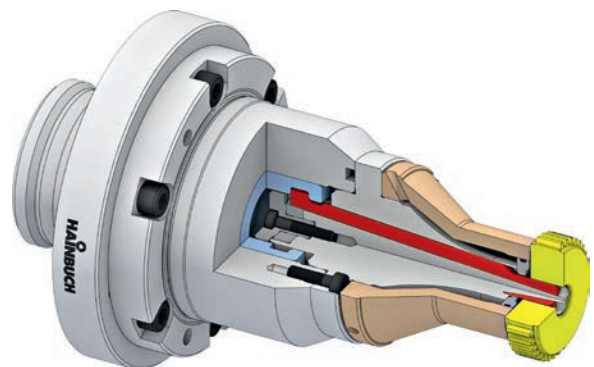
Workpiece **Gears**
Clamping task **I.D. clamping**
Machining **Milling of the gear teeth**

- Mass production of small gears
- Different clamping diameters must be interchangeable
- Long service life of the clamping device



Results / customer benefits

- Service life of the clamping device has been significantly increased
- High-precision change interface provided for clamping device change-over



SAVINGS

- Reduction of the annual total investment for clamping devices by approx. € 10,000.00



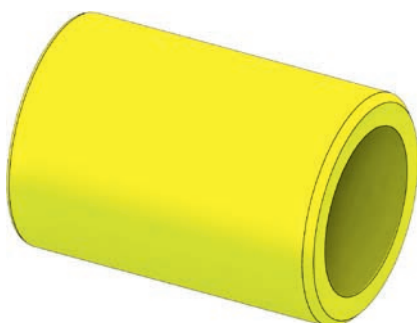
Position-compensating I.D. clamping device

- I.D. clamping device for use as torque
- Run-out error between clamping bore and reference center 0.5 mm

Challenge

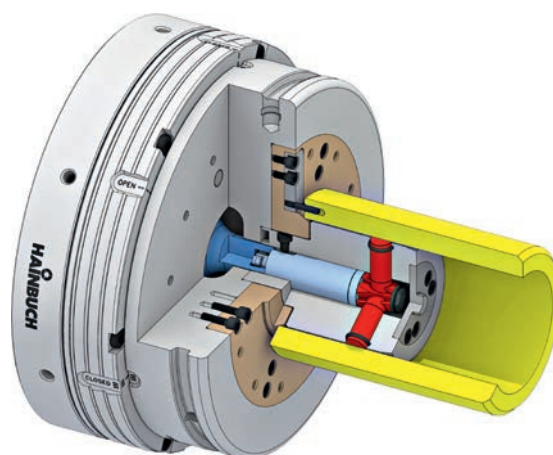
Workpiece Tube shaft
Clamping task Compensating I.D. clamping as torque entrainment
Machining Grinding of the outer contour

- Inner contour as clamping reference with run-out error to the centers
- Run-outs between centers within 5 μm
- Guided rotation must be position-compensating



Results / customer benefits

- Run-outs between centers within 3 μm
- Center must only be aligned once



SAVINGS

- Higher feed rates possible → Time savings: 35 %

SPECIAL SOLUTIONS

Special segmented mandrels



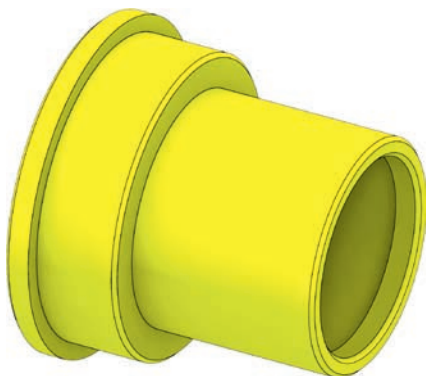
Eccentric mandrel adjustable

- Mandrel for centric and eccentric machining
- Adjusting process via C-axis of the machine

Challenge

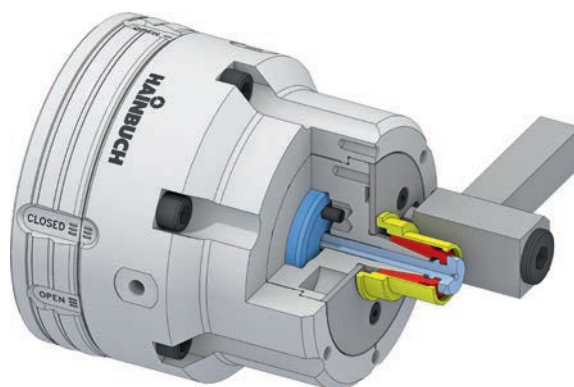
Workpiece Eccentric sleeve
Clamping task I.D. clamping
Machining Turning

- Eccentric mandrel adjustment via the C-axis
- Centric and eccentric machining
- Clamping of different workpieces with one mandrel



Results / customer benefits

- Adjustable eccentric mandrel with maximum eccentric dimension of 1 mm
- Complete machining of the workpiece with one machine



SAVINGS

- Overall process time reduced by approx. 15 %
- Waiting time between the processes reduced to »0«

SPECIAL SOLUTIONS

Special stationary clamping devices



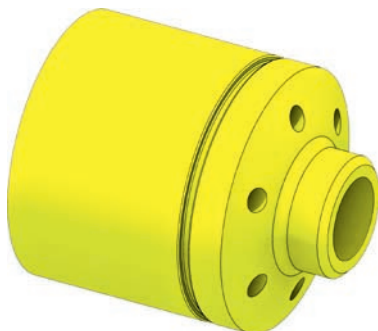
Horizontal stationary chuck

- Hydraulically-actuated stationary chuck that is suitable for 2-sided machining
- High positioning accuracy on the clamping diameter

Challenge

Workpiece **Shaft**
Clamping task **Stationary chuck**
Machining **Milling and drilling**

- Positioning of less than 0.02 mm must be guaranteed
- Accessible from both sides
- High axial machining forces must be safely absorbed



Results / customer benefits

- Manufacturing of both sides of the workpiece in one clamping set-up with process reliability
- Position accuracy of 0.01 mm is achieved



SAVINGS

- Overall manufacturing process time has been reduced by approx. 25 %

SPECIAL SOLUTIONS

Special clamping elements

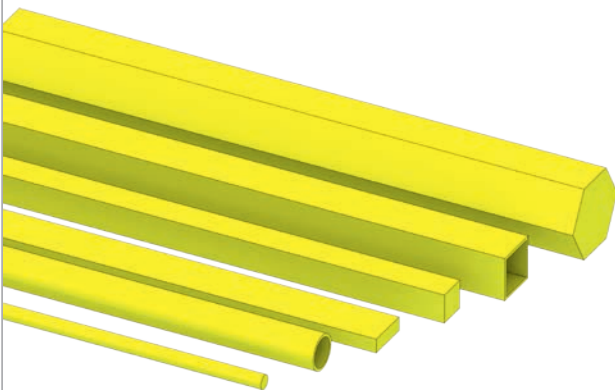


Profile clamping

- For clamping almost every workpiece profile with one clamping head
- With HSW heads the contour is self-producing

Challenge

- Fast availability of profiles is required
- The workpiece should be clamped precisely on its shape



Results / customer benefits

- Fast availability
- Fast set-up
- Inexpensive clamping solution
- Often special clamping devices are unnecessary



SAVINGS

- No special clamping devices are required
- Extremely easy clamping head change-over saves an incredible amount of set-up time



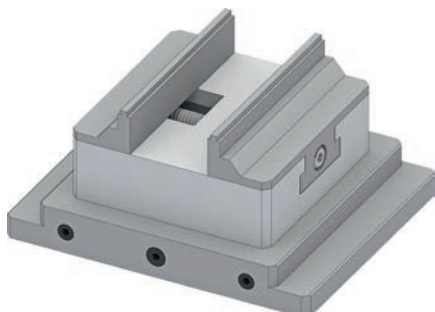
TESTit clamping force measuring device

- Special model for axial draw force and documentation of the measurement results
- The application area is the testing of zero position clamping systems

Challenge

Application area Zero position clamping systems
Application Installation, maintenance, error analysis
Measuring range 0 – 10 kN

- Base plate and carrier pallet [incl. clamping device] of the zero position clamping system should be tested for function, contamination, and wear on a regular basis
- TESTit simulates the carrier pallet with a draw bolt and measures the axial draw force of the base plate



Results / customer benefits

- The actual value of the draw force is now known
- Thus timely detection of changes in the draw force and the associated contamination or wear
- Active quality monitoring and increased process reliability
- Documentation and archiving of the measurement results

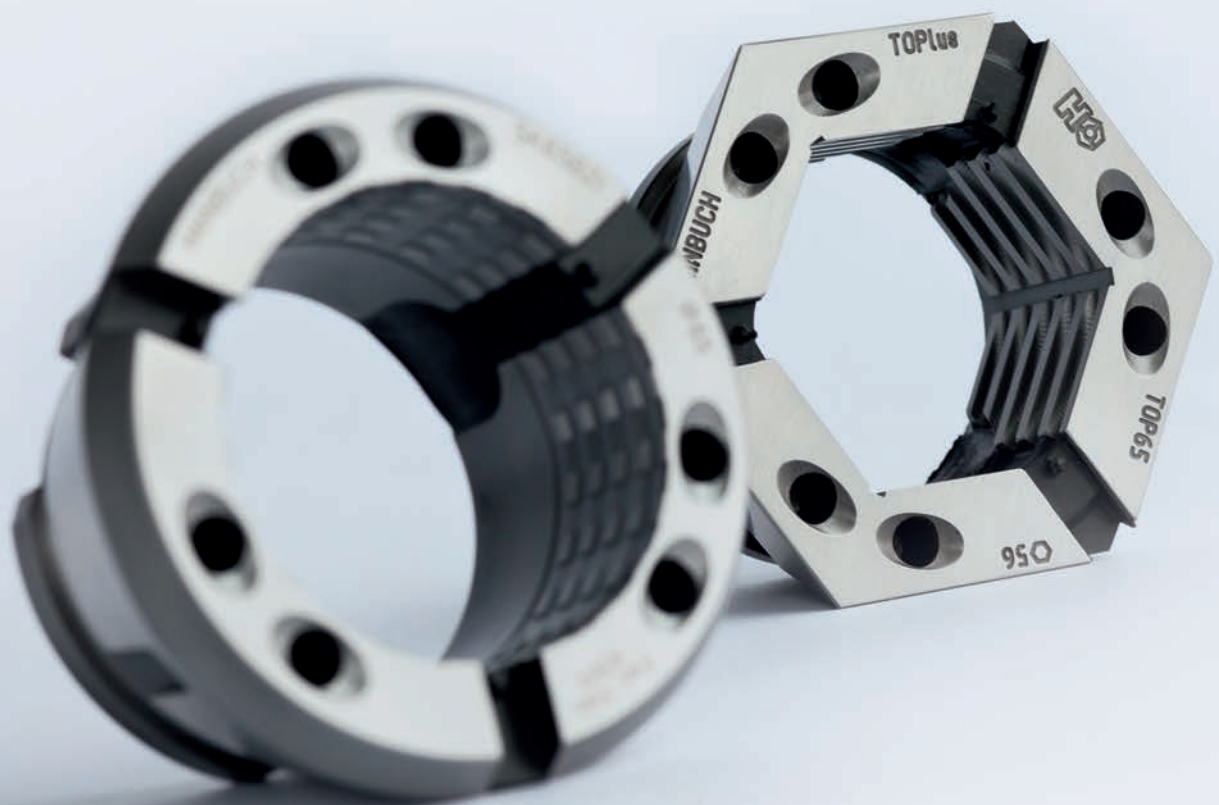


SAVINGS

- Reduction of machine downtimes due to unscheduled maintenance
- No machine crash due to insufficient draw force

Overview

Find what's important fast



Standard clamping head types

	Clamping head SE	Clamping head RD
		
Variant	SE [hexagonal]	RD [round]
Applications	Raw material clamping, clamping of finished material	Raw material clamping, clamping of finished material
Sizes	26, 40, 52, 65, 100	32, 42, 52, 65, 80, 100, 125, 160
Clamping range of all sizes [mm]	3 – 100	3 – 160
Advantages	■ 25 % higher holding power than clamping head RD [SPANNTOP] ■ Insensitive to dirt through the clamping head geometry ■ Unequalled rigidity due to full-surface contact of the clamping segments ■ Run-out accuracy ≤ 0.015 mm possible ■ Longer maintenance intervals ■ Significantly improved wear behavior ■ Active torsional safety	■ Run-out accuracy ≤ 0.01 mm possible ■ Typical HAINBUCH features, such as user friendly set-up, full passage, parallel clamping, optimal power conversion, extreme rigidity and superior holding power, as well as minimal wear and tear
Suitable for	 TOPlus mini  TOPlus  TOROK SE  MANOK plus SE  HYDROK SE	 SPANNTOP mini  SPANNTOP nova  TOROK RD  MANOK plus RD  MANOK  HYDROK RD
	 Page 358	 Page 366



Clamping heads

SE – hexagonal clamping geometry





With our hexagonal clamping heads you get up to 25 % more clamping force and higher output with the same clamping cylinder actuating force that is used to actuate our SPANNTOP chucks. The pyramid arrangement of glide surfaces makes it possible. In addition, the hexagonal geometry ensures that TOPlus is more resistant to contamination than former clamping head / chuck systems. Therefore, TOPlus is even better suited for raw material, cast and forged parts, as well as fine-particle non-ferrous metals such as brass. With a run-out accuracy of ≤ 0.015 mm!



Key advantages

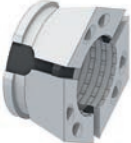
- 25 % higher holding power than clamping head RD [SPANNTOP]
- Insensitive to dirt through the clamping head geometry
- Unequalled rigidity due to full-surface contact of the clamping segments
- Run-out accuracy ≤ 0.015 mm possible
- Longer maintenance intervals
- Significantly improved wear behavior
- Active torsional safety

CLAMPING HEADS

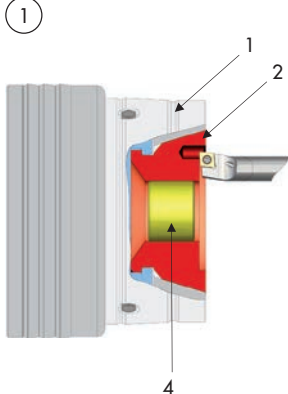
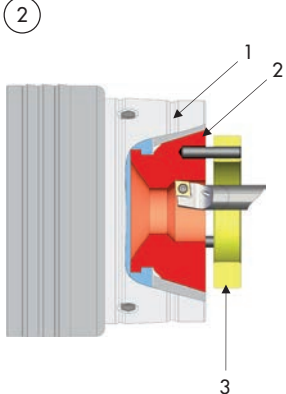
Clamping heads SE



Three SE types

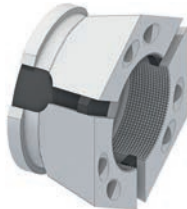
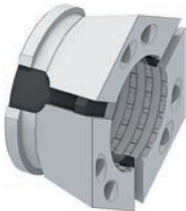
	TOP	TOPG	TOP HSW
			
Applications	For clamping of raw material	For clamping of finished material	For machining to size
Sizes	26, 40, 52, 65, 100	26, 40, 52, 65, 100	40, 52, 65, 100
Clamping range of all sizes [mm]	3 – 100	3 – 100	8 – 90
Clamping surface	serrated	smooth	
Material condition	hard [60 HRC]	hard [60 HRC]	hard [60 HRC] / reduced hardness [40 HRC] in the bore
Standard profiles	round square hexagonal	round	round
Special - serration	coarse toothed [Z] finely serrated [F]		
Definition	TOP = with serration	TOPG = G stands for smooth bore	TOP HSW = HSW stands for machineable

Machining to size of HSW clamping heads

Designation	
1 Chuck 2 HSW clamping head [reduced hardness of 40 HRC in the bore] 3 Loading ring 4 Bolts	 



Design of the bore

Standard version	Special serration
Smooth  Clamping with virtually no clamping marks Application example: Clamping of previously machined contours	F-serration  Powerful clamping through scoring the small pointed teeth – with clamping marks Application example: Clamping of raw material
Radial and axial grooves  Powerful clamping with clamping marks Application example: Clamping of raw material	Z-serration  Powerful clamping through deep scoring of the clamping teeth – with clamping marks Application example: Clamping of raw material [e.g. oxidized, rolled material]
Radial grooves  Powerful clamping with clamping marks Application example: Clamping of raw material	



Clamping head TOP. For raw material clamping

Size	Total length [mm]	Particularity	Profile	Increments [mm]	Type of serration	Clamping range [mm]	In stock	Order no.
26	34	Front nose extension		1	Smooth	4 - 7	✓	top26r4,0-7,0
					Radial grooves	8 - 10	✓	top26r8,0-10,0
					Radial and axial grooves	11 - 26	✓	top26r11,0-26,0
					Smooth	7	-	top26v7,0
					Radial grooves	8 - 18	-	top26v8,0-18,0
					Smooth	7	-	top26s7,0
			Radial grooves		8 - 22	-	top26s8,0-22,0	
40	47	Front nose extension		1	Smooth	4 - 7	✓	top40r4,0-7,0
					Radial grooves	8 - 10	✓	top40r8,0-10,0
					Radial and axial grooves	11 - 40	✓	top40r11,0-40,0
					Smooth	7	-	top40v7,0
					Radial grooves	8 - 27	-	top40v8,0-27,0
					Smooth	7	-	top40s7,0
			Radial grooves		8 - 32	-	top40s8,0-32,0	
52	42	No front nose		0,5	Smooth	4 - 7,5	✓	top52r4,0-7,5
					Radial grooves	8 - 10,5	✓	top52r8,0-10,5
					Radial and axial grooves	11 - 52	✓	top52r11,0-52,0
				1	Radial grooves	8 - 36	-	top52v8,0-36,0
					Smooth	7	✓	top52s7,0
					Radial grooves	8 - 45	✓	top52s8,0-45,0
			65	49	No front nose		0,5	Smooth
Radial grooves	8 - 10,5	✓						top65r8,0-10,5
Radial and axial grooves	11 - 65	✓						top65r11,0-65,0
	1	Radial grooves				8 - 45	-	top65v8,0-45,0
		Smooth				7	✓	top65s7,0
		Radial grooves				8 - 56	✓	top65s8,0-56,0
100	59	No front nose		1	Radial and axial grooves	15 - 41	-	top100r15,0-41,0
						42 - 100	✓	top100r42,0-100,0
					Radial grooves	50 - 70	-	top100v50,0-70,0
						50 - 86	-	top100s50,0-86,0

Explanations of types of clamping surfaces on the previous page.



Clamping head TOPG. For clamping of finished material

Size	Total length [mm]	Particularity	Profile	Increments [mm]	Type of serration	Clamping range [mm]	In stock	Order no.
26	31	No front nose	●	0,5	Smooth	3 - 26	✓	top26gr3,0-26,0
40	44	No front nose	●	0,5	Smooth	3 - 40	✓	top40gr3,0-40,0
52	42	No front nose	●	0,5	Smooth	3 - 52	✓	top52gr3,0-52,0
65	49	No front nose	●	0,5	Smooth	3 - 65	✓	top65gr3,0-65,0
100	59	No front nose	●	1	Smooth	15 - 41	-	top100gr15,0-41,0
						42 - 100	✓	top100gr42,0-100,0

Explanations of the types of clamping surfaces on the previous page.

Clamping head TOP HSW. For machining to size

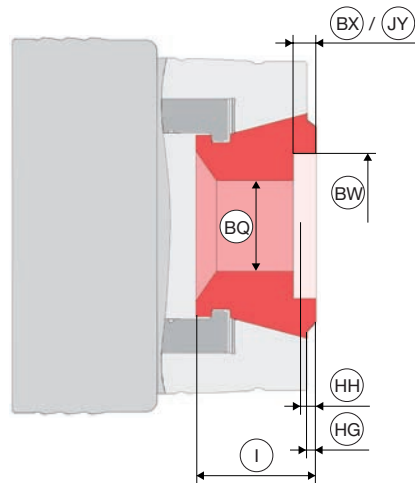
Size	Total length [mm]	Particularity	Profile	Base bore Ø [mm]	Max. axial drawtube force [pull / push] [kN]	In stock	Order no.
40	47	Face and clamping surface 40 HRC	●	8	33	✓	top40hswr8,0
				15		✓	top40hswr15,0
				30		✓	top40hswr30,0
52	42	Face and clamping surface 40 HRC	●	8	40	✓	top52hswr8,0
				15		✓	top52hswr15,0
				30		✓	top52hswr30,0
65	49	Face and clamping surface 40 HRC	●	5	45	✓	top65hswr5,0
				8		✓	top65hswr8,0
				20		✓	top65hswr20,0
				40		✓	top65hswr40,0
100	59	Face and clamping surface 40 HRC	●	15	65	✓	top100hswr15,0
				30		✓	top100hswr30,0
				45		✓	top100hswr45,0
				65		✓	top100hswr65,0
				90		✓	top100hswr90,0

Loading ring [for clamping head TOP HSW]

Size	In stock	Order no.
40	✓	ar40
42/52	✓	ar42/52
65	✓	ar65
100	✓	ar100



Permissible counter bore when manufacturing to order and for HSW clamping heads. Technical data



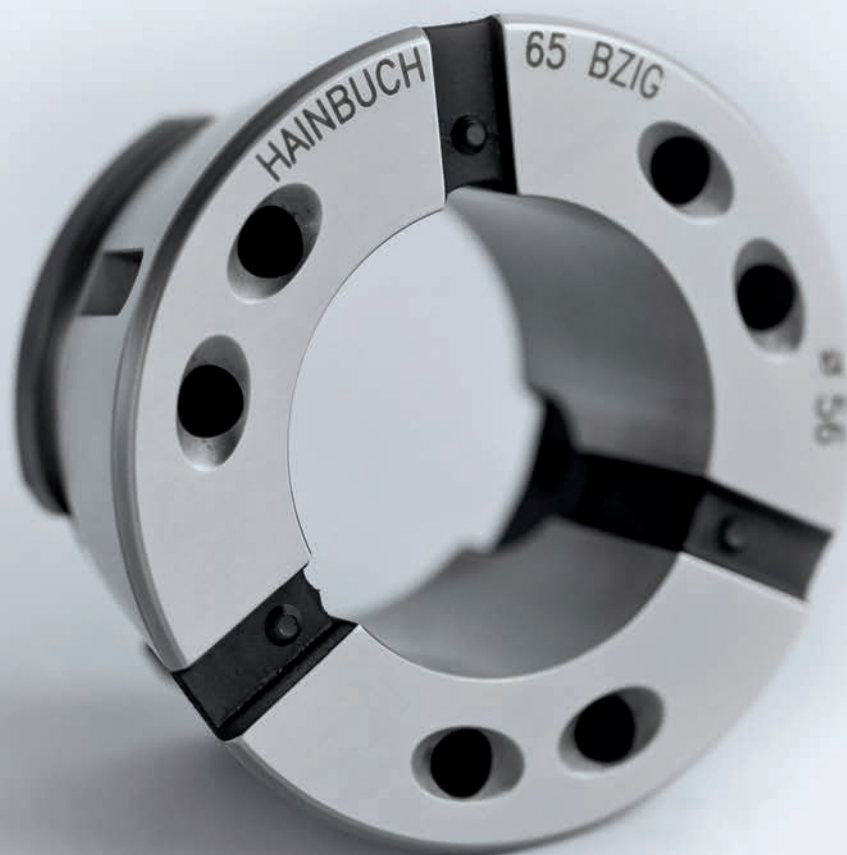
Size	Capacity	Length	Clamping head protrusion length	Variant 1 [max. turning Ø]				Variant 2 [max. clamping depth]			
				Max. permissible turning Ø	Max. permissible turning depth	Min. turning depth	Min. clamping depth of workpiece	Max. permissible turning Ø	Max. permissible turning depth	Min. turning depth	Min. clamping depth of workpiece
	BQ	I	HG	BW	BX	JY	HH	BW	BX	JY	HH
TOP 40 / TOP 40 HSW	40	47	3	51	14	9	6	42	25	9	6
TOP 40 G	40	44	0					42	22	6	3
TOP 52 / TOP 52 G / TOP 52 HSW	52	42	0	60	12	6,5	3				
TOP 65 / TOP 65 G / TOP 65 HSW	65	49	0	78	10	6,5	3	66	26	6,5	3
TOP 100 / TOP 100 G / TOP 100 HSW	102	59	0	98	20	9	3				
				120	20	16	10				

CLAMPING HEADS
Clamping heads SE



Clamping heads

RD – the classic clamping head





This development represents more than 30 years of SPANNTOP experience. It exploits all the advantages of the latest machine tools. This clamping head is not only extremely powerful, it is also convincing through simple handling. With the changing fixture you set-up in no time. The combination of steel and rubber, specially developed by HAINBUCH, in conjunction with a vulcanization that has been perfected over the decades, is designed for maximum speeds and holding forces – with optimal run-out, and incredible rigidity and service life.

The original!



Key advantages

- Run-out accuracy ≤ 0.01 mm possible
- Typical HAINBUCH features, such as user friendly set-up, full passage, parallel clamping, optimal power conversion, extreme rigidity and superior holding power, as well as minimal wear and tear

CLAMPING HEADS

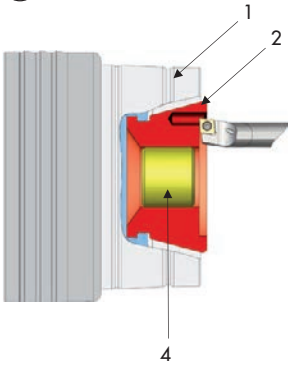
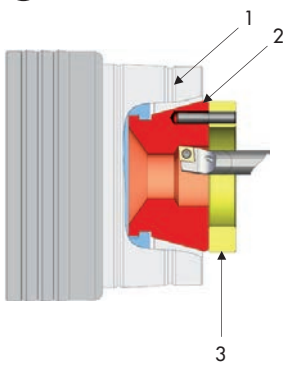
Clamping heads RD



Three RD types

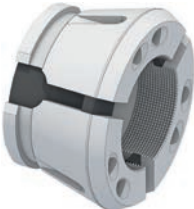
	BZI	BZIG	BZI HSW
			
Applications	For clamping of raw material	For clamping of finished material	For machining to size
Sizes	32, 42, 52, 65, 80, 100, 125, 160	32, 42, 52, 65, 80, 100, 125, 160	32, 42, 52, 65, 80, 100, 125, 160
Clamping range of all sizes [mm]	3 – 160	3 – 160	5 – 130
Clamping surface	serrated	smooth	
Material condition	hard [60 HRC]	hard [60 HRC]	hard [60 HRC] / reduced hardness [40 HRC] in the bore
Standard profiles	round square hexagonal	round	round
Special - serration	coarse toothed [Z] finely serrated [F]		
Definition	BZI = with serration	BZIG = G stands for smooth bore	BZI HSW = HSW stands for machineable

Machining to size of HSW clamping heads

Designation	
1 Chuck 2 HSW clamping head [reduced hardness of 40 HRC in the bore] 3 Loading ring 4 Bolts	①  ② 



Design of the bore

Standard version	Special serration
Smooth  Clamping with virtually no clamping marks Application example: Clamping of previously machined contours	F-serration  Powerful clamping through scoring the small pointed teeth – with clamping marks Application example: Clamping of raw material
Radial and axial grooves  Powerful clamping with clamping marks Application example: Clamping of raw material	Z-serration  Powerful clamping through deep scoring of the clamping teeth – with clamping marks Application example: Clamping of raw material [e.g. oxidized, rolled material]
Radial grooves  Powerful clamping with clamping marks Application example: Clamping of raw material	



Clamping head BZI. For raw material clamping

Size	Total length [mm]	Particularity	Profile	Increments [mm]	Type of serration	Clamping range [mm]	In stock	Order no.				
32	47	Front nose extension		1	Smooth	4 - 7	✓	sk32bzir4,0-7,0				
					Radial grooves	8 - 10	✓	sk32bzir8,0-10,0				
					Radial and axial grooves	11 - 32	✓	sk32bzir11,0-32,0				
					Smooth	7	✓	sk32bziv7,0				
					Radial grooves	8 - 22	✓	sk32bziv8,0-22,0				
						Smooth	7	✓	sk32bzis7,0			
			Radial grooves			8 - 27	✓	sk32bzis8,0-27,0				
42	47	Front nose extension		0,5	Smooth	4,0 - 7,5	✓	sk42bzir4,0-7,5				
					Radial grooves	8,0 - 10,5	✓	sk42bzir8,0-10,5				
					Radial and axial grooves	11 - 42	✓	sk42bzir11,0-42,0				
				1	Smooth	7	✓	sk42bziv7,0				
					Radial grooves	8 - 28	✓	sk42bziv8,0-28,0				
						Smooth	7	✓	sk42bzis7,0			
						Radial grooves	8 - 37*	✓	sk42bzis8,0-37,0			
52	46	Reduced front nose		0,5	Smooth	4,0 - 7,5	✓	sk52bzir4,0-7,5				
					Radial grooves	8,0 - 10,5	✓	sk52bzir8,0-10,5				
					Radial and axial grooves	11 - 52	✓	sk52bzir11,0-52,0				
				1	Radial grooves	8 - 36	✓	sk52bziv8,0-36,0				
					Smooth	7	✓	sk52bzis7,0				
						Radial grooves	8 - 45	✓	sk52bzis8,0-45,0			
						Smooth	4,0 - 7,5	✓	sk65bzir4,0-7,5			
65	58	Front nose extension		0,5	Radial grooves	8,0 - 10,5	✓	sk65bzir8,0-10,5				
					Radial and axial grooves	11 - 65	✓	sk65bzir11,0-65,0				
						1	Radial grooves	8 - 46	✓	sk65bziv8,0-46,0		
			Smooth	7			✓	sk65bzis7,0				
				Radial grooves			8 - 56	✓	sk65bzis8,0-56,0			
				Smooth			4 - 7	✓	sk80bzir4,0-7,0			
			80	53	Reduced front nose		1	Radial grooves	8 - 10	✓	sk80bzir8,0-10,0	
Radial and axial grooves	11 - 80	✓						sk80bzir11,0-80,0				
	Radial grooves	8 - 56						✓	sk80bziv8,0-56,0			
		Smooth				7		✓	sk80bzis7,0			
		Radial grooves				8 - 68		✓	sk80bzis8,0-68,0			
		100				59		No front nose		1	Radial grooves	15 - 24
Radial and axial grooves	25 - 41										-	sk100bzi25,0-41,0
	42 - 100		✓	sk100bzi42,0-100,0								
	Radial grooves		50 - 70	-	sk100bzi50,0-70,0							
			50 - 86	✓	sk100bzi50,0-86,0							
125	67	Reduced front nose		1	Radial and axial grooves	25 - 125	-	sk125bzi25,0-125,0				
					Radial grooves	25 - 87	-	sk125bzi25,0-87,0				
						25 - 107	-	sk125bzi25,0-107,0				
160	63	Reduced front nose		1	Radial and axial grooves	27 - 160	-	sk160bzi27,0-160,0				
					Radial grooves	27 - 112	-	sk160bzi27,0-112,0				
						27 - 137	-	sk160bzi27,0-137,0				

Explanations of types of clamping surface on the previous pages.

*Clamping range 36 mm and 37 mm have restricted clamping forces.



Clamping head BZIG. For clamping of finished material

Size	Total length [mm]	Particularity	Profile	Increments [mm]	Type of serration	Clamping range [mm]	In stock	Order no.
32	44	Reduced front nose	●	1	Smooth	3 - 32	✓	sk32bzigr3,0-32,0
42	42	Reduced front nose	●	0,5	Smooth	3 - 42	✓	sk42bzigr3,0-42,0
52	46	Reduced front nose	●	0,5	Smooth	3 - 52	✓	sk52bzigr3,0-52,0
65	53	Reduced front nose	●	0,5	Smooth	3 - 65	✓	sk65bzigr3,0-65,0
			●	1		7 - 56	-	sk65bzigs7,0-56,0
80	53	Reduced front nose	●	1	Smooth	4 - 80	✓	sk80bzigr4,0-80,0
100	59	No front nose	●	1	Smooth	15 - 41	-	sk100bzgr15,0-41,0
						42 - 100	✓	sk100bzgr42,0-100,0
125	67	Reduced front nose	●	1	Smooth	25 - 125	-	sk125bzgr25,0-125,0
160	63	Reduced front nose	●	1	Smooth	27 - 160	-	sk160bzgr27,0-160,0

Explanations of types of clamping surfaces on the previous page.

Clamping head BZI HSW. For machining to size

Size	Total length [mm]	Particularity	Profile	Base bore Ø [mm]	Max. axial drawtube force [pull / push] [kN]	In stock	Order no.
32	44	Face and clamping surface 40 HRC	●	5	15	✓	sk32bzihsr5,0
				10		✓	sk32bzihsr10,0
				20		✓	sk32bzihsr20,0
42	42	Face and clamping surface 40 HRC	●	8	18	✓	sk42bzihsr8,0
				15		✓	sk42bzihsr15,0
				30		✓	sk42bzihsr30,0
52	46	Face and clamping surface 40 HRC	●	8	34	✓	sk52bzihsr8,0
				15		✓	sk52bzihsr15,0
				30		✓	sk52bzihsr30,0
65	53	Face and clamping surface 40 HRC	●	3	45	✓	sk65bzihsr3,0
				5		✓	sk65bzihsr5,0
				8		✓	sk65bzihsr8,0
				20		✓	sk65bzihsr20,0
				40		✓	sk65bzihsr40,0
80	53	Face and clamping surface 40 HRC	●	8	44	✓	sk80bzihsr8,0
				20		✓	sk80bzihsr20,0
				40		✓	sk80bzihsr40,0
				60		✓	sk80bzihsr60,0
100	59	Face and clamping surface 40 HRC	●	15	50	✓	sk100bzhswr15,0
				30		✓	sk100bzhswr30,0
				45		✓	sk100bzhswr45,0
				65		✓	sk100bzhswr65,0
				90		✓	sk100bzhswr90,0
125	67	Face and clamping surface 40 HRC	●	25	70	✓	sk125bzhswr25,0
				45		✓	sk125bzhswr45,0
				70		✓	sk125bzhswr70,0
				100		✓	sk125bzhswr100,0
160	63	Face and clamping surface 40 HRC	●	27	100	✓	sk160bzhswr27,0
				65		✓	sk160bzhswr65,0
				100		✓	sk160bzhswr100,0
				130		✓	sk160bzhswr130,0

CLAMPING HEADS

Clamping heads RD



Loading ring [for clamping head BZI HSW]

Size	In stock	Order no.
32	✓	ar32
42	✓	ar42
42/52	✓	ar42/52
65	✓	ar65
80	✓	ar80
100	✓	ar100
125	✓	ar125
160	✓	ar160

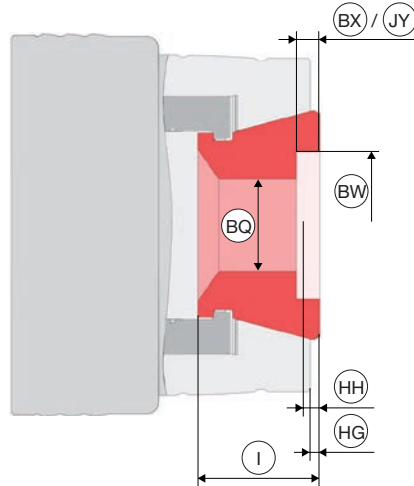
Please note:

ar42: for clamping heads with one change bore per segment

ar42/52: for clamping heads with two change bores per segment



Max. permissible counter bores when manufacturing to order and for HSW clamping heads. Technical data



Size	Capacity	Length	Clamping head protrusion length	Variant 1 [max. turning Ø]				Variant 2 [max. clamping depth]			
				Max. permissible turning Ø	Max. permissible turning depth	Min. turning depth	Min. clamping depth of workpiece	Max. permissible turning Ø	Max. permissible turning depth	Min. turning depth	Min. clamping depth of workpiece
	BQ	I	HG	BW	BX	JY	HH	BW	BX	JY	HH
SK 32 BZI	32	47	6	40	13	13	9	35	23,5	13	9
SK 32 BZIG	32	44	3	40	10	10	6	35	20,5	10	6
SK 32 HSW	32	44	3	40	10	10	6	35	20,5	10	6
SK 42 BZI	42	47	9	64	15	14	12	45	30	15	12
SK 42 BZIG	42	42	4	64	10	10	7	45	25	10,5	7
SK 42 HSW	42	42	4	64	10,5	10,5	7	45	25	10,5	7
SK 52 BZI / SK 52 BZIG	52	46	4	64	10	10	6,5				
SK 52 HSW	52	46	4	64	10,5	10,5	7				
SK 65 BZI	65	58	9	78	18	15,5	12	66	35	15,5	12
SK 65 BZIG	65	53	4	78	13	10,5	7	66	30	10,5	7
SK 65 HSW	65	53	4	78	13	10,5	7	66	30	10,5	7
SK 80 BZI / SK 80 BZIG	80	53	4	93	11	10,5	7	81	30	10,5	7
SK 80 HSW	80	53	4	93	11	10,5	7	81	30	10,5	7
SK 100 BZ / SK 100 BZG	100	59	0	117	20	9	3				
SK 100 HSW	100	59	0	117	20	16	10				
SK 120 BZ	120	61	3	152	18	14	6	141	30	10	6
SK 120 HSW	120	61	3	152	18	14	10	136	30	10	6
SK 125 BZ / SK 125 BZG	127	67	4	167	18	16	7	151	36	16	12
SK 125 HSW	127	67	4	167	18	16	7	151	36	16	12
SK 140 BZ	140	63	5	170	17	12	8	144	36	12	8
SK 140 HSW	140	63	5	170	18	17	13	144	36	17	13
SK 160 BZ	160	63	5	210	12	12	8	188	32	12	8
SK 160 HSW	160	63	5	177	32	14	8				
				187	32	17	13				

**Special profiles**

Do your workpieces include frequently recurring profiles? In these cases we manufacture special profile clamping heads for you. We are also flexible in regards to the type and execution of the vulcanization. Thus, it is possible to have vulcanization run along the bore. For critical components, this is most effective to seal the clamping device.

Key advantages

- Special profiles possible
- Parallel clamping over the entire clamping length
- The vulcanized rubber takes over the clamping movement
- Extended life time and powerful circumferential clamping due to rigid steel segments with over 60 HRC
- Exact radially fixed



CLAMPING HEADS

Clamping heads with **special profiles**

Overview

Find what's important fast



CLAMPING ELEMENTS

Segmented clamping bushings

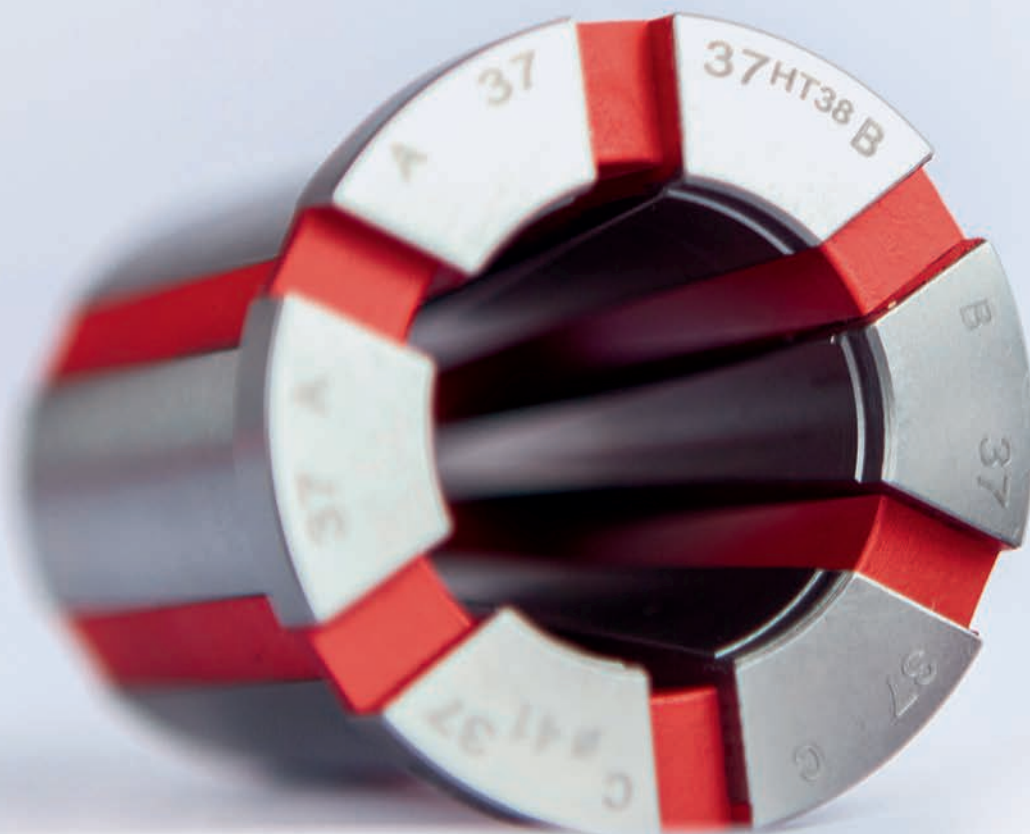
Standard segmented clamping bushings

	Segmented clamping bushing RD	Segmented clamping bushing SE
		
Variant	RD [round]	SE [hexagonal]
Applications	Raw material clamping, clamping of finished material	Raw material clamping, clamping of finished material
Sizes	XXS, XS, S, 1, 2, 3, 4, 5, 6, 7	A, B, C, D, E, F
Clamping range of all sizes [mm]	8 – 200	18 – 100
Advantages	■ Parallel clamping over the entire clamping length ■ Vibration dampening through rigid steel segments ■ Large clamping ranges due to elastic vulcanization between the segments	■ Run-out accuracy ≤ 0.007 mm possible ■ Unique rigidity through pyramid shape ■ Resistant to contamination through large-surface contact of the clamping segments ■ Active torsional safety ■ Longer maintenance intervals
	 Page 378	 Page 384



Bushings

RD – round clamping geometry





SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings RD

In terms of precision, stability, and flexibility the vulcanized segmented clamping bushings are unbeatable. They consist of segments made of chrome/nickel, case hardened steel that is very hard, extremely wear resistant, and rigid [60 HRC]. Plus, they do not have to »bend« to clamp the workpiece. In addition, all functional surfaces are completely ground in one clamping set-up. The result: maximum run-out accuracy, maximum holding power, and long life span.



Key advantages

- Parallel clamping over the entire clamping length
- Vibration dampening through rigid steel segments
- Large clamping ranges due to elastic vulcanization between the segments

SEGMENTED CLAMPING BUSHINGS

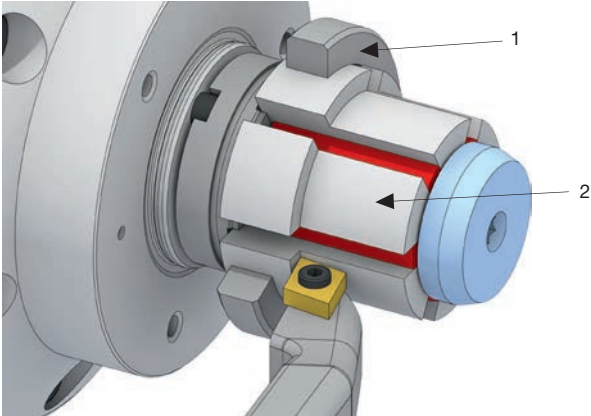
Segmented clamping bushings RD



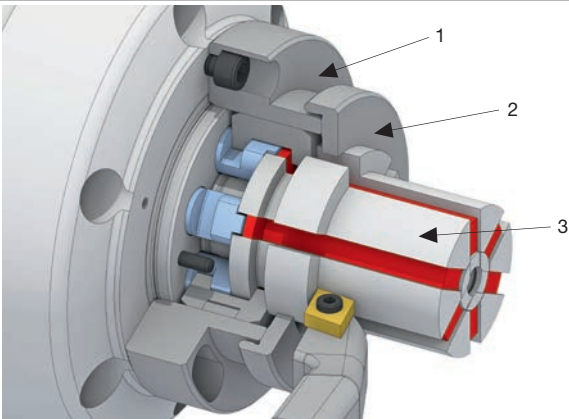
RD models

	MANDO T211 / G211 segmented clamping bushing	MANDO T212 / T812 segmented clamping bushing	MANDO SAD segmented clamping bushing
			
Applications	Blank / machined part	Blank / machined part	
Sizes	0, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 1, 2, 3, 4, 5, 6, 7	XXS, XS, S, 1, 2, 3, 4, 5, 6, 7
Clamping range of all sizes [mm]	20 – 200	8 – 190	18 – 200
Clamping surface	smooth	smooth	
Material condition	60 HRC	60 HRC	60 / 50 HRC
Standard profiles	round	round	round
Special - serration	coarse toothed [Z] finely serrated [F]	coarse toothed [Z] finely serrated [F]	
Definition	211 = with draw bolt	212 / 812 = without draw bolt	SAD = for machining to size

Machining the MANDO T211 / G211 SAD segmented clamping bushing to size

Designation	
- Support ring - SAD segmented clamping bushing [reduced hardness of 40 HRC]	

Machining the MANDO T212 / T812 SAD segmented clamping bushing to size

Designation	
- Support sleeve for SAD segmented clamping bushing - Support ring - SAD segmented clamping bushing [reduced hardness of 40 HRC]	



SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings RD

Segmented clamping bushing MANDO T211 / G211

Size	Clamping range [mm]	Range / recommended workpiece tolerance [mm]	Max. clamping length [mm]	Increments [mm]	In stock	Order no.
0	20 - 28	± 0,25	22	0,5	✓	sb100r20,0-28,0
1	26 - 38	± 0,25	26	0,5	✓	sb110r26,0-38,0
2	36 - 54	± 0,25	43	0,5	✓	sb120r36,0-54,0
3	50 - 80	± 0,35	49	0,5	✓	sb130r50,0-80,0
4	69 - 100	± 0,4	59	0,5	✓	sb140r69,0-100,0
	101 - 120			1	-	sb140r101,0-120,0
5	100 - 130	± 0,5	86	1	-	sb150r100,0-130,0
6	130 - 160	± 0,5	96	1	-	sb160r130,0-160,0
7	160 - 200	± 0,5	94	1	-	sb170r160,0-200,0

Segmented clamping bushing size 5, 6, and 7 upon request.
For size 4, clamping range 101 - 120 mm, a max. speed of 4200 RPM applies.

Segmented clamping bushing MANDO T211 / G211 SAD. For machining to size

Size	Clamping Ø [mm]	Particularity	At least clamping Ø [mm]	Max. clamping length [mm]	In stock	Order no.
0	24	Face and clamping surface 50 HRC	20	22	✓	sad100r24,0
	28				✓	sad100r28,0
1	32	Face and clamping surface 50 HRC	26	26	✓	sad110r32,0
	38				✓	sad110r38,0
2	42	Face and clamping surface 50 HRC	36	43	✓	sad120r42,0
	48				✓	sad120r48,0
	54				✓	sad120r54,0
3	56	Face and clamping surface 50 HRC	50	49	✓	sad130r56,0
	62				✓	sad130r62,0
	70				✓	sad130r70,0
	80				✓	sad130r80,0
4	76	Face and clamping surface 50 HRC	70	59	✓	sad140r76,0
	84				✓	sad140r84,0
	92				✓	sad140r92,0
	100				✓	sad140r100,0
	120			48	✓	sad140r120,0
5	110	Face and clamping surface 50 HRC	100	76	✓	sad150r110,0
	120				✓	sad150r120,0
	130				✓	sad150r130,0
6	140	Face and clamping surface 50 HRC	130	84	✓	sad160r140,0
	150				✓	sad160r150,0
	160				✓	sad160r160,0
7	170	Face and clamping surface 50 HRC	160	89	✓	sad170r170,0
	180				✓	sad170r180,0
	200				✓	sad170r200,0

Support ring is included free of charge.

SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings RD



Segmented clamping bushing MANDO T212 and T812

Size	Clamping Ø [mm]	Range / recommended workpiece tolerance [mm]	Max. clamping length [mm]	Increments [mm]	In stock	Order no.
XXS	8	± 0,2	6	0,5	✓	sb2xxsr8,0
	8,5		6,7		✓	sb2xxsr8,5
	9		7,4		✓	sb2xxsr9,0
	9,5		8,1		✓	sb2xxsr9,5
	10		8,8		✓	sb2xxsr10,0
	10,5		9,4		✓	sb2xxsr10,5
	11		10,1		✓	sb2xxsr11,0
	11,5		10,8		✓	sb2xxsr11,5
	12		11,5		✓	sb2xxsr12,0
	12,5		12,2		✓	sb2xxsr12,5
	13		12,9		✓	sb2xxsr13,0
XS	13 - 19	± 0,25	14	0,5	✓	sb2xsr13,0-19,0
S	16 - 21	± 0,25	15	0,5	✓	sb2sr16,0-21,0
0	20 - 28	± 0,25	21	0,5	✓	sb200r20,0-28,0
1	26 - 38	± 0,25	25	0,5	✓	sb210r26,0-38,0
2	36 - 54	± 0,25	40	0,5	✓	sb220r36,0-54,0
3	50 - 80	± 0,35	44,5	0,5	✓	sb230r50,0-80,0
4	69 - 100	± 0,4	52,5	0,5	✓	sb240r69,0-100,0
5	100 - 130	± 0,5	53	1,0	-	sb250r100,0-130,0
6	130 - 160	± 0,5	61	1,0	-	sb260r130,0-160,0
7	160 - 190	± 0,5	63	1,0	-	sb270r160,0-190,0



SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings RD

Segmented clamping bushing MANDO T212 / T812 SAD. For machining to size

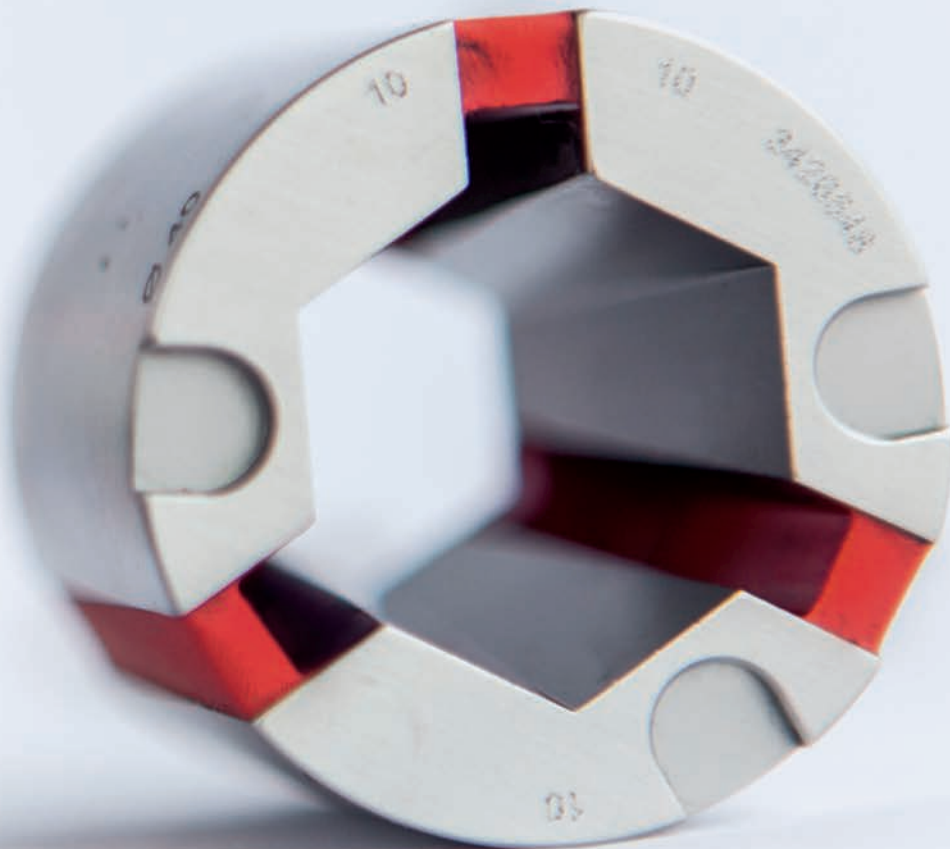
Size	Clamping Ø [mm]	Particularity	At least clamping Ø [mm]	Max. clamping length [mm]	In stock	Order no.
XS	18	Face and clamping surface 50 HRC	13	9	✓	sad2xsr18,0
S	21	Face and clamping surface 50 HRC	16	9,5	✓	sad2sr21,0
0	24	Face and clamping surface 50 HRC	20	15,5	✓	sad200r24,0
	28				✓	sad200r28,0
1	32	Face and clamping surface 50 HRC	26	21	✓	sad210r32,0
	38				✓	sad210r38,0
2	42	Face and clamping surface 50 HRC	36	33	✓	sad220r42,0
	48				✓	sad220r48,0
	54				✓	sad220r54,0
3	56	Face and clamping surface 50 HRC	50	39,0	✓	sad230r56,0
	62				✓	sad230r62,0
	70				✓	sad230r70,0
	80				✓	sad230r80,0
4	76	Face and clamping surface 50 HRC	69	45,0	✓	sad240r76,0
	84				✓	sad240r84,0
	92				✓	sad240r92,0
	100				✓	sad240r100,0
5	106	Face and clamping surface 50 HRC	100	48	✓	sad250r106,0
	114				✓	sad250r114,0
	122				✓	sad250r122,0
	130				✓	sad250r130,0
6	136	Face and clamping surface 50 HRC	130	56	✓	sad260r136,0
	144				✓	sad260r144,0
	152				✓	sad260r152,0
	160				✓	sad260r160,0
7	170	Face and clamping surface 50 HRC	147	55	✓	sad270r170,0
	180				✓	sad270r180,0
	190				✓	sad270r190,0

Support ring is included free of charge.



Bushings

SE – hexagonal clamping geometry





SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings SE

The segmented clamping bushing SE with the hexagon socket sits on the clamping pyramid, absolutely form-fitted in every clamping position and thereby enables maximum machining performance with minimal vibration and thus less tool wear. The full-surface contact of the segmented clamping bushing on the mandrel ensures a significantly better insensitivity to contamination than previous segmented clamping bushing/mandrel systems. Therefore, these segmented clamping bushings are even better suited for raw material, cast and forged parts, as well as fine-particle non-ferrous metals such as brass. And they offer this suitability at run-out of ≤ 0.01 mm and in the premium version at ≤ 0.007 mm.



Key advantages

- Run-out accuracy ≤ 0.007 mm possible
- Unique rigidity through pyramid shape
- Resistant to contamination through large-surface contact of the clamping segments
- Active torsional safety
- Longer maintenance intervals

SEGMENTED CLAMPING BUSHINGS

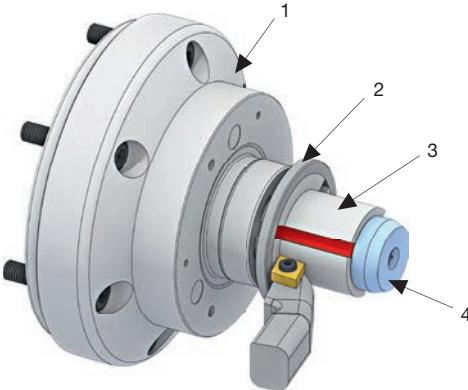
Segmented clamping bushings SE



SE models

	MAXXOS T211 segmented clamping bushing	MAXXOS SAD segmented clamping bushing
		
Applications	Blank / machined part	For machining to size
Sizes	A, B, C, D, E, F	A, B, C, D, E, F
Clamping range of all sizes [mm]	18 – 100	24 – 100
Clamping surface	smooth	smooth
Material condition	60 HRC	60 / 40 HRC
Standard profiles	round	round
Special - serration	coarse toothed [Z] finely serrated [F]	

Machining the MAXXOS SAD segmented clamping bushing to size

Designation	
1 Mandrel 2 Support ring 3 SAD segmented clamping bushing [reduced hardness of 40 HRC] 4 Draw bolt	



SEGMENTED CLAMPING BUSHINGS

Segmented clamping bushings SE

Segmented clamping bushing MAXXOS T211

Size	Clamping range [mm]	Range / recommended workpiece tolerance [mm]	Max. clamping length [mm]	Increments [mm]	Variant	Run-out ≤ [mm]	In stock	Order no.
A	18 - 24	± 0,15	20	0,5	Standard	0,010	✓	sb1ar18,0-24,0
					Premium	0,007	-	sb1ar18,0-24,0p7
B	20 - 32	± 0,15	20	0,5	Standard	0,010	✓	sb1br20,0-32,0
					Premium	0,007	-	sb1br20,0-32,0p7
C	24 - 39	± 0,25	24	0,5	Standard	0,010	✓	sb1cr24,0-39,0
					Premium	0,007	-	sb1cr24,0-39,0p7
D	32 - 50	± 0,3	35	0,5	Standard	0,010	✓	sb1dr32,0-50,0
					Premium	0,007	-	sb1dr32,0-50,0p7
E	39 - 68	± 0,3	45	0,5	Standard	0,010	✓	sb1er39,0-68,0
					Premium	0,007	-	sb1er39,0-68,0p7
F	50 - 100	± 0,3	45	0,5	Standard	0,010	✓	sb1fr50,0-100,0
					Premium	0,007	-	sb1fr50,0-100,0p7

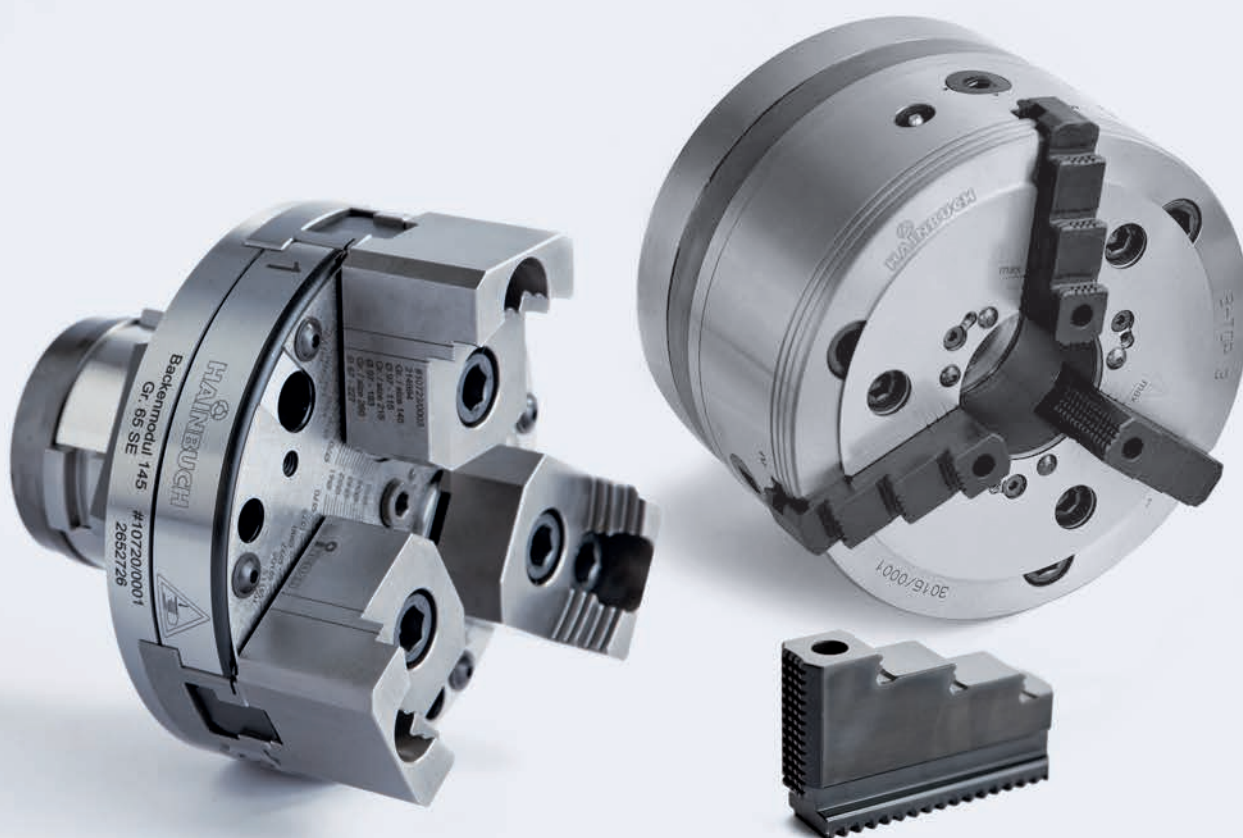
Segmented clamping bushing MAXXOS T211 SAD. For machining to size

Size	Particularity	Clamping Ø [mm]	At least clamping Ø [mm]	Max. clamping length [mm]	In stock	Order no.
A	Face and clamping surface 40 HRC	24	18	20	✓	sad1ar24,0
B	Face and clamping surface 40 HRC	27	20	20	✓	sad1br27,0
		32			✓	sad1br32,0
C	Face and clamping surface 40 HRC	33	24	24	✓	sad1cr33,0
		39			✓	sad1cr39,0
D	Face and clamping surface 40 HRC	43	32	35	✓	sad1dr43,0
		50			✓	sad1dr50,0
E	Face and clamping surface 40 HRC	58	39	45	✓	sad1er58,0
		68			✓	sad1er68,0
F	Face and clamping surface 40 HRC	63	50	45	✓	sad1fr63,0
		81			✓	sad1fr81,0
		100			✓	sad1fr100,0

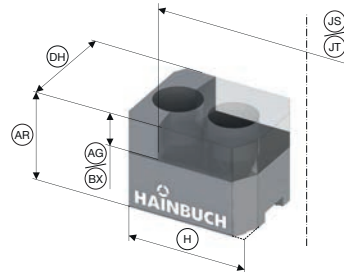
Support ring is included free of charge.

Jaws

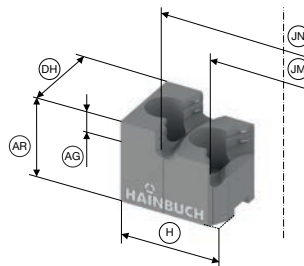
For jaw module and jaw chucks



Jaws for jaw module



Product	Top jaws, soft	
Size	145/215	
Gear cutting type	1,5 x 60° [serration]	
Length [mm]	H	65
Jaw width [mm]	DH	45
Jaw height [mm]	AR	40
Clamping range for size 145 [mm]	25 - 140	
Clamping range for size 215 [mm]	25 - 209	
Max. clamping length [mm]	AG	15
Max. permissible turning Ø	BW	140 / 209
Max. permissible turning depth [mm]	BX	15
In stock	✓	
Order no.	10724/0002	



Product		Radial grooved jaws				
Size		145/215				
Gear cutting type		1,5 x 60° [serration]				
Length [mm]	H	63	55			
Jaw width [mm]	DH	45				
Jaw height [mm]	AR	46				
Clamping range at counter bore 1 size 145 [mm]	JM	25 - 34	35 - 43	43 - 52	52 - 60	62 - 71
Clamping range at counter bore 2 size 145 [mm]	JN	70 - 79	79 - 89	89 - 99	97 - 107	106 - 116
Clamping range at counter bore 1 size 215 [mm]	JM	25 - 103	35 - 111	43 - 119	52 - 126	62 - 137
Clamping range at counter bore 2 size 215 [mm]	JN	70 - 148	79 - 158	89 - 168	97 - 177	106 - 187
Ø Counter bore 1 side 1 [mm]	JM	25	35	43	52	62
Ø Counter bore 2 side 1 [mm]	JN	70	79	89	97	106
Max. clamping length [mm]	AG	10				
In stock		✓	✓	✓	✓	✓
Order no.		10723/0004	10723/0009	10723/0010	10723/0007	10723/0011

JAWS

Jaws for jaw chucks B-Top and B-Top3

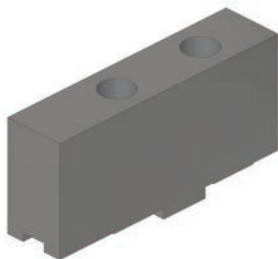
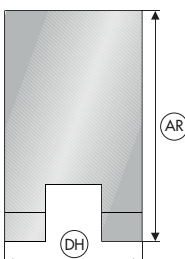
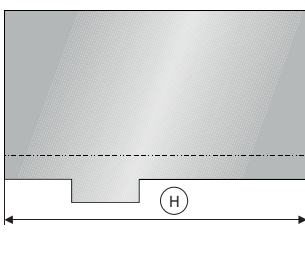
Jaws for jaw chucks B-Top and B-Top3. Order overview

Product	Size	Jaw type	In stock	Order no.
Master jaws	165	GBK 160	-	3504/0001
	215	GBK 200	-	3504/0002
	260	GBK 250	-	3504/0003
	315	GBK 315	-	3504/0004
Top jaws, soft	165	SFA 160	-	3503/0004
		SFA 160-C1	-	3503/0005
		SFA 160-C2	-	3503/0006
		SFA 160-C3	-	3503/0007
	215	SFA 200	-	3503/0009
		SFA 200-C1	-	3503/0010
		SFA 200-C2	-	3503/0011
		SFA 200-C3	-	3503/0012
		SFA 200-C4	-	3503/0013
		SFA 200-C5	-	3503/0014
	260/315	SFA 250	-	3503/0016
		SFA 250-C1	-	3503/0017
		SFA 250-C2	-	3503/0018
		SFA 250-C3	-	3503/0019
		SFA 250-C4	-	3503/0020
		SFA 250-C5	-	3503/0021
		SFA 250-C6	-	3503/0022
		SFA 250-C7	-	3503/0023
Top jaws, aluminum	165	SFA AL160	-	3503/0008
	215	SFA AL200	-	3503/0015
	260/315	SFA AL250	-	3503/0024
Top jaws, hard	165	SHF 160	-	3503/0001
	215	SHF 200	-	3503/0002
	260/315	SHF 250	-	3503/0003
Claw jaws, hard	165	SZKA 163	-	3503/0026
		SZKA 167	-	3503/0027
		SZKA 169	-	3503/0025
	215	SZKA 212	-	3503/0028
		SZKA 213	-	3503/0029
		SZKA 216	-	3503/0030
	260/315	SZKA 263	-	3503/0031
		SZKA 266	-	3503/0032
		SZKA 268	-	3503/0033
Profiled stepped jaws, hard	165	GST 160 I	-	3505/0001
		GST 160 II	-	3505/0002
	215	GST 201	-	3505/0003
	260	GST 251	-	3505/0004
	315	GST 315	-	3505/0005

B-Top3: Please note the maximum jaw width of 22 mm. When using wider jaws you need wider guard bushings [see section »Insert bushings B-Top3«].

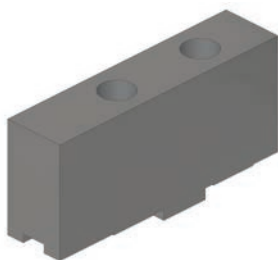
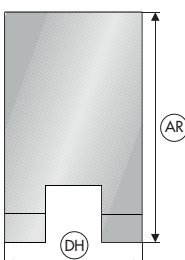
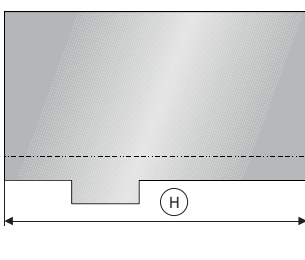
Jaws for jaw chucks B-Top and B-Top3

Top jaws, soft. Technical data

Size	165												
Jaw type	SFA 160		SFA 160-C1		SFA 160-C2		SFA 160-C3						
Material	16MnCr5												
Gear cutting type	Cross offset												
Length [mm]	H	85				63		70					
Jaw height [mm]	AR	36		51		36		56					
Jaw width [mm]	DH	20		30		35		40					
Size	215												
Jaw type	SFA 200		SFA 200-C1		SFA 200-C2		SFA 200-C3		SFA 200-C4		SFA 200-C5		
Material	16MnCr5												
Gear cutting type	Cross offset												
Length [mm]	H	105		100		70		85		95			
Jaw height [mm]	AR	43		51		36		56		76			
Jaw width [mm]	DH	22		30		22		40					
Size	260/315												
Jaw type	SFA 250		SFA 250-C1		SFA 250-C2		SFA 250-C3		SFA 250-C4		SFA 250-C5	SFA 250-C6	SFA 250-C7
Material	16MnCr5												
Gear cutting type	Cross offset												
Length [mm]	H	125		90		125				90			
Jaw height [mm]	AR	50		55		75		95		115		55	
Jaw width [mm]	DH	30				40				60		80	

Top jaws, aluminum. Technical data

Size	165		215		260/315	
Jaw type	SFA AL160		SFA AL200		SFA AL250	
Material	Aluminum					
Gear cutting type	Cross offset					
Length [mm]	H	85	105		125	
Jaw height [mm]	AR	46			55	
Jaw width [mm]	DH	25			40	

JAWS

Jaws for jaw chucks B-Top and B-Top3

Top jaws, hard. Technical data

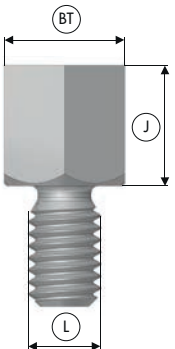
Size		165	215	260/315
Jaw type		SHF 160	SHF 200	SHF 250
Length [mm]	H	63	72	90
Gear cutting type		Cross offset		
Jaw height [mm]	AR	32,5	38	50
Jaw width [mm]	DH	20	22	30
Max. clamping length [mm]	AG	7,5	10	14
Clamping range O.D.	DW	22-67	49-125	80-158 / 104-217
Clamping range O.D.	DX	65-100	73-140	42-97 / 45-136
Clamping range O.D.	DY	90-120	100-167	122-177 / 125-216
Clamping range O.D.	DZ	13-49	12-87	17-94 / 20-132
Clamping range O.D.	EA	74-118	102-178	83-161 / 108-220
Clamping range O.D.	EB	99-143	130-205	163-242 / 188-300
Clamping range O.D.	EC	29-73	50-126	
Clamping range O.D.	EF	20-55	21-88	
Clamping range I.D.	EG	78-122	113-189	162-239 / 186-298
Clamping range I.D.	EH	103-148	141-216	242-319 / 266-380
Clamping range I.D.	EI	145-180	164-231	- / 204-296
Clamping range I.D.	EJ	70-105	75-151	98-175 / 102-214
Clamping range I.D.	EK	94-130	102-178	178-255 / 182-294
Clamping range I.D.	EL	153-198	193-269	- / 266-380
Swing Ø	AX	196	270	340 / 398

Claw jaws, hard. Technical data

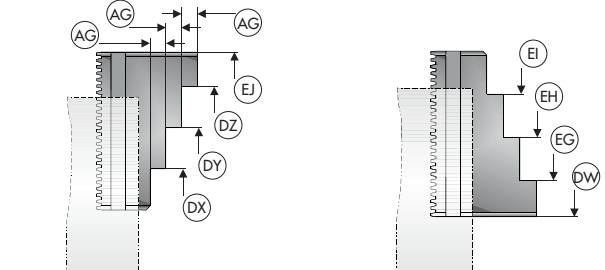
Size		165			215			260/315	
Jaw type		SZKA 163	SZKA 167	SZKA 169	SZKA 212	SZKA 213	SZKA 216	SZKA 263	SZKA 266
Gear cutting type		Cross offset							
Jaw height [mm]	AR	40			45			50	
Jaw width [mm]	DH	30			26			40	
Clamping range for master jaw position 1		70-116	121-167	32 - 68	33-97	98-171	133-206		145-221
Clamping range for master jaw position 2		62-98	103-149					31-100 / 41-138	178-255 / 202-313
Max. clamping length [mm]	AG	20						82-157	- / 128-228

Jaws for jaw chucks B-Top and B-Top3

Support bolts for claw jaws

Product	Figure	Height [mm] J	Wrench size [SW] BT	Thread size [M] L	In stock	Order no.
Support bolts for claw jaws		5	10	6	-	3513/0004
		10			-	3513/0005
		15			-	3513/0006
		20			-	3513/0007
		25			-	3513/0008

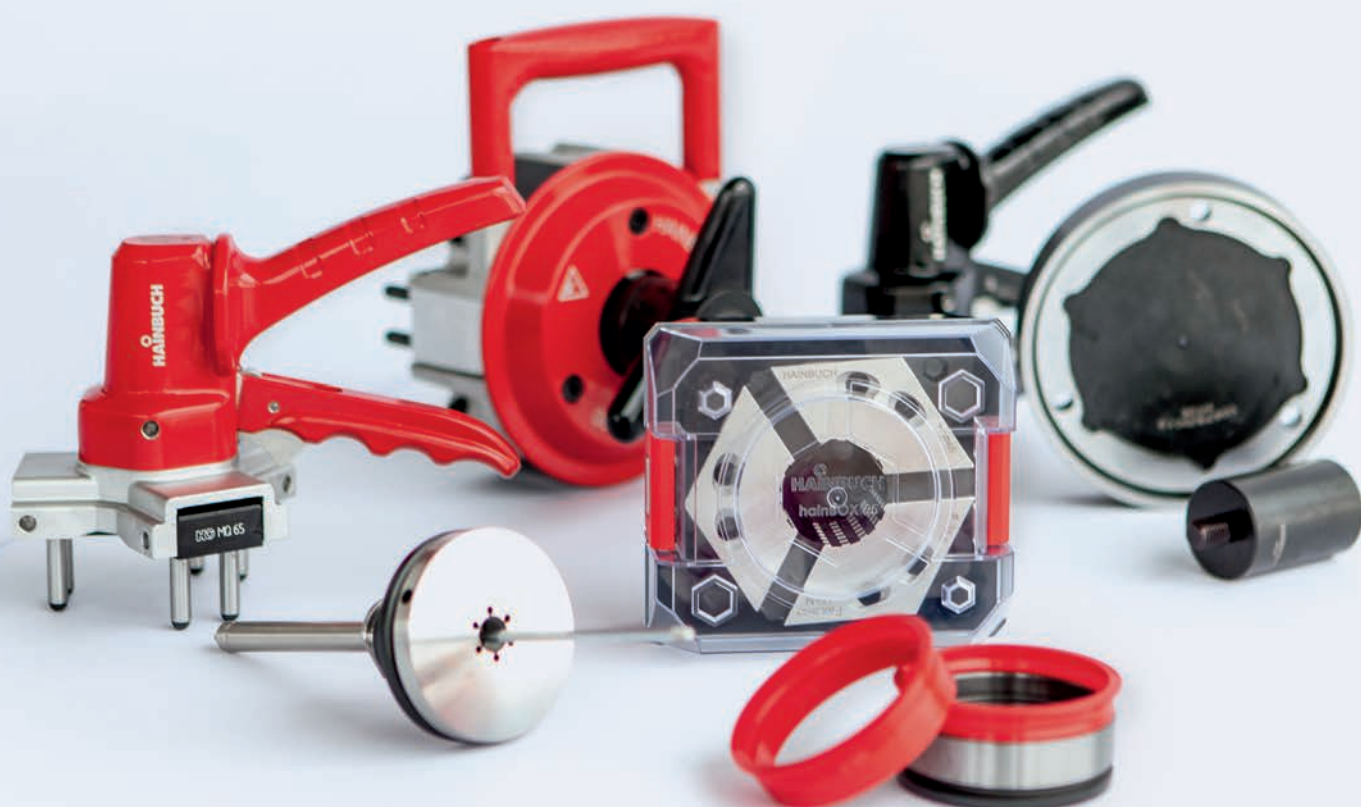
Profiled stepped jaws, hard. Technical data

					
Size	165		215	260	315
Jaw type	GST 160 I	GST 160 II	GST 201	GST 251	GST 315
Length [mm]	H	58	84,8	107,4	117
Jaw height [mm]	AR	44	54	40	46
Jaw width [mm]	DH	20	22	26	32
Max. clamping length [mm]	AG	7	8	10	11
Clamping range O.D.	DW	13-52	16-50	17-84	20-98
Clamping range O.D.	DX	45-77	49-73	45-120	70-148
Clamping range O.D.	DY	76-108	85-106	92-168	125-202
Clamping range O.D.	DZ	105-138	50-84	140-215	180-256
Clamping range I.D.	EG	47-85	50-84	64-130	81-158
Clamping range I.D.	EH	77-116	80-113	112-178	136-213
Clamping range I.D.	EI	108-147	112-144	126-160	184-294
Clamping range I.D.	EJ	136-171	132-165	186-260	242-316
Max. clamping length [mm]	AG	7	8	10	11

If absolute run-out is required, the hard profiled stepped jaws must be ground on the chuck.

Overview

Find what's important fast



Accessories

	vario part end-stop system	398		Insert bushings jaw chuck	435
	vario quick end-stop system	401		CENTREX duo	438
	vario flex end-stop system	409		Multiple clamping pallets	440
	End-stop blanks	411		Tandem cylinder / base plate for HYDROK	442
	Front end-stops	417		Base plate for TOROK	445
	Chip protection rings	419		Adaptation set for MANDO G211	447
	hainBOX storage system	422		Grease	449
	Changing fixtures	424		Various	451
	Adaptation ring modular system	427			
	Flanges / drawtube adapters	429			
	Adapters for air sensing control	433			

ACCESSORIES

Quick reference overview

Overview of accessories

		<i>vario part end-stop system</i>	<i>vario quick end-stop system</i>	<i>vario flex end-stop system</i>	<i>End-stop blanks</i>	<i>Front end-stops</i>	<i>Chip protection rings</i>	<i>hainBOX storage system</i>
								
		Page 398	Page 401	Page 409	Page 411	Page 417	Page 419	Page 422
	Chucks							
	Chuck TOPlus mini	X	X	X	X	X	X	X
	Chuck TOPlus	X	X	X	X	X	X	X
	Chuck SPANNTOP mini	X	X	X	X	X	X	X
	Chuck SPANNTOP nova	X	X	X	X	X	X	X
	Manual chuck TOROK	X	X					X
	Jaw chuck B-Top							
	Jaw chuck B-Top3							X
	Eccentric chuck							X
	Mandrels							
	Mandrel MANDO				X			
	Mandrel MANDO G							
	Mandrel MAXXOS				X			
	Stationary clamping devices							
	Manual stationary chuck MANOK				X			X
	Manual stationary chuck MANOK plus	X	X					X
	Hydraulic stationary chuck HYDROK							X
	Mandrel actuating units ms dock / hs dock							
	Adaptation clamping devices							
	MANDO Adapt [mandrel adaptation]				X			
	Jaw module							
	Face driver / morse taper adaptation							
	Magnet module							
	Clamping elements [clamping heads]							
	Clamping heads SE							X
	Clamping heads RD							X
	Clamping heads with special profiles							X

Customer-specific adaptations and other accessories available upon request.

ACCESSORIES

Quick reference overview

Changing fixtures	Adaptation ring modular system	Flanges / drawtube adapters	Adapters for air sensing control	Insert bushings jaw chuck	CENTREX duo	Multiple clamping pallets	Tandem cylinder / base plate for HYDROK	Base plate for TOROK	Adaptation set for MANDO G21 1	Grease	Torque wrench
											
Page 424	Page 427	Page 429	Page 433	Page 435	Page 438	Page 440	Page 442	Page 445	Page 447	Page 449	Page 451
X		X								X	X
X		X								X	X
X	X	X								X	X
X		X								X	X
X		X						X		X	X
		X		X						X	X
X		X		X						X	X
X		X								X	X
		X	X							X	X
		X	X							X	X
		X							X	X	X
X										X	X
X										X	X
X						X	X			X	X
						X			X	X	X
										X	X
										X	X
											X
X										X	
X										X	
X										X	

End-stop system vario part



End-stop system vario part

The vario part is an extremely rigid and precise end-stop system that functions like a gauge block box. With the ground gauge discs the clamping length can be determined with millimeter accuracy. Thus, in principle you already have the suitable end-stop ready in the drawer – and this saves valuable work preparation time.

The offered sets can be extended as desired with further end-stop plates.

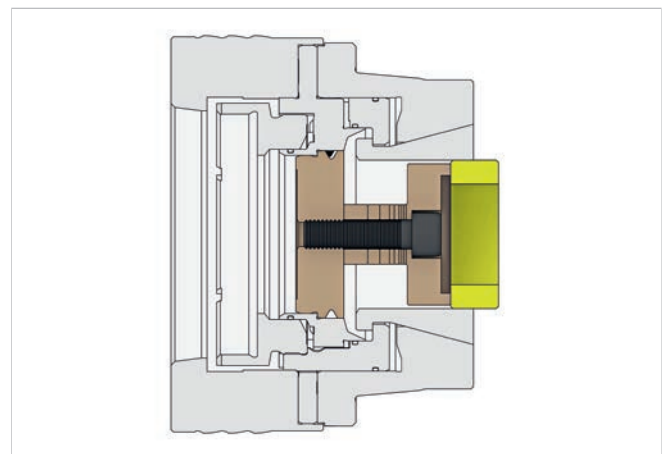


Key advantages

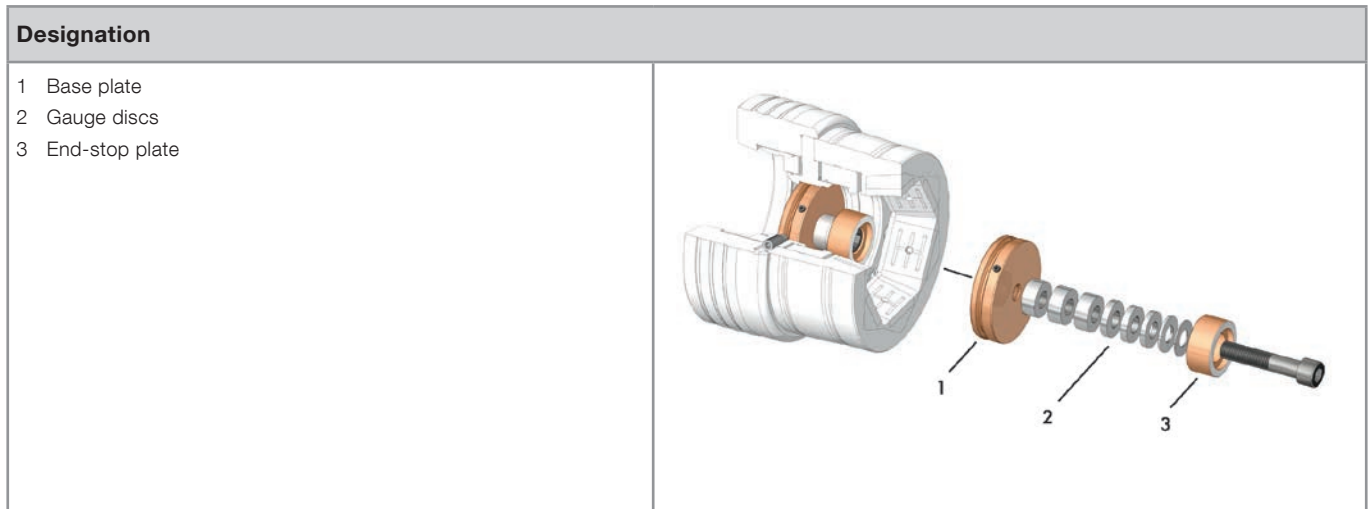
- Standardized workpiece end-stops
- Proven and well-known system with gauge discs
- Through gauge discs the clamping length is flexibly adjustable and adaptable to the workpiece in 1 mm increments
- Can be used rotating and stationary
- Practical storage box

Your benefits

- End-stop design is virtually unnecessary
- Faster set-up
- Multiple use through modular structure



vario part in detail



vario part SETS. Order overview

Size	Suitable for	In addition to the basic equipment* set also contains	In stock	Order no.
32	SPANNTOP mini pull-back SPANNTOP mini deadlength	End-stop plate Ø 29 mm	✓	10498/0045
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10498/0001
40	TOPlus mini pull-back	End-stop plate Ø 29 / 34 mm	✓	10498/0046
	TOPlus mini deadlength		✓	10498/0047
42	SPANNTOP mini pull-back	End-stop plate Ø 29 / 39 mm	✓	10498/0048
	SPANNTOP mini deadlength		✓	10498/0049
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10498/0002
52	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	End-stop plate Ø 29 / 39 / 49 mm	✓	10498/0050
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10498/0003

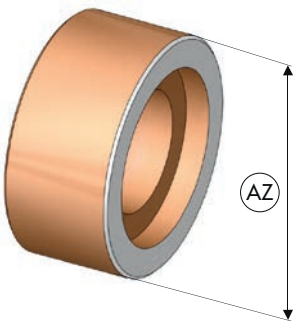
ACCESSORIES

End-stop system vario part

Size	Suitable for	In addition to the basic equipment* set also contains	In stock	Order no.
65	TOPlus mini pull-back TOPlus mini deadlength TOPlus combi pull-back TOPlus combi deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	End-stop plate Ø 29 / 39 / 49 / 59 mm	✓	10498/0004
	TOROK SE/RD TOROK CFK SE/RD		✓	10498/0044
	MANOK plus SE/RD		✓	10498/0006
80	SPANNTOP mini pull-back SPANNTOP mini deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	End-stop plate Ø 29 / 39 / 49 / 59 / 69 / 79 mm	✓	10498/0008
	SPANNTOP nova SPANNTOP mini pull-back SPANNTOP mini deadlength		✓	10498/0052
100	SPANNTOP mini pull-back SPANNTOP mini deadlength TOPlus mini pull-back TOPlus mini deadlength	End-stop plate Ø 49 / 59 / 69 / 79 / 89 mm	✓	10498/0053
	TOPlus mini pull-back TOPlus mini deadlength TOPlus combi pull-back TOPlus combi deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10498/0009
	TOROK SE/RD		✓	10498/0010

* Basic equipment: Allen wrench, gauge discs and a magnet. For sizes 32, 42 and 52: base disc is included. For sizes 65 – 100 the base plate from the chuck may be used.

Supplemental end-stop plates for vario part [included in some sets]

Product	Figure	End-stop outer Ø [mm] AZ	In stock	Order no.
End-stop plate		29,0	✓	10498/0024
		34,0	✓	10498/0031
		39,0	✓	10498/0025
		44,0	✓	10498/0032
		49,0	✓	10498/0026
		54,0	✓	10498/0033
		59,0	✓	10498/0027
		64,0	✓	10498/0034
		69,0	✓	10498/0028
		74,0	✓	10498/0035
		79,0	✓	10498/0029
		84,0	✓	10498/0036
		89,0	✓	10498/0030
		94,0	✓	10498/0037



End-stop system vario quick

The vario quick is an end-stop system with standardized adjustable workpiece end-stops. It saves valuable work preparation time and gives you significantly more flexibility. Since you always have the required clamping length on hand – without having to produce the end-stops yourself.

The clamping length is set for the end-stop screws / blank screws via a threaded spindle. One half turn corresponds to 1 mm adjustment travel.

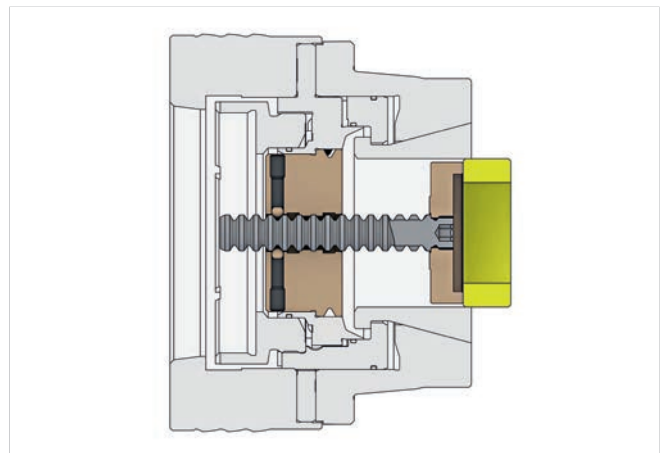
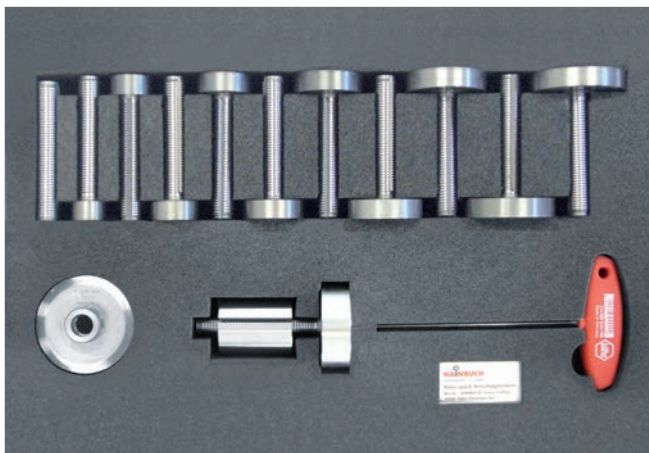
The sets can be expanded individually with separately available end-stop and blank screws. The vario quick end-stop system can also be used stationary under specific conditions [table bore required]. As an alternative, we recommend our vario part system.

Key advantages

- Standardized workpiece end-stops
- End-stop depth can quickly be adjusted in 1 mm increments
- End-stop blanks available
- Can be used rotating and stationary
- Practical storage box

Your benefits

- End-stop design is virtually unnecessary
- Faster set-up
- Multiple use through modular structure



ACCESSORIES

End-stop system vario quick

vario quick in detail

Designation	
1 Base plate [By replacing the base plate the end-stop screws and blank screws can also be used on other clamping devices.] 2 End-stop screws 3 Blank screw	

vario quick SETS. Order overview

Size	Suitable for	Variant	In addition to the basic equipment* set also contains	In stock	Order no.
32	SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 15,5 mm Blank screw Ø 30 mm	✓	10496/0080
		Standard set	End-stop screw Ø 15,5 / 29 mm Blank screw Ø 30 mm	✓	10496/0081
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 15,5 mm Blank screw Ø 30 mm	✓	10496/0011
		Standard set	End-stop screw Ø 15,5 / 29 mm Blank screw Ø 30 mm	✓	10496/0001
40	TOPlus mini pull-back TOPlus mini deadlength	Starter set	End-stop screw Ø 15,5 / 29 mm Blank screw Ø 40 mm	✓	10496/0082
		Standard set	End-stop screw Ø 15,5 / 29 / 34 mm Blank screw Ø 40 mm	✓	10496/0083
42	SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 15,5 / 29 mm Blank screw Ø 40 mm	✓	10496/0084
		Standard set	End-stop screw Ø 15,5 / 29 / 34 mm Blank screw Ø 40 mm	✓	10496/0085
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 15,5 / 29 mm Blank screw Ø 40 mm	✓	10496/0012
		Standard set	End-stop screw Ø 15,5 / 29 / 39 mm Blank screw Ø 40 mm	✓	10496/0002
52	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 50 mm	✓	10496/0086
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 mm Blank screw Ø 50 mm	✓	10496/0087
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 50 mm	✓	10496/0013
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 mm Blank screw Ø 50 mm	✓	10496/0003

ACCESSORIES

End-stop system vario quick

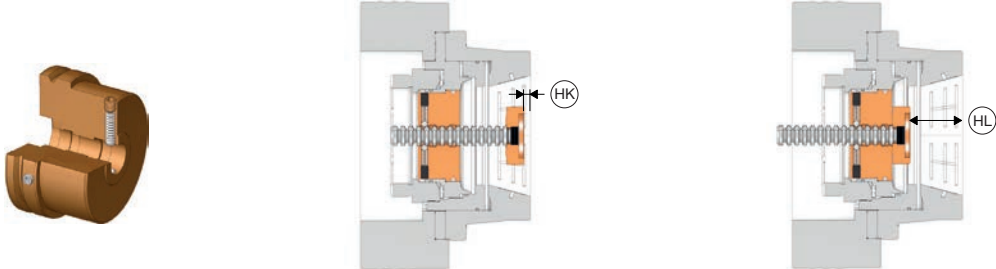
Size	Suitable for	Variant	In addition to the basic equipment* set also contains	In stock	Order no.
65	TOROK Stahl / CFK SE/RD MANOK plus CFK SE/RD	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 63 mm	✓	10496/0076
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 mm Blank screw Ø 63 mm	✓	10496/0077
	MANOK plus steel SE/RD	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 63 mm	✓	10496/0016
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 mm Blank screw Ø 63 mm	✓	10496/0006
	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 63 mm	✓	10496/0088
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 mm Blank screw Ø 63 mm	✓	10496/0089
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 15,5 / 39 mm Blank screw Ø 63 mm	✓	10496/0014
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 mm Blank screw Ø 63 mm	✓	10496/0004
80	SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 15,5 / 39 / 69 mm Blank screw Ø 78 mm	✓	10496/0090
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 / 69 / 79 mm Blank screw Ø 78 mm	✓	10496/0091
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 15,5 / 39 / 69 mm Blank screw Ø 78 mm	✓	10496/0018
		Standard set	End-stop screw Ø 15,5 / 29 / 39 / 49 / 59 / 69 / 79 mm Blank screw Ø 78 mm	✓	10496/0008
100	TOROK steel SE/RD	Starter set	End-stop screw Ø 39 / 79 mm Blank screw Ø 93 mm	✓	10496/0020
		Standard set	End-stop screw Ø 39 / 49 / 59 / 69 / 79 / 89 mm Blank screw Ø 93 mm	✓	10496/0010
	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	Starter set	End-stop screw Ø 39 / 79 mm Blank screw Ø 93 mm	✓	10496/0092
		Standard set	End-stop screw Ø 39 / 49 / 59 / 69 / 79 / 89 mm Blank screw Ø 93 mm	✓	10496/0093
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	Starter set	End-stop screw Ø 39 / 79 mm Blank screw Ø 93 mm	✓	10496/0019
		Standard set	End-stop screw Ø 39 / 49 / 59 / 69 / 79 / 89 mm Blank screw Ø 93 mm	✓	10496/0009

*Basic equipment: Clamping sleeve, base plate and allen wrench.

ACCESSORIES

End-stop system vario quick

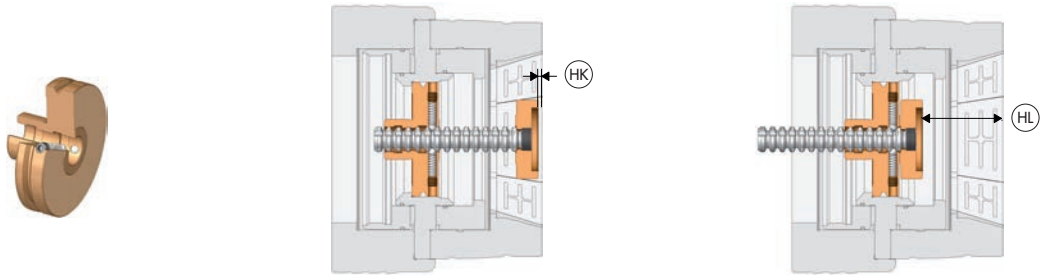
Base plate for TOPlus mini and SPANNTOP mini [included in the set of the respective size]

								
Size	Suitable for	Minimal clamping depth [mm] HK	Maximum clamping depth for TOPlus mini pull-back [mm] HL	Maximum clamping depth for TOPlus mini deadlength [mm] HL	Maximum clamping depth for SPANNTOP mini pull-back [mm] HL	Maximum clamping depth for SPANNTOP mini deadlength [mm] HL	In stock	Order no.
32	SPANNTOP mini pull-back SPANNTOP mini deadlength	5			31	31	✓	10496/0059
40	TOPlus mini pull-back TOPlus mini deadlength	5	33	33			✓	10496/0069
42	SPANNTOP mini pull-back SPANNTOP mini deadlength	5			28	31	✓	10496/0067
52	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	5	32	31	32	31	✓	10496/0063
65	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	5	40	40	40	40	✓	10496/0061
80	SPANNTOP mini pull-back SPANNTOP mini deadlength	5			40	41	✓	10496/0066
100	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	5	58	60	58	60	✓	10496/0064

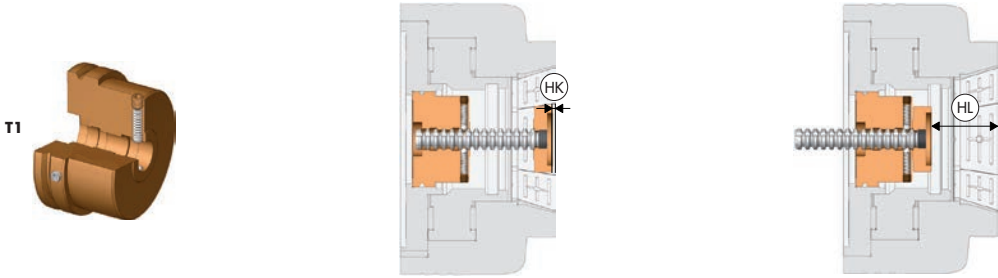
ACCESSORIES

End-stop system vario quick

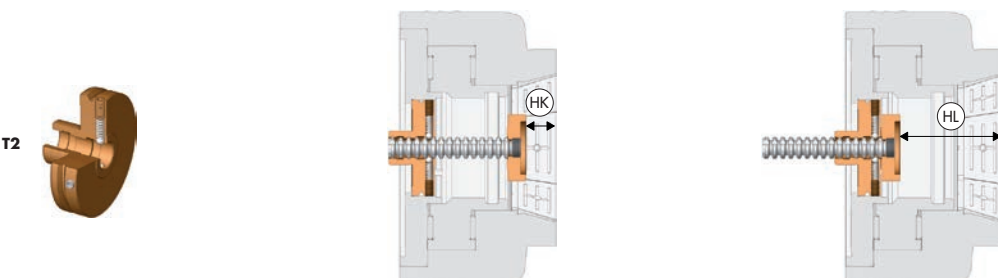
Base plate for TOPlus and SPANNTOP nova [included in the set of the respective size]

				
Size	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	In stock	Order no.
32	5	38,5	✓	10496/0021
42	5	42,5	✓	10496/0022
52	5	42,5	✓	10496/0023
65	5	49,5	✓	10496/0024
80	5	49,5	✓	10496/0028
100	5	59	✓	10496/0029

Base plate for TOROK - end-stop type 1 [included in the set of the respective size]

					
Size	End-stop type	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	In stock	Order no.
52	T1	3	49,5	✓	10496/0074
65	T1	3	49,5	✓	10496/0078
100	T1	3	57	✓	10496/0030

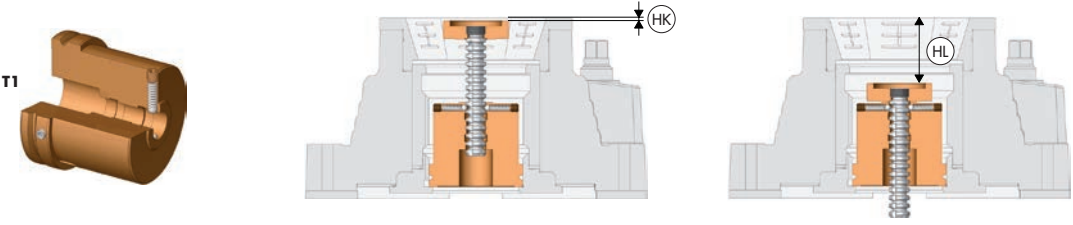
Base plate for TOROK – end-stop type 2 for greater clamping depth [not included in the scope of delivery of the set]

					
Size	End-stop type	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	In stock	Order no.
52	T2	23	76	✓	10496/0094
65	T2	24	77	✓	10496/0079
100	T2	31,5	85,5	✓	10496/0029

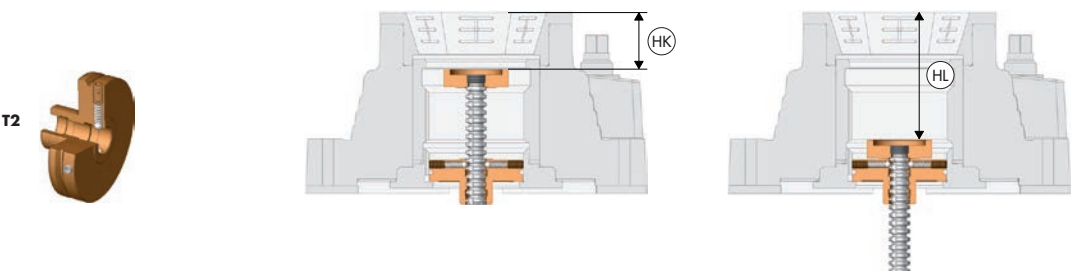
ACCESSORIES

End-stop system vario quick

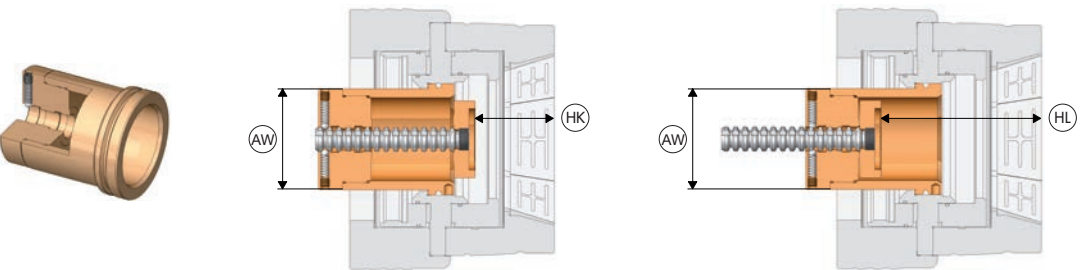
Base plate for MANOK plus – end-stop type 1 [included in the set of the respective size]

						
Size	Suitable for	End-stop type	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	In stock	Order no.
52	CFK model	T1	3	49,5	✓	10496/0074
65	Steel model	T1	3,5	48	✓	10496/0026
	CFK model		3	49	✓	10496/0078

Base plate for MANOK plus – end-stop type 2 for greater clamping depth [not included in the scope of delivery of the set]

						
Size	Suitable for	End-stop type	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	In stock	Order no.
52	CFK model	T2	23	76	✓	10496/0094
65	Steel model	T2	50	94,5	✓	10496/0024
	CFK model		23	77	✓	10496/0079

Depth end-stop, short [not included in the scope of delivery of the set]

							
Size	Suitable for	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	Workpiece Ø [mm] KP	Outer Ø [mm] AW	In stock	Order no.
32	SPANNTOP nova	37,5	88	23,5	32,6	✓	10577/0001
	SPANNTOP mini	30,5	82			✓	10577/0013
40	TOPlus mini	32	85,6	33,5	42	✓	10577/0015

ACCESSORIES

End-stop system vario quick

Size	Suitable for	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	Workpiece Ø [mm] KP	Outer Ø [mm] AW	In stock	Order no.
42	SPANNTOP nova	41,5	92	33,5	42	✓	10577/0003
	SPANNTOP mini	30,2	81			✓	10577/0017
52	TOPlus SPANNTOP nova	41,5	94	44	51,5	✓	10577/0005
	TOPlus mini SPANNTOP mini	31	84,5			✓	10577/0019
65	TOPlus SPANNTOP nova	48,5	102	52	64,5	✓	10577/0007
	TOPlus mini SPANNTOP mini	39	93		64	✓	10577/0021
80	SPANNTOP nova	48,5	102	65	78,5	✓	10577/0009
	SPANNTOP mini	40	93		78	✓	10577/0023
100	TOPlus SPANNTOP nova	57	110,5	89	100	✓	10577/0011
	TOPlus mini SPANNTOP mini	59	111			✓	10577/0025

Delivery without end-stop / blank screw.

Depth end-stop, long [not included in the scope of delivery of the set]

Size	Suitable for	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	Workpiece Ø [mm] KP	Outer Ø [mm] AW	In stock	Order no.
32	SPANNTOP nova	87	130	23,5	32,6	✓	10577/0002
	SPANNTOP mini	78,5				✓	10577/0014
40	TOPlus mini	81	134,6	33,5	42	✓	10577/0016
42	SPANNTOP nova	91	141	33,5	42	✓	10577/0004
	SPANNTOP mini	83,2	134			✓	10577/0018
52	TOPlus SPANNTOP nova	93	145,5	44	51,5	✓	10577/0006
	TOPlus mini SPANNTOP mini	84	137,8			✓	10577/0020
65	TOPlus SPANNTOP nova	101	154,5	52	64,5	✓	10577/0008
	TOPlus mini SPANNTOP mini	92	146		64	✓	10577/0022

ACCESSORIES

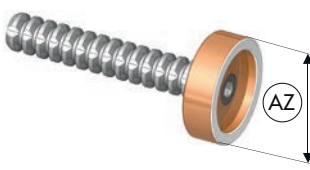
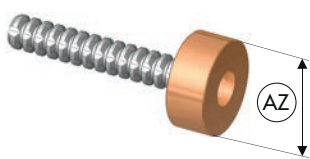
End-stop system vario quick

Size	Suitable for	Minimal clamping depth [mm] HK	Maximal clamping depth [mm] HL	Workpiece Ø [mm] KP	Outer Ø [mm] AW	In stock	Order no.
80	SPANNTOP nova	101	154,5	65	78,5	✓	10577/0010
	SPANNTOP mini	93	146		78	✓	10577/0024
100	TOPlus SPANNTOP nova	108,5	162	89	100	✓	10577/0012
	TOPlus mini SPANNTOP mini	112	164			✓	10577/0026

Delivery without end-stop / blank screw.

Product	Figure	Description	In stock	Order no.
Assembly aid [for depth end-stops]		With trapezoidal thread	✓	10430/0001

Supplemental end-stop/blank screws – suitable for all sets and depth end-stops

Product	Figure	End-stop outer Ø [mm] AZ	In stock	Order no.
End-stop screw		15,5	✓	10496/0055
		19,0	✓	10496/0039
		24,0	✓	10496/0040
		29,0	✓	10496/0041
		34,0	✓	10496/0042
		39,0	✓	10496/0043
		44,0	✓	10496/0044
		49,0	✓	10496/0045
		54,0	✓	10496/0046
		59,0	✓	10496/0047
		64,0	✓	10496/0048
		69,0	✓	10496/0049
		74,0	✓	10496/0050
		79,0	✓	10496/0051
		84,0	✓	10496/0052
		89,0	✓	10496/0053
		94,0	✓	10496/0054
Blank screw		30,0	✓	10496/0032
		40,0	✓	10496/0033
		50,0	✓	10496/0034
		63,0	✓	10496/0035
		78,0	✓	10496/0036
		93,0	✓	10496/0037



End-stop system vario flex

With the vario flex gas pressure workpiece ejector the machined workpiece is automatically ejected out of the clamping device. This automation increases your process reliability and reduces cycle times.

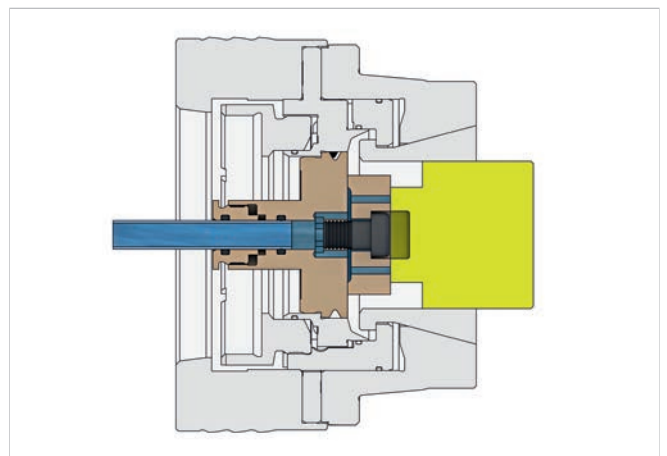
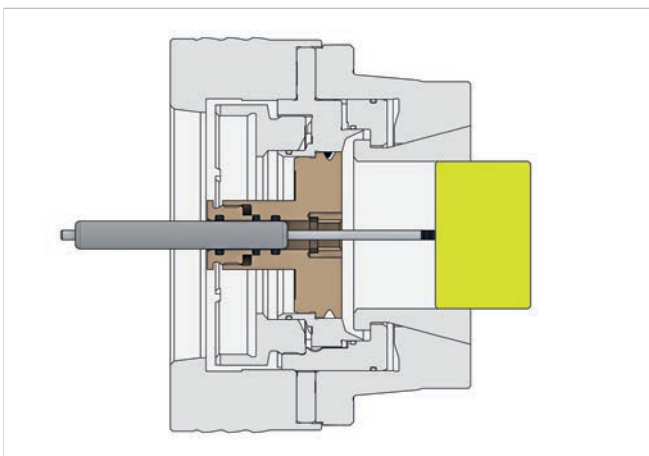
Moreover, the vario flex workpiece ejector can also be used as base end-stop for the flushing or air sensing system connection. Therefore the gas pressure spring is removed and replaced with a media connection.

Key advantages

- For automatic ejection of the workpiece out of the chuck
- Workpiece ejector or base end-stop for flushing or air sensing system

Your benefits

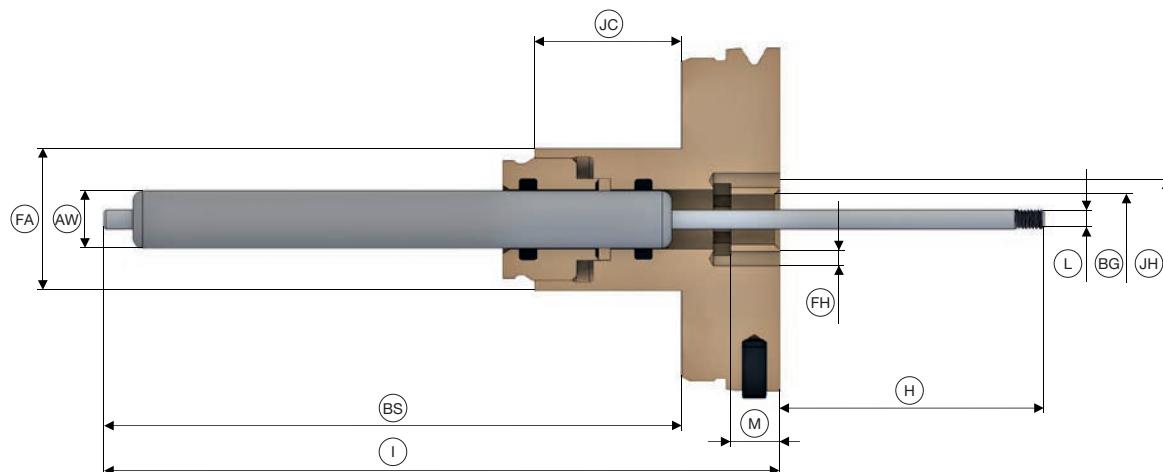
- Process reliability through automatic workpiece ejection
- Productivity increase through reduced cycle time
- Flexibility through different implementation possibilities



ACCESSORIES

End-stop system vario flex

vario flex. Technical data



Suitable for		TOPlus mini pull-back / deadlength SPANNTOP mini pull-back / deadlength						
Size		32	40	42	52	65	80	100
Length [mm]	H	45	48,1	42,6	46	54		72
Piston force [N]					40			
Thread size [M]	L				4			
End-stop thread size [M]	BG		10			12		
Depth of thread [mm]	M				10			
Total length [mm]	I	127	123,9	129,4	126	138		160
Length 2 [mm]	BS	113,5	111	116	106	118		138
Outer Ø [mm]	AW				12			
Length 3 [mm]	JC				30			
Outer Ø 2 [mm]	FA				29			
Bore-Ø	FH				3			
Bolt hole circle [mm]	JH		14			16		
Wrench size [SW]	BT				24			
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10924/0007	10924/0008	10924/0009	10924/0010	10924/0011	10924/0012	10924/0013

Suitable for		TOPlus combi pull-back / combi deadlength SPANNTOP nova combi pull-back / combi deadlength						
Size		32	42	52	65	80	100	
Length [mm]	H	53,5		56		65		85
Piston force [N]					40			
Thread size [M]	L				4			
End-stop thread size [M]	BG		10			12		
Depth of thread [mm]	M				10			
Total length [mm]	I	118,5		116		127		147
Length 2 [mm]	BS	101,5		99		110		127
Outer Ø [mm]	AW				12			
Length 3 [mm]	JC				30			
Outer Ø 2 [mm]	FA				29			
Bore-Ø	FH				3			
Bolt hole circle [mm]	JH		14			16		
Wrench size [SW]	BT				24			
In stock		✓	✓	✓	✓	✓	✓	✓
Order no.		10924/0001	10924/0002	10924/0003	10924/0004	10924/0005	10924/0006	



End-stop blanks

With the workpiece end-stop blanks you have pre-fabricated workpiece end-stops »in the drawer« that you can adapt individually to your workpieces and clamping situations. The hardness of the blanks is 42 HRC – which allows good machining.

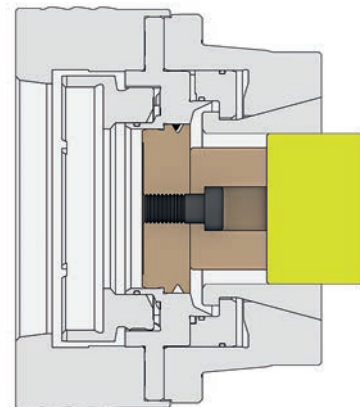
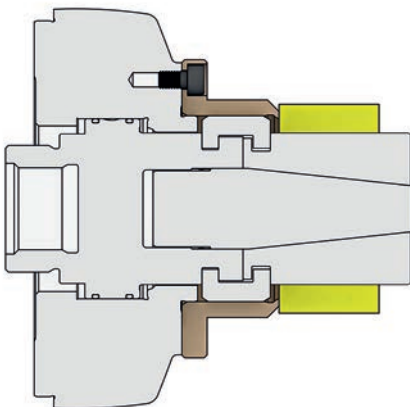
The workpiece end-stop blanks are mounted on the base plate included in the scope of delivery.

Key advantages

- Prefabricated workpiece end-stops that can be individually adapted in diameter and length
- Easy to change through assembly on the base end-stop plate

Your benefits

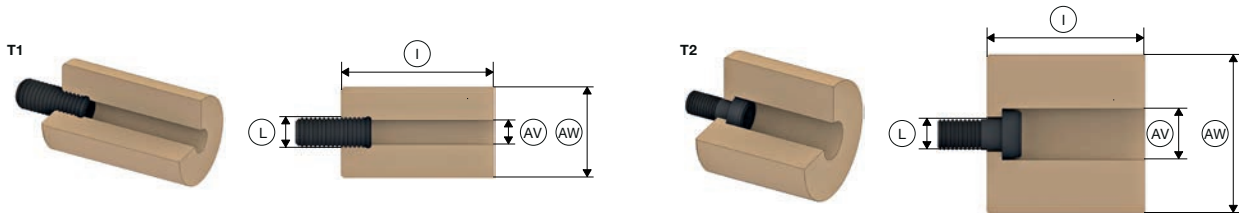
- Time saving and ready to use immediately
- Cost saving because work preparation is not required



ACCESSORIES

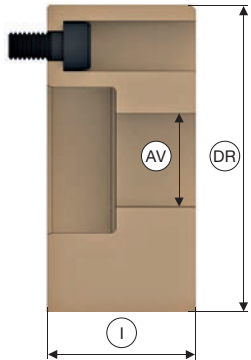
End-stop blanks

TOPlus / SPANNTOP chuck. Workpiece end-stops for machining to size

								
Size	End-stop type	Suitable for	Outer Ø [mm] AW	Inner Ø [mm] AV	Total length [mm] I	Thread size [M] L	In stock	Order no.
32	T1	SPANNTOP nova SPANNTOP mini	30	8	50,5	10	✓	10590/0005
40/42/52	T1	TOPlus TOPlus mini SPANNTOP nova SPANNTOP mini	40	8	54,5	10	✓	10590/0006
52	T2	TOPlus TOPlus mini SPANNTOP nova SPANNTOP mini	50	18	54,5	10	✓	10590/0001
65/80	T1	TOPlus TOPlus mini SPANNTOP nova SPANNTOP mini	40	10	61,5	12	✓	10590/0007
65	T2	TOPlus TOPlus mini SPANNTOP nova SPANNTOP mini	63	20	61,5	12	✓	10590/0002
80	T2	SPANNTOP nova SPANNTOP mini	78	20	61,5	12	✓	10590/0003
100	T1	TOPlus TOPlus mini SPANNTOP nova SPANNTOP mini	42	10	71	12	✓	10590/0008
	T2		98	32			✓	10590/0004

MANDO / MANDO Adapt T211 [mandrel and mandrel adaptation].

End-stops for machining to size for SB and SAD segmented clamping bushing

Size	Figure	Outer Ø [mm] DR	Total length [mm] I	Inner Ø [mm] AV	In stock	Order no.
0		65	30	20,5	✓	a100r20,5
1				24,5	✓	a100r24,5
				28,5	✓	a100r28,5
				32,5	✓	a100r32,5
		2	26,5	✓	a110r26,5	
69			40	32,5	✓	a110r32,5
				38,5	✓	a110r38,5
				24,5	✓	a110r24,5
		39,5		✓	a110r39,5	
3		93	55	36,5	✓	a120r36,5
				42,5	✓	a120r42,5
				50,5	✓	a120r50,5
				48,5	✓	a120r48,5
4		96	63	54,5	✓	a120r54,5
				50,6	✓	a130r50,6
				100,6	✓	a130r100,6
				56,6	✓	a130r56,6
5		96	75	62,6	✓	a130r62,6
				70,6	✓	a130r70,6
				80,6	✓	a130r80,6
				68,6	✓	a130r68,6
6		106	104	90,6	✓	a130r90,6
				70,8	✓	a140r70,8
				76,8	✓	a140r76,8
				84,8	✓	a140r84,8
7		120	112	92,8	✓	a140r92,8
				100,8	✓	a140r100,8
				106,8	✓	a140r106,8
	113,8			✓	a140r113,8	
8	130	125,5	120,8	✓	a140r120,8	
			131	✓	a150r131,0	
			101	✓	a150r101,0	
			111	✓	a150r111,0	
9	150	112	121	✓	a150r121,0	
			131	✓	a160r131,0	
			141	✓	a160r141,0	
			151	✓	a160r151,0	
10	180	125,5	161	✓	a160r161,0	
			161,8	✓	a170r161,8	
			181,8	✓	a170r181,8	
			191,8	✓	a170r191,8	
11	220	125,5	171,8	✓	a170r171,8	
			201,8	✓	a170r201,8	
			201,8	✓	a170r201,8	
			201,8	✓	a170r201,8	

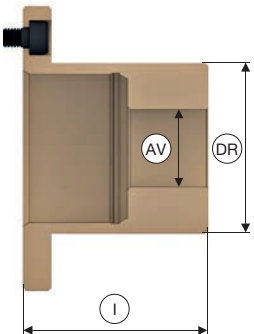
ACCESSORIES

End-stop blanks

MANDO / MANDO Adapt T212 / T812 [mandrel and mandrel adaptation].

End-stops for machining to size for SB segmented clamping bushings

[When using SAD segmented clamping bushings please see the following table.]

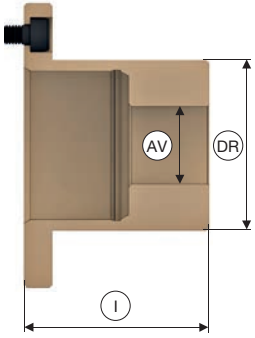
Size	Figure	Outer Ø [mm] DR	Total length [mm] I	Inner Ø [mm] AV	In stock	Order no.
XXS		41	45,5	8,5	✓	a2xxsr8,5
				9,5	✓	a2xxsr9,5
				10,5	✓	a2xxsr10,5
				13,5	✓	a2xxsr13,5
XS		42	45,5	13,5	✓	a2xsr13,5
				18,5	✓	a2xsr18,5
				19,5	✓	a2xsr19,5
S		45	47,5	16,5	✓	a2sr16,5
				21,5	✓	a2sr21,5
0		54	58,5	20,5	✓	a200r20,5
				24,5	✓	a200r24,5
				28,5	✓	a200r28,5
1		62	64,5	26,5	✓	a210r26,5
				32,5	✓	a210r32,5
				38,5	✓	a210r38,5
2		76	80,5	36,5	✓	a220r36,5
				42,5	✓	a220r42,5
				48,5	✓	a220r48,5
				54,5	✓	a220r54,5
3		105	87,5	50,6	✓	a230r50,6
				56,6	✓	a230r56,6
				62,6	✓	a230r62,6
				70,6	✓	a230r70,6
				80,6	✓	a230r80,6
4		124	97,5	70,8	✓	a240r70,8
				76,8	✓	a240r76,8
				84,8	✓	a240r84,8
				92,8	✓	a240r92,8
	100,8			✓	a240r100,8	
5	160	112,5	100,8	-	a250r100,8	
			106,8	-	a250r106,8	
			114,8	-	a250r114,8	
			122,8	-	a250r122,8	
			130,8	-	a250r130,8	
6	190	121,5	130,8	-	a260r130,8	
			136,8	-	a260r136,8	
			144,8	-	a260r144,8	
			152,8	-	a260r152,8	
			160,8	-	a260r160,8	
7	212	115,5	161,8	-	a270r161,8	
			171,8	-	a270r171,8	
			181,2	-	a270r181,2	
			192,0	-	a270r192,0	

ACCESSORIES

End-stop blanks

MANDO / MANDO Adapt T212 / T812 [mandrel and mandrel adaptation].

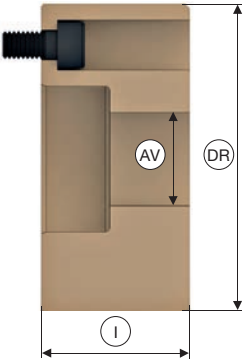
End-stops for machining to size with use of SAD segmented clamping bushings

Size	Figure	Outer Ø [mm] DR	Total length [mm] I	Inner Ø [mm] AV	In stock	Order no.
XS		42	45,5	13,5	✓	as2xsr13,5
				18,5	✓	as2xsr18,5
S		45	47,5	16,5	✓	as2sr16,5
				21,5	✓	as2sr21,5
0		54,0	58,5	20,5	✓	as200r20,5
				24,5	✓	as200r24,5
				28,5	✓	as200r28,5
1		62	64,5	26,5	✓	as210r26,5
				32,5	✓	as210r32,5
				38,5	✓	as210r38,5
2		76	80,5	36,5	✓	as220r36,5
				42,5	✓	as220r42,5
				48,5	✓	as220r48,5
				54,5	✓	as220r54,5
3		105	87,5	50,6	✓	as230r50,6
				56,6	✓	as230r56,6
				62,6	✓	as230r62,6
				70,6	✓	as230r70,6
				80,6	✓	as230r80,6
4		124	97,5	70,8	✓	as240r70,8
				76,8	✓	as240r76,8
				84,8	✓	as240r84,8
				92,8	✓	as240r92,8
				100,8	✓	as240r100,8
5		160	112,5	100,80	✓	as250r100,8
				106,80	✓	as250r106,8
				114,8	✓	as250r114,8
				122,8	✓	as250r122,8
				130,8	✓	as250r130,8
6		190	122	130,80	✓	as260r130,8
				136,80	✓	as260r136,8
				144,80	✓	as260r144,8
				152,80	✓	as260r152,8
				160,8	✓	as260r160,8
7		212	115	161,8	✓	as270r161,8
				171,8	✓	as270r171,8
				181,8	✓	as270r181,8
				192,0	✓	as270r192,0

ACCESSORIES

End-stop blanks

MAXXOS T211 mandrel. End-stops for machining to size for SB and SAD segmented clamping bushing

Size	Figure	Outer Ø [mm] DR	Total length [mm] I	Inner Ø [mm] AV	In stock	Order no.
A		65	30	18,5	✓	a100r18,5
A				20,5	✓	a100r20,5
B				24,5	✓	a100r24,5
B				28,5	✓	a100r28,5
B				32,5	✓	a100r32,5
C		69	40	24,5	✓	a110r24,5
				26,5	✓	a110r26,5
				32,5	✓	a110r32,5
				38,5	✓	a110r38,5
				39,5	✓	a110r39,5
D		93	55	32,5	✓	a120r32,5
				36,5	✓	a120r36,5
				42,5	✓	a120r42,5
				48,5	✓	a120r48,5
				50,5	✓	a120r50,5
E		96	63	54,5	✓	a120r54,5
E F				39,6	✓	a130r39,6
				50,6	✓	a130r50,6
				56,6	✓	a130r56,6
	62,6			✓	a130r62,6	
	68,6			✓	a130r68,6	
	70,6			✓	a130r70,6	
	80,6			✓	a130r80,6	
106	90,6	✓		a130r90,6		
	116	100,6		✓	a130r100,6	

MANOK manual stationary chuck. Workpiece end-stop

Product	Figure	Size	In stock	Order no.
Workpiece end-stop		65	✓	3012/0001



Front end-stop blanks

With the front end-stop blanks you have prefabricated workpiece end-stops on hand that you can adapt individually to your workpieces and clamping situations. The hardness of the blanks is 42 HRC – which allows good machining.

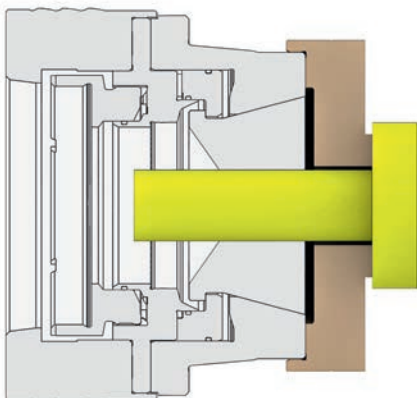
The front end-stop blanks are mounted on the face of the chuck. For the SPANNTOP mini chucks, they are mounted on the adaptation ring.

Key advantages

- Prefabricated workpiece end-stops that can be individually adapted in diameter and length
- Easy to change
- Higher force transmission compared to inside end-stop

Your benefits

- Time saving and ready to use immediately
- Cost saving because work preparation is not required
- Higher machining parameters are possible

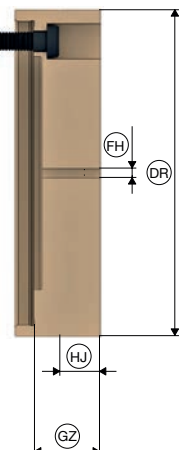


ACCESSORIES

Front end-stops

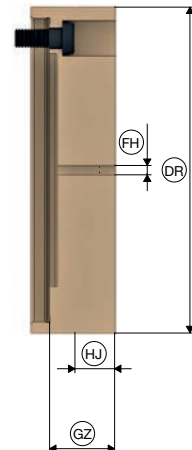
TOPlus mini [pull-back] / TOPlus [combi pull-back and modular].

Front end-stops for machining to size

Size	Figure	Suitable for	End-stop height [mm] GZ	Effective length [mm] HJ	Outer Ø [mm] DR	Bore-Ø FH	In stock	Order no.
26		TOPlus mini pull-back	27	17	72	4	-	10578/0010
40		TOPlus mini pull-back	29	17	101	4	✓	10578/0011
52		TOPlus mini pull-back	28	17	129	4	✓	10578/0012
		TOPlus combi pull-back / modular	26		135		✓	10578/0006
65		TOPlus mini pull-back	28	17	139	4	✓	10578/0013
		TOPlus combi pull-back / modular	24,5		155		✓	10578/0007
100		TOPlus mini pull-back	30,5	17	193	4	✓	10578/0014
		TOPlus combi pull-back / modular	26		225		✓	10578/0008

SPANNTOP mini [pull-back] / SPANNTOP nova [combi pull-back and modular].

Front end-stops for machining to size

Size	Figure	Suitable for	End-stop height [mm] GZ	Effective length [mm] HJ	Outer Ø [mm] DR	Bore-Ø FH	In stock	Order no.
32		SPANNTOP mini pull-back	30	17	78	4	-	10578/0009
		SPANNTOP combi pull-back / modular SPANNTOP mini pull-back	29,5		85		✓	10578/0001
42/52		SPANNTOP combi pull-back / modular SPANNTOP mini pull-back	27,5	17	135	4	✓	10578/0002
65		SPANNTOP combi pull-back / modular SPANNTOP mini pull-back	27	17	155	4	✓	10578/0003
80		SPANNTOP combi pull-back / modular SPANNTOP mini pull-back	27	17	170	4	✓	10578/0004
100		SPANNTOP combi pull-back / modular SPANNTOP mini pull-back	30,5	17	225	4	✓	10578/0005

Please note: The front end-stops only fit for clamping heads size 32 – 80 BZIG, or size 100 BZG [clamping of finished material].



Chip protection rings

Chip protection rings extensively protect the chuck mechanism from contaminants and thus guarantee high process reliability.

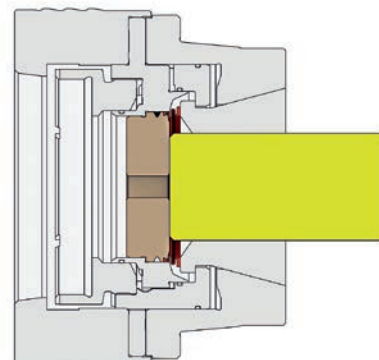
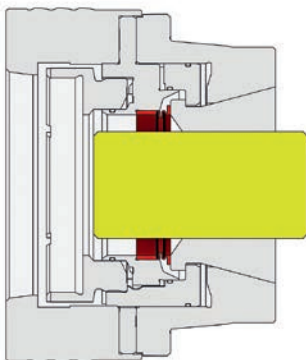
Two variants are available that are suited for the different chuck models: One variant for use of the existing unrestricted chuck capacity, the other variant for use when the workpiece is clamped position-oriented on a base end-stop.

Key advantages

- Protects the chuck mechanism from contamination
- Fast and easy assembly
- Variant with full chuck capacity or base end-stop available
- Dimensionally stable seal ring produced through machining

Your benefits

- Less machine downtime
- Increased process reliability
- Longer service life of the chuck

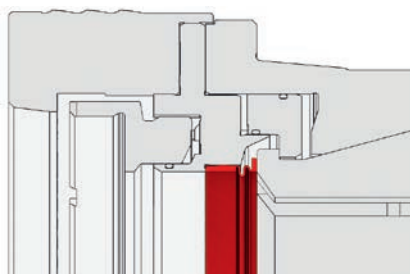


ACCESSORIES

Chip protection rings

Chip protection ring for sealing, with through-bore.

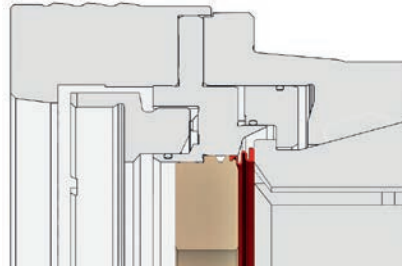
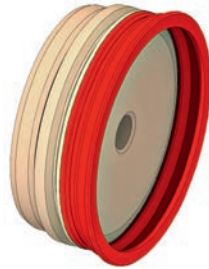
Chucks TOPlus / TOPlus mini / SPANNTOP nova / SPANNTOP mini



Size	Suitable for	Ø Capacity [mm]	In stock	Order no.
26	TOPlus mini pull-back TOPlus mini deadlength	26,5	✓	10921/0001
32	SPANNTOP mini pull-back SPANNTOP mini deadlength	33	✓	10921/0002
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10921/0009
40	TOPlus mini pull-back TOPlus mini deadlength	41	✓	10921/0003
42	SPANNTOP mini pull-back SPANNTOP mini deadlength	43	✓	10921/0004
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10921/0010
52	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	53	✓	10921/0005
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10921/0011
65	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	66	✓	10921/0006
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10921/0012
80	SPANNTOP mini pull-back SPANNTOP mini deadlength	81	✓	10921/0007
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength		✓	10921/0013
100	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	101	✓	10921/0008
	TOPlus combi pull-back SPANNTOP nova combi pull-back		✓	10921/0014
	TOPlus combi deadlength SPANNTOP nova combi deadlength		✓	10921/0015

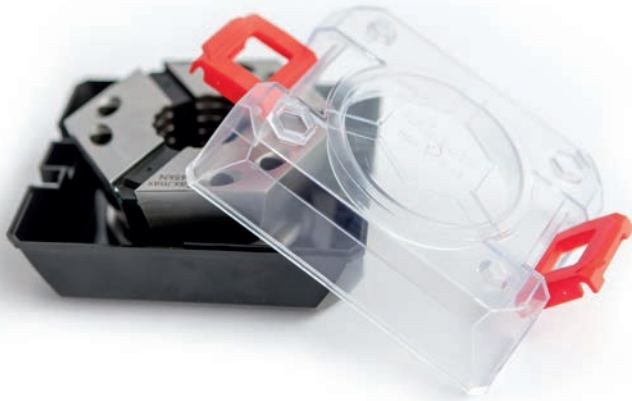
Chip protection ring for sealing, with base end-stop.

Chucks TOPlus / TOPlus mini / SPANNTOP nova / SPANNTOP mini



Size	Suitable for	Workpiece Ø [mm]	In stock	Order no.
26	TOPlus mini pull-back TOPlus mini deadlength	26,5	✓	10922/0001
32	SPANNTOP mini pull-back SPANNTOP mini deadlength	33	✓	10922/0002
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	31	✓	10922/0009
40	TOPlus mini pull-back TOPlus mini deadlength	41	✓	10922/0003
42	SPANNTOP mini pull-back SPANNTOP mini deadlength	43	✓	10922/0004
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	40	✓	10922/0010
52	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	53	✓	10922/0005
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	50	✓	10922/0011
65	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	66	✓	10922/0006
	TOPlus combi pull-back TOPlus combi deadlength SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	63	✓	10922/0012
80	SPANNTOP mini pull-back SPANNTOP mini deadlength	81	✓	10922/0007
	SPANNTOP nova combi pull-back SPANNTOP nova combi deadlength	79	✓	10922/0013
100	TOPlus mini pull-back TOPlus mini deadlength SPANNTOP mini pull-back SPANNTOP mini deadlength	101	✓	10922/0008
	TOPlus combi pull-back SPANNTOP nova combi pull-back		✓	10922/0014
	TOPlus combi deadlength SPANNTOP nova combi deadlength		✓	10922/0015

hainBOX system for proper storage



hainBOX system for proper storage

With the practical hainBOX storage system you can properly store your clamping heads. Safe workholding with a clamping head insures successful machining. Both depend on the accuracy, cleanliness, and condition of the clamping head. In this respect, clean storage is a component of high process reliability.

In the hainBOX, made of high-impact ABS plastic, the clamping head is safely protected from damage and contamination. The transparent lid enables easy identification of which clamping head, with which bore, is in the hainBOX.

The individual hainBOXes can be stowed in drawers or cabinets. The hainBOX for TOPlus and SPANNTOP clamping heads is available in size 65.

Key advantages

- Storage system for clamping heads
- Protects the clamping head from contamination and damage
- Stackable

Your benefits

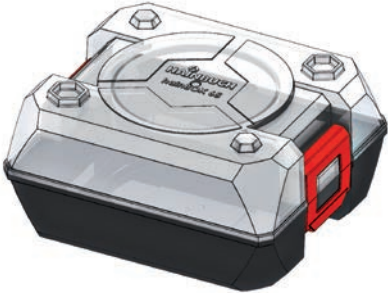
- Higher process reliability and accuracy
- Reduction of set-up times thanks to good »clamping head organization« and no need of repeated cleaning of the clamping head



ACCESSORIES

hainBOX system for proper storage

hainBOX system for proper storage

Size	Figure	Suitable for	Clamping head total length [mm]	In stock	Order no.
65		TOP TOPG TOP HSW	49	✓	10927/0001
		BZIG BZI HSW	53	✓	10927/0002
		BZI	58	✓	10927/0003

Changing fixtures



Changing fixtures

With the changing fixture you simply and safely insert and remove the clamping head. Thus you can quickly change your clamping device over to a different clamping diameter or to one of our adaptations.

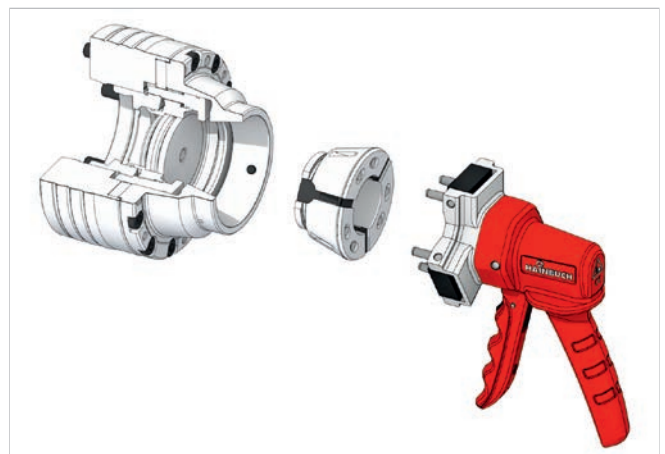
The changing fixtures are available in a manual or pneumatic version, with wheel or 2-hand safety operation. In this regard, the PPGV is especially suited for use with vertical machines.

Key advantages

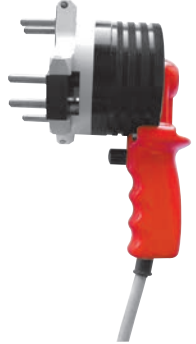
- Set-up device for changing clamping heads
- Ergonomic handle
- Manual and pneumatic version available

Your benefits

- Saves time when setting up
- Changing fixture that is ideally matched to the HAINBUCH clamping head
- Comfortable work through perfect ergonomics



Changing fixtures for clamping heads

Variant	Figure	Description	Size	Suitable for	Weight [kg]	In stock	Order no.
Manual		Standard	26	SE	1	✓	mqtop26
			32	RD		✓	mq32
			40	SE		✓	mqtop40
			42/52	SE/RD	1,1	✓	mq42/52
			42	RD		✓	mq42
			65	SE		✓	mqtop65
			80	RD	1,2	✓	mq65
					1,3	✓	mq80
Pneumatic		Standard	32	RD	1,9	✓	pp32
			42/52		2,0	✓	pp42/52
			42		1,9	✓	pp42
			65	SE/RD	2,2	✓	pp65
			80	RD	2,5	✓	pp80
			100		2,8	✓	pptop100
				SE		✓	pp100
		2-hand operation	100	RD	3,0	✓	ppg100
			120			✓	ppg120
			125			✓	ppg125
			140		3,5	✓	ppg140
			160			✓	ppg160
		2-hand operation / for vertical machines	100	RD	3,0	✓	ppgv100
			120		3,5	✓	ppgv120
			125			✓	ppgv125
			140			✓	ppgv140
			160		3,8	✓	ppgv160

Please note:

mq 42 and pp 42: for clamping heads with one changing fixture bore per segment

mq 42/52 and pp 42/52: for clamping heads with a minimum of two changing fixture bores per segment

Optimal changing fixtures for multi spindle starting on page 462.

Scope of delivery

- Changing fixture
- Changing fixture holder

ACCESSORIES

Changing fixtures

Changing fixture holder

Product	Figure	Application	In stock	Order no.
Changing fixture holder		MQQ01, MQQ02, MQQ03, MQQ04, MQQ05, MQQ06, MQQ07, MQQ08, MQ32, MQ42, MQ42-4, MQ52, MQ52-4, MQ65, MQ65-4, MQ80 MQTOP40, MQTOP65 MV100, MV100-4 MVTOP100 PP32, PP42, PP42-4, PP42/52, PP65, PP65-4, PP80, PP100, PP100-4 PPTOP100 PPG100, PPG120, PPG125, PPG140 PPGV100, PPGV120, PPGV125, PPGV140	✓	10697/0001



Adaptation ring for modular system

Through assembly of the adaptation ring on the SPANNTOP mini chuck, in spite of the extremely slender chuck contour, the modular adaptations, like the MANDO Adapt, the jaw module or the magnet module can be used.

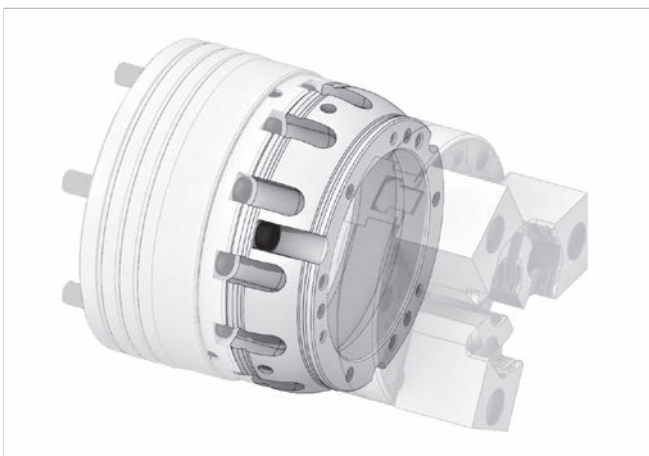
The adaptation ring is bolted onto the face of the chuck with 3 screws. Due to the fit, for all pull-back chucks the adaptation ring even center itself – thus alignment is not necessary. For all dead-length chucks the adaptation ring may be aligned manually.

Key advantages

- Enables use of the modular system
- For SPANNTOP mini chuck
- Self-aligning for SPANNTOP mini pull-back

Your benefits

- Application areas of the chuck are extended through the adaptations = fast changing from O.D. clamping to I.D. clamping, jaw clamping or clamping of magnetic parts



ACCESSORIES

Adaptation ring modular system

SPANNTOP mini chuck.

Adaptation ring for assembly of MANDO Adapt, jaw module, face driver, and morse taper

Size	Figure	Variant	In stock	Order no.
42		Pull-back	✓	10811/0001
		Deadlength	✓	10812/0001
52		Pull-back	✓	10811/0002
		Deadlength	✓	10812/0002
65		Pull-back	✓	10811/0003
		Deadlength	✓	10812/0003
80		Pull-back	✓	10811/0004
		Deadlength	✓	10812/0004
100		Pull-back	✓	10811/0005



Flanges / drawtube adapters

The flange and the drawtube adapter are the connection between clamping device and machine spindle. Thus, you can use your clamping devices on different machines.

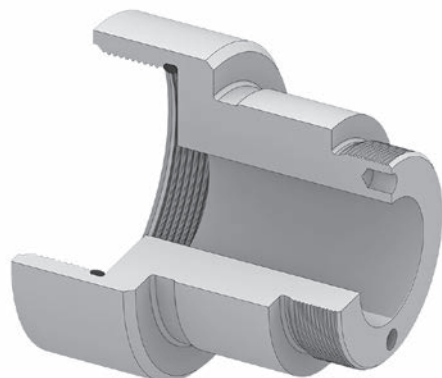
The flanges are already configured for the different spindle standards. The drawtube adapter is individually adapted to your machine. Thus, special requirements imposed by the machine manufactures such as sealing relative to the drawtube, can be complied with.

Key advantages

- Flange: Standard flange for the major spindle norms
- Drawtube: Individually configured for your machine

Your benefits

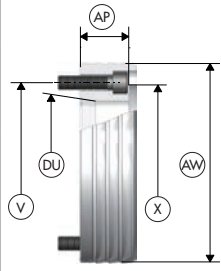
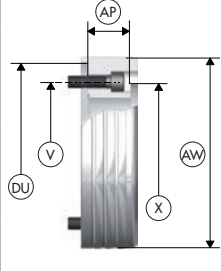
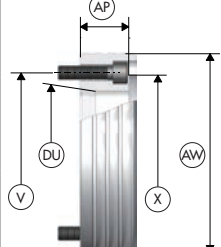
- On-site design and safety calculation are not required
- Time saving through plug & play solution



ACCESSORIES

Flanges / drawtube adapters

MANDO / MAXXOS mandrels. Flanges

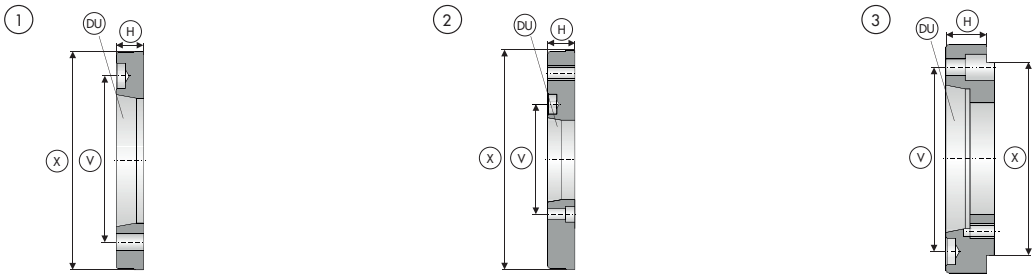
Size	Figure	Spindle nose DU	Flange height [mm] AP	Interface X	Outer Ø [mm] AW	Bolt hole circle V	In stock	Order no.
XXS – 4 / A – F		A2-4	40	Ø 131	140	LK Ø 82,6 [3 x M10]	✓	2099/0003
		A2-5				LK Ø 104,8 [6 x M10]	✓	2099/0002
		A2-6			165	LK Ø 133,4 [6 x M12]	✓	2099/0001
		A2-8	44		210	LK Ø 171,4 [6 x M16]	✓	2099/0004
		AP120	40		140	LK Ø 104,8 [6 x M10]	✓	2099/0005
		AP140			150		✓	2099/0006
		AP170			180	LK Ø 133,4 [6 x M12]	✓	2099/0007
		AP220			230	LK Ø 171,4 [6 x M16]	✓	2099/0008
5 – 7		A2-6	63,5	Ø 219	235	LK Ø 133,4 [6 x M12]	✓	2099/0015
		A2-8	67,5			LK Ø 171,4 [6 x M16]	✓	2099/0016
		A2-11	73,5		280	LK Ø 235 [6 x M20]	✓	2099/0017

Machine spindle standard DIN 55026.
Flanges size 5 – 7 AP upon request.

ACCESSORIES

Flanges / drawtube adapters

B-Top jaw chuck. Flanges

							
Size	Spindle nose	Flange type	Interface	Length [mm]	Bolt hole circle	In stock	Order no.
	DU		X	H	V		
165	A2-4	2	Ø 140	21	LK Ø 82,6 [6 x M10]	✓	2083/0004
	A2-5	1		16	LK Ø 104,8 [6 x M10]	✓	2083/0005
	A2-6	3		34	LK Ø 133,4 [6 x M12]	✓	2083/0006
215	A2-5	2	Ø 170	25	LK Ø 104,8 [6 x M10]	✓	2083/0007
	A2-6	1		17	LK Ø 133,4 [6 x M12]	✓	2083/0008
	A2-8	3		40	LK Ø 171,4 [6 x M16]	✓	2083/0009
260/315	A2-5	2	Ø 220	28	LK Ø 104,8 [6 x M10]	✓	2083/0010
	A2-6				LK Ø 133,4 [6 x M12]	✓	2083/0011
	A2-8	1		19	LK Ø 171,4 [6 x M16]	✓	2083/0012
	A2-11	3		50	LK Ø 235 [6 x M16]	✓	2083/0013

Machine spindle standard DIN 55026.

B-Top3 jaw chuck. Flanges

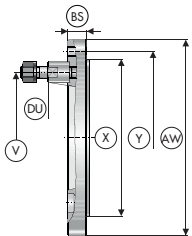
							
Size	Spindle nose	Flange type	Interface	Length [mm]	Bolt hole circle	In stock	Order no.
	DU		X	H	V		
215	A2-6	4	Ø 170	20	LK Ø 133,4 [6 x M12]	✓	2083/0001
	A2-8			37	LK Ø 171,4 [6 x M16]	✓	2083/0002
	AP170	5		20	LK Ø 133,4 [6 x M12]	✓	2083/0003

Machine spindle standard DIN 55026.

ACCESSORIES

Flanges / drawtube adapters

TOROK, TOROK CFK, and actuating unit ms dock [size XXS - 4]. Flanges

Size	Figure	Spindle nose DU	Suitable for	Length 2 [mm] BS	Inter- face X	Interface hole circle Y	Outer Ø [mm] AW	Bolt hole circle V	Variant	In stock	Order no.
52		A2-5	TOROK TOROK CFK Actuating unit ms dock rotating	20	Ø 145 g5	LK Ø 156 [6 x M8]	194	LK Ø 104,8 [4 x M10]	Adjustable bolt DIN 55027 M10 x 43	✓	10352/0010
		A2-6						LK Ø 133,4 [4 x M12]	Adjustable bolt DIN 55027 M10 x 50	✓	10352/0011
		A2-8					210	LK Ø 171,4 [4 x M16]	Adjustable bolt DIN 55027 M10 x 60	✓	10352/0012
65		A2-5	TOROK TOROK CFK	20	Ø 162 g5	LK Ø 176 [6 x M8]	194	LK Ø 104,8 [4 x M10]	Adjustable bolt DIN 55027 M10 x 43	✓	10352/0020
		A2-6						LK Ø 133,4 [4 x M12]	Adjustable bolt DIN 55027 M10 x 50	✓	10352/0021
		A2-8					210	LK Ø 171,4 [4 x M16]	Adjustable bolt DIN 55027 M10 x 60	✓	10352/0022

Upon request for: TOROK size 100, DIN Camlock.

TOPlus / SPANNTOP chucks and MAXXOS / MANDO mandrels. Drawtube adapters

Product	Description	Sizes	In stock	Order no.
Drawtube adapters	Connects your clamping device with the drawtube to the machine. We require your spindle data for configuration.	Chucks up to size 100 and mandrels	-	10102
		Chuck from size 125	-	10102

Drawtube adapter order form see page 497.

ACCESSORIES

Adapter for air sensing control



Adapter for air sensing control

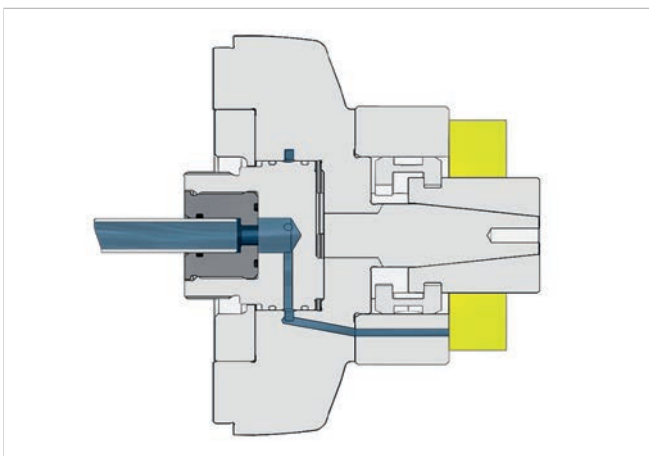
With the adapter for air sensing control the air system can be integrated in a mandrel with minimal assembly effort. It is the connecting link between air lance and end-stop surface on the mandrel. Screwing in the adapter in the MANDO / MAXXOS mandrel seals it on the connection side. The air lance that is routed out of the machine spindle and into the mandrel is sealed with an O-ring. Now the force is transmitted via the O.D. thread that is attached on the mandrel.

Key advantages

- Enables workpiece scan for mandrels
- Fast and easy assembly
- Sealed to the media tube

Your benefits

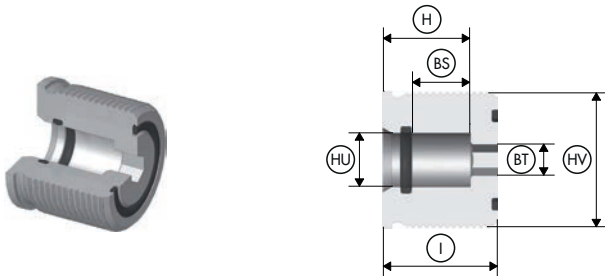
- Process reliability through workpiece scan
- Reduction of scrap
- Basis for automation



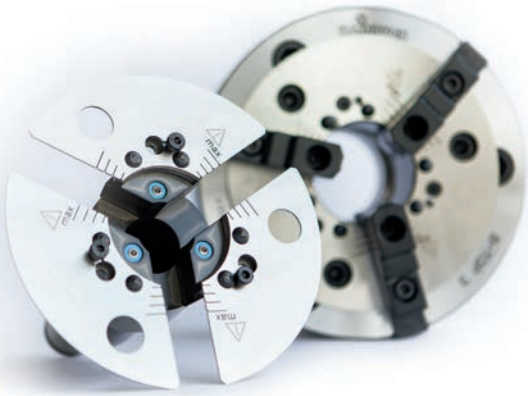
ACCESSORIES

Adapter for air sensing control

Mandrels MANDO T211 / T212 / MAXXOS T211. Adapter for air sensing control

								
Size	Inner Ø [mm] HU	Total length [mm] I	Length [mm] H	Length 2 [mm] BS	Wrench size [SW] BT	Thread size HV	In stock	Order no.
XXS – 4 / A – F	12 H7	25,5	19,5	13	6	M30 x 1,5	✓	10102/0001

The adapter is screwed into the M30 x 1.5 inner thread of the MANDO or MAXXOS mandrel and is used as a location of the air lance. For force actuation, please use the M44 x 1.5 O.D. thread.



Bushing inserts

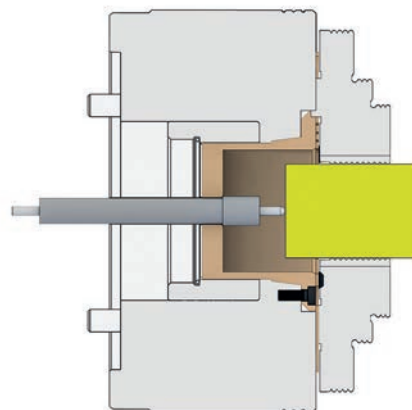
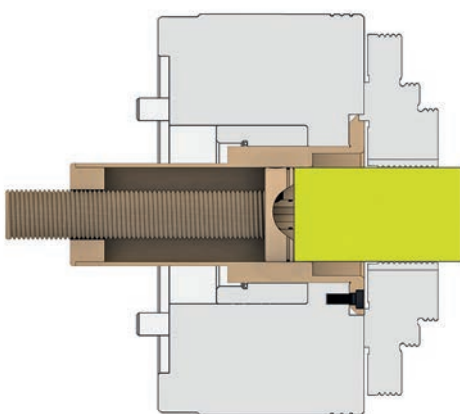
With the insert bushings the B-Top and B-Top3 jaw chucks can be expanded with many additional useful functions. Whether automatic ejection of the workpiece after a machining process or use of an adjustable workpiece end-stop. To do this the insert bushing with through-bore mounted in the jaw chuck will be replaced with a different insert bushing.

Key advantages

- Additional functions for jaw chucks, such as ejecting the workpiece or the adjustable workpiece depth end-stop
- Easy to change

Your benefits

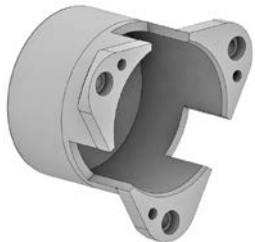
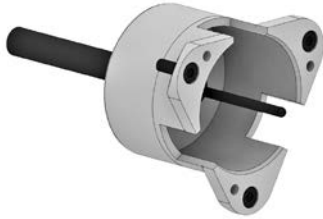
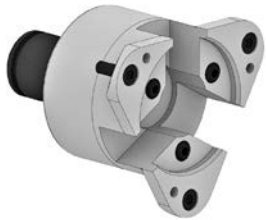
- Cost saving through fast response to different requirements
- Time saving and ready to use immediately



ACCESSORIES

Insert bushings jaw chuck

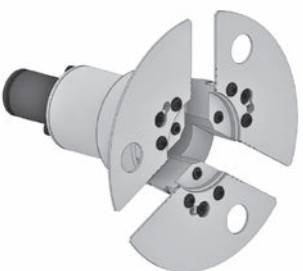
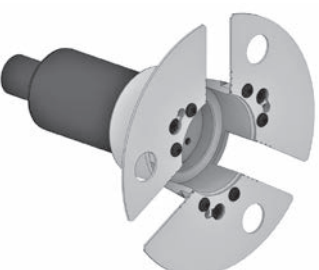
B-Top jaw chuck. Bushing inserts

Product	Figure	Size	In stock	Order no.
Bushing insert with through-bore		165	✓	3019/0001
		215	✓	3019/0002
		260	✓	3019/0003
		315	✓	3019/0004
Bushing insert, closed		165	✓	3019/0005
		215	✓	3019/0006
		260	✓	3019/0007
		315	✓	3019/0008
Bushing insert with ejector		165	✓	3022/0001
		215	✓	3022/0002
		260	✓	3022/0003
		315	✓	3022/0004
Bushing insert with spray nozzles		165	✓	3020/0001
		215	✓	3020/0002
		260	✓	3020/0003
		315	✓	3020/0004
Bushing insert with adjustable end-stop		165	✓	3021/0001
		215	✓	3021/0002
		260	✓	3021/0003
		315	✓	3021/0004

ACCESSORIES

Insert bushings jaw chuck

B-Top3 jaw chuck. Bushing inserts

Product	Figure	Jaw width [mm]	In stock	Order no.
Bushing insert with through-bore		22	✓	3019/0010
		40	✓	3019/0011
Bushing insert, closed		22	✓	3019/0009
		40	✓	3019/0012
Bushing insert with ejector		22	✓	3022/0005
		40	✓	3022/0006
Bushing insert with spray nozzles		22	✓	3020/0005
		40	✓	3020/0006
Bushing insert with adjustable end-stop		22	✓	3021/0005
		40	✓	3021/0006

Insert bushings include mounted guard plates.

ACCESSORIES

CENTREX duo



CENTREX duo

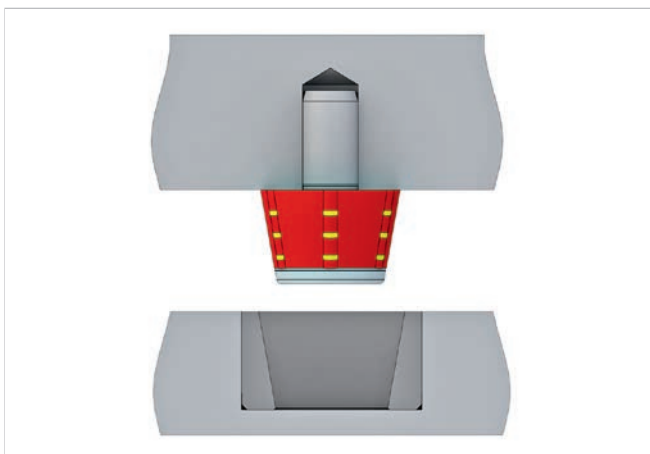
Fast clamping device change-over and reliable processes are the top priorities in production. You can equip your pallet system or your clamping devices with CENTREX duo centering unit. With this, time-intensive alignment of the clamping device change-over are a part of the past. CENTREX duo is versatile and usable in multiple areas.

Key advantages

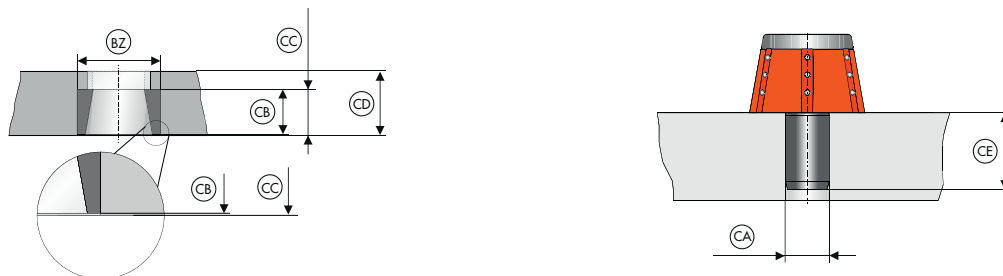
- Positioning and fixing element
- Insensitive to swarf and chips
- Extremely high repeatability [$\leq 0.003 \text{ mm}$]

Your benefits

- Suitable for a very small installation space
- Can be flexibly integrated in your own designs
- Complex maintenance is not required
- Medium is not required
- Saves time when setting up

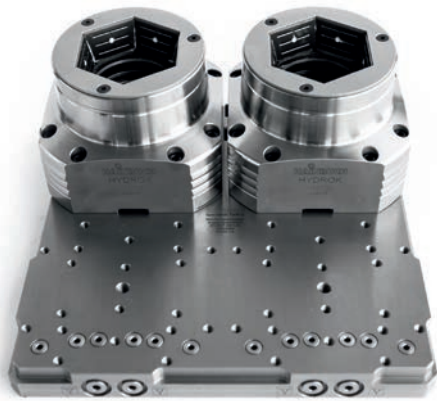


CENTREX duo centering element. Technical data and order overview



Description	Positioning bushing		Positioning taper	
Size	1	3	1	3
Repeatability [mm]	0,003			
Weight [kg]	0,01	0,05	0,01	0,04
Bore bushing Ø [mm]	BZ Ø 16 H7	Ø 32 H7		
Bushing height [mm]	CB 8,5	17,5		
Bore depth	CC 9 [+0,0 -0,1]	18 [+0,0 -0,1]		
Min. plate thickness [mm]	CD 12,5	25		
Bore bolt Ø [mm]	CA Ø 6 H7		Ø 6 H7	Ø 10 H7
Bolt length [mm]	CE 9		9	18
In stock	✓	✓	✓	✓
Order no.	2096/0009	2096/0008	2097/0011	2097/0010

Multiple clamping pallets



Multiple clamping pallets

The multiple clamping pallets are expansions for the HYDROK hydraulic stationary chucks and the hs dock actuating units. A plate makes it possible to actuate up to four hydraulic clamping devices simultaneously.

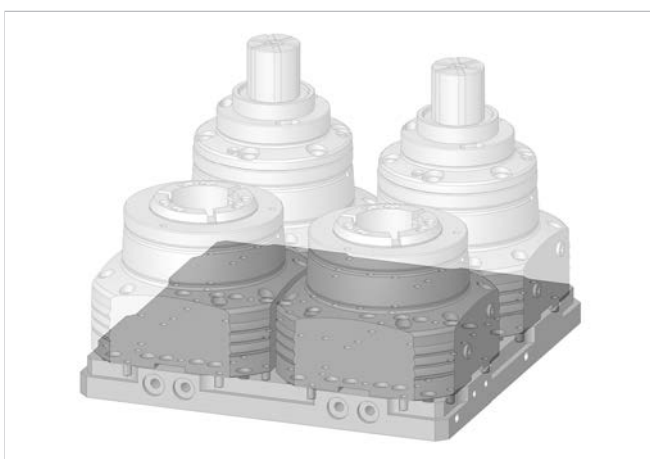
Through the pre-bored bolt hole circles the clamping devices can be easily bolted on and they are actuated through channels in the interior of the clamping plate. The bores for the hydraulics on the multiple clamping pallet can be sealed with screw plugs. Thus it is possible to adapt the number of clamping devices to the manufacturing process.

Key advantages

- Ideal for automated clamping
- For assembly of multiple hydraulic clamping devices in a row or in a square arrangement
- Central media activation for control of all clamping devices

Your benefits

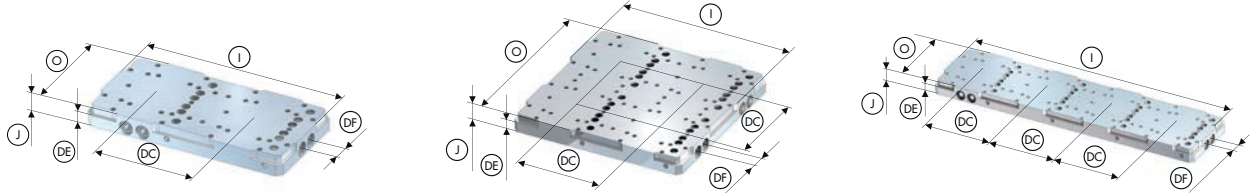
- Better utilization of machine capacity
- Multiple clamping in a very small installation space
- Time saving through automated clamping



ACCESSORIES

Multiple clamping pallets

Multiple clamping pallets. Technical data and order overview



Size		2-fold	4-fold	
Variant		In series	Angular	In series
Linear dimensions of the clamping position [mm]	DC		180	
Parallelism [mm]			0,01	
Total length [mm]	I	360		720
Width [mm]	O	180	360	180
Height [mm]	J		35	
Clamping edge height [mm]	DE		20	
Connecting thread two-side [selectable connecting side]	DF		G1/4"	
Max. actuating pressure [bar]			100	
Weight [kg]		16,7		33
In stock		✓	✓	✓
Order no.		1205/0001	1205/0003	1205/0002

Please note: The multiple clamping pallet is suitable for the HYDROK hydraulic stationary chuck size 65 SE / RD, the hs dock actuating unit size XXS - 4, and special stationary chucks that are available upon request.



	
Actuating units	Stationary chucks
Page 228	Page 218

Tandem cylinder / base plate for HYDROK



Tandem cylinder / base plate for HYDROK

With the HYDROK base plate the »small« HYDROKs [40 SE / 32 RD] can be mounted on the machine table incl. media connection. To place multiple HYDROKs on the machine table, the individual base plates are simply fitted together. Thus, you benefit from multiple clamping with incredible holding forces in a very small space.

The tandem cylinder is always used in conjunction with the base plate and enables full clamping force at minimal actuating pressure.

Key advantages

- Base plate: for assembly of the HYDROK on the machine table including media connection
- Tandem cylinder: enables the max. clamping force of the HYDROK at half the actuating pressure

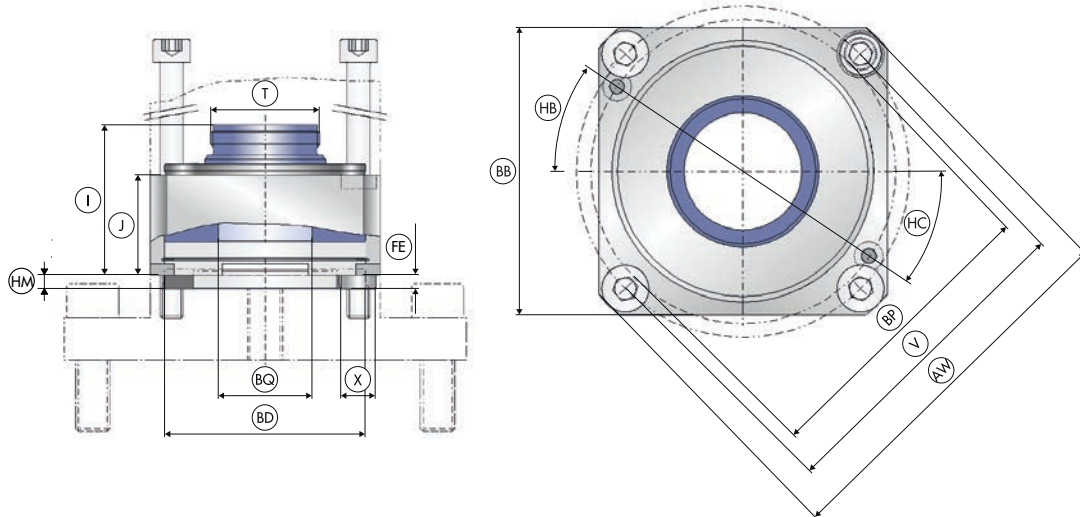
Your benefits

- Base plate: easy and fast assembly, multiple clamping in a very small space
- Tandem cylinder: optimized clamping through max. clamping force



Tandem cylinder / base plate for HYDROK

HYDROK stationary chuck size 40 SE / 32 RD. Tandem cylinder



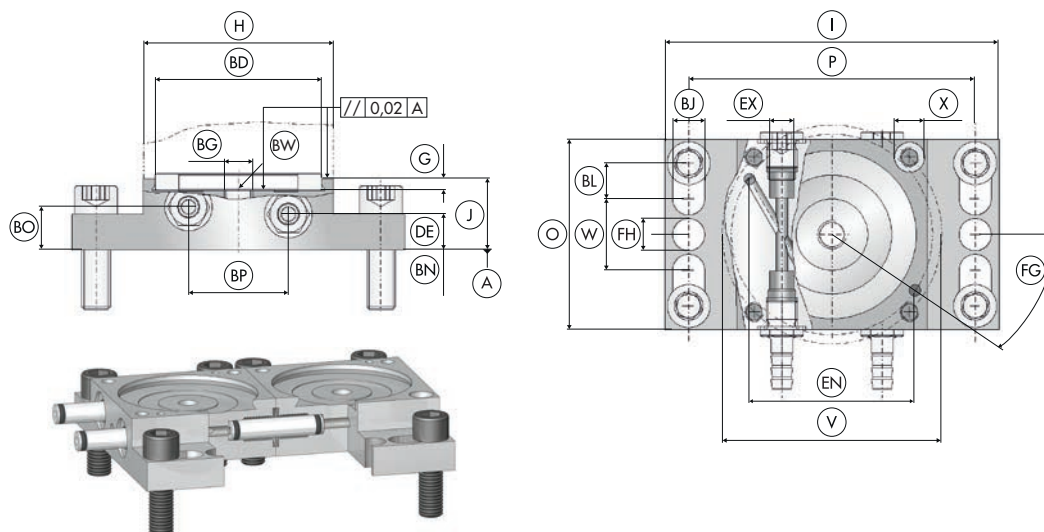
Product line	SE/RD	
Size	40/32	
Max. axial drawtube force [pull / push] [kN]		13,5
Max. actuating pressure [bar]		55
Outer Ø [mm]	AW	106 g6
Bolt hole circle	V	LK Ø 92 [4 x M8]
Interface	X	Ø 12 H7
Height [mm]	J	35
Ø Capacity [mm]	BQ	32,5
Flange location	BD	Ø 70 H7/g7
Centering height 1 [mm]	FE	5
Outer variant [mm]	BB	79,8
Connecting position [mm]	BP	82
Clamping via base plate [°]	HB	33
Release via base plate [°]	HC	33
Installation depth [mm]	HM	5 +0,005
Total length [mm]	I	50,5
Connecting thread outside	T	M38 x 1
In stock		✓
Order no.		10510/0001

With adaptation of the tandem cylinder to HYDROK size 40 SE, the maximum clamping force of 75 kN can be achieved, even at 43 bar.
 With adaptation of the tandem cylinder to HYDROK size 32 RD, the maximum clamping force of 70 kN can be achieved, even at 50 bar.

ACCESSORIES

Tandem cylinder / base plate for HYDROK

HYDROK stationary chuck size 40 SE / 32 RD. Base plate



Product line	SE/RD	
Size	40/32	
Bolt hole circle	V	LK Ø 92 [4 x M8]
Interface	X	Ø 12 H7
Release	BN	15 [1/4"]
Clamping	BO	18 [1/4"]
Clamping edge height [mm]	DE	15
Length [mm]	H	80
Total length [mm]	I	140
Height [mm]	J	30
Width [mm]	O	79,8
Flange location	BD	Ø 70 H7
End-stop thread size [M]	BG	12
Connecting position [mm]	BP	42
Centering length [mm]	G	5
Max. permissible turning Ø	BW	28
Grooves [mm]	BL	15 [4 x]
Bolt hole distance [mm]	W	30
Fitting bore	EX	10 H11
Groove width [mm]	BJ	13,5
Screw connection width [mm]	P	120
Fluid connection 1 [mm]	EN	69,5
Angle position [°]	FG	33
Bore-Ø	FH	13,5
In stock		✓
Order no.		1205/0006



Base plate for stationary use

The base plate enables stationary use of the TOROK manual chuck. Thus the TOROK can be used on different machines. Sensitive clamping, including use of different adaptation possibilities, is available for stationary machining.

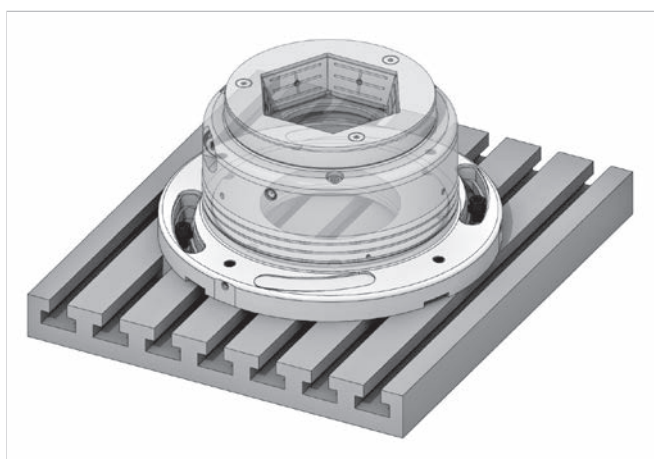
By means of the integrated slotted holes the base plate can be used on almost all major T-groove machine tables.

Key advantages

- Enables stationary use of the TOROK manual chuck
- Rotation-symmetric interference contour and thus use of the TOROK's full rotational speed
- Flexible use on major T-groove machine tables

Your benefits

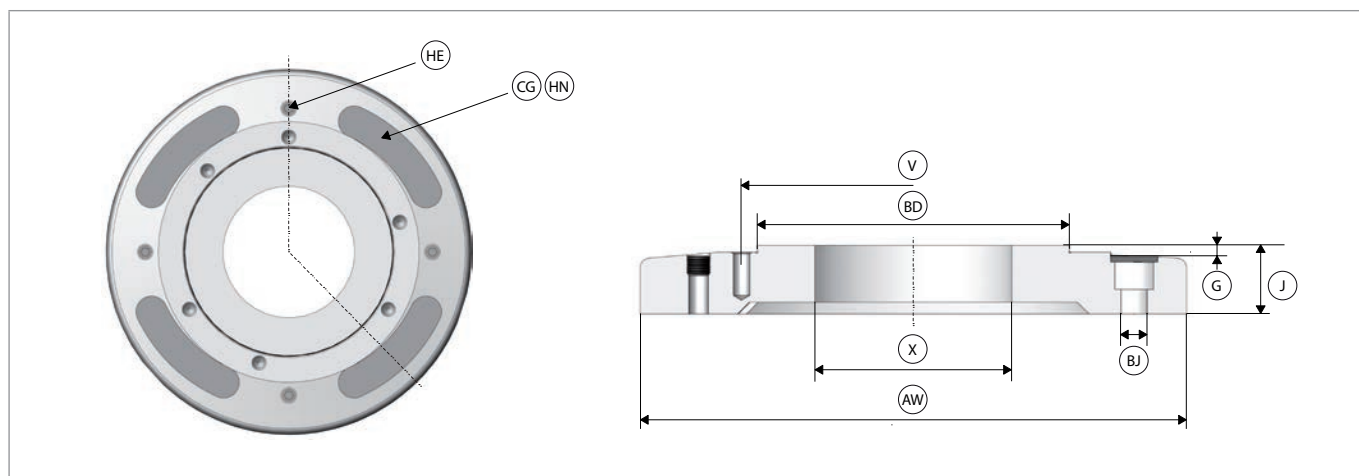
- Cost saving through machine-independent use of the TOROK



ACCESSORIES

Base plate for TOROK

TOROK manual chuck. Base plate for stationary use



Size		100 SE / RD
Bolt hole circle	V	LK Ø 234 [6 x M10]
Flange location	BD	Ø 240 f7
Interface	X	Ø 140 H7
Outer Ø [mm]	AW	350
Height [mm]	J	35
Centering length [mm]	G	3,5
Mounting slots for T-groove table with groove spacing [mm]	CG	63, 80, 100
Groove width [mm]	BJ	13,5
Protective cover	HN	4x
Torsional safety	HE	300 [4 x M10]
Weight [kg]		17
In stock		✓
Order no.		1205/0005

ACCESSORIES

Adaptation sets for MANDO G211



Adaptation sets for MANDO G211

The MANDO G mandrel and the ms / hs dock actuating units, the mandoteX quick change-over interface, and various flanges all have inner fits and thus can be directly connected.

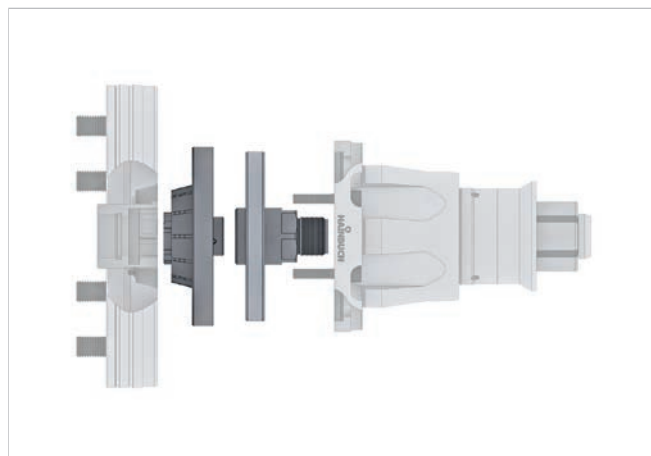
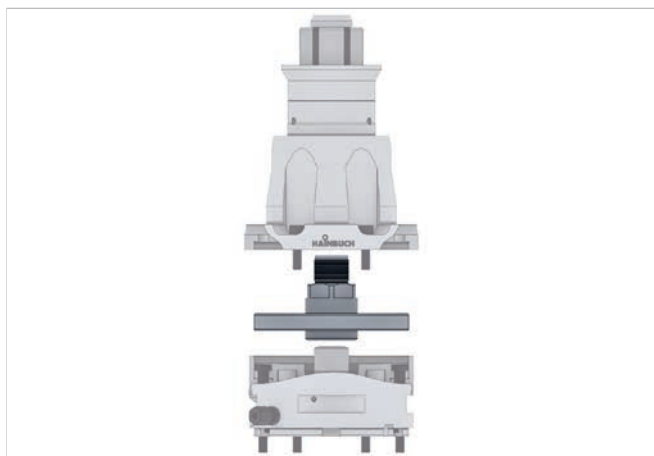
With these adaptation sets the connection is made quickly and easily. The set consists of a ring and a drawtube adapter. The ring is centered on the inner fit of the MANDO G, and on the interface of the actuating unit / the quick change-over interface or of the flange. The drawtube adapter is screwed into the mandrel and connects the connecting thread of the actuating unit with the mandrel.

Key advantages

- Connection between MANDO G mandrel and ms / hs dock actuating units, mandoteX quick change-over interface or flange

Your benefits

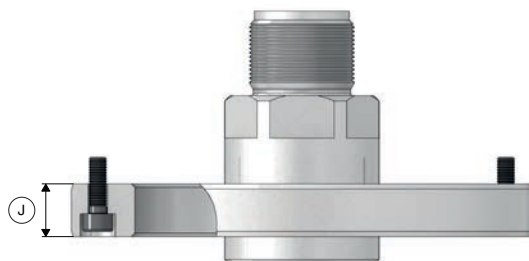
- Fast and easy assembly



ACCESSORIES

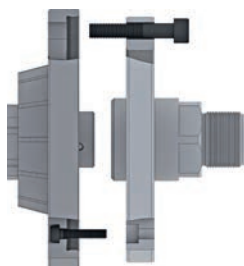
Adaptation sets for MANDO G211

For connection on the ms / hs dock actuating units



Product	Height [mm] J	In stock	Order no.
Adaptation set	15	✓	11088/0001

For connection on the mandoteX quick change-over interface



Product	Height [mm] J	In stock	Order no.
Adaptation set	25	✓	11088/0002

Incl. mandoteX clamping device adapter.



Grease

To ensure the long service life of your clamping devices, they must be lubricated at regular intervals. Inadequate lubrication can result in malfunctions, reduced clamping force, and inaccuracies, as well as excessive wear extending to blocking of the clamping device.

Key advantages

- For lubrication of the clamping mechanism
- Constant low coefficient friction
- High bonding strength
- High resistance to pressure and water

Your benefits

- To maintain the mechanical function and clamping force
- Extension of the maintenance intervals



ACCESSORIES

Grease

Grease

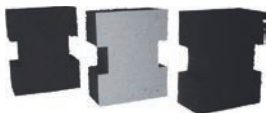
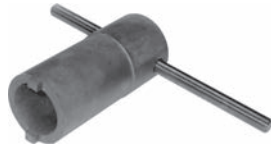
Product	Figure	Suitable for	Description	Packaging type	Content [g]	In stock	Order no.
Universal grease		High-pressure grease gun	For all chucks except eccentric chucks	Cartridge	400	✓	2085/0004
		Grease gun		Can	1000	✓	2085/0003
Special grease		High-pressure grease gun	For eccentric chucks	Cartridge	400	✓	2085/0006
		Grease gun		Can	1000	✓	2085/0005
Antiadhesion spray		All products	Reduces friction, wear and the adhesion between clamping element and clamping device. Ideally suited for service and maintenance tasks.	Spray can	400	✓	nk.5127.0002

Antiadhesion spray is only sold in Europe.

Grease guns

Product	Figure	Description	In stock	Order no.
High-pressure grease gun		Including pointed mouth piece and flexible hose with mouth	✓	2086/0005
Grease gun		With pointed mouth piece	✓	2086/0004

B-Top / B-Top3 jaw chuck. Chip protection and wrench

Product	Figure	Size	In stock	Order no.
Chip protection		165/215	✓	3018/0001
		260	✓	3018/0002
		315	✓	3018/0003
Ejector wrench		165/215	✓	3018/0004
		260/315	✓	3018/0005
Assembly wrench		260	✓	3018/0008
		315	✓	3018/0009

Various accessories

Product	Figure	Description	Suitable for	In stock	Order no.
Torque wrench		Torque wrench 10-100 Nm, flex ratchet handle, extension, hexagon socket wrench SW17 [inner and outer]	TOROK MANOK MANOK plus ms dock	✓	2012/0008
Allen key insert with journal pivot 1/2" connection		SW 5 mm	SPANNTOP mini pull-back size 32 / SPANNTOP mini deadlength size 32 / TOPlus mini pull-back size 26, 40 / TOPlus mini deadlength size 26, 40	✓	2012/0009
		SW 6 mm	SPANNTOP mini pull-back size 42, 52, 65, 80, 100 / SPANNTOP mini deadlength size 42, 52, 65, 80, 100 / TOPlus mini pull-back size 52, 65, 100 / TOPlus mini deadlength size 52, 65, 100	✓	2012/0010

Overview

Find what's important fast



Equipment for multi spindle

	Gildemeister	462
	INDEX	468
	Schütte	477
	Tornos	491

Multi spindle

Two cost-effective systems



Automated manufacturing with our feedfingers, or flexible, functional and user friendly set-up work with our SPANNTOP system: Both are extremely economical, offer significant extension possibilities and fulfill the most demanding tasks.



Key advantages

- Reduced set-up times due to modular systems
- Increased production due to longer runtimes and maintenance intervals
- Significantly reduced marking on bar material
- Lower inventory through multiple use of individual modules

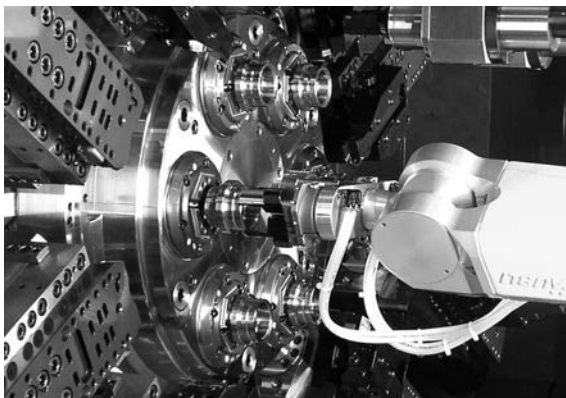


Photo: INDEX-Werke GmbH & Co. KG



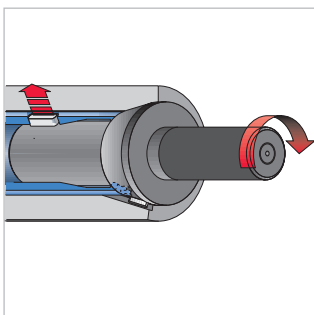
SPANNTOP system

In terms of functionality, flexibility and user friendly set-up of multi spindles, our SPANNTOP system is just the right partner.

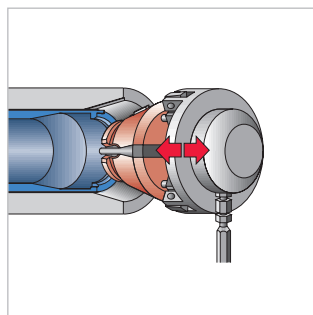
The system consists of an elastic clamping part, the clamping head, a rigid pipe part and the basic body. Both parts are coupled together to form a single unit that has the outer contour of a conventional clamping collet. Installation in the spindle nose is easy.

Key advantages

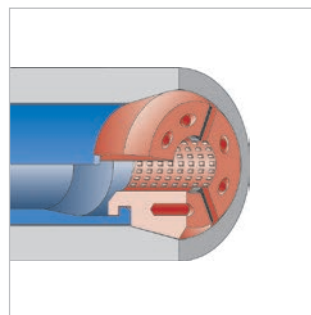
- Easy clamping head change-over from the front
- Long lifespan through case-hardened steel
- Typical HAINBUCH features, such as parallel clamping, optimal power conversion, extreme stiffness and high holding power, as well as little wear and tear



The basic body is installed or removed with an assembly aid.

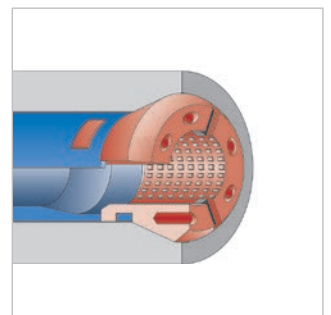


Use a changing fixture that is inserted into the face holes to collapse the segments of the clamping head far enough to the inside that it can uncouple easily.



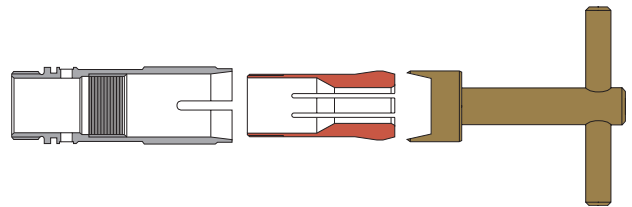
The System BZ

- Simple »original« coupling
- Used wherever there are no space or wall thickness problems



The System ZW

- Coupling type especially for multi spindles
- Offers more capacity with the same outer geometry



RS feedfingers

HAINBUCH feedfingers have set standards with their adjustable thrust force. The tasks and requirements are diverse: various materials, high RPM, feed speeds and process reliability.

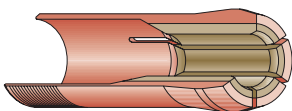
The inner collet is screwed into the outer sleeve with a special wrench. A marking ring on the inner collet in conjunction with a scale on the outer sleeve provides reference values of the level of thrust force.

Key advantages

- Adjustable thrust force, thus reduced abrasion and wear
- Significantly reduced marking on bar material
- Multi-slot inner collet fits on the bar, thereby resulting in minimal wear
- Inner collet can be adjusted multiple times, resulting in a longer lifespan

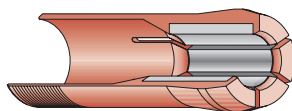
Variants

In most application cases you are absolutely right with the selection of our steel inner collets. If you have more rigorous requirements on the surface condition of the bar material, then with the 3 variants below you have all possibilities to prevent bothersome scoring on the material.



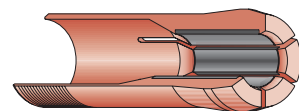
KSB [plastic coating]

This coating is recommended wherever an absolutely score-free and scratch-free surface is required. Profiles can be worked in.



OXK [ceramic coating]

The extraordinary hardness of the ceramic coating prevents »build up« and »smearing« in the bores. Particularly recommended for rust-resistant and acid-resistant steels. The extremely long service life makes it suitable for continuous-operation machines with bar feeders. Only available for round dimensions.



HM [carbide coating]

Characteristics and implementation recommendations similar to those specified for the ceramic coating. Steel brass and SPH inner collets have particularly proven themselves as cost-effective alternatives for rust-resistant and acid-resistant steels, to prevent scoring.

Retrofit

Older machines gain profit from conversion to a modern clamping system. If the possibility exists to exchange the collet location in the spindle drum with TOPlus locations with hexagon clamping geometry, the clamping system can fully exploit its advantages due to the full-surface support of the clamping head, which is resistant to contamination. You will particularly notice it through the rigidity when recessing and the lower cycle times, since in most cases machining parameters can be increased.

Regardless of whether you are giving your machine a general overhaul, or are only replacing the clamping system. With conversion to our hexagon clamping heads, you have a genuine alternative against purchasing a new machine at a significantly lower investment.

Retrofit – modern and more efficient

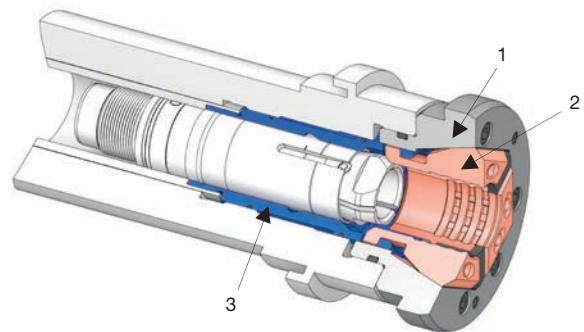
Key advantages

- Get more capacity out of your machine:
Conversion from conventional collets to hexagon clamping heads
- Higher rigidity than with round clamping elements
- Significantly higher resistance to contamination
- Cycle time reduction is possible through increased machining parameters
- Ensures less tool wear and thus reduces costs and machine downtimes

Detail

Designation

- 1 TOPlus unit [with exchange of the previous collet fixture]
- 2 Clamping head
- 3 Basic body



Selection

Here's how to select your equipment



The equipment categories

	Standard equipment	Special equipment
Description	The standard equipment fits on a variety of Gildemeister, INDEX, Schütte and Tornos machines. In this regard, we make a distinction between SPANNTOP system, RS system and conventional clamping collets.	The special equipment is based on the same principle as the standard equipment. However, in this case all components can be specially adapted to your requirements.
	 Page 462	 Upon request

EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Gildemeister GM 20 / AS 16-20 / GS 20. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			34	42	M30 x 1 - LH	90	-	sg9012bz
	Clamping head BZ	●	6,0 - 20,0					-	sk9012bzs6,0-20,0
		■	8,0 - 9,0					-	sk9012bzs8,0-9,0
			10,0 - 14,0					-	sk9012bzs10,0-14,0
		■	7,0 - 9,0					-	sk9012bzs7,0-9,0
		■	10,0 - 17,0					-	sk9012bzs10,0-17,0
	Hydraulic changing fixture							✓	wv.0226.0002.00
	Manual changing fixture							✓	mqq08
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							-	ekv9012bz
Conventional	Collet	●	4,0 - 20,0	34	42	M30 x 1 - LH	90	-	9012er4,0-20,0
		■	7,0 - 9,0					-	9012ev7,0-9,0
			10,0 - 14,0					-	9012ev10,0-14,0
		■	7,0 - 9,0					-	9012es7,0-9,0
		■	10,0 - 17,0					-	9012es10,0-17,0

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			24,6	25	M24 x 1	90	✓	9258e/rs
	Inner collet steel	●	4,0 - 18,0					✓	rs20/st/r4,0-18,0
		■	4,0 - 9,0					-	rs20/st/v4,0-9,0
			10,0 - 12,0					-	rs20/st/v10,0-12,0
		■	4,0 - 9,0					-	rs20/st/s4,0-9,0
		■	10,0 - 15,0					-	rs20/st/s10,0-15,0
	Inner collet steel brass	●	4,0 - 18,0					-	rs20/sb/r4,0-18,0
		■	4,0 - 9,0					-	rs20/sb/v4,0-9,0
			10,0 - 12,0					-	rs20/sb/v10,0-12,0
		■	4,0 - 9,0					-	rs20/sb/s4,0-9,0
		■	10,0 - 15,0					-	rs20/sb/s10,0-15,0

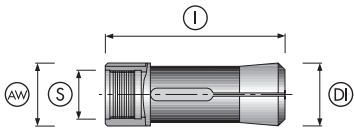
EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	4,0 - 18,0					-	rs20/sph/r4,0-18,0
		■	4,0 - 9,0					-	rs20/sph/v4,0-9,0
			10,0 - 12,0					-	rs20/sph/v10,0-12,0
		◆	4,0 - 9,0					-	rs20/sph/s4,0-9,0
			10,0 - 15,0					-	rs20/sph/s10,0-15,0
	Inner collet KSB	●	5,0 - 16,0					-	rs20/ksb/r5,0-16,0
		■	5,0 - 9,0					-	rs20/ksb/v5,0-9,0
			10,0 - 11,0					-	rs20/ksb/v10,0-11,0
		◆	5,0 - 9,0					-	rs20/ksb/s5,0-9,0
			10,0 - 14,0					-	rs20/ksb/s10,0-14,0
	Inner collet OXK	●	3,1 - 17,0					-	rs20/oxk/r3,1-17,0
	Wrench							✓	s20
Conventional	Feedfinger	●	4,0 - 20,0	24,6	25	M24 x 1	90	-	9258er4,0-20,0
		■	7,0 - 9,0					-	9258ev7,0-9,0
			10,0 - 14,0					-	9258ev10,0-14,0
		◆	7,0 - 9,0					-	9258es7,0-9,0
			10,0 - 16,5					-	9258es10,0-16,5
	Guide ring for feed tube	●	4,0 - 20,0					✓	9258e/fr4,0-20,0
		■	7,0 - 9,0					-	9258e/fv7,0-9,0
			10,0 - 14,0					-	9258e/fv10,0-14,0
		◆	7,0 - 9,0					-	9258e/fs7,0-9,0
			10,0 - 17,0					-	9258e/fs10,0-17,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

								
Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
Pick-off collet	●	4,0 - 20,0	26	28,5	M21,5 x 0,75	80	-	9012e/gr4,0-20,0
	■	7,0 - 9,0					-	9012e/gv7,0-9,0
		10,0 - 14,0					-	9012e/gv10,0-14,0
	◆	7,0 - 9,0					-	9012e/gs7,0-9,0
		10,0 - 17,0					-	9012e/gs10,0-17,0

EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Gildemeister AS 20-25. Main spindle

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			38	45,5	M34,5 x 0,75 - LH	90	-	sg9012bz-2
	Clamping head BZ	●	6,0 - 25,0					-	sk9012bz-2r6,0-25,0
		■	8,0 - 9,0					-	sk9012bz-2v8,0-9,0
			10,0 - 17,0					-	sk9012bz-2v10,0-17,0
		⬡	8,0 - 9,0					-	sk9012bz-2s8,0-9,0
			10,0 - 21,0					-	sk9012bz-2s10,0-21,0
	Hydraulic changing fixture							-	wv.0226.0004.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							-	ekv9012bz-2
Conventional	Collet	●	4,0 - 25,0	38	45,5	M34,5 x 0,75 - LH	90	-	9012e-2r4,0-25,0
		■	7,0 - 9,0					-	9012e-2v7,0-9,0
			10,0 - 17,0					-	9012e-2v10,0-17,0
		⬡	7,0 - 9,0					-	9012e-2s7,0-9,0
			10,0 - 20,0					-	9012e-2s10,0-20,0
								-	

Feed tube

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			30,5	30,5	M28,5 x 0,75	90	✓	9258e-2/rs
	Inner collet steel	●	4,0 - 22,0					✓	rs24/st/r4,0-22,0
		■	5,0 - 9,0					-	rs24/st/v5,0-9,0
			10,0 - 15,0					-	rs24/st/v10,0-15,0
		⬡	5,0 - 9,0					-	rs24/st/s5,0-9,0
			10,0 - 19,0					-	rs24/st/s10,0-19,0
	Inner collet steel brass	●	4,0 - 21,0					-	rs24/sb/r4,0-21,0
		■	5,0 - 9,0					-	rs24/sb/v5,0-9,0
			10,0 - 15,0					-	rs24/sb/v10,0-15,0
		⬡	5,0 - 9,0					-	rs24/sb/s5,0-9,0
			10,0 - 19,0					-	rs24/sb/s10,0-19,0
								-	
								-	
								-	

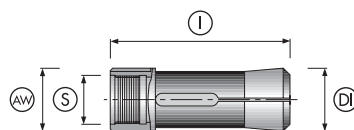
EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	4,0 - 21,0					-	rs24/sph/r4,0-21,0
		■	5,0 - 9,0					-	rs24/sph/v5,0-9,0
			10,0 - 15,0					-	rs24/sph/v10,0-15,0
		⬡	5,0 - 9,0					-	rs24/sph/s5,0-9,0
			10,0 - 19,0					-	rs24/sph/s10,0-19,0
	Inner collet KSB	●	5,0 - 19,5					-	rs24/ksb/r5,0-19,5
		■	5,0 - 9,0					-	rs24/ksb/v5,0-9,0
			10,0 - 14,0					-	rs24/ksb/v10,0-14,0
		⬡	5,0 - 9,0					-	rs24/ksb/s5,0-9,0
			10,0 - 18,0					-	rs24/ksb/s10,0-18,0
	Inner collet OXK	●	5,0 - 20,0					-	rs24/oxk/r5,0-20,0
			20,1 - 21,0					-	rs24/oxk/r20,1-21
	Wrench							✓	s24
Conventional	Feedfinger	●	4,0 - 25,0	30,5	30,5	M28,5 x 0,75	90	-	9258e-2r4,0-25,0
		■	7,0 - 9,0					-	9258e-2v7,0-9,0
			10,0 - 17,0					-	9258e-2v10,0-17,0
		⬡	7,0 - 9,0					-	9258e-2s7,0-9,0
			10,0 - 20,0					-	9258e-2s10,0-20,0
	Guide ring for feed tube	●	4,0 - 22,0					✓	9258e/f2r4,0-22,0
		■	7,0 - 9,0					-	9258e/f2v7,0-9,0
			10,0 - 15,0					-	9258e/f2v10,0-15,0
		⬡	7,0 - 9,0					-	9258e/f2s7,0-9,0
			10,0 - 19,0					-	9258e/f2s10,0-19,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

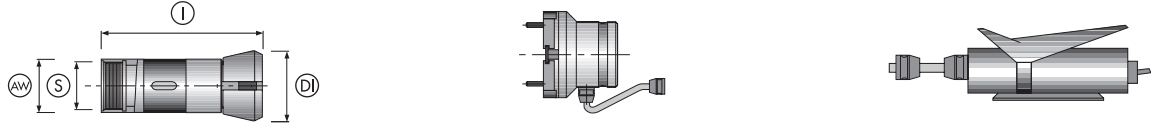


Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
Pick-off collet	●	4,0 - 20,0	26	28,5	M21,5 x 0,75	80	-	9012e/gr4,0-20,0
	■	7,0 - 9,0					-	9012e/gv7,0-9,0
		10,0 - 14,0					-	9012e/gv10,0-14,0
	⬡	7,0 - 9,0					-	9012e/gs7,0-9,0
		10,0 - 17,0					-	9012e/gs10,0-17,0

EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Gildemeister AS 32 / GS 32 / GM 32. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			53	69,4	M48 x 1,5 - LH	135	-	sg9069bz
	Clamping head BZ	●	6,0 - 32,0					✓	sk6970bzb6,0-32,0
		■	7,0 - 9,0					-	sk6970bzbv7,0-9,0
			10,0 - 22,0					-	sk6970bzbv10,0-22,0
		⬡	7,0 - 9,0					-	sk6970bzs7,0-9,0
			10,0 - 27,0					-	sk6970bzs10,0-27,0
	Hydraulic changing fixture							✓	wv.0218.0002.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							✓	ekv9069bz
	Manual changing fixture							✓	mqq02
Conventional	Collet	●	4,0 - 32,0	53	69,4	M48 x 1,5 - LH	128	-	9069er4,0-32,0
		■	7,0 - 9,0					-	9069ev7,0-9,0
			10,0 - 22,0					-	9069ev10,0-22,0
		⬡	7,0 - 9,0					-	9069es7,0-9,0
			10,0 - 27,0					-	9069es10,0-27,0
								-	

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			39,8	40	M38 x 1,5 - LH	124	✓	9316e/rs
						M38 x 1,5		✓	93162h/rs
	Inner collet steel	●	4,0 - 32,0					✓	rs32/st/r4,0-32,0
		■	7,0 - 9,0					-	rs32/st/v7,0-9,0
			10,0 - 22,0					-	rs32/st/v10,0-22,0
		⬡	7,0 - 9,0					-	rs32/st/s7,0-9,0
			10,0 - 27,0					-	rs32/st/s10,0-27,0
								-	
	Inner collet steel brass	●	4,0 - 32,0					-	rs32/sb/r4,0-32,0
		■	7,0 - 9,0					-	rs32/sb/v7,0-9,0
			10,0 - 22,0					-	rs32/sb/v10,0-22,0
		⬡	7,0 - 9,0					-	rs32/sb/s7,0-9,0
			10,0 - 27,0					-	rs32/sb/s10,0-27,0
								-	

EQUIPMENT FOR MULTI SPINDLE

Gildemeister

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	4,0 - 32,0					-	rs32/sph/r4,0-32,0
		■	7,0 - 9,0					-	rs32/sph/v7,0-9,0
		■	10,0 - 22,0					-	rs32/sph/v10,0-22,0
		●	7,0 - 9,0					-	rs32/sph/s7,0-9,0
		●	10,0 - 27,0					-	rs32/sph/s10,0-27,0
	Inner collet KSB	●	4,0 - 29,5					-	rs32/ksb/r4,0-29,5
		■	8,0 - 9,0					-	rs32/ksb/v8,0-9,0
		■	10,0 - 22,0					-	rs32/ksb/v10,0-22,0
		●	8,0 - 9,0					-	rs32/ksb/s8,0-9,0
		●	10,0 - 27,0					-	rs32/ksb/s10,0-27,0
	Inner collet OXK	●	6,0 - 20,0					-	rs32/oxk/r6,0-20,0
		●	20,1 - 29,0					-	rs32/oxk/r20,1-29,0
	Wrench							✓	s32
Conventional	Feedfinger	●	4,0 - 32,0	39,8	40	M38 x 1,5 - LH	136	-	9316er4,0-32,0
		■	7,0 - 9,0					-	9316ev7,0-9,0
		■	10,0 - 22,0					-	9316ev10,0-22,0
		●	7,0 - 9,0					-	9316es7,0-9,0
		●	10,0 - 27,0					-	9316es10,0-27,0
	Guide ring for feed tube	●	4,0 - 32,0					-	9316e/f-vr4,0-32,0
		■	7,0 - 9,0					-	9316e/f-vrv7,0-9,0
		■	10,0 - 22,0					-	9316e/f-vrv10,0-22,0
		●	7,0 - 9,0					-	9316e/f-vrs7,0-9,0
		●	10,0 - 27,0					-	9316e/f-vrs10,0-27,0
	Support ring for bar guiding system	●	4,0 - 32,0					-	9316e/f-srr4,0-32,0
		■	7,0 - 9,0					-	9316e/f-srv7,0-9,0
		■	10,0 - 22,0					-	9316e/f-srv10,0-22,0
		●	7,0 - 9,0					-	9316e/f-srs7,0-9,0
		●	10,0 - 27,0					-	9316e/f-srs10,0-27,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

									
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
Pick-off collet	Triple slotted	●	4,0 - 32,0	38	43	M24 x 1,5	80	-	9069e/gr4,0-32,0
		■	7,0 - 9,0					-	9069e/gv7,0-9,0
		■	10,0 - 22,0					-	9069e/gv10,0-22,0
		●	7,0 - 9,0					-	9069e/gs7,0-9,0
		●	10,0 - 27,0					-	9069e/gs10,0-27,0
	Sextuple slotted	●	4,0 - 32,0	39	44		82	-	90699h/gr4,0-32,0
		■	7,0 - 9,0					-	90699h/gv7,0-9,0
		■	10,0 - 22,0					-	90699h/gv10,0-22,0
		●	7,0 - 9,0					-	90699h/gs7,0-9,0
		●	10,0 - 27,0					-	90699h/gs10,0-27,0

EQUIPMENT FOR MULTI SPINDLE INDEX

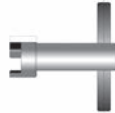
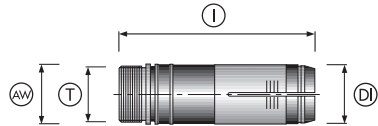
INDEX MS 16. Main spindle

									
Product variants	Product	Profile	Clamping range [mm]	Type of serration	Increments [mm]	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ					M32 x 1	71	✓	sg16bz
	Clamping head BZI	●	4,0 - 7,0	Smooth	1,0			✓	sk16bzir4,0-7,0
			8,0 - 10,0	Radial grooves				✓	sk16bzir8,0-10,0
			11,0 - 16,0	Radial and axial grooves				✓	sk16bzir11,0-16,0
		■	7,0 - 9,0	Smooth				-	sk16bziv7,0-9,0
			10,0 - 11,0	Radial grooves				-	sk16bziv10,0-11,0
		⬢	7,0 - 9,0	Smooth				-	sk16bzis7,0-9,0
			10,0 - 13,0	Radial grooves				-	sk16bzis10,0-13,0
	Assembling aid							✓	eaw16bz
	Manual changing fixture							✓	mqq08

Synchron spindle

Product variants	Product	Variant	Profile	Clamping range [mm]	Type of serration	Increments [mm]	Particularity	In stock	Order no.
SPANNTOP BZ	SPANNTOP chuck	Combi deadlength						✓	2713/0010
	Clamping head BZI		●	4,0 - 16,0	Smooth	0,5	No front nose	✓	sk16bzig4,0-16,0

Feed tube

										
Product variants	Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve				25,7	16	M22 x 1	99	✓	10188/0004
	Inner collet steel		●	4,0 - 10,0					✓	rs12/st/r4,0-10,0
	Inner collet steel brass								-	rs12/sb/r4,0-10,0
	Inner collet SPH								-	rs12/sph/r4,0-10,0
	Inner collet KSB								-	rs12/ksb/r4,0-10,0
	Inner collet OXK								-	rs12/oxk/r4,0-10,0
	Wrench								✓	s12

EQUIPMENT FOR MULTI SPINDLE INDEX

Product variants	Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
	Key to change the entire RS 12 unit								✓	10189/0002
RS system	Outer sleeve	For Ø >8-16 for hexagon SW 10-13			25,7	25	M22 x 1	95	✓	10188/0003
		For hexagon SW 4-10							✓	10188/0002
	Inner collet steel		●	4,0 - 16,0					✓	rs20/st/r4,0-16,0
			■	4,0 - 9,0					-	rs20/st/v4,0-9,0
				10,0 - 12,0					-	rs20/st/v10,0-12,0
			●	4,0 - 9,0					-	rs20/st/s4,0-9,0
			●	10,0 - 13,0					-	rs20/st/s10,0-13,0
	Inner collet steel brass		●	4,0 - 16,0					-	rs20/sb/r4,0-16,0
			■	4,0 - 9,0					-	rs20/sb/v4,0-9,0
				10,0 - 12,0					-	rs20/sb/v10,0-12,0
			●	4,0 - 9,0					-	rs20/sb/s4,0-9,0
			●	10,0 - 13,0					-	rs20/sb/s10,0-13,0
	Inner collet SPH		●	4,0 - 16,0					-	rs20/sph/r4,0-16,0
			■	4,0 - 9,0					-	rs20/sph/v4,0-9,0
				10,0 - 12,0					-	rs20/sph/v10,0-12,0
			●	4,0 - 9,0					-	rs20/sph/s4,0-9,0
			●	10,0 - 13,0					-	rs20/sph/s10,0-13,0
	Inner collet KSB		●	5,0 - 16,0					-	rs20/ksb/r5,0-16,0
			■	5,0 - 9,0					-	rs20/ksb/v5,0-9,0
				10,0 - 11,0					-	rs20/ksb/v10,0-11,0
			●	5,0 - 9,0					-	rs20/ksb/s5,0-9,0
			●	10,0 - 13,0					-	rs20/ksb/s10,0-13,0
	Inner collet OXK		●	3,1 - 16,0					-	rs20/oxk/r3,1-16,0
	Wrench								✓	s20
	Key to change the entire RS 20 unit								✓	10189/0001

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

EQUIPMENT FOR MULTI SPINDLE INDEX

INDEX MS 16 Plus. Main spindle

							
Product variants	Product	Profile	Clamping Ø [mm] BU	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			M32 x 1	74	✓	10180/0008
	Clamping head ZW	●	4,0 - 22,0			✓	sk9022zwr4,0-22,0
	Assembling aid					✓	eaw9022zw
	Manual changing fixture					✓	mq22

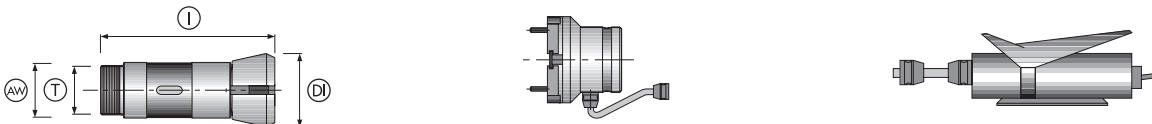
Synchron spindle

Product variants	Product	Variant	Profile	Clamping Ø [mm] BU	Type of serration	Increments [mm]	In stock	Order no.
SPANNTOP ZW	SPANNTOP chuck	Combi deadlength					✓	2613/0023
	Clamping head ZW [smooth]		●	4,0 - 22,0	Smooth	0,5	✓	sk9022zwgr4,0-22,0

INDEX MS 22. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			32,8	44,30	M29 x 1	103	✓	sg9022zw
	Clamping head ZW	●	4,0 - 22,0					✓	sk9022zwr4,0-22,0
	Clamping head ZW [smooth]							✓	sk9022zwgr4,0-22,0
	Assembling aid							✓	eaw9022zw
	Manual changing fixture							✓	mq22
	Deadlength chuck for sub spindles							✓	2613/0017

INDEX MS 25. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			46	60,4	M40 x 1,5 - LH	120	✓	sg9039bz
	Clamping head BZ	●	5,0 - 26,0					✓	sk9039bzbz5,0-26,0
		■	7,0 - 9,0					-	sk9039bzbz7,0-9,0
		■	10,0 - 18,0					-	sk9039bzbz10,0-18,0
		■	7,0 - 9,0					-	sk9039bzbz7,0-9,0
		■	10,0 - 22,0					-	sk9039bzbz10,0-22,0

EQUIPMENT FOR MULTI SPINDLE INDEX

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] l	In stock	Order no.
SPANNTOP BZ	Hydraulic changing fixture							-	vv.0216.0002.00
	Pneumatic pressure converter							-	vv.902d.0002.00
	Assembling aid							-	ekv9039bz
	Manual changing fixture							-	mqq01
Conventional	Collet	●	6,0 - 28,0	46	60,4	M40 x 1,5 - LH	120	-	9039er6,0-28,0
		■	7,0 - 9,0					-	9039ev7,0-9,0
			10,0 - 18,0					-	9039ev10,0-18,0
		⬡	7,0 - 9,0					-	9039es7,0-9,0
			10,0 - 25,0					-	9039es10,0-25,0
								-	

Feed tube

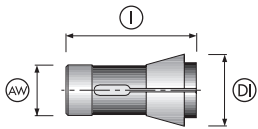
									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] l	In stock	Order no.
RS system	Outer sleeve			35	33	M33 x 1,5	118	✓	9282e/rs
	Outer sleeve – feeder design							-	92821hrsk
	Inner collet steel	●	4,0 - 25,0					✓	rs25/st/r4,0-25,0
		■	7,0 - 9,0					-	rs25/st/v7,0-9,0
			10,0 - 17,0					-	rs25/st/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/st/s6,0-9,0
			10,0 - 22,0					-	rs25/st/s10,0-22,0
	Inner collet steel brass	●	4,0 - 25,0					-	rs25/sb/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sb/v7,0-9,0
			10,0 - 17,0					-	rs25/sb/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sb/s6,0-9,0
			10,0 - 22,0					-	rs25/sb/s10,0-22,0
	Inner collet SPH	●	4,0 - 25,0					-	rs25/sph/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sph/v7,0-9,0
			10,0 - 17,0					-	rs25/sph/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sph/s6,0-9,0
			10,0 - 22,0					-	rs25/sph/s10,0-22,0
	Inner collet KSB	●	7,0 - 23,5					-	rs25/ksb/r7,0-23,5
		■	7,0 - 9,0					-	rs25/ksb/v7,0-9,0
			10,0 - 17,0					-	rs25/ksb/v10,0-17,0
		⬡	7,0 - 9,0					-	rs25/ksb/s7,0-9,0
			10,0 - 21,0					-	rs25/ksb/s10,0-21,0
	Inner collet OXK	●	5,0 - 20,0					-	rs25/oxk/r5,0-20,0
			20,1 - 24,0					-	rs25/oxk/r20,1-24,0
	Wrench							✓	s25

EQUIPMENT FOR MULTI SPINDLE INDEX

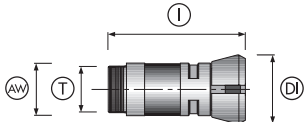
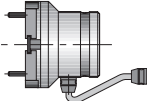
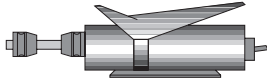
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
Conventional	Feedfinger	●	6,0 - 28,0	35	33	M33 x 1,5	118	-	9282er6,0-28,0
		■	7,0 - 9,0					-	9282ev7,0-9,0
		■	10,0 - 18,0					-	9282ev10,0-18,0
		●	7,0 - 9,0					-	9282es7,0-9,0
		●	10,0 - 22,0					-	9282es10,0-22,0
		●	4,0 - 26,0					✓	9282e/f-msr4,0-26,0
	Guide ring for feed tube	■	14,0 - 17,0					-	9282e/f-msv14,0-17,0
		●	17,0 - 22,0					-	9282e/f-mss17,0-22,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

								
Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.	
Pick-off collet	●	4,0 - 26,0	25	35,4	65	✓	9039e/syr4,0-26,0	
	■	7,0 - 9,0				-	9039e/syv7,0-9,0	
	■	10,0 - 14,0				-	9039e/syv10,0-14,0	
	●	7,0 - 9,0				-	9039e/sys7,0-9,0	
	●	10,0 - 17,0				-	9039e/sys10,0-17,0	
	●	4,0 - 21,0				-	14305h/syr4,0-21,0	
Pick-off collet small model	■	7,0 - 9,0	25	31	54	-	14305h/syv7,0-9,0	
	■	10,0 - 14,0				-	14305h/syv10,0-14,0	
	●	7,0 - 9,0				-	14305h/sys7,0-9,0	
	●	10,0 - 17,0				-	14305h/sys10,0-17,0	

INDEX MS 25. Main spindle

  									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			46	60,5	M40 x 1,5 - LH	120,5	-	sg90395h-zw
	Clamping head ZW		4,0 - 30,0					✓	sk9039zwr4,0-30,0
			7,0 - 9,0					-	sk9039zww7,0-9,0
			10,0 - 20,0					-	sk9039zww10,0-20,0
			7,0 - 9,0					-	sk9039zws7,0-9,0
			10,0 - 24,0					-	sk9039zws10,0-24,0
	Hydraulic changing fixture							✓	vv.0228.0002.00
	Pneumatic pressure converter							-	vv.902d.0002.00
	Assembling aid							-	eaw9039zw

EQUIPMENT FOR MULTI SPINDLE

INDEX

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
Conventional	Collet	●	6,0 - 28,0	46	60,4	M40 x 1,5 - LH	120	-	9039er6,0-28,0
		■	7,0 - 9,0					-	9039ev7,0-9,0
		■	10,0 - 18,0					-	9039ev10,0-18,0
		■	7,0 - 9,0					-	9039es7,0-9,0
		■	10,0 - 25,0					-	9039es10,0-25,0
		■						-	

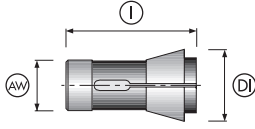
Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve – feeder design			35	33	M33 x 1,5	118	-	92821hrsk
	Inner collet steel	●	4,0 - 25,0					✓	rs25/st/r4,0-25,0
		■	7,0 - 9,0					-	rs25/st/v7,0-9,0
		■	10,0 - 17,0					-	rs25/st/v10,0-17,0
		■	6,0 - 9,0					-	rs25/st/s6,0-9,0
		■	10,0 - 22,0					-	rs25/st/s10,0-22,0
	Inner collet steel brass	●	4,0 - 25,0					-	rs25/sb/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sb/v7,0-9,0
		■	10,0 - 17,0					-	rs25/sb/v10,0-17,0
		■	6,0 - 9,0					-	rs25/sb/s6,0-9,0
		■	10,0 - 22,0					-	rs25/sb/s10,0-22,0
	Inner collet SPH	●	4,0 - 25,0					-	rs25/sph/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sph/v7,0-9,0
		■	10,0 - 17,0					-	rs25/sph/v10,0-17,0
		■	6,0 - 9,0					-	rs25/sph/s6,0-9,0
		■	10,0 - 22,0					-	rs25/sph/s10,0-22,0
	Inner collet KSB	●	7,0 - 23,5					-	rs25/ksb/r7,0-23,5
		■	7,0 - 9,0					-	rs25/ksb/v7,0-9,0
		■	10,0 - 17,0					-	rs25/ksb/v10,0-17,0
		■	7,0 - 9,0					-	rs25/ksb/s7,0-9,0
		■	10,0 - 21,0					-	rs25/ksb/s10,0-21,0
	Inner collet OXK	●	5,0 - 20,0					-	rs25/oxk/r5,0-20,0
		■	20,1 - 24,0					-	rs25/oxk/r20,1-24,0
	Wrench							✓	s25
Conventional	Feedfinger	●	6,0 - 28,0	35	33	M33 x 1,5	118	-	9282er6,0-28,0
		■	7,0 - 9,0					-	9282ev7,0-9,0
		■	10,0 - 18,0					-	9282ev10,0-18,0
		■	7,0 - 9,0					-	9282es7,0-9,0
		■	10,0 - 22,0					-	9282es10,0-22,0
		■						-	

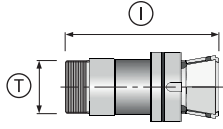
SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

EQUIPMENT FOR MULTI SPINDLE INDEX

Sub spindle

							
Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.
Pick-off collet	●	4,0 - 26,0	25	35,4	65	✓	9039e/syr4,0-26,0
	■	7,0 - 9,0				-	9039e/syv7,0-9,0
		10,0 - 14,0				-	9039e/syv10,0-14,0
	⬡	7,0 - 9,0				-	9039e/sys7,0-9,0
		10,0 - 17,0				-	9039e/sys10,0-17,0
Pick-off collet small model	●	4,0 - 21,0	25	31	54	-	14305h/syr4,0-21,0
	■	7,0 - 9,0				-	14305h/syv7,0-9,0
		10,0 - 14,0				-	14305h/syv10,0-14,0
	⬡	7,0 - 9,0				-	14305h/sys7,0-9,0
		10,0 - 17,0				-	14305h/sys10,0-17,0

INDEX MS 25. Retrofit

  							
Product variants	Product	Profile	Clamping Ø [mm] BU	Connecting thread outside T	Total length [mm] I	In stock	Order no.
TOPlus	TOPlus unit for M31825				51,5	-	10827/0001
	TOPlus unit for M31823					-	10827/0002
	Basic body			M40 x 1,5	126	-	10180/0009
	Clamping head SE	●	4,0 - 32,0			-	top32zwr4,0-32,0
		■	7,0 - 21,0			-	top32zww7,0-21,0
		⬡	7,0 - 26,0			-	top32zws7,0-26,0
	Assembling aid					-	10179/0003
	Manual changing fixture					✓	mqq03

INDEX MS 32. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			46	61	M42 x 1 - LH	109,5	✓	sg32zw
	Clamping head ZW	●	5,0 - 32,0					✓	sk32zwr5,0-32,0
		■	7,0 - 9,0					-	sk32zww7,0-9,0
			10,0 - 22,0					-	sk32zww10,0-22,0
		⬡	7,0 - 9,0					✓	sk32zws7,0-9,0
			10,0 - 27,0					✓	sk32zws10,0-27,0
	Pneumatic changing fixture							✓	pp32
	Assembling aid							✓	nh.442.0010.00
	Manual changing fixture							✓	mqq03
	Deadlength chuck for synchron spindle							✓	2613/0018

INDEX MS 40. Main spindle

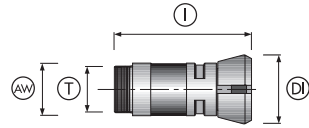
							
Product variants	Product	Profile	Clamping range [mm]	Connecting thread inside S	Total length [mm] I	In stock	Order no.
TOPlus	Basic body			M48 x 1	122	✓	10180/0007
	Clamping head SE	●	4 - 7		47	✓	top40r4,0-7,0
			8 - 10			✓	top40r8,0-10,0
			11 - 40			✓	top40r11,0-40,0
		■	7			-	top40v7,0
			8 - 27			-	top40v8,0-27,0
						-	top40v8,0-27,0
		⬡	7			-	top40s7,0
			8 - 32			-	top40s8,0-32,0
						-	top40s8,0-32,0
		●	3 - 40		44	✓	top40gr3,0-40,0
	Manual changing fixture					✓	mqttop40
	Assembling aid					✓	10179/0001
	Deadlength chuck for synchron spindle					✓	10168/0001

EQUIPMENT FOR MULTI SPINDLE INDEX

INDEX MS 52. Main spindle

									
Product variants	Product	Profile	Clamping range [mm]	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP BZI	Basic body BZI			69	99,5	M62 x 1,5	53	✓	1105/0002
	Clamping head RD	●	4,0 - 7,5				58	✓	sk65bzir4,0-7,5
			8,0 - 10,5					✓	sk65bzir8,0-10,5
			11 - 65					✓	sk65bzir11,0-65,0
		■	8 - 46					✓	sk65bziv8,0-46,0
								✓	sk65bziv8,0-46,0
								✓	sk65bziv8,0-46,0
		⬡	7					✓	sk65bzis7,0
								✓	sk65bzis8,0-56,0
			8 - 56					✓	sk65bzis8,0-56,0
								✓	sk65bzis8,0-56,0
	Manual changing fixture							✓	mq65

Schütte SG 18 / AG 20 to Ø 20. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body H-ZW			32	41,8	M28 x 1 - LH	84	✓	sg90071h-zw
	Clamping head H-ZW	●	4,0 - 18,0					✓	sk90071h-zwr4,0-18,0
		■	7,0 - 9,0					-	sk90071h-zwv7,0-9,0
			10,0 - 13,0					-	sk90071h-zwv10,0-13,0
		⬡	7,0 - 9,0					-	sk90071h-zws7,0-9,0
			10,0 - 15,0					-	sk90071h-zws10,0-15,0
	Assembling aid							✓	ekv90071h-zw
	Manual changing fixture							✓	mqq08
Conventional	Collet	●	5,0 - 20,0	32	41,8	M28 x 1 - LH	84	✓	90076hr5,0-20,0
		■	7,0 - 9,0					-	90076hv7,0-9,0
			10,0 - 12,0					-	90076hv10,0-12,0
		⬡	7,0 - 9,0					-	90076hs7,0-9,0
			10,0 - 15,0					-	90076hs10,0-15,0
		●	4,0 - 20,0		41,5	M29 x 1 - LH [conical]		-	90078hr4,0-20,0
		■	7,0 - 9,0					-	90078hv7,0-9,0
			10,0 - 14,0					-	90078hv10,0-14,0
		⬡	7,0 - 9,0					-	90078hs7,0-9,0
			10,0 - 17,0					-	90078hs10,0-17,0

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			23	25	M23 x 1	88	✓	9255e/rs
	Inner collet steel	●	2,5 - 16,0					✓	rs16/st/r2,5-16,0
		■	4,0 - 9,0					-	rs16/st/v4,0-9,0
			10,0 - 11,0					-	rs16/st/v10,0-11,0
		■	4,0 - 9,0					-	rs16/st/s4,0-9,0
			10,0 - 13,0					-	rs16/st/s10,0-13,0

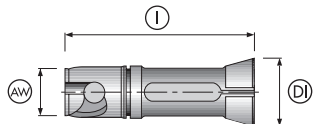
EQUIPMENT FOR MULTI SPINDLE

Schütte

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.	
RS system	Inner collet steel brass	●	2,5 - 16,0					-	rs16/sb/r2,5-16,0	
		■	4,0 - 9,0					-	rs16/sb/v4,0-9,0	
			10,0 - 11,0					-	rs16/sb/v10,0-11,0	
			4,0 - 9,0					-	rs16/sb/s4,0-9,0	
		10,0 - 13,0					-	rs16/sb/s10,0-13,0		
	Inner collet SPH	●	2,5 - 16,0						-	rs16/sph/r2,5-16,0
		■	4,0 - 9,0						-	rs16/sph/v4,0-9,0
			10,0 - 11,0						-	rs16/sph/v10,0-11,0
			4,0 - 9,0						-	rs16/sph/s4,0-9,0
		10,0 - 13,0						-	rs16/sph/s10,0-13,0	
	Inner collet KSB	●	5,0 - 14,0						-	rs16/ksb/r5,0-14,0
		■	5,0 - 9,0						-	rs16/ksb/v5,0-9,0
			10,0						-	rs16/ksb/v10,0
		●	5,0 - 9,0						-	rs16/ksb/s5,0-9,0
			10,0 - 13,0						-	rs16/ksb/s10,0-13,0
	Inner collet OXK	●	3,1 - 14,5						-	rs16/oxk/r3,1-14,5
	Wrench								✓	s16
	Conventional	Feedfinger	●	4,0 - 18,0	23	25	M23 x 1	88	-	9255er4,0-18,0
			■	7,0 - 9,0					-	9255ev7,0-9,0
10,0 - 12,0				-					9255ev10,0-12,0	
4,0 - 20,0				-					9255es7,0-9,0	
10,0 - 15,0			-	9255es10,0-15,0						
●			7,0 - 9,0	25,4	M24 x 1 [conical]		-		92554hr4,0-20,0	
			10,0 - 14,0				-		92554hv7,0-9,0	
			10,0 - 17,0				-		92554hv10,0-14,0	
			7,0 - 9,0				-		92554hs7,0-9,0	
			10,0 - 17,0				-		92554hs10,0-17,0	
			●				4,0 - 20,0		-	9262e/f-sfr4,0-20,0
							■		7,0 - 9,0	-
10,0 - 14,0	-	9262e/f-sfv10,0-14,0								
Guide ring for feed tube	●	7,0 - 9,0	-	9262e/f-sfs7,0-9,0						
		10,0 - 17,0	-	9262e/f-sfs10,0-17,0						
		■	7,0 - 9,0	-	9262e/f-sfs7,0-9,0					
			10,0 - 17,0	-	9262e/f-sfs10,0-17,0					

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

									
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.	
Pick-off collet	Triple slotted	●	4,0- 20,0	25	32,1	91,5	✓	35161h/gr4,0-20,0	
		■	7,0 - 9,0				-	35161h/gv7,0-9,0	
		■	10,0 - 14,0				-	35161h/gv10,0-14,0	
		●	7,0 - 9,0				-	35161h/gs7,0-9,0	
		●	10,0 - 17,0				-	35161h/gs10,0-17,0	
		●	10,0 - 17,0				-	35161h/gs10,0-17,0	

Schütte SF 25 / SE 26 / AF 26 / SF 26 / SF 26S / SC 26 / SCX 26. Main spindle

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			46	60,4	M40 x 1,5 - LH	120	✓	sg9039bz
	Clamping head BZ	●	5,0 - 26,0					✓	sk9039bzs5,0-26,0
		■	7,0 - 9,0					-	sk9039bzs7,0-9,0
			10,0 - 18,0					-	sk9039bzs10,0-18,0
		⬡	7,0 - 9,0					-	sk9039bzs7,0-9,0
			10,0 - 22,0					-	sk9039bzs10,0-22,0
	Hydraulic changing fixture							-	vv.0216.0002.00
	Pneumatic pressure converter							-	vv.902d.0002.00
	Assembling aid							-	ekv9039bz
	Manual changing fixture							-	mqq01
Conventional	Collet	●	6,0 - 28,0	46	60,4	M40 x 1,5 - LH	120	-	9039er6,0-28,0
		■	7,0 - 9,0					-	9039ev7,0-9,0
			10,0 - 18,0					-	9039ev10,0-18,0
			7,0 - 9,0					-	9039es7,0-9,0
		⬡	10,0 - 25,0					-	9039es10,0-25,0

EQUIPMENT FOR MULTI SPINDLE

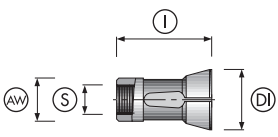
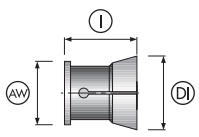
Schütte

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] l	In stock	Order no.
RS system	Outer sleeve			35	33	M33 x 1,5	118	✓	9282e/rs
				37,5			106	✓	10188/0001
	Inner collet steel	●	4,0 - 25,0					✓	rs25/st/r4,0-25,0
		■	7,0 - 9,0					-	rs25/st/v7,0-9,0
			10,0 - 17,0					-	rs25/st/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/st/s6,0-9,0
			10,0 - 22,0					-	rs25/st/s10,0-22,0
	Inner collet steel brass	●	4,0 - 25,0					-	rs25/sb/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sb/v7,0-9,0
			10,0 - 17,0					-	rs25/sb/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sb/s6,0-9,0
			10,0 - 22,0					-	rs25/sb/s10,0-22,0
	Inner collet SPH	●	4,0 - 25,0					-	rs25/sph/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sph/v7,0-9,0
			10,0 - 17,0					-	rs25/sph/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sph/s6,0-9,0
			10,0 - 22,0					-	rs25/sph/s10,0-22,0
	Inner collet KSB	●	7,0 - 23,5					-	rs25/ksb/r7,0-23,5
		■	7,0 - 9,0					-	rs25/ksb/v7,0-9,0
			10,0 - 17,0					-	rs25/ksb/v10,0-17,0
		⬡	7,0 - 9,0					-	rs25/ksb/s7,0-9,0
			10,0 - 21,0					-	rs25/ksb/s10,0-21,0
	Inner collet OXK	●	5,0 - 20,0					-	rs25/oxk/r5,0-20,0
			20,1 - 24,0					-	rs25/oxk/r20,1-24,0
	Wrench							✓	s25
Conventional	Feedfinger	●	6,0 - 28,0	35	33	M33 x 1,5	118	-	9282er6,0-28,0
		■	7,0 - 9,0					-	9282ev7,0-9,0
			10,0 - 18,0					-	9282ev10,0-18,0
		⬡	7,0 - 9,0					-	9282es7,0-9,0
			10,0 - 22,0					-	9282es10,0-22,0
	Guide ring for feed tube	●	4,0 - 25,0					✓	9282e/f-sdr4,0-25,0
		■	7,0 - 9,0					-	9282e/f-sdv7,0-9,0
			10,0 - 17,0					-	9282e/f-sdv10,0-17,0
		⬡	7,0 - 9,0					-	9282e/f-sds7,0-9,0
			10,0 - 21,0					-	9282e/f-sds10,0-21,0
		●	4,0 - 26,0					-	9282e/f-ser4,0-26,0
		■	7,0 - 9,0					-	9282e/f-sev7,0-9,0
			10,0 - 18,0					-	9282e/f-sev10,0-18,0
		⬡	7,0 - 9,0					-	9282e/f-ses7,0-9,0
			10,0 - 22,0					-	9282e/f-ses10,0-22,0
		●	4,0 - 28,0					✓	9319e/f-sfr4,0-28,0
		■	7,0 - 9,0					-	9319e/f-sfv7,0-9,0
			10,0 - 22,0					-	9319e/f-sfv10,0-22,0
		⬡	7,0 - 9,0					✓	9319e/f-sfs7,0-9,0
			10,0 - 27,0					✓	9319e/f-sfs10,0-27,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

 									
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
Pick-off collet	Sextuple slotted	●	6,0 - 25,0	34	42		53	✓	9039e/g-sfr6,0-25,0
		■	7,0 - 9,0					-	9039e/g-sfv7,0-9,0
		■	10,0 - 17,0					-	9039e/g-sfv10,0-17,0
		●	7,0 - 9,0					-	9039e/g-sfs7,0-9,0
		●	10,0 - 21,0					-	9039e/g-sfs10,0-21,0
		●	5,0 - 21,0	28	37	M24 x 1,5 - LH	50	✓	9016e/gr5,0-21,0
		■	7,0 - 9,0					-	9016e/gv7,0-9,0
		■	10,0 - 14,0					-	9016e/gv10,0-14,0
		●	7,0 - 9,0					-	9016e/gs7,0-9,0
		●	10,0 - 14,0					-	9016e/gs10,0-14,0
		●	4,0 - 40,0	52	60,6		60	✓	9070e/g-sfr4,0-40,0
		■	7,0 - 9,0					-	9070e/g-sfv7,0-9,0
		■	10,0 - 28,0					-	9070e/g-sfv10,0-28,0
		●	7,0 - 9,0					-	9070e/g-sfs7,0-9,0
		●	10,0 - 34,0					-	9070e/g-sfs10,0-34,0

Schütte SC7-26 / SC7-32. Sub spindle

Product	Suitable for	Size	Product	Profile	Clamping Ø [mm]	Type of serration	Total length [mm]	In stock	Order no.
SPANNTOP pull-back	Chuck A030123.0008C and A030573.0003C	28	Clamping head	●	4,0 - 26,0	Smooth	31,5	-	A030126.0005A
			Manual changing fixture					-	mq 32
	Chuck A019659.0003C	32	Clamping head	●	4,0 - 32,0	Smooth	33	-	A030633.0001A
			Manual changing fixture					-	A015903.0005B
SPANNTOP deadlength	Chuck A035510.0008C	32	Clamping head	●	4,0 - 32,0	Smooth	33	-	A030633.0001A
			Manual changing fixture						A015903.0005B

Schütte SC9-26 / SC9-32. Sub spindle

Product	Suitable for	Size	Product	Profile	Clamping Ø [mm]	Type of serration	Total length [mm]	In stock	Order no.
SPANNTOP pull-back	Chuck 2612/0014	28	Clamping head	●	4,0 - 26,0	Smooth	31,5	-	A030126.0005A
			Manual changing fixture					-	mq 32
	Chuck 2612/0013	32	Clamping head	●	4,0 - 32,0	Smooth	33	-	A030633.0001A
			Manual changing fixture					-	A015903.0005B
SPANNTOP deadlength	Chuck A053509.0004C	32	Clamping bush	●	4,0 - 32,0	Smooth	30	-	A053515.0006A
			Manual changing fixture						A053526.0003B

EQUIPMENT FOR MULTI SPINDLE

Schütte

SF 32 / SF 32S / AF 32 / AF 32S / S 32PC. Main spindle

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			53	69,7	M47 x 1,5 - LH	136	✓	sg9070bz
	Clamping head BZ	●	6,0 - 32,0					✓	sk6970bzb6,0-32,0
		■	7,0 - 9,0					-	sk6970bzbv7,0-9,0
			10,0 - 22,0					-	sk6970bzbv10,0-22,0
		⬡	7,0 - 9,0					-	sk6970bzs7,0-9,0
			10,0 - 27,0					-	sk6970bzs10,0-27,0
	Hydraulic changing fixture							✓	wv.0218.0002.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							✓	ekv9070bz
	Manual changing fixture							✓	mqq02
Conventional	Collet	●	4,0 - 35,0	53	69,7	M47 x 1,5 - LH	136	✓	9070er4,0-35,0
		■	7,0 - 9,0					-	9070ev7,0-9,0
			10,0 - 22,0					-	9070ev10,0-22,0
		⬡	7,0 - 9,0					-	9070es7,0-9,0
			10,0 - 27,0					-	9070es10,0-27,0

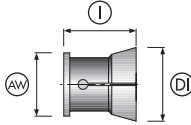
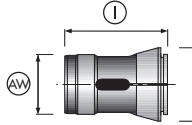
Feed tube

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			40	42	M38 x 1,5	130	✓	9319e/rs
	Inner collet steel	●	4,0 - 32,0					✓	rs32/st/r4,0-32,0
		■	7,0 - 9,0					-	rs32/st/v7,0-9,0
			10,0 - 22,0					-	rs32/st/v10,0-22,0
		⬡	7,0 - 9,0					-	rs32/st/s7,0-9,0
			10,0 - 27,0					-	rs32/st/s10,0-27,0
	Inner collet steel brass	●	4,0 - 32,0					-	rs32/sb/r4,0-32,0
		■	7,0 - 9,0					-	rs32/sb/v7,0-9,0
			10,0 - 22,0					-	rs32/sb/v10,0-22,0
		⬡	7,0 - 9,0					-	rs32/sb/s7,0-9,0
			10,0 - 27,0					-	rs32/sb/s10,0-27,0

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	4,0 - 32,0					-	rs32/sph/r4,0-32,0
		■	7,0 - 9,0					-	rs32/sph/v7,0-9,0
		■	10,0 - 22,0					-	rs32/sph/v10,0-22,0
		●	7,0 - 9,0					-	rs32/sph/s7,0-9,0
		●	10,0 - 27,0					-	rs32/sph/s10,0-27,0
	Inner collet KSB	●	4,0 - 29,5					-	rs32/ksb/r4,0-29,5
		■	8,0 - 9,0					-	rs32/ksb/v8,0-9,0
		■	10,0 - 22,0					-	rs32/ksb/v10,0-22,0
		●	8,0 - 9,0					-	rs32/ksb/s8,0-9,0
		●	10,0 - 27,0					-	rs32/ksb/s10,0-27,0
	Inner collet OXK	●	6,0 - 20,0					-	rs32/oxk/r6,0-20,0
		●	20,1 - 29,0					-	rs32/oxk/r20,1-29,0
	Wrench							✓	s32
Conventional	Feedfinger	●	4,0 - 32,0	40	42	M38 x 1,5	130	-	9319er4,0-32,0
		■	7,0 - 9,0					-	9319ev7,0-9,0
		■	10,0 - 22,0					-	9319ev10,0-22,0
		●	7,0 - 9,0					-	9319es7,0-9,0
		●	10,0 - 27,0					-	9319es10,0-27,0
	Guide ring for feed tube	●	4,0 - 32,0					✓	9319e/f-sdr4,0-32,0
		■	7,0 - 9,0					-	9319e/f-sdv7,0-9,0
		■	10,0 - 22,0					-	9319e/f-sdv10,0-22,0
		●	7,0 - 9,0					-	9319e/f-sds7,0-9,0
		●	10,0 - 27,0					-	9319e/f-sds10,0-27,0
		●	4,0 - 28,0					✓	9319e/f-sfr4,0-28,0
		■	7,0 - 9,0					-	9319e/f-sfv7,0-9,0
		■	10,0 - 22,0					-	9319e/f-sfv10,0-22,0
		●	7,0 - 9,0					✓	9319e/f-sfs7,0-9,0
		●	10,0 - 27,0					✓	9319e/f-sfs10,0-27,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

									
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.	
Pick-off collet	Sextuple slotted	●	4,0 - 40,0	52	60,6	60	✓	9070e/g-sfr4,0-40,0	
		■	7,0 - 9,0				-	9070e/g-sfv7,0-9,0	
		■	10,0 - 28,0				-	9070e/g-sfv10,0-28,0	
		●	7,0 - 9,0				-	9070e/g-sfs7,0-9,0	
		●	10,0 - 34,0				-	9070e/g-sfs10,0-34,0	
		●	4,0 - 32,0	44	54	76	✓	907034h/gr4,0-32,0	
		■	7,0 - 9,0				-	907034h/gv7,0-9,0	
		■	10,0 - 22,0				-	907034h/gv10,0-23,0	
		●	7,0 - 9,0				-	907034h/gs7,0-9,0	
		●	10,0 - 27,0				-	907034h/gs10,0-27,0	

EQUIPMENT FOR MULTI SPINDLE

Schütte

Schütte S / A 36PC. Main spindle

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			56	72,2	M52 x 1,5 - LH	139	✓	1105/0004
	Clamping head ZW	●	4,0 - 36,0					-	sb.k.0096r4,0-36,0
		■	7,0 - 9,0					-	sb.k.0096v7,0-9,0
			10,0 - 25,0					-	sb.k.0096v10,0-25,0
		■	7,0 - 9,0					-	sb.k.0096s7,0-9,0
		■	10,0 - 31,0					-	sb.k.0096s10,0-31,0
	Hydraulic changing fixture							✓	wv.0228.0002.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							-	ew0115.0001.00
	Manual changing fixture							✓	mqq06
Conventional	Collet	●	4,0 - 36,0	56	72,2	M52 x 1,5 - LH	139	-	se.f.0020r4,0-36,0
		■	7,0 - 9,0					-	se.f.0020v7,0-9,0
			10,0 - 25,0					-	se.f.0020v10,0-25,0
		■	7,0 - 9,0					-	se.f.0020s7,0-9,0
		■	10,0 - 31,0					-	se.f.0020s10,0-31,0

Feed tube

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			45	43,8	M42 x 1,5 - LH	136	✓	1106/0001
	Inner collet steel	●	6,0 - 34,0					✓	rs36/st/r6,0-34,0
		■	8,0 - 9,0					-	rs36/st/v8,0-9,0
			10,0 - 29,0					-	rs36/st/v10,0-29,0
		■	8,0 - 9,0					-	rs36/st/s8,0-9,0
		■	10,0 - 27,0					✓	rs36/st/s10,0-27,0
	Inner collet steel brass	●	6,0 - 34,0					✓	rs36/sb/r6,0-34,0
		■	8,0 - 9,9					✓	rs36/sb/v8,0-9,9
			10,0 - 24,0					✓	rs36/sb/v10,0-24,0
		■	8,0 - 9,9					✓	rs36/sb/s8,0-9,9
		■	10,0 - 29,0					✓	rs36/sb/s10,0-29,0

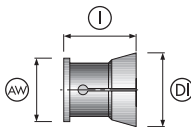
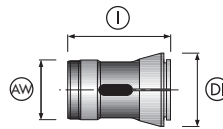
EQUIPMENT FOR MULTI SPINDLE

Schütte

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	6,0 - 32,0					-	rs36/sph/r6,0-32,0
		■	8,0 - 9,0					-	rs36/sph/v8,0-9,0
			10,0 - 22,0					-	rs36/sph/v10,0-22,0
		◆	8,0 - 9,0					-	rs36/sph/s8,0-9,0
			10,0 - 27,0					-	rs36/sph/s10,0-27,0
	Inner collet KSB	●	6,0 - 32,0					-	rs36/ksb/r6,0-32,0
		■	8,0 - 9,0					-	rs36/ksb/v8,0-9,0
			10,0 - 22,0					-	rs36/ksb/v10,0-22,0
		◆	8,0 - 9,0					-	rs36/ksb/s8,0-9,0
			10,0 - 27,0					-	rs36/ksb/s10,0-27,0
	Inner collet OXK	●	6,0 - 20,0					-	rs36/oxk/r6,0-20,0
			20,1-26,5					-	rs36/oxk/r20,1-26,5
			26,6 - 35,0					-	rs36/oxk/r26,6-35,0
	Wrench							✓	s36
Conventional	Feedfinger	●	4,0 - 36,0	45	43,8	M42 x 1,5 - LH	136	-	se.v.0009r4,0-36,0
		■	7,0 - 9,0					-	se.v.0009v7,0-9,0
			10,0 - 25,0					-	se.v.0009v10,0-25,0
		◆	7,0 - 9,0					-	se.v.0009s7,0-9,0
			10,0 - 31,0					-	se.v.0009s10,0-31,0
	Guide ring for feed tube	●	4,0 - 36,0					-	fs.1105.0005.00r4,0-36,0
		■	7,0 - 9,0					-	fs.1105.0005.00v7,0-9,0
			10,0 - 25,0					-	fs.1105.0005.00v10,0-25,0
		◆	7,0 - 9,0					-	fs.1105.0005.00s7,0-9,0
			10,0 - 31,0					-	fs.1105.0005.00s10,0-31,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

 								
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.
Pick-off collet	Sextuple slotted	●	4,0 - 32,0	44	54	76	✓	907034h/gr4,0-32,0
		■	7,0 - 9,0				-	907034h/gv7,0-9,0
			10,0 - 22,0				-	907034h/gv10,0-23,0
		◆	7,0 - 9,0				-	907034h/gs7,0-9,0
			10,0 - 27,0				-	907034h/gs10,0-27,0

EQUIPMENT FOR MULTI SPINDLE

Schütte

AD 40 / AF 42 / SF 42 / SF 40. Main spindle

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			62,9	78,8	M56 x 1,5 - LH	157	-	sg9112bz
	Clamping head BZ	●	5,0 - 42,0					-	sk9112bzs5,0-42,0
		■	7,0 - 9,0					-	sk9112bzs7,0-9,0
			10,0 - 30,0					-	sk9112bzs10,0-30,0
		◆	7,0 - 9,0					-	sk9112bzs7,0-9,0
			10,0 - 36,0					-	sk9112bzs10,0-36,0
	Hydraulic changing fixture							-	wv.0218.0003.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							✓	ekv9112bz
	Manual changing fixture							✓	mqq04
Conventional	Collet only with radial grooves	●	4,0 - 42,0	62,9	78,8	M56 x 1,5 - LH	157	-	9112er4,0-42,0
		■	7,0 - 9,0					-	9112ev7,0-9,0
			10,0 - 29,0					-	9112ev10,0-29,0
		◆	7,0 - 9,0					-	9112es7,0-9,0
			10,0 - 35,0					-	9112es10,0-35,0

Feed tube

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			51	49	M48 x 1,5	140	✓	9372e/rs
	Inner collet steel	●	6,0 - 40,0					✓	rs40/st/r6,0-40,0
		■	10,0 - 28,0					-	rs40/st/v10,0-28,0
		◆	7,0 - 9,0					-	rs40/st/s7,0-9,0
			10,0 - 34,0					-	rs40/st/s10,0-34,0
	Inner collet steel brass	●	6,0 - 40,0					-	rs40/sb/r6,0-40,0
		■	10,0 - 28,0					-	rs40/sb/v10,0-28,0
		◆	7,0 - 9,0					-	rs40/sb/s7,0-9,0
			10,0 - 34,0					-	rs40/sb/s10,0-34,0

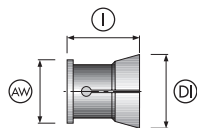
EQUIPMENT FOR MULTI SPINDLE

Schütte

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	6,0 - 40,0					-	rs40/sph/r6,0-40,0
		■	10,0 - 28,0					-	rs40/sph/v10,0-28,0
		⬡	7,0 - 9,0					-	rs40/sph/s7,0-9,0
			10,0 - 34,0					-	rs40/sph/s10,0-34,0
	Inner collet KSB	●	10,0 - 38,5					-	rs40/ksb/r10,0-38,5
		■	10,0 - 27,0					-	rs40/ksb/v10,0-27,0
		⬡	7,0 - 9,0					-	rs40/ksb/s7,0-9,0
			10,0 - 34,0					-	rs40/ksb/s10,0-34,0
	Inner collet OXK	●	10,0 - 20,0					-	rs40/oxk/r10,0-20,0
			20,1 - 38,0					-	rs40/oxk/r20,1-38,0
	Wrench							✓	s40
Conventional	Feedfinger	●	4,0 - 42,0	51	49	M48 x 1,5	152	-	9372er4,0-42,0
		■	7,0 - 9,0					-	9372ev7,0-9,0
			10,0 - 29,0					-	9372ev10,0-29,0
		⬡	7,0 - 9,0					-	9372es7,0-9,0
			10,0 - 35,0					-	9372es10,0-35,0
	Guide ring for feed tube	●	10,0 - 42,0					-	9372e/f-sfr10,0-42,0
		■	7,0 - 9,0					-	9372e/f-sfv7,0-9,0
			10,0 - 29,0					-	9372e/f-sfv10,0-29,0
		⬡	7,0 - 9,0					-	9372e/f-sfs7,0-9,0
			7,0 - 35,0					-	9372e/f-sfs10,0-35,0
		●	4,0 - 40,0					-	9372e/f-sf-1r4,0-40,0
			7,0 - 9,0					-	9372e/f-sf-1v7,0-9,0
		■	10,0 - 28,0					-	9372e/f-sf-1v10,0-28,0
			7,0 - 9,0					-	9372e/f-sf-1s7,0-9,0
		⬡	10,0 - 34,0					-	9372e/f-sf-1s10,0-34,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

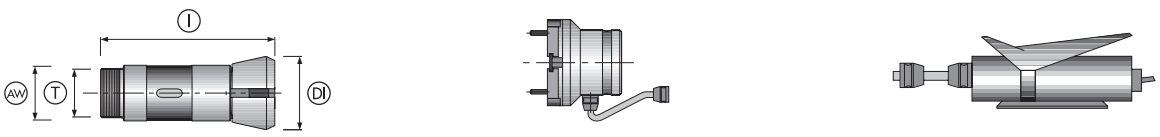


Product	Description	Pro- file	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.
Pick-off collet	Sextuple slotted	●	4,0 - 40,0	52	60,6	60	✓	9070e/g-sfr4,0-40,0
		■	7,0 - 9,0				-	9070e/g-sfv7,0-9,0
			10,0 - 28,0				-	9070e/g-sfv10,0-28,0
		⬡	7,0 - 9,0				-	9070e/g-sfs7,0-9,0
			10,0 - 34,0				-	9070e/g-sfs10,0-34,0

EQUIPMENT FOR MULTI SPINDLE

Schütte

Schütte SD 50 / SF 51 / AF 51 / SF 51S. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
SPANNTOP BZ	Basic body BZ			75	98,2	M68 x 1,5 - LH	187	✓	sg9139bz
	Clamping head BZ	●	9,0 - 48,0					-	sk9139bzs9,0-50,0
		■	20,0 - 34,0					-	sk9139bzs20,0-34,0
		◆	14,0 - 41,0					-	sk9139bzs14,0-41,0
	Hydraulic changing fixture							-	wv.022a.0002.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							-	ekv9139bz
Conventional	Collet	●	9,0 - 51,0	75	98,2	M68 x 1,5 - LH	187	-	9139e

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			58	62	M58 x 1,5	178,5	✓	9406e/rs
	Inner collet steel	●	6,0 - 48,0					✓	rs50/st/r6,0-48,0
		■	12,0 - 34,0					-	rs50/st/v12,0-34,0
		◆	6,0 - 9,0					-	rs50/st/s6,0-9,0
		◆	10,0 - 41,0					-	rs50/st/s10,0-41,0
	Inner collet steel brass	●	6,0 - 48,0					-	rs50/sb/r6,0-48,0
		■	12,0 - 34,0					-	rs50/sb/v12,0-34,0
		◆	6,0 - 9,0					-	rs50/sb/s6,0-9,0
		◆	10,0 - 41,0					-	rs50/sb/s10,0-41,0
	Inner collet SPH	●	6,0 - 48,0					-	rs50/sph/r6,0-48,0
		■	12,0 - 34,0					-	rs50/sph/v12,0-34,0
		◆	6,0 - 9,0					-	rs50/sph/s6,0-9,0
		◆	10,0 - 41,0					-	rs50/sph/s10,0-41,0
	Inner collet KSB	●	12,0 - 44,5					-	rs50/ksb/r12,0-44,5
		■	12,0 - 31,0					-	rs50/ksb/v12,0-31,0
		◆	12,0 - 41,0					-	rs50/ksb/s12,0-41,0
	Inner collet OXK	●	12,0 - 20,0					-	rs50/oxk/r12,0-20,0
		●	20,1 - 40,0					-	rs50/oxk/r20,1-40,0
		●	40,1 - 46,0					-	rs50/oxk/r40,1-46,0
	Wrench							✓	s50

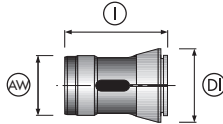
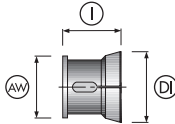
EQUIPMENT FOR MULTI SPINDLE

Schütte

Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
Conventional	Feedfinger			58	62	M58 x 1,5	178,5	-	9406e
	Guide ring for feed tube							-	9406e/f-sd
								-	9406e/f-sf-1
								-	9406e/f-sf
	Support ring for bar guiding system							-	9406e/st-sd
								-	9406e/st-sf

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

Sub spindle

									
Product	Description	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Total length [mm] I	In stock	Order no.	
Pick-off collet	Sextuple slotted		15,0 - 19,0	63	71,6	60	-	9139e/g-sfr15,0-19,0	
			20,0 - 51,0				✓	9139e/g-sfr20,0-51,0	
			12,0 - 35,0				-	9139e/g-sfv12,0-35,0	
							12,0 - 42,0	-	9139e/g-sfs12,0-42,0
			10,0 - 49,0	59	67	76	✓	91397h/gr10,0-49,0	
							12,0 - 34,0	-	91397h/gv12,0-34,0
							12,0 - 41,0	-	91397h/gs12,0-41,0

EQUIPMENT FOR MULTI SPINDLE

Schütte

Schütte S 51 PC. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW [Cucci side loader]			75	98,5	M70 x 1,5 - LH	135,5	✓	1105/0006
						M68 x 1,5 - LH	147,5	-	sp.1247.0005.00
	Basic body ZW [rear loader]							-	sp.1247.0004.00
	Clamping head ZW							-	sb.k.0098
	Pneumatic changing fixture							-	wv.032a.0009.00
	Assembling aid							-	ew.0117.0003.00
Conventional	Collet	●	10,0 - 56,0	75	98,5	M70 x 1,5 - LH	175	-	se.f.0023r10,0-56,0
		■	12,0 - 39,0					-	se.f.0023v12,0-39,0
		⬡	12,0 - 42,0					-	se.f.0023s12,0-42,0
		⬢	43,0 - 47,0					-	se.f.0023s43,0-47,0

Sub spindle

Product	Description	Profile	Clamping Ø [mm]	Outer Ø [mm]	Head Ø [mm]	Total length [mm]	In stock	Order no.
Pick-off collet	Sextuple slotted	●	10,0 - 49,0	59	67	76	✓	91397h/gr10,0-49,0
		■	12,0 - 34,0				-	91397h/gv12,0-34,0
		⬡	12,0 - 41,0				-	91397h/gs12,0-41,0

Tornos Multi Deko 26/6. Main spindle

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread inside S	Total length [mm] I	In stock	Order no.
SPANNTOP ZW	Basic body ZW			46	61	M42 x 1 - LH	109,5	✓	sg32zw
	Clamping head ZW	●	5,0 - 32,0					✓	sk32zwr5,0-32,0
		■	7,0 - 9,0					-	sk32zww7,0-9,0
			10,0 - 22,0					-	sk32zww10,0-22,0
		⬡	7,0 - 9,0					✓	sk32zws7,0-9,0
			10,0 - 27,0					✓	sk32zws10,0-27,0
	Hydraulic changing fixture							✓	wv.0228.0002.00
	Pneumatic pressure converter							-	wv.902d.0002.00
	Assembling aid							✓	nh.442.0010.00
Conventional	Collet	●	6,0 - 28,0	46	60,4	M40 x 1,5 - LH	120	-	9039er6,0-28,0
		■	7,0 - 9,0					-	9039ev7,0-9,0
			10,0 - 18,0					-	9039ev10,0-18,0
		⬡	7,0 - 9,0					-	9039es7,0-9,0
			10,0 - 25,0					-	9039es10,0-25,0

Feed tube

									
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Outer sleeve			35	33	M33 x 1,5	118	✓	9282e/rs
	Inner collet steel	●	4,0 - 25,0					✓	rs25/st/r4,0-25,0
		■	7,0 - 9,0					-	rs25/st/v7,0-9,0
			10,0 - 17,0					-	rs25/st/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/st/s6,0-9,0
			10,0 - 22,0					-	rs25/st/s10,0-22,0
	Inner collet steel brass	●	4,0 - 25,0					-	rs25/sb/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sb/v7,0-9,0
			10,0 - 17,0					-	rs25/sb/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sb/s6,0-9,0
			10,0 - 22,0					-	rs25/sb/s10,0-22,0

EQUIPMENT FOR MULTI SPINDLE

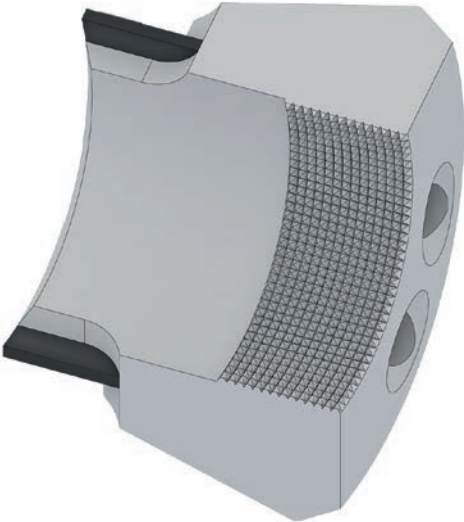
Tornos

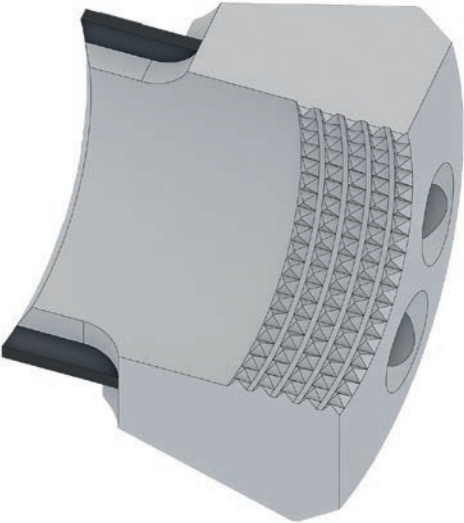
Product variants	Product	Profile	Clamping Ø [mm] BU	Outer Ø [mm] AW	Head Ø [mm] DI	Connecting thread outside T	Total length [mm] I	In stock	Order no.
RS system	Inner collet SPH	●	4,0 - 25,0					-	rs25/sph/r4,0-25,0
		■	7,0 - 9,0					-	rs25/sph/v7,0-9,0
			10,0 - 17,0					-	rs25/sph/v10,0-17,0
		⬡	6,0 - 9,0					-	rs25/sph/s6,0-9,0
			10,0 - 22,0					-	rs25/sph/s10,0-22,0
	Inner collet KSB	●	7,0 - 23,5					-	rs25/ksb/r7,0-23,5
		■	7,0 - 9,0					-	rs25/ksb/v7,0-9,0
			10,0 - 17,0					-	rs25/ksb/v10,0-17,0
		⬡	7,0 - 9,0					-	rs25/ksb/s7,0-9,0
			10,0 - 21,0					-	rs25/ksb/s10,0-21,0
	Inner collet OXK	●	5,0 - 20,0					-	rs25/oxk/r5,0-20,0
			20,1 - 24,0					-	rs25/oxk/r20,1-24,0
	Wrench							✓	s25
Conven- tional	Feedfinger	●	6,0 - 28,0	35	33	M33 x 1,5	118	-	9282er6,0-28,0
		■	7,0 - 9,0					-	9282ev7,0-9,0
			10,0 - 18,0					-	9282ev10,0-18,0
		⬡	7,0 - 9,0					-	9282es7,0-9,0
			10,0 - 22,0					-	9282es10,0-22,0

SPH = special cast coating; KSB = plastic coating; OXK = oxidized ceramic coating

EQUIPMENT FOR MULTI SPINDLE
Tornos

Serrations for increased clamping power

	
HN 01-F	clamping Ø
Multitude of small pointed teeth for round stock	10 – 100
	100,1 – 180

	
HN 01-Z	clamping Ø
Fewer teeth for rolled material and extreme loads	10 – 100
	100,1 – 180

KSB [plastic coating]

Shore hardness 90

It is the ideal coating to prevent scoring for inner feedfingers.

Only partially recommended for parts [under Ø 10 mm].

When large quantities must be machined [using bar feeders], we recommend using a hard coating [OXK, oxidized ceramic coating]. In special situations a plastic coating, called ASG, could also be suitable for clamping collet bores.

ASG [epoxy coating]

Avoid damage to high quality finished surfaces. This coating can be applied on the clamping bores of feedfingers, clamping heads, and collets. The wear is naturally higher than the conventional material selection.

Steel bronze

The inner collet is made of steel bronze. It is wear-resistant, especially with regards to stainless steels, and suitable for preventing tool marking. It is not recommended for soft materials such as brass or aluminum. It can be used for round stock and profiles. Bars should be chamfered.

SPH

The inner collet is made of special cast material. Suitable for preventing feed marks in steels and brass, and aluminum for round stock and profiles. Bars should be chamfered.

WK [hard metal]

Hardness 65 RC, coating thickness 0.02 mm for round stock and profiles. Can be applied to tools in stock and then reapplied several times. The surface finish is like fine sandpaper.

For feedfingers

Can be used as a wear-resistant surface and to prevent tool marking.

For collets

Highly suitable as a wear-resistant coating with good grip in the clamping bores.

OXK [oxidized ceramic coating]

Hardness 90 RC, coating thickness 1.2 mm only for round stock. Cannot be applied to in stock tools. Can only be reapplied when surface finish is completely worn out. The surface is somewhat rough.

For feedfingers

Can be used as a wear-resistant surface to prevent tool marking.

For collets

With low clamping forces in the clamping bore. Suitable as a wear-resistant layer and to prevent seizing.

HM [carbide coating]

It is recommended for rough machining, for example, using, unchamfered bar stock, in inner feedfingers for round and profiled stock.

WKW coating

Is on the clamping taper to prevent »sticking« of the clamping head in the chuck [collets upon request].

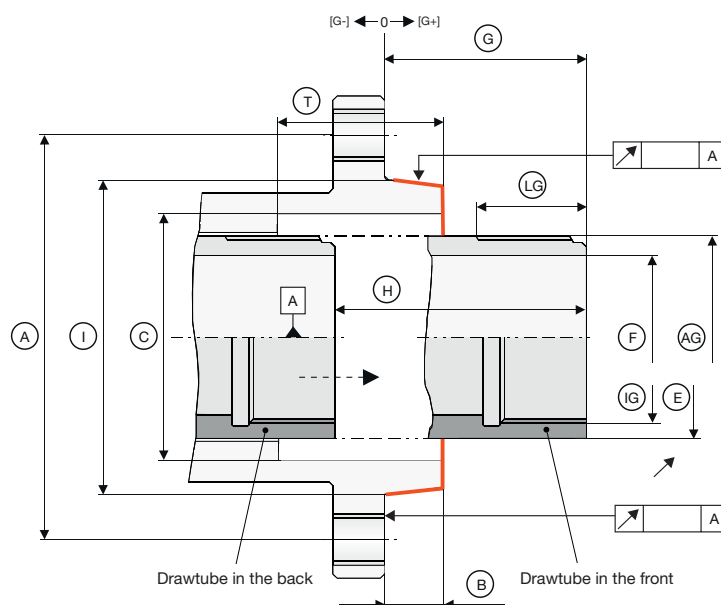
ORDER

Conversion table inches mm

Inch	Inch decimal	mm
< 1"		
1/16"	0.0625"	1.587 mm
1/8"	0.1250"	3.175 mm
3/16"	0.1875"	4.7625 mm
1/4"	0.2500"	6.35 mm
5/16"	0.3125"	7.9375 mm
3/8"	0.3750"	9.525 mm
7/16"	0.4375"	11.1125 mm
1/2"	0.5000"	12.7 mm
9/16"	0.5625"	14.2875 mm
5/8"	0.6250"	15.875 mm
11/16"	0.6875"	17.4625 mm
3/4"	0.7500"	19.05 mm
13/16"	0.8125"	20.6375 mm
7/8"	0.8750"	22.225 mm
15/16"	0.9375"	23.8125 mm
1"	1.0000"	25.4 mm
1.1/16"	1.0625"	26.9875 mm
1.1/8"	1.1250"	28.575 mm
1.3/16"	1.1875"	30.1625 mm
1.1/4"	1.2500"	31.75 mm
1.5/16"	1.3125"	33.3375 mm
1.3/8"	1.3750"	34.925 mm
1.7/16"	1.4375"	36.5125 mm
1.1/2"	1.5000"	38.1 mm
1.9/16"	1.5625"	39.6875 mm
1.5/8"	1.6250"	41.275 mm
11/16"	1.6875"	42.8625 mm
1.3/4"	1.7500"	44.5 mm
1.13/16"	1.8125"	46.0375 mm
1.7/8"	1.8750"	47.625 mm
1.15/16"	1.9375"	49.2125 mm

Inch	Inch decimal	mm
2"	2.0000"	50.8 mm
2.1/16"	2.0625"	52.3875 mm
2.1/8"	2.1250"	53.975 mm
2.3/16"	2.1875"	55.5625 mm
2.1/4"	0.2500"	57.15 mm
2.5/16"	2.3125"	58.7375 mm
2.3/8"	2.3750"	60.325 mm
2.7/16"	2.4375"	61.9125 mm
2.1/2"	2.5000"	63.5 mm
2.9/16"	2.5625"	65.0875 mm
2.5/8"	2.6250"	66.675 mm
2.11/16"	2.6875"	68.2625 mm
2.3/4"	2.7500"	69.85 mm
2.13/16"	2.8125"	71.4375 mm
2.7/8"	2.8750"	73.025 mm
2.15/16"	2.9375"	74.6125 mm
3"	3.0000"	76.2 mm
3.1/16"	3.0625"	77.7875 mm
3.1/8"	3.1250"	79.375 mm
3.3/16"	3.1875"	80.9625 mm
3.1/4"	3.2500"	82.55 mm
3.5/16"	3.3125"	84.1375 mm
3.3/8"	3.3750"	85.725 mm
3.7/16"	3.4375"	87.3125 mm
3.1/2"	3.5000"	88.9 mm
3.9/16"	3.5625"	90.4875 mm
3.5/8"	3.6250"	92.075 mm
3.11/16"	3.6875"	93.6625 mm
3.3/4"	3.7500"	95.25 mm
3.13/16"	3.8125"	95.8375 mm
3.7/8"	3.8750"	98.425 mm
3.15/16"	3.9375"	100.0125 mm
4"	4.0000"	101.6 mm

Short taper. Spindle data

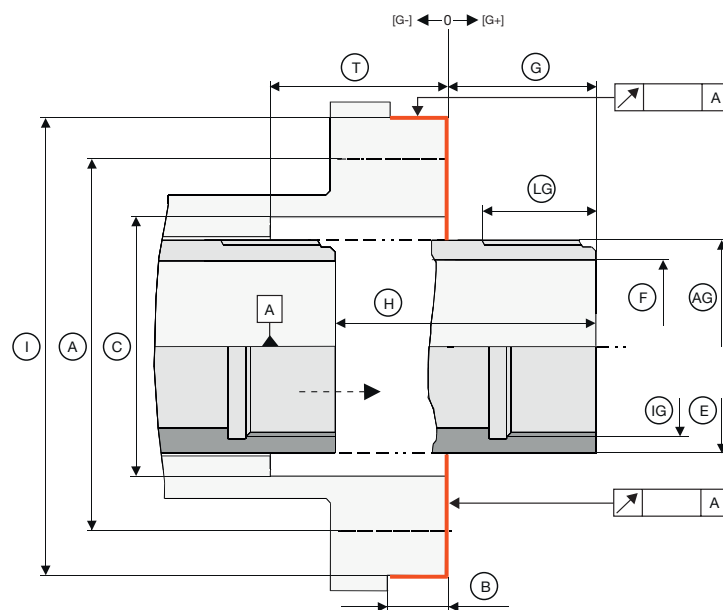


Spindle nose		Size
Bolt hole circle	A	mm
Amount of threads		x M
Height of spindle nose	B	mm
Spindle bore Ø	C	mm
Outside thread or Inside thread	AG	x M
Thread length	LG	mm
Drawtube O.D. Ø	E	mm
Drawtube I.D. Ø	F	mm
Front position drawtube [-/+]	G	mm
Stroke [Clamping cylinder]	H	mm
Spindle nose Ø	I	mm
Spindle bore depth	T	mm

Offer- / Order-No.:	
Company address / Name:	
Machine type:	

Fax +49 7144.18826

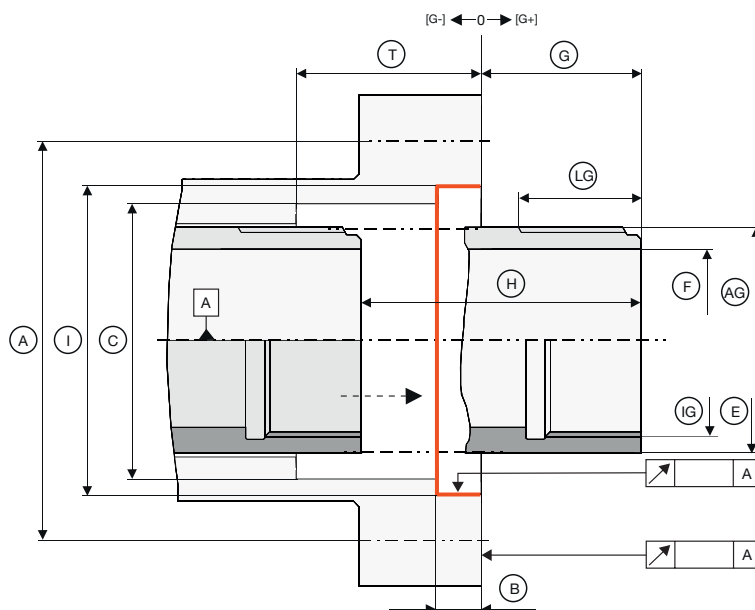
Outside fitting. Spindle data



Spindle nose		Size
Bolt hole circle	A	mm
Amount of threads		x M
Height of spindle nose	B	mm
Spindle bore Ø	C	mm
Outside thread or inside thread	AG	x M
Thread length	LG	mm
Drawtube O.D. Ø	E	mm
Drawtube I.D. Ø	F	mm
Front position drawtube [-/+]	G	mm
Stroke [Clamping cylinder]	H	mm
Spindle nose Ø	I	mm
Spindle bore depth	T	mm

Offer- / Order-No.:	
Company address / Name:	
Machine type:	

Inside fitting. Spindle data

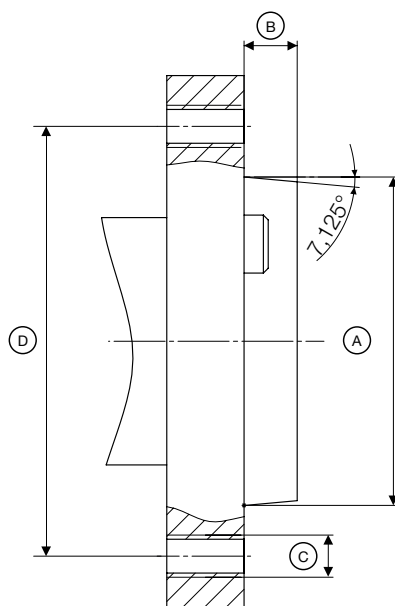


Spindle nose		Size
Bolt hole circle	A	mm
Amount of threads		x M
Height of spindle nose	B	mm
Spindle bore Ø	C	mm
Outside thread or inside thread	AG IG	x M
Thread length	LG	mm
Drawtube O.D. Ø	E	mm
Drawtube I.D. Ø	F	mm
Front position drawtube [-/+]	G	mm
Stroke [Clamping cylinder]	H	mm
Spindle nose Ø	I	mm
Spindle bore depth	T	mm

Offer- / Order-No.:	
Company address / Name:	
Machine type:	

ORDER Spindle Data

Connection machine data.



Standard spindle: DIN 55026

Short taper size	A Spindle nose Ø [mm]	B Spindle nose height [mm]	C Thread	D Bolt hole circle [mm]
4	63.521	11,0	11xM10	82.6
5	82.573	13,0	11xM10	104.8
6	106.385	14,0	11xM12	133.4
8	139.731	16,0	11xM16	171.4
11	196.883	18,0	11xM20	235.0
15	285.791	19,0	12xM24	330.2

Standard spindle: DIN ISO 702-1 and ASA B5.9 A2, B2

Short taper size	A Spindle nose Ø [mm]	B Spindle nose height [mm]	C Thread	D Bolt hole circle [mm]
4	63.525	11,1	11xM10 11 x 7/16-14 UNC	82.6
5	82.575	12,7	11xM10 11 x 7/16-14 UNC	104.8
6	106.390	14,3	11xM12 11 x 1/2-13 UNC	133.4
8	139.735	15,9	11xM16 11 x 5/8-11 UNC	171.4
11	196.885	17,5	11xM20 11 x 3/4-10 UNC	235.0
15	285.800	19,0	12xM24 12 x 7/8-9 UNC	330.2

Fax +49 7144.18826

Complete, detach and send

First name/Last name

Company/Department

Street/No.

ZIP Code/City

Phone

Fax

E-mail

We will use your data to process your inquiry. We will also use that data to inform you about our products and services in writing. If you do not wish to be informed, please let us know by writing to HAINBUCH GMBH, SPANNENDE TECHNIK, Postfach 1262, 71667 Marbach, Germany or sales@hainbuch.de.

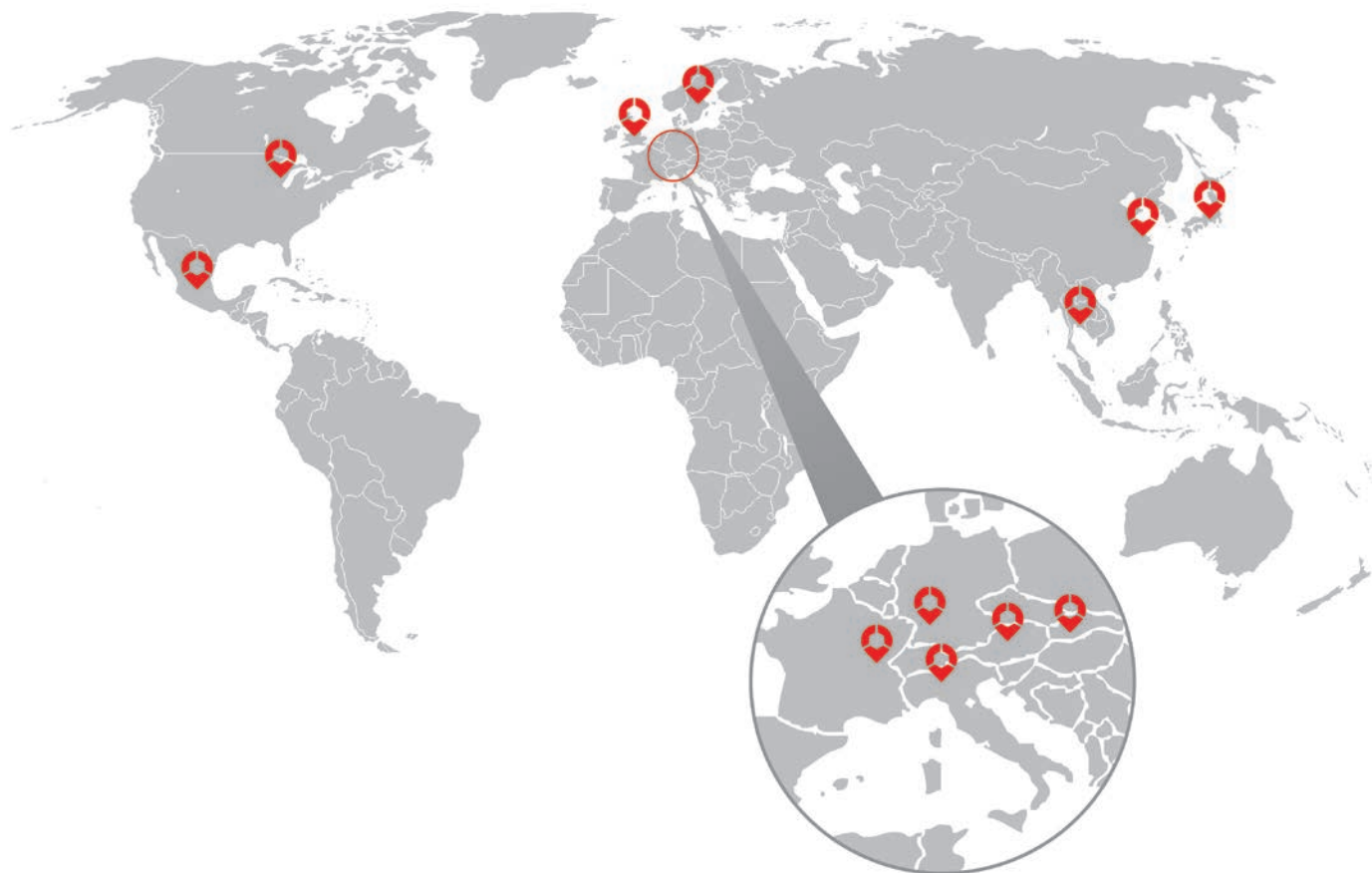
Quantity	Order No.	Product

DateStamp and signature

CONTACT

HAINBUCH worldwide

- 12 international subsidiaries
- Worldwide agencies: approximately 40



Asia

China  **HAINBUCH Shanghai Co. Ltd.**
WORKHOLDING TECHNOLOGY
www.hainbuch.cn

India **M³la Sales Corporation**
www.mla-sales.com

Indonesia **PT. STAHL ARBEIT**
www.stahl-arbeit.com

Israel **MTM Ltd.**
www.mtm.co.il

M.K. Sales Ltd.
www.mk-sales.com

Japan  **HAINBUCH Japan K.K.**
WORKHOLDING SOLUTIONS
www.hainbuch.jp

Korea **Kims International Co., Ltd.**
www.kims-inter.com

K2TECH Co., Ltd.
www.k2tech.co.kr

Malaysia, Singapore **Jebsen & Jessen Technology [S] Pte Ltd.**
Industrial Services Division
www.jjsea.com

Taiwan **GSTC Technology Co., Ltd.**
www.gstctech.com.tw

Thailand  **HAINBUCH [Thailand] Co. Ltd.**
WORKHOLDING SOLUTIONS
www.hainbuch.co.th

Jutawat Solutions Co. Ltd.
www.jutawatsolutions.co.th

Vietnam **WOLFRAM INDUSTRIAL SERVICE JSC**
www.wolfram.vn

Australia

Australia Romheld Automation Pty Ltd.
www.romheld.com.au

Europe

Austria  HAINBUCH in Austria GmbH
SPANNENDE TECHNIK
www.hainbuch.at

Belgium BIS Technics bvba/sprl
www.bistechnics.com

Bulgaria Aton MI Ltd
www.smartcnc.eu

Czech Republic TMC CR s.r.o.
www.tmc-cr.cz

Denmark Jørn B. Herringe A/S
www.jbh-tools.dk

Estonia
Latvia
Lithuania DV-Tools OÜ
www.dv-tools.ee

Finland Oy Maantera Ab
www.maantera.fi

France  HAINBUCH France Sarl
TECHNIQUE DE SERRAGE
www.hainbuch.fr

Germany  HAINBUCH GmbH
SPANNENDE TECHNIK
www.hainbuch.com

Great Britain  HAINBUCH UK Ltd.
WORKHOLDING TECHNOLOGY
www.hainbuch.co.uk

Greece CNCMECHANICS
www.cncmechanics.gr

Hungary GIMEX Hydraulik GmbH
www.gimex.hu

Ireland  HAINBUCH UK Ltd.
WORKHOLDING TECHNOLOGY
www.hainbuch.co.uk

Italy  HAINBUCH Italia srl
TECNICA DEL SERRAGGIO
www.hainbuch.it

Netherlands BIS Specials
[Brandenburg Industry Service Dongen B.V.]
www.bisspecials.com

Norway BERGSLI Metallmaskiner AS
www.bergslimetallmaskiner.no

Poland ARCO Andrzej Rudenko
www.arcotools.pl

BIM Sp.z.o.o.
www.bim-polska.pl

Romania Banatech srl – connecting technologies
www.banatech.ro

Representative for
Moldova, Muntenia,
Dobrogea and Oltenia
Romsan
www.romsan.eu

Russia ROSNA Engineering NT LLC
www.rosna.spb.ru

UNIMATIC Ltd.
www.unimatic.ru

KTC RU Ltd.
www.ktc-kazan.ru

Slovakia TNS s.r.o.
www.tnssro.eu

TMC CR s.r.o.
www.tmc-cr.cz

Slovenia Elmetool d.o.o.
www.elmetool.si

Spain
Portugal ATM S.L.
www.atmbarcelona.com

Sweden  HAINBUCH Svenska AB
SPÄNNANDE TEKNIK
www.hainbuch.se

Switzerland Utilis AG
Präzisionswerkzeuge
www.utilis.com

Turkey Hidkom
Organize Sanayi Bölgesi
www.hidkom.com

Northamerica

Canada  HAINBUCH America Corp.
WORKHOLDING TECHNOLOGY
www.hainbuchamerica.com

Representative for
Ontario and Québec J. Winkel & Associates Inc.
www.winkel.ca

Mexico  HAINBUCH México
TECNOLOGÍA EN SUJECCIÓN
www.hainbuch.mx

USA  HAINBUCH America Corp.
WORKHOLDING TECHNOLOGY
www.hainbuchamerica.com

Southamerica

Brazil Sanposs Tecnologia
Suprimentos e Consultoria Internacional Ltda.
www.sanposs.com.br

Southafrica

Southafrica Retecon [PTY] Ltd.
www.retecon.co.za

CNC Support
www.cncsupport.co.za



Actuating torque	Torque with which the clamping device is actuated, e.g. with a torque wrench.
Base end-stop	Workpiece end-stop within the chuck.
Centrifugal force	Occurs at rotation, with a jaw chuck for example. The jaws are forced outward and the clamping force decreases. TOPlus and SPANNTOP on the other hand enclose the clamping head with their chuck body and therefore are virtually loss-free.
Clamped position	Defined position of the clamping element, in which the nominal diameter is clamped, if the workpiece does not have any tolerance deviation.
Clamping force, radial [frad]	Force with which the workpiece is radially clamped by the clamping device.
Clamping head protrusion length	Front nose extension of the clamping head that projects beyond the face of the chuck.
Clamping of finished material	Workpiece that is clamped on a finish-machined surface.
Clamping of raw material	Workpiece that is clamped on an unmachined surface.
Clamping range	Indicates the total range of the clamping diameters that can be covered with the respective size of the clamping device. Multiple clamping elements are required to use the entire range.

Clamping reserve in Ø	Additional clamping distance of the clamping device for spanning negative workpiece tolerances.
Concentric precision	Deviation [difference between the greatest and lowest dial gauge indication] of a test piece at rotation relative to the reference axis.
Draw force / compression force axial [fax]	Force, with which the clamping device is actuated, e.g. by a clamping cylinder.
Drawtube position	Dimensions of the front edge of the drawtube inside/outside of the machine spindle to the bolt-on surface of the clamping device on the spindle.
Holding power	The force with which the workpiece is clamped in the clamping device.
RD	Round geometry, e.g. clamping head outer geometry SPANNTOP.
Release stroke in Ø	Distance of the clamping element from the theoretical clamping position to the release position, in which the workpiece can be removed or the clamping element can be changed.
Repeatability	Deviation that can be measured as the spread of two successive assembly and disassembly processes. It cannot be corrected manually, it is intrinsic.
Rigidity	Resistance of the clamping device against plastic deformation due to force or a moment.
SE	Hexagonal geography e.g. clamping head outer geometry TOPlus.
Span / recommended workpiece tolerance	Clamping range, in which the workpiece tolerance should be.
Spindle nose	Standardized interface between clamping device and machine spindle.
Torsional safety	Positioning of the clamping element in the clamping device.
Vulcanization	Procedure for producing high-quality rubber-steel combinations. It is used with our clamping heads, for example.



HAINBUCH GMBH · SPANNENDE TECHNIK

Postfach 12 62 · 71667 Marbach / Erdmannhäuser Straße 57 · 71672 Marbach · Germany

Tel. +49 7144.907-0 · Fax +49 7144.18826 · sales@hainbuch.de · www.hainbuch.com