

MODULAR QUICK CHANGE SYSTEMS

BENZ Solidfix® | BENZ CAPTO™

Tooling Technology

Metal | Wood | Composites machining



BENZ TOOLING

At BENZ Tooling our maxim „Innovation. Precision. Passion.“ is far more than just a marketing formula.

Rather, it describes the core goals of our business while also outlining the reasons why we have been able to compete in the market successfully with tool systems for metal machining, woodworking and composite material processing for more than 75 years.

Innovations are important to us. But we also recognize that they can be successful only if they precisely meet the needs of our customers.

This is why we have maintained a strict focus on our customers for many years. We ensure that our developments and innovations simplify your production processes and lower your manufacturing costs – and ultimately improve your competitiveness as a result.

INNOVATION. With an eye on what is currently within the bounds of feasibility, we strive to always make use of innovative technologies. And we keep in close contact with our customers to ensure we already know today what our customers will need tomorrow. Technical progress is ingrained into our very identity. This means you can always find smart, detailed solutions in our product range.

PRECISION. We ensure our products have the highest level of precision and reliability. This is vital in our industry. Our customers also rely on absolute precision during production – and need to be able to put all their trust in us. But production is not the only area where we strive for precision. We also seek minimal tolerances and maximum accuracy in other areas as well – from development to sales to delivery.

PASSION. BENZ precision products are composed of a vast array of different individual parts. They are the result of great care that starts in the design phase and even includes the selection of raw materials. Primarily, however, they are the expression of our employee’s experience and passion to do good work. We are tool specialists through and through and we are willing to move mountains to reach the perfect solution and to ensure the satisfaction of our customers.

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BENZ CAPTO™

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SYSTEM BENEFITS

BENZ SOLIDFIX® | BENZ CAPTO™

AN INVESTMENT WORTH MAKING

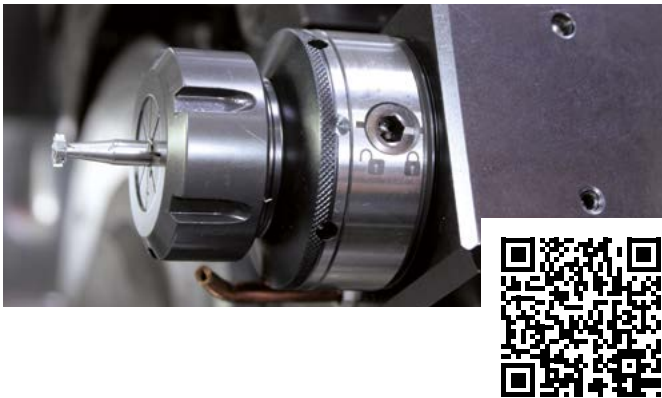
Beside higher rpms and higher accuracy the reduction of setup and machine downtimes is the main focus in the manufacturing industry. A crucial component is the integration of a modular tool interface.

The basic principle and key advantage is that the tool adapters can be preset outside the machine during the machining process. The preset adapters are ready-to-use and can be changed very quickly on the basic unit once needed.

As a customer, you enhance the operating times of your machine and save costs at the same time. Thanks to the modular design, only the adapters need to be changed – the basic tool remains on the machine. Additionally the purchase of extra units can be reduced to a minimum.

Using BENZ Solidfix® and BENZ CAPTO™ you benefit from two of the most advanced, sophisticated and efficient modular quick change sytems in the world.

BENZ SOLIDFIX®



BENZ CAPTO™



PERFORMANCE. PRECISION. HANDLING. SAFETY.



Minimize setup & non-productive time

increase productivity by changing the preset tool within seconds



Low investment overhead

angle head remains on the machine and only the adapter needs to be changed; fewer angle heads are needed overall



Easy handling

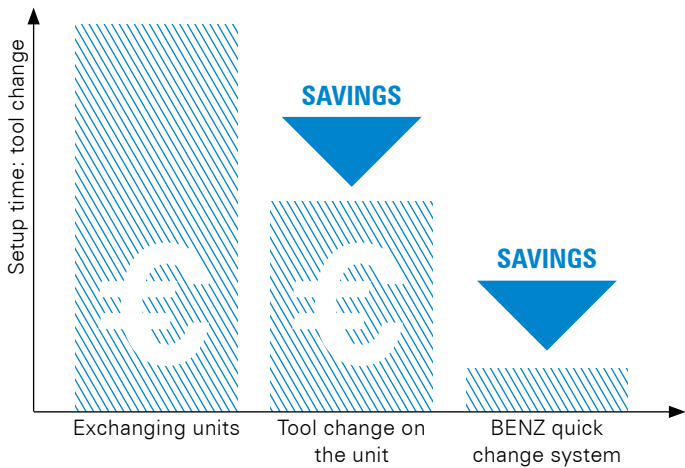
one-hand operation without a special tool



Operating safety

cannot come off accidentally

REDUCE SETUP TIME AND SAVE COSTS WITH BENZ QUICK CHANGE SYSTEMS



A tool change, during which the entire unit is removed from the machine, results in high machine downtimes. By changing the cutting tool directly on the unit, setup costs can already be reduced by 40%.

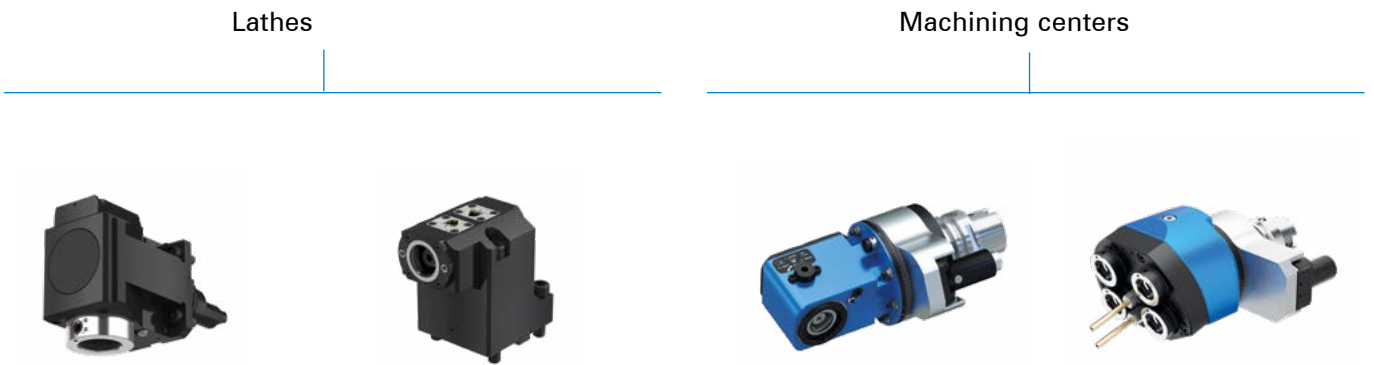
This savings can be extended with modular quick-change systems. Here the cutting tool is measured outside the machine in the presetting device. Therefore replacing the adapter only requires a few seconds.

You save 90% of your original setup costs! Additionally you reduce your reject rate as the first part is already a good part.

CAN BE USED ON ALL COMMON MACHINES

Are you looking for a quick change system that can be used in all areas of your production? The modular quick change systems made by BENZ Tooling can be used with Live Tools as well as angle heads, even multi-spindle heads.

BENZ Solidfix® and BENZ CAPTO™ are not only suited for large batch manufacturing but are especially cost effective when machines have to be re-tooled frequently due to manufacture of small lots or specialty parts. You save time and money.



BENZ SOLIDFIX®

userfriendly, stable and very precise

PRODUCT BENEFITS, SYSTEM DESIGN, TOOL CHANGE

08

ADAPTER



COLLET CHUCK
8° Type ER

12



WELDON
for parallel shanks DIN1835B

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WHISTLE-NOTCH
for parallel shanks DIN1835E

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MILLING ARBOR

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SAW BLADE HOLDER
screwed
on arbor

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SHRINK FIT CHUCK

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SCREW-IN MILL CUTTER
Basic Holder
Haimer

16



HYDRO CLAMPING CHUCK

16



SQUARE SHOULDER
Plunge mill cutter

17



TAPPING CHUCK
Emuge

17

ADJUSTMENT AND ASSEMBLY AID



MASTER SHANKS
VDI DIN 69880
HSK Form A ISO 12164
SK DIN 69871 AD
CAPTO

18



MOUNTING BLOCK

19

MISCELLANEOUS



TEST MANDREL

20



REDUCING SLEEVE

20



CLOSING PLUG

20



BLANK

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MODUALR QUICK CHANGE SYSTEM

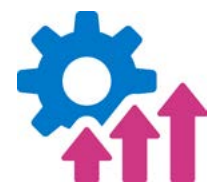
BENZ SOLIDFIX®

USER FRIENDLY, STABLE AND VERY PRECISE

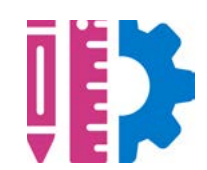
By combining taper concentricity with no backlash with an extremely large planar surface, combined with high torque, BENZ Solidfix® offers a maximum in stability and rigidity, which is even capable of withstanding the demands of milling. The high torque transmission and the highest possible rpms also stress the effectiveness.

This is supported by a special clamping mechanism which works centrally, without lateral forces, which in combination with the compact, highly precise components used achieves optimal values for concentricity, rigidity and accuracy in repeatability. Because of its compact design the system is ideal for tools with internal cooling.

PRODUCT BENEFITS



- Performances**
- + compact design
 - + arge planar contact surface
 - + high rigidity (milling capable)
 - + high transmission of torque
 - + high speed (balancing-neutral design)



- Precision**
- + high concentricity: < 5 µm at 30 mm
 - + high repeatability
 - + central, cross-force-free transmission of forces
 - + play-free centering of taper

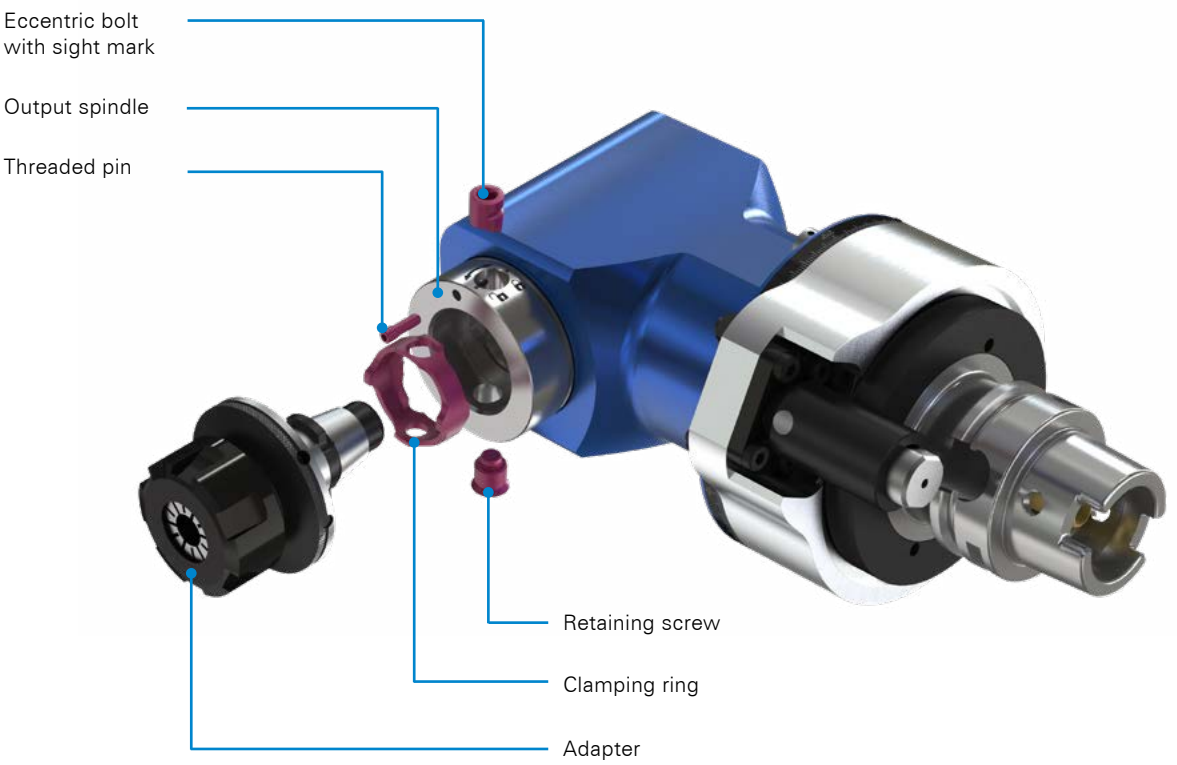


- Handling**
- + quick change: change in < 20 seconds
 - + one-hand operation
 - + simple handling without the need of special tools
 - + resistance controlled clamping (180°)
 - > no need to observe torque
 - + ejection feature

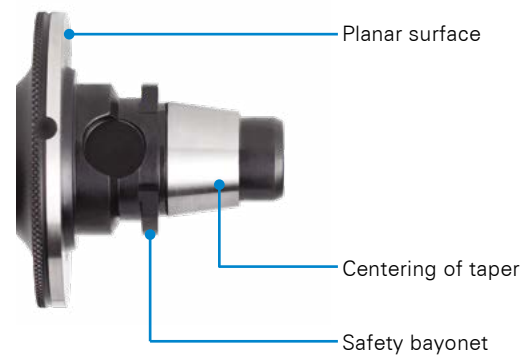


- Safety**
- + securing device via safety bayonet
 - + self-locking clamp function
 - + avoidance of operating errors
 - + fullfills machinery directive 2006/42/EG

SYSTEM DESIGN



ADAPTER



SYSTEM OVERVIEW

Technical data		
Size	T* [Nm]	Size Inbus wrench
S1	25	SW 3
S2	50	SW 4
S3	100	SW 5
S4	200	SW 6
S5	400	SW 6

*transmittable tourque of interface



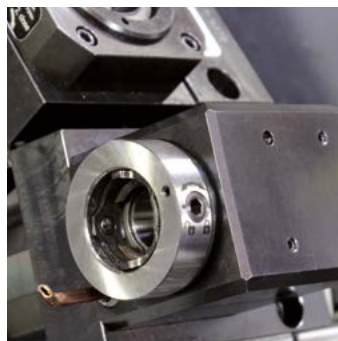
IC-capable



MQL-cabable
Adapter on request

TOOL CHANGE

BENZ SOLIDFIX®



Step 1: get used to the system

In order to change an adapter in the angle head / live tool the operation unit needs to be in the loosed position.



Loose position:
marking is sitting on
open lock

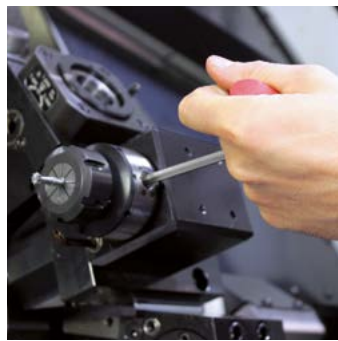


Clamped position:
marking is sitting on
closed lock



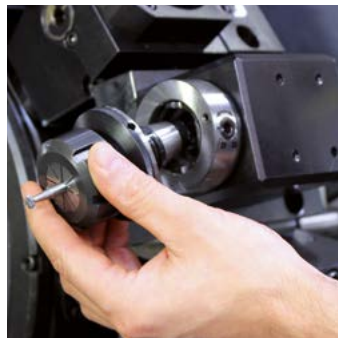
Step 2: inserting the adapter

Insert the adapter into the tool spindle. Turn the adapter by 90°. The adapter cannot fall out due to a special safety mechanism which holds the tool in place, even if not clamped yet. This prevents injuries during setup of the tools in the machine.



Step 3: resistance controlled clamping

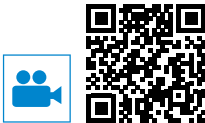
The modular quick change system BENZ Solidfix® can be operated with just one hand without any special tools – a standard hex key is sufficient. By simply turning the clamping screw 180 degrees (up to its end position) the tool adapter (meaning the tool) is clamped.



Step 4: loosening and changing the adapter

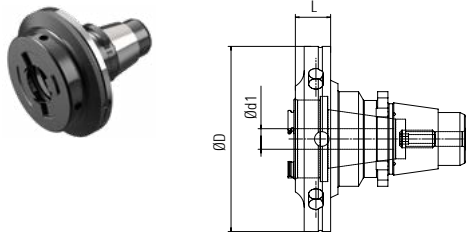
After loosening the locking mechanism with a hex key and turning the tool adapter 90 degrees (a bayonet style safety mechanism prevents the tool from falling out after opening the lock) the adapter can be removed.

A specialized eject feature ensures that the adapter does not get stuck in the spindle. The tool change can be done in less than 20 seconds.



ADAPTER BENZ SOLIDFIX®

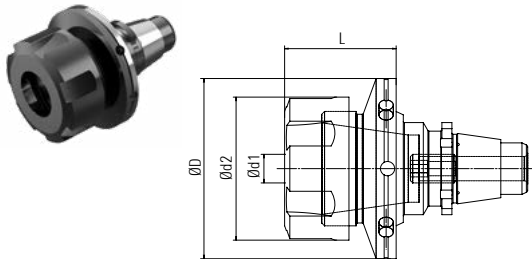
COLLET CHUCK 8° TYPE ER | INTERNAL CLAMPING NUT

		Technical data							
Model	Drawing	Size	Type	ØD [mm]	Ød1 [mm]	L [mm]	Product center	Availa-bility	Order number
		S1	ER11	32	1-7	9	●	●	691.130E1A09
		S2	ER16	40	1-10	13	●	●	692.130E3A13
		S3	ER16	50	1-10	10	●	●	693.130E3A10
		S3	ER20	50	2-13	14	●	●	693.130E4A14
		S4	ER16	63	1-10	11	●	●	694.130E3A11
		S4	ER20	63	2-13	12	●	●	694.130E4A12
		S4	ER25	63	2-16	20	●	●	694.130E5A20
		S5	ER32	75	2-20	22	●	●	695.130E6A22
collet chuck not included									

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Accessories page 32

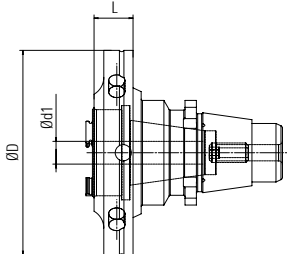
COLLET CHUCK 8° TYPE ER | EXTERNAL CLAMPING NUT

		Technical data								
Model	Drawing	Size	Type	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa- bility	Order number
		S1	ER11M	32	1-7	16	20	●	●	691.130M120
		S1	ER16M	32	1-10	22	30	●	●	691.130M230
		S2	ER20M	40	2-13	28	31	●	●	692.130M331
		S2	ER20	40	2-13	34	31	●	●	692.130E431
		S3	ER16M	50	1-10	22	32	●	●	693.130M232
		S3	ER20	50	2-13	34	30	●	●	693.130E430
		S3	ER25	50	2-16	42	34	●	●	693.130E534
		S3	ER32	50	2-20	50	48	●	●	693.130E648
		S4	ER16M	63	1-10	22	30	●	●	694.130M232
		S4	ER25	63	2-16	42	35	●	●	694.130E535
		S4	ER32	63	2-20	50	39	●	●	694.130E639
		S5	ER32	75	2-20	50	40	●	●	695.130E640
		S5	ER40	75	3-26	63	46	●	●	695.130E746
	collet chuck not included									

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Accessories page 32

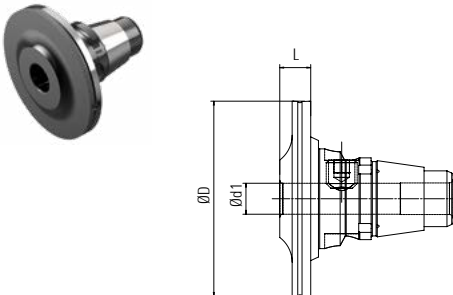
ULTRA-PRECISION COLLET CHUCK 8° TYPE ER | INTERNAL CLAMPING NUT

		Technical data							
Model	Drawing	Size	Type	ØD [mm]	Ød1 [mm]	L [mm]	Product center	Availa- bility	Order number
		S1	ER 16M	32	1-10	30	●	○	691.130M230UP
		S2	ER 16	40	1-10	13	●	○	692.130E3A13UP
		S3	ER 20	50	2-13	14	●	○	693.130E4A14UP
		S4	ER 25	63	2-16	20	●	○	694.130E5A20UP
		S5	ER 32	75	2-20	22	●	○	695.130E6A22UP
UP-collet chucks: differ versus standard collet chucks by being extremely precise for high speed machining									
									 Accessories page 32

Accessories page 32

● PC Metal ● PC Wood ● on stock ○ on request

WELDON FOR PARALLEL SHANKS DIN 1835 B | SHORT DESIGN

Model	Drawing	Technical data						Order number
		Size	ØD [mm]	Ød1 [mm]	L [mm]	Product center	Availa- bility	
		S1	32	3	4	●	○	691.1400304
		S1	32	4	5	●	○	691.1400405
		S2	40	4	5	●	○	692.1400405
		S2	40	6	7	●	○	692.1400607
		S3	50	6	6	●	●	693.1400606
		S3	50	8	8	●	●	693.1400808
		S4	63	6	7	●	●	694.1400607
		S4	63	8	8	●	●	694.1400808
		S4	63	10	10	●	●	694.1401010
		S4	63	12	12	●	●	694.1401212
		S5	75	6	10	●	●	695.1400610
		S5	75	8	10	●	●	695.1400810
		S5	75	10	10	●	●	695.1401010
		S5	75	12	10	●	●	695.1401210
		S5	75	14	12	●	○	695.1401412
		S5	75	16	12	●	●	695.1401612

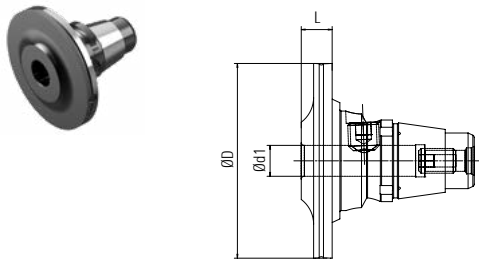
WELDON FOR PARALLEL SHANKS DIN 1835 B | STANDARD DESIGN

Model	Drawing	Technical data							Order number
		Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa-bility	
		S1	32	6	25	24	●	○	691.1400624
		S2	40	8	28	25	●	○	692.1400825
		S3	50	10	35	28	●	●	693.1401028
		S3	50	12	42	32	●	●	693.1401232
		S3	50	16	48	35	●	●	693.1401635
		S4	63	14	48	32	●	●	694.1401432
		S4	63	16	48	35	●	●	694.1401635
		S4	63	18	50	35	●	○	694.1401835
		S4	63	20	52	38	●	●	694.1402038
		S4	63	25	63	52	●	○	694.1402552
		S5	75	18	50	36	●	○	695.1401836
		S5	75	20	52	38	●	●	695.1402038
		S5	75	25	65	40	●	●	695.1402540

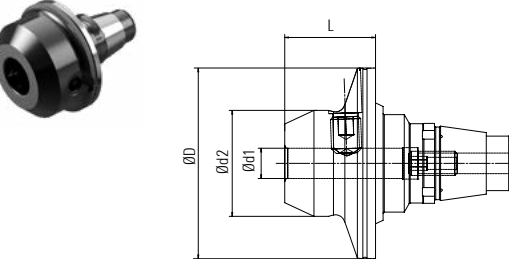
ADAPTER BENZ SOLIDFIX®

● PC Metal ● PC Wood ● on stock ○ on request

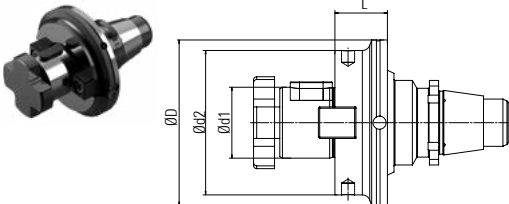
WHISTLE NOTCH PARALLEL SHANKS DIN 1835 E | SHORT DESIGN

		Technical data							
Model	Drawing	Size	ØD [mm]	Ød1 [mm]	L [mm]	Product center	Availa- bility	Order number	
		S2	40	6	9	●	○	692.1410609	
		S3	50	6	6	●	○	693.1410606	
		S3	50	8	8	●	○	693.1410808	
		S4	63	6	7	●	○	694.1410607	
		S4	63	8	8	●	○	694.1410808	
		S4	63	10	10	●	○	694.1411010	
		S4	63	12	12	●	○	694.1411212	
		S5	75	6	10	●	○	695.1410610	
		S5	75	8	10	●	○	695.1410810	
		S5	75	10	10	●	○	695.1411010	
		S5	75	12	10	●	○	695.1411210	
		S5	75	14	12	●	○	695.1411412	
		S5	75	16	12	●	○	695.1411612	

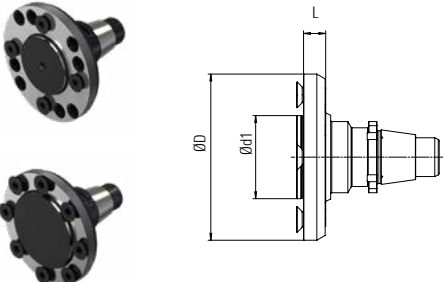
WHISTLE NOTCH FOR PARALLEL SHANKS DIN 1835 E | STANDARD DESIGN

Model	Drawing	Technical data					Product center	Availa- bility	Order number
		Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]			
		S1	32	6	25	24	●	○	691.1410624
		S2	40	8	28	25	●	○	692.1410825
		S3	50	10	35	28	●	○	693.1411028
		S3	50	12	42	32	●	○	693.1411232
		S3	50	16	48	35	●	○	693.1411635
		S4	63	14	48	32	●	○	694.1411432
		S4	63	16	48	35	●	○	694.1411635
		S4	63	18	50	35	●	○	694.1411835
		S4	63	20	52	38	●	○	694.1412038
		S5	75	18	50	36	●	○	695.1411836
		S5	75	20	52	38	●	○	695.1412038
		S5	75	25	65	40	●	○	695.1412540

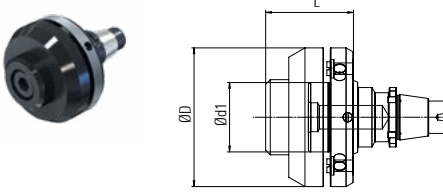
MILLING ARBOR

Model	Drawing	Technical data					Product center	Availa- bility	Order number
		Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]			
		S2	40	16	34	11	●	●	692.2311611
		S3	50	16	34	12	●	○	693.2311612
		S3	50	22	48	14	●	●	693.2312214
		S4	63	16	34	14	●	○	694.2311614
		S4	63	22	48	14	●	●	694.2312214
		S4	63	27	55	14	●	●	694.2312714
		S5	75	22	48	12	●	○	695.2312212
		S5	75	27	55	14	●	●	695.2312714
		S5	75	32	62	15	●	○	695.2313215

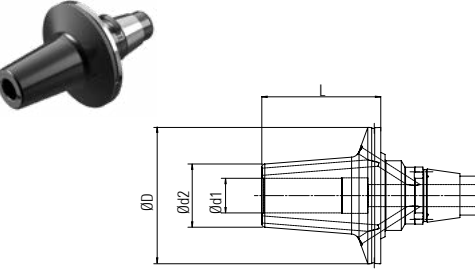
SAW BLADE HOLDER | SCREWED

Model	Drawing	Technical data					Product center	Availa- bility	Order number
		Size	ØTK/M	ØD [mm]	Ød1 [mm]	L [mm]			
		S3	45 / 5 48 / 5 52 / 5	60	30	8	●	●	693.04030S0561
		S3	52 / 5	60	40	8	●	○	693.04040S0414

SAW BLADE HOLDER | ON ARBOR

Model	Drawing	Technical data					Product center	Availa- bility	Order number
		Size	Length [mm]	ØD [mm]	Ød1 [mm]	L [mm]			
		S3	1-6	60	30	38	●	●	693.040SD38

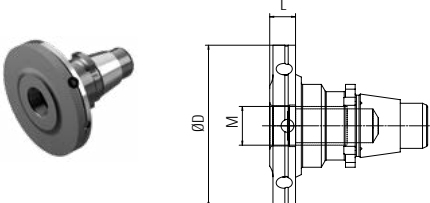
SHRINK FIT CHUCK | ONE-PIECE

Model	Drawing	Technical data					Product center	Availa- bility	Order number
		Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]			
		S3	50	6	21	45	●	●	693.1520645KB
		S3	50	8	21	45	●	●	693.1520845KB
		S3	50	10	24	50	●	●	693.1521050KB
		S3	50	12	24	55	●	●	693.1521255KB
		S4	63	6	21	50	●	●	694.1520650KB
		S4	63	8	21	50	●	●	694.1520850KB
		S4	63	10	24	50	●	●	694.1521050KB
		S4	63	12	24	55	●	○	694.1521255KB
		S4	63	14	29	55	●	○	694.1521455KB
		S4	63	16	29	55	●	●	694.1521655KB
		S4	63	20	33	60	●	○	694.1522060KB
		S5	75	6	21	55	●	○	695.1520655KB
		S5	75	8	21	55	●	○	695.1520855KB
		S5	75	10	24	55	●	○	695.1521055KB
		S5	75	12	24	60	●	○	695.1521260KB
		S5	75	20	33	65	●	○	695.1522065KB
		S5	75	25	44	70	●	○	695.1522570KB

ADAPTER

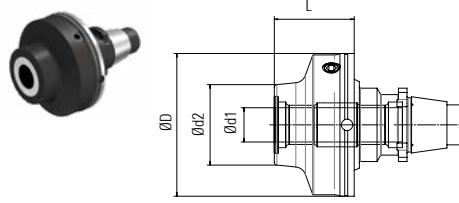
BENZ SOLIDFIX®

SCREW-IN MILL CUTTER – BASE HOLDER | SHORT DESIGN

Model	Drawing	Technical data						Order number
		Size	ØD [mm]	M [mm]	L [mm]	Product center	Availa-bility	
		S3	50	M10	8	●	○	693.2861008
		S3	50	M12	8	●	○	693.2861208
		S4	63	M12	9	●	○	694.2861209
		S4	63	M16	9	●	○	694.2861609
		S5	75	M12	10	●	○	695.2861210
		S5	75	M16	10	●	○	695.2861610

base holder fits all standard threaded arbors (e.g. Seco, Kennametal)

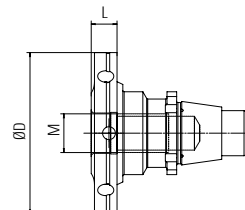
HYDRO CLAMPING CHUCK | ONE-PIECE

		Technical data								
Model	Drawing	Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa- bility	Order number	
		S3	50	6	28	18	●	●	693.1580618	
		S3	50	10	28	23	●	●	693.1581023	
		S3	50	12	28	28	●	●	693.1581228	
		S4	63	06	28	20	●	●	694.1580620	
		S4	63	12	28	28	●	●	694.1581228	
		S4	63	20	28	42	●	●	694.1582042	
		S5	75	16	38	30	●	○	695.1581630	
		S5	75	20	38	30	●	●	695.1582030	

two-part version with Hydrostar-insert on request

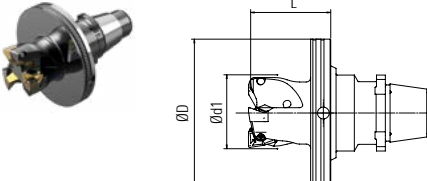
● PC Metal ● PC Wood ● on stock ○ on request

SCREW-IN MILL CUTTER – BASE HOLDER | SHORT DESIGN – HAIMER DUOLOCK

		Technical data									
Model	Drawing	BENZ Solidfix	Haimer Duolock	ØD [mm]	M [mm]	L [mm]	Product center	Availa- bility	BENZ Order number	HAIMER Order number	
		S3	DL10	50	M10	8	●	○	693.2871008	75.SFS3.DL10.080	
		S3	DL12	50	M12	8	●	○	693.2871208	75.SFS3.DL12.080	
		S3	DL16	50	M16	8	●	○	693.2871608	75.SFS3.DL16.080	
		S4	DL12	63	M12	9	●	○	694.2871209	75.SFS4.DL12.080	
		S4	DL16	63	M16	9	●	○	694.2871609	75.SFS4.DL16.080	
		S4	DL20	63	M20	9	●	○	694.2872009	75.SFS4.DL20.080	
		S5	DL16	75	M16	10	●	○	695.2871610	75.SFS5.DL16.080	
		S5	DL20	75	M20	10	●	○	695.2872010	75.SFS5.DL20.080	
		S5	DL25	75	M25	10	●	○	695.2872510	75.SFS5.DL25.080	

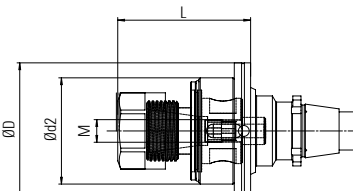
base holder fits all standard threaded arbors (e.g. Seco, Kennametal)

SQUARE SHOULDER | PLUNGE MILL

Model	Drawing	Technical data						Order number
		Size	ØD [mm]	Ød1 [mm]	L [mm]	Product center	Availa-bility	
		S3	50	25	28	●	○	693.6502528S001
		S4	63	32	33	●	○	694.6503233S001

cooperation with Horn 
Indexable inserts not included in scope of supply / can be supplied by Paul Horn GmbH (Type DA32)

TAPPING CHUCK | EMUGE

		Technical data								
Model	Drawing	Size	Type	ØD [mm]	Ød2 [mm]	M [mm]	L* [mm]	Product center	Availa- bility	Order number
		S3	ER16	50	39	4-12	48,8	●	○	693.177E348
		S4	ER16	63	39	4-12	53,7	●	○	694.177E348
		S4	ER32	63	45	4-20	81	●	○	694.177E686

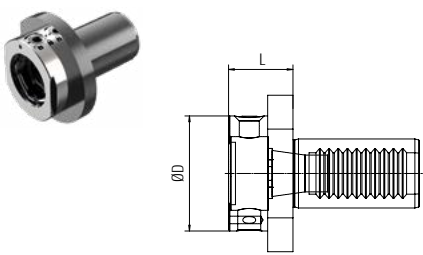
* ±0,05

 Accessories page 32

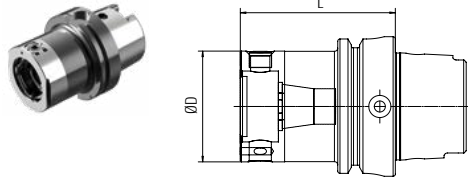
ADJUSTMENT AND ASSEMBLY AID

BENZ SOLIDFIX®

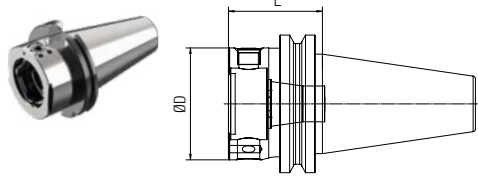
MASTER SHANK – BASE HOLDER | VDI

Model	Drawing	Technical data		ØD [mm]	L [mm]	IK	Product center	Availa- bility	Order number
		Size	Type						
		S1	VDI 20	32	22		●	○	112.251S1022VE
		S2	VDI 25	40	25		●	○	325.251S2025VE
		S3	VDI 30	50	25		●	○	113.251S2025VE
		S3	VDI 30	50	32	✓	●	●	113.251S3032R
		S4	VDI 40	63	28		●	○	114.251S3028VE
		S4	VDI 40	63	30		●	○	114.251S4030VE
		S4	VDI 40	63	32	✓	●	●	114.251S4032R
		S5	VDI 50	75	32		●	○	115.251S5032VE
		S5	VDI 50	75	35	✓	●	○	115.251S5035R

MASTER SHANK | HSK

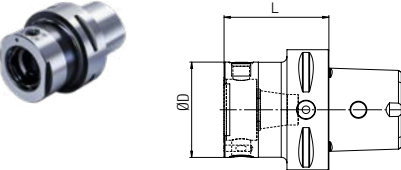
Model	Drawing	Technical data		ØD [mm]	L [mm]	Product center	Availa- bility	Order number
		Size	Type					
		S1	HSK 63-A	32	55	●	○	711.251S1055VE
		S2	HSK 63-A	40	62	●	○	711.251S2062VE
		S3	HSK 63-A	50	70	●	●	711.251S3070VE
		S4	HSK 63-A	63	75	●	●	711.251S4075VE
		S5	HSK 63-A	75	80	●	○	711.251S5080VE
		S3	HSK 63-F	50	70	●	○	727.251S3070VE
		S4	HSK 100-A	63	80	●	○	713.251S4080VE
		S5	HSK 100-A	75	90	●	○	713.251S5090VE

MASTER SHANK | SK

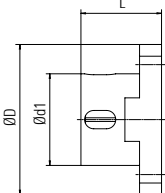
Model	Drawing	Technical data		ØD [mm]	L [mm]	Product center	Availa- bility	Order number
		Size	Type					
		S1	SK 30	32	30	●	○	090.251S1030VE
		S2	SK 30	40	40	●	○	090.251S2040VE
		S3	SK 40	50	42	●	●	040.251S3042VE
		S4	SK 40	63	55	●	○	040.251S4055VE
		S3	SK 50	50	37	●	○	042.251S3037VE
		S4	SK 50	63	40	●	○	042.251S4040VE
		S5	SK 50	75	52	●	○	042.251S5052VE

● PC Metal ● PC Wood ● on stock ○ on request

MASTER SHANK | CAPTO

Model	Drawing	Technical data		ØD [mm]	L [mm]	Product center	Availa- bility	Order number
		Size	Type					
		S3	C6	50	55	●	○	533.251S3055VE
		S4	C6	63	57	●	○	533.251S4057VE
		S5	C8	63	60	●	○	534.251S4060VE
		S6	C8	75	60	●	○	534.251S5060VE

MOUNTING BLOCK

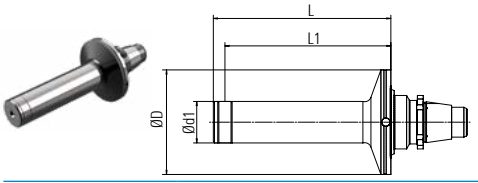
Model	Drawing	Technical data				Product center	Availa- bility	Order number
		Size	ØD [mm]	Ød1 [mm]	L [mm]			
		S1	62	31	30			B300-4-S1
		S2	67	40	38			B300-4-S2
		S3	82	50	44	 		B300-4-S3
		S4	96	65	50			B300-4-S4
		S5	116	75	60			B300-4-S5

no integrated clamping mechanism

MISCELLANEOUS

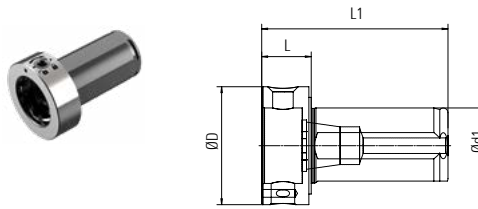
BENZ SOLIDFIX®

TEST MANDREL

Model	Drawing	Technical data							Order number
		Size	ØD [mm]	Ød1 [mm]	L [mm]	*L1 [mm]	Product center	Availa- bility	
		S1	32	12	55	50	●	○	691.2471255
		S2	40	16	68	63	●	○	692.2471668
		S3	50	20	87	80	●	●	693.2472087
		S4	63	25	107	100	●	●	694.24725107
		S5	75	32	134	125	●	●	695.24732134

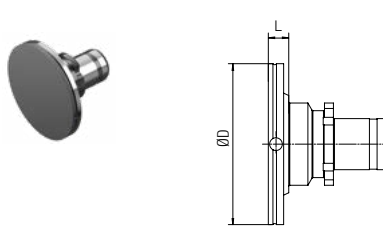
scope of supply: test mandrel in case with test certificate
*Measuring point

REDUCING SLEEVE

Model	Drawing	Technical data							Order number
		Size	ØD [mm]	Ød1 [mm]	L [mm]	L1 [mm]	Product center	Availa- bility	
		S2	40	25	17	65	●	○	B570-25S2
		S3	50	32	21	79	●	●	B570-32S3
		S4	63	40	22	94	●	●	B570-40S4

used for boring bars or combination holders

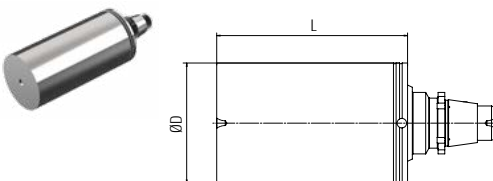
CLOSING PLUG

Model	Drawing	Technical data					Order number
		Size	ØD [mm]	L [mm]	Product center	Availa- bility	
		S1	32	3,5	●	○	691.581S
		S2	40	4	●	○	692.581S
		S3	50	5	●	●	693.581S
		S4	63	6	●	●	694.581S
		S5	75	8	●	●	695.581S

made of steel

● PC Metal ● PC Wood ● on stock ○ on request

BLANK

Model	Drawing	Technical data					Order number
		Size	ØD [mm]	L [mm]	Product center	Availa- bility	
		S1	32	63	●	○	691.1023263
		S2	40	80	●	○	692.1024080
		S3	50	100	● ●	●	693.10250100
		S4	63	125	●	●	694.10263125
		S5	75	160	●	●	695.10275160

BENZ CAPTO™

increase your efficiency and machining
quality

PRODUCT BENEFITS, SYSTEM DESIGN, TOOL CHANGE

24

ADAPTER



COLLET CHUCK
8° Type ER

28



WELDON
for parallel shanks DIN1835B

28



MILLING ARBOR

29

MISCELLANEOUS



CLOSING PLUG

30



BLANK

30

MODULAR QUICK CHANGE SYSTEM

BENZ CAPTO™

INCREASE OF EFFICIENCY AND MACHINING QUALITY

The modular quick change system BENZ CAPTO™ guarantees an extremely compact design by being integrated into the spindle. Special clamping kinetics for clamping forces are noticeably below the required range of ISO / DIS 26623-2.

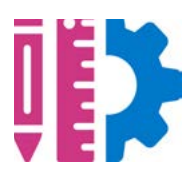
BENZ CAPTO™ can be used for milling, drilling and turning, with up to 100 bar coolant pressure. The system is especially suited for heavy duty milling and machining.

PRODUCT BENEFITS



Performance

- + compact design / short implementation
- + special clamping kinetics for clamping forces are noticeably below the required range of ISO / DIS 26623-2
- + pressure of coolant up to 100 bar
- + ideal for heavy milling



Precision

- + stability and rigidity with high flexibility at the same time
- + compact shape guarantees high cutting speeds and surface quality



Handling

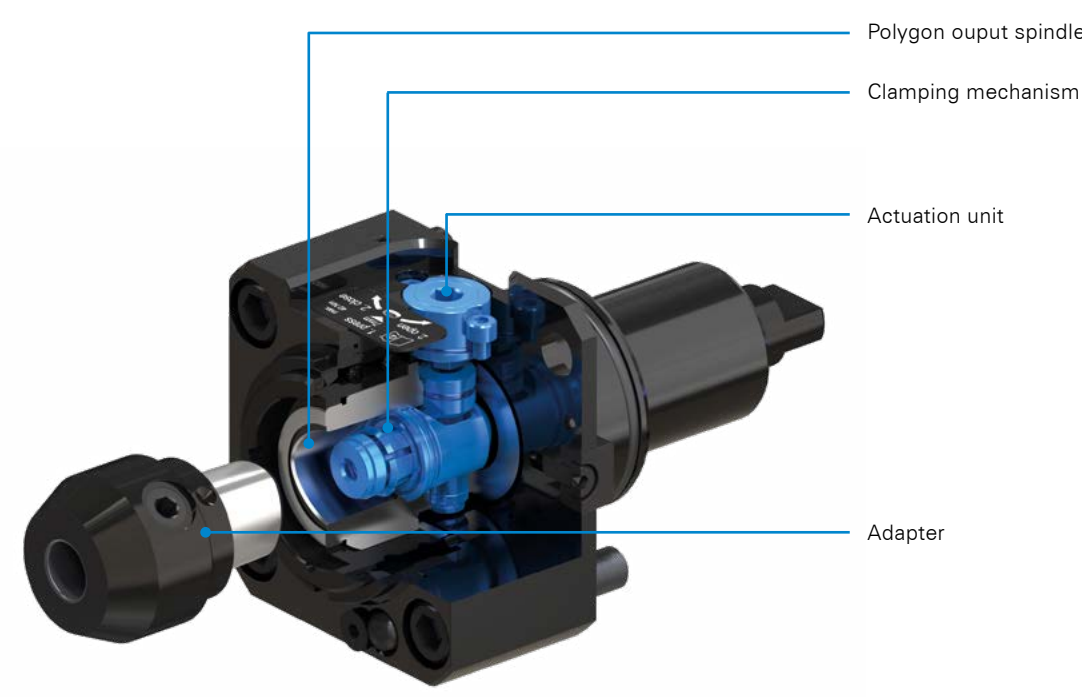
- + fast tool change with additional locking mechanism (ratcheted)
- + optically visible clamping position 100°
- + starting torque: 50 Nm (C4)



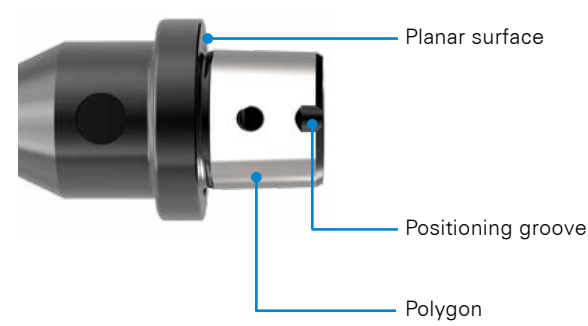
Safety

- + from 75 degrees onwards the clamping process is already so secure that the tool can be used in production
- + visual markings > correct clamping of the tool is easily seen
- + additional safety function > prevents uncontrolled falling out of the tool holder

SYSTEM DESIGN



ADAPTER



SYSTEMDATEN

Technical data		
Size	T* [Nm]	Size Inbus wrench
C3	250	SW 6
C4	500	SW 8
C5	1000	SW 10
C6	2000	SW 12

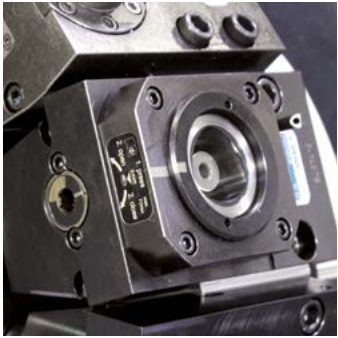
*transmittable torque of interface



IC-capable

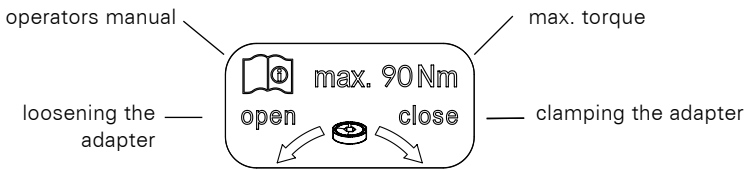
TOOL CHANGE

BENZ CAPTO™



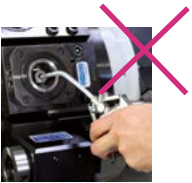
Step 1: get used to the symbols

In order to change an adapter in the angle head / live tool the operation unit needs to be in the loosed position.



Step 2: cleaning of tool holder with compressed air

Clean the tool insert. Please note: only clean around the edges of the polygon. Never blow air centrally into the clamping mechanism!



Step 3: inserting the adapter

Inserting the adapter into the tool holder (in release position). The adapter is held in the base by a locking mechanism.



The locking mechanism holds the tool in the base



Step 4: align markings

Align the marks on the housing to the spindle. The adapter is held in the base by a locking mechanism.

Note: this step is only necessary for Live Tools. Static BENZ CAPTO™ tools have a fixed polygon position.



Step 5: clamping of the adapter

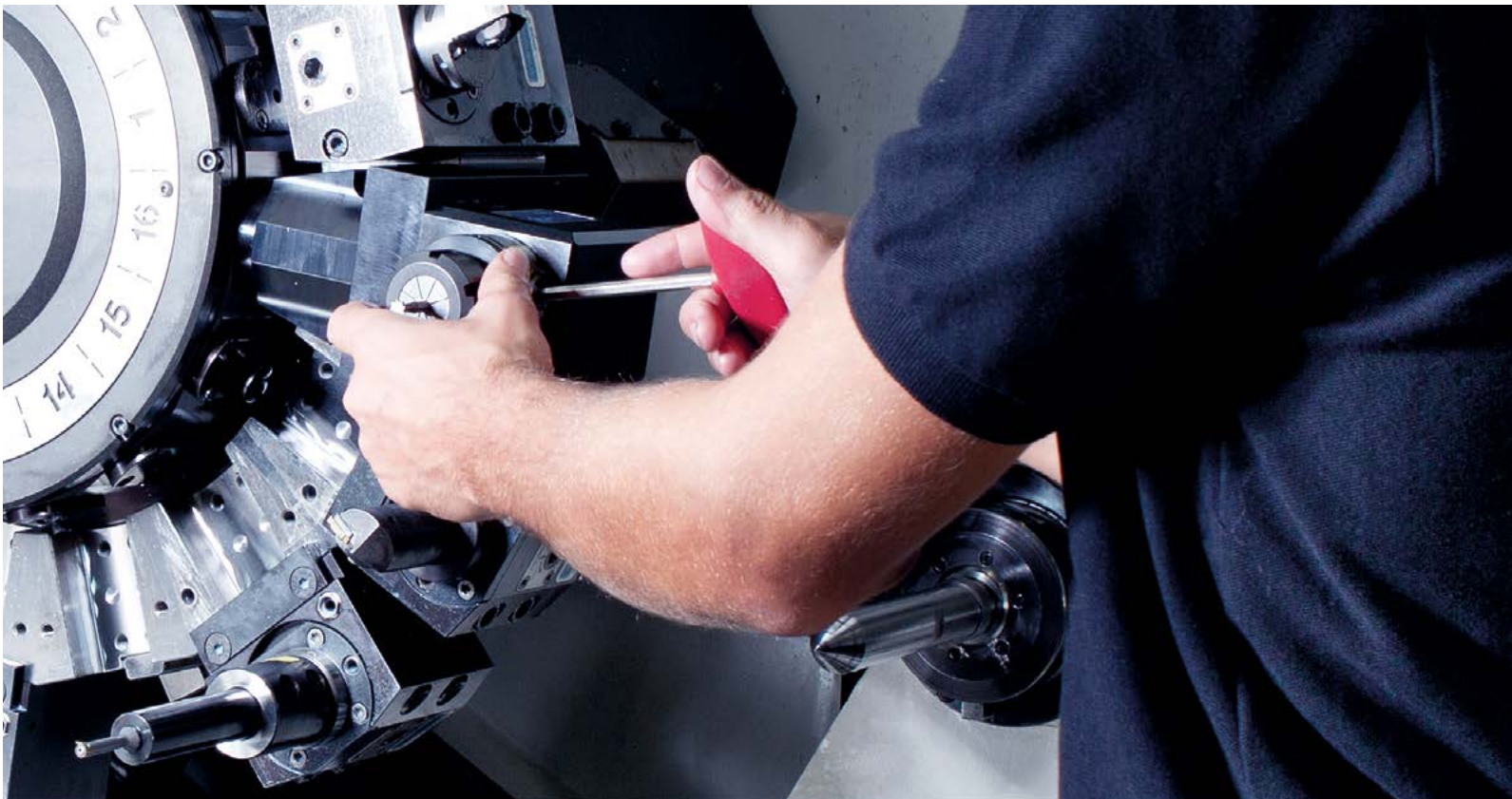
To do this press the mechanism and at the same time rotate by approx. 100 degree clockwise in the "close" direction. Optimal clamping force is achieved when applying the recommended torque. The tool is already clamped securely as soon as a 75 degree angle is achieved.



Step 6: loosening the adapter

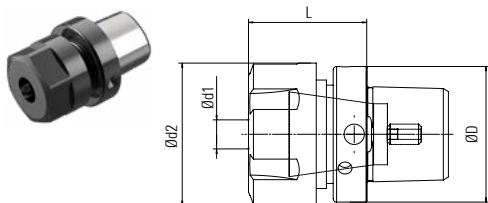
After the machining process, release the adapter again by first aligning the mark on the housing with the mark on the spindle. Then press the actuating unit. The adapter will be held in the tool after loosening until you take it out.

Note for clamping and un-clamping: for static BENZ CAPTO™ tools it is sufficient to simply rotate, no pressure needs to be applied.

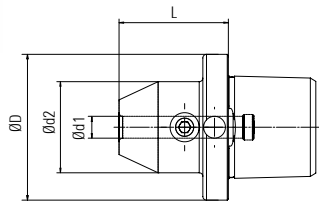


ADAPTER BENZ CAPTO™

COLLET CHUCK 8° TYPE ER | EXTERNAL CLAMPING NUT

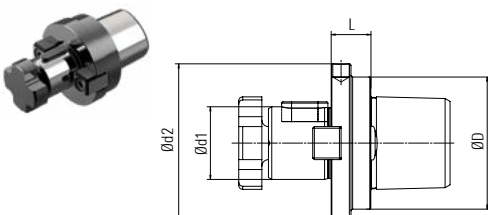
		Technical data								
Model	Drawing	Size	Type	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa- bility	Order number
		C3	ER11	32	1-7	19	22	●	●	550.130E122
		C3	ER16	32	1-10	28	30	●	●	550.130E330
		C3	ER20	32	2-13	34	35	●	●	550.130E435
		C3	ER25	32	2-16	42	44	●	●	550.130E544
		C4	ER16	40	1-10	28	27	●	○	551.130E327
		C4	ER20	40	2-13	34	32	●	○	551.130E432
		C4	ER25	40	2-16	42	35	●	●	551.130E535
		C4	ER32	40	2-20	50	52	●	●	551.130E652
		C5	ER16	50	1-10	28	29	●	○	552.130E329
		C5	ER25	50	2-16	42	34	●	○	552.130E534
		C5	ER32	50	2-20	50	41	●	○	552.130E641
		C5	ER40	50	3-26	63	58	●	○	552.130E758
		C6	ER32	63	3-26	63	40	●	○	553.130E640
		C6	ER40	63	3-26	63	46	●	○	553.130E746
without gripper groove										
 Accessories page 32										

WELDON FOR PARALLEL SHANKS DIN 1835 B | STANDARD DESIGN

Model	Drawing	Technical data							Order number
		Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa- bility	
 	C3	32	6	25	33	●	●	550.1400633	
	C3	32	8	28	33	●	●	550.1400833	
	C3	32	10	35	37	●	●	550.1401037	
	C3	32	12	42	42	●	●	550.1401242	
	C3	32	14	44	43	●	○	550.1401443	
	C3	32	16	48	51	●	●	550.1401651	
	C4	40	6	25	30	●	●	551.1400630	
	C4	40	8	28	30	●	●	551.1400830	
	C4	40	10	35	34	●	●	551.1401034	
	C4	40	12	42	39	●	●	551.1401239	
	C4	40	14	44	39	●	○	551.1401439	
	C4	40	16	48	43	●	●	551.1401643	
	C4	40	18	50	43	●	○	551.1401843	
	C4	40	20	52	45	●	●	551.1402045	
	C5	50	6	25	29	●	○	552.1400629	
	C5	50	8	28	29	●	○	552.1400829	
	C5	50	10	35	33	●	○	552.1401033	
	C5	50	12	42	38	●	○	552.1401238	
	C5	50	14	44	38	●	○	552.1401438	
	C5	50	16	48	41	●	○	552.1401641	
	C5	50	18	50	42	●	○	552.1401842	
	C5	50	20	52	44	●	○	552.1402044	
	C5	50	25	65	52	●	○	552.1402552	
	C6	63	6	25	28	●	○	553.1400628	
	C6	63	8	28	28	●	○	553.1400828	
	C6	63	1	35	32	●	○	553.1401032	
	C6	63	12	42	37	●	○	553.1401237	
	C6	63	14	44	37	●	○	553.1401437	
	C6	63	16	48	40	●	○	553.1401640	
	C6	63	18	50	41	●	○	553.1401841	
	C6	63	20	52	43	●	○	553.1402043	
	C6	63	25	65	52	●	○	553.1402552	

● PC Metal ● PC Wood ● on stock ○ on request

MILLING ARBOR

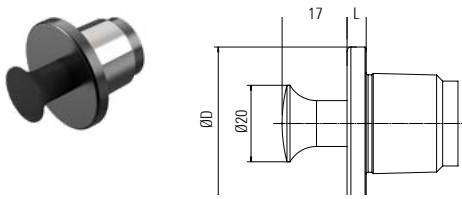
		Technical data							
Model	Drawing	Size	ØD [mm]	Ød1 [mm]	Ød2 [mm]	L [mm]	Product center	Availa- bility	Order number
		C3	32	16	34	13	●	●	550.2311613
		C3	32	22	48	17	●	●	550.2312217
		C4	40	22	48	16	●	○	551.2312216
		C4	40	27	51	19	●	○	551.2312719
		C5	50	27	55	11	●	○	552.2312711
		C5	50	32	62	22	●	○	552.2313222
		C6	63	27	63	11	●	○	553.2312711
		C6	63	32	63	16	●	○	553.2313216
without gripper groove									
 Accessories page 32									

MISCELLANEOUS

BENZ CAPTO™

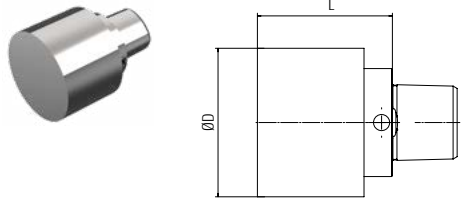
● PC Metal ● PC Wood ● on stock ○ on request

CLOSING PLUG

Model	Drawing	Technical data			Product center	Availa-bility	Order number
		Size	ØD [mm]	L [mm]			
		C3	32	5	●	○	550.581S
		C4	40	5	●	○	551.581S
		C5	50	6	●	○	552.581S
		C6	63	7	●	○	553.581S

made of steel

BLANK

Model	Drawing	Technical data			Product center	Availa-bility	Order number
		Size	ØD [mm]	L [mm]			
		C3	47	50	●	○	550.1024750
		C4	57	63	●	●	551.1025763
		C5	72	67	●	○	552.1027267
		C6	92	67	●	○	553.1029267

without gripper groove

ACCESSORIES

Collet Chuck | Wrenches | Miscellaneous

COLLET CHUCK



CLAMPING NUT 34



SEAL RING 35



COLLET CHUCK 36

WRENCHES



COLLET WRENCH 38



INBUS T-WRENCH 39



SOLIDFIX® STARTER SET 39

ACCESSORIES



TAPER CLEANER
BENZ Solidfix® / Collet Chuck 40



KEY BLOCK DIN2097 40



REDUCING SLEEVE 40



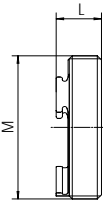
COOLANT NOZZLE 41

ACCESSORIES

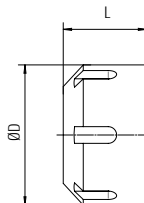
COLLET CHUCK

● PC Metal ● PC Wood ● on stock ○ on request

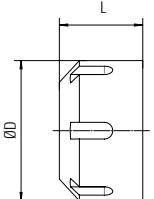
CLAMPING NUT | INTERNAL

		Technical data					
Model	Drawing	Size Collet Chuck	M	L [mm]	Product center	Availa-bility	Order number
		ER 11	M18x1	7,5	 		B135-E1AX
		ER 16	M24x1	7,6	 		B135-E3AX
		ER 20	M28x1,5	8,5	 		B135-E4AX
		ER 25	M32x1,5	8,8	 		B135-E5AX
		ER 32	M40x1,5	9,8	 		B135-E6AX
		ER 40	M50x1,5	11,7	 		B135-E7AX

CLAMPING NUT | EXTERNAL – MINI VERSION

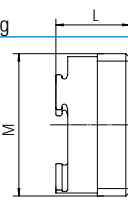
		Technical data					
Model	Drawing	Size Collet Chuck	ØD [mm]	L [mm]	Product center	Availa- bility	Order number
		ER 8M	12	10,8	 		B135-M0
		ER 11M	16	12	 		B135-M1
		ER 16M	22	18,4	 		B135-M2
		ER 20M	28	19	 		B135-M3
		ER 25M	35	20	 		B135-M4

CLAMPING NUT | EXTERNAL

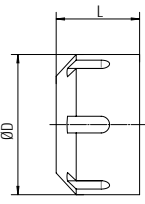
		Technical data					
Model	Drawing	Size Collet Chuck	ØD [mm]	L [mm]	Product center	Availa-bility	Order number
		ER 11	19	11,3	 		B135-E1*
		ER 16	28	17,5	 		B135-E3*
		ER 20	34	19	 		B135-E4*
		ER 25	42	20	 		B135-E5
		ER 32	50	22,5	 		B135-E6
		ER 40	63	25,5	 		B135-E7
		ER 50	78	35,5	 		B135-E8

*illustrations deviate

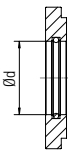
CLAMPING NUT | INTERNAL – SYSTEM REGOFIX FOR TOOLS WITH INTERNAL COOLING

		Technical data					
Model	Drawing	Size Collet Chuck	M	L [mm]	Product center	Availa- bility	Order number
		ER 16	M24x1	12,5			B135-E3AXC
		ER 20	M28x1,5	13,5			B135-E4AXC
		ER 25	M32x1,5	13,8			B135-E5AXC
		ER 32	M40x1,5	14,9			B135-E6AXC
		ER 40	M50x1,5	16,6			B135-E7AXC

CLAMPING NUT | EXTERNAL – SYSTEM REGOFIX FOR TOOLS WITH INTERNAL COOLING

		Technical data					
Model	Drawing	Size Collet Chuck	ØD [mm]	L [mm]	Product center	Availa- bility	Order number
		ER 16	28	22,5	 		B135-H3A
		ER 20	34	24	 		B135-H4A
		ER 25	42	25	 		B135-H5A
		ER 32	50	27,5	 		B135-H6A
		ER 40	63	30,5	 		B135-H7A

SEAL RING

		Technical data					
Model	Drawing	Size Collet	Ød [mm]	Steigung [mm]	Product center	Availa-bility	Order number
		ER 16	1-10	0,5	 		B137-E3-...
		ER 20	1-13	0,5	 		B137-E4-...
		ER 25	2-16	0,5	 		B137-E5-...
		ER 32	2-20	0,5	 		B137-E6-...
		ER 40	4-26	0,5	 		B137-E7-...

Order number			
ER 16	B137-E3-	<div></div>	
Ød=6mm		0600	
Example: B137-E3-0600			

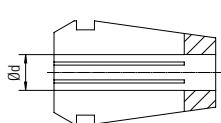
Sealing range can be used up to 0.5 mm smaller than nominal dimension d

ACCESSORIES

COLLET CHUCK

● PC Metal ● PC Wood ● on stock ○ on request

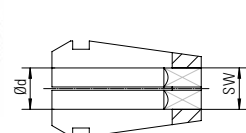
COLLET CHUCK | REGOFIX FORM B

		Technical data					
Model	Drawing	Size Collet	Ød [mm]	Steigung [mm]	Product center	Availa-bility	Order number
		ER 11 ¹	1-7	0,5	● ●	○	B134-424E-...
		ER 16 ¹	1-10	0,5	● ●	○	B134-426E-...
		ER 20 ²	1-13	1	● ●	○	B134-428E-...
		ER 25 ²	1-16	1	● ●	○	B134-430E-...
		ER 32 ²	3-20	1	● ●	○	B134-470E-...
		ER 40 ²	4-26	1	● ●	○	B134-472E-...
							Order number
		ER 16	B134-426E-				
		Ød=6mm		0600			
							Example: B134-426E-0600

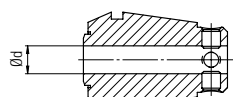
¹ Collet chuck can clamping up to 0,5 mm smaller as nominal range d

² Collet chuck can clamping up to 1 mm smaller as nominal range d

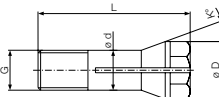
COLLET CHUCK FOR TAP | REGOFIX WITH INTERNAL SQUARE SECTION

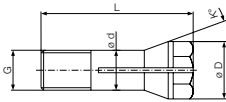
		Technical data					
Model	Drawing	Size Collet.	Ød [mm]	SW [mm]	Product center	Availa-bility	Order number
		ER 16	4-10	3,15-7	● ●	○	B134-E3...
		ER 20	4-13	3,15-9	● ●	○	B134-E4...
		ER 25	4-16	3,15-16	● ●	○	B134-E5...
		ER 32	4-20	3,15-20	● ●	○	B134-E6...
		ER 40	6-22	6-22	● ●	○	B134-E7...
Order number							
ER 16		B134-E3					
Ød=6mm			0600				
SW=4,9mm					49		
Example: B134-E3-060049							

COLLET CHUCK | REGOFIX WITH LOCKING DRIVE & LENGHT COMPENSATION DIN 6499 / ISO 15488

		Technical data								
Model	Drawing	Size Collet.	Drill hole Ød [mm]	Product center	Availa-bility	Order number				
		ER 11	1,4-3,5	● ●	○	B134-A2...	Order number			
		ER 16	1,4-6,0	● ●	○	B134-A3...	ER 25	B134-A5-		
		ER 20	1,4-8,0	● ●	○	B134-A4...	Ød=9mm			
		ER 25	1,4-10,2	● ●	○	B134-A5...				
		ER 32	2-12,5	● ●	○	B134-A6...	Example: B134-A5-0900			
		ER 40	4-16,0	● ●	○	B134-A7...				

NANN COLLET CHUCK

Technical data																		
Type	Ød	ØD	L	K°	Thread G	Clamping Ø*	Product center	Availa-bility	Order number									
Model / Drawing																		
	6043E	6	8,5	26	20	M6x0,7	1,5-3	 		B134-6043E...								
	603E	8	12	31	20	M8x0,85	1,5-6	 		B134-603E...								
																		
<table><tr><td colspan="2">Order number</td></tr><tr><td>ER 25</td><td>B134-603E-<div></div></td></tr><tr><td>Clamping Ø=2mm</td><td>0200</td></tr><tr><td colspan="2">Example: B134-603E-0200</td></tr></table>											Order number		ER 25	B134-603E- <div></div>	Clamping Ø=2mm	0200	Example: B134-603E-0200	
Order number																		
ER 25	B134-603E- <div></div>																	
Clamping Ø=2mm	0200																	
Example: B134-603E-0200																		

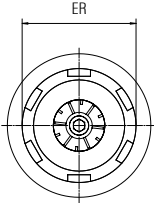


* in 0,5 mm steps

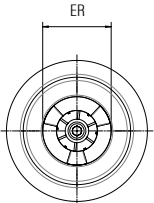
ACCESSORIES

WRENCHES & STARTER SET

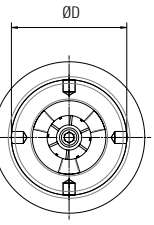
CLAMPING NUT | EXTERNAL COLLET CHUCK

Model	Drawing	Technical data		Product center	Availability	Order number
		Size	Collet Chuck			
		ER 11M		● ●	●	B136-M1
		ER 16M		● ●	●	B136-M3
		ER 20M		● ●	●	B136-M3
		ER 20		● ●	●	B136-E4
		ER 25		● ●	●	B136-E5
		ER 32		● ●	●	B136-E6
		ER 40		● ●	●	B136-E7

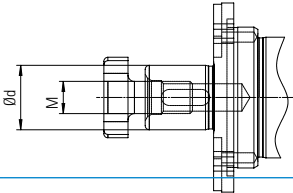
CLAMPING NUT | INTERNAL COLLET CHUCK

Model	Drawing	Technical data		Product center	Availability	Order number
		Size	Collet Chuck			
		ER 11		● ●	●	B136-E1AX
		ER 16		● ●	●	B136-E3AX
		ER 20		● ●	●	B136-E4AX
		ER 25		● ●	●	B136-E5AX
		ER 32		● ●	●	B136-E6AX
		ER 40		● ●	●	B136-E7AX

HOOK WRENCH

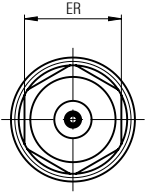
Model	Drawing	Technical data		Product center	Availability	Order number
		ØD	Spindle			
		12-14		● ●	○	D01810B012014
		16-18		● ●	●	D01810B016018
		20-22		● ●	○	D01810B020022
		25-28		● ●	●	D01810B025028
		30-32		● ●	●	D01810B030032
		34-36		● ●	●	D01810B034036
		40-42		● ●	●	D01810B040042
		45-50		● ●	●	D01810B045050
		52-55		● ●	●	D01810B052055
		58-62		● ●	●	D01810B058062
		68-75		● ●	●	D01810B068075
		80-90		● ●	●	D01810B080090
		95-100		● ●	●	D01810B095100

WRENCH DIN 6368 | FOR CROSS RETAINING SCREWS

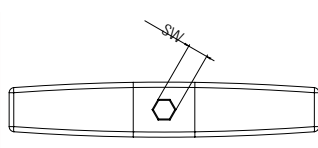
Model	Drawing	Technical data		Product center	Availability	Order number
		ØD	M			
		16	8	● ●	○	D06368-080
		22	10	● ●	○	D06368-100
		27	12	● ●	○	D06368-120
		32	16	● ●	○	D06368-160

● PC Metal ● PC Wood ● on stock ○ on request

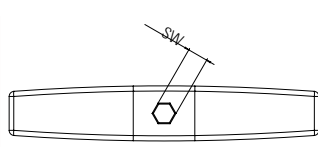
OPEN-END WRENCH DIN 894

Model	Drawing	Technical data		Product center	Availability	Order number
		Size	Collet Chuck			
		ER 11		● ●	○	D00894-170
		ER 16		● ●	○	D00894-250
		ER 20		● ●	○	D00894-300

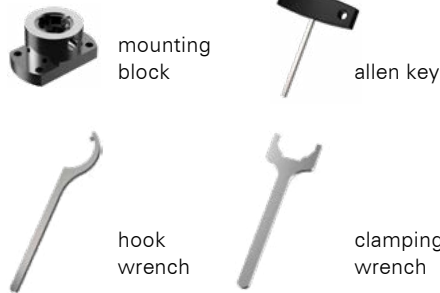
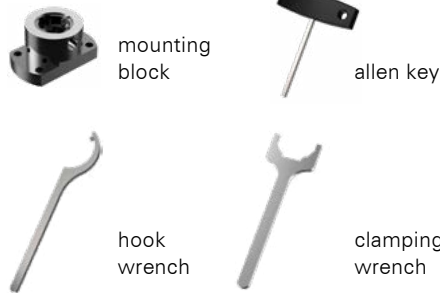
INBUS T-WRENCH | FOR BENZ SOLIDFIX® AND BENZ CAPTO™ ACTUATION

Model	Drawing	Technical data		Product center	Availability	Order number
		Size	Size			
		BENZ Solidfix®	BENZ CAPTO™	SW		
		S1		3	● ●	KL8317-45039-SW3
		S2		4	● ●	KL8317-44982-SW4
		S3		5	● ●	KL8317-45013-SW5
		S4 / S5	C3	6	● ●	KL8317-45039-SW6
			C4	8	● ●	KL8317-45039-SW8
			C5	10	○	KL8317-45039-SW10
			C6	12	○	KL8317-45112-SW12

INBUS T-WRENCH | FOR BENZ LINA 4.0

Model	Drawing	Technical data		Product center	Availability	Order number
		LINA Version	SW	L		
		Tuning Center	5	150	●	KL8317-627481 5-SW5
		Machining Center	5	350	●	KL8317-627483 5-SW5
		Use of the key for short, standard, and long-stroke versions				

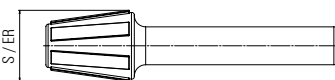
SOLIDFIX® STARTER SET

Model	Drawing	Technical data		Product center	Availability	Order number
		Size				
		S3 x ER25	mounting block	● ●	○	S3-SET-0001
		S4 x ER32	allen key	● ●	○	S4-SET-0001
		hook wrench				
		clamping wrench				

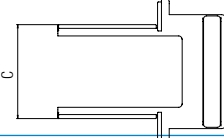
ACCESSORIES

MISCELLANEOUS

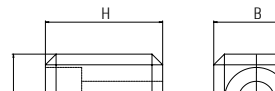
TAPER CLEANER | BENZ SOLIDFIX® / COLLET CHUCK

Model	Drawing	Technical data				Order number
		Size BENZ Solidfix®	Size Collet Chuck	Product center	Availa- bility	
		S1	ER 11	● ●	○	B069-ER16
		S2	ER 16	● ●	○	B069-ER16
		S3	ER 20	● ●	○	B069-ER20
		S4	ER 25	● ●	○	B069-ER25
		S5	ER 32	● ●	○	B069-ER32

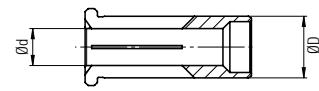
TAPER CLEANER | BENZ CAPTO™

		Technical data			
Model	Drawing	Size BENZ CAPTO™	Product center	Availa- bility	Order number
		C3	●	○	B069-C3
		C4	●	○	B069-C4
		C5	●	○	B069-C5
		C6	●	○	B069-C6
		C8	●	○	B069-C8

KEY BLOCK DIN2097 | FOR MILLING ARBORS

		Technical data						
Model	Drawing	Ød1 [mm]	L [mm]	B [mm]	H [mm]	Product center	Availa- bility	Order number
		16	8,5	8	11	●	●	B245-66
		22	11	10	8,6	●	●	B245-81
		27	10	12	9,3	●	●	B245-126
		32	12	14	14	●	●	B245-117

REDUCING SLEEVES | COOLANTPROOF FOR HYDRAULIC EXPANSION CHUCKS

Model	Drawing	Technical data				Order number
		ØD [mm]	Ød [mm]	Product center	Availa- bility	
		12	3	● ●	○	068Y012003440
		12	4	● ●	○	068Y012004440
		12	5	● ●	○	068Y012005440
		12	6	● ●	○	068Y012006440
		12	8	● ●	○	068Y012008440
		12	10	● ●	○	068Y012010440
		20	6	● ●	○	068Y020006555
		20	8	● ●	○	068Y020008555
		20	10	● ●	○	068Y020010555
		20	12	● ●	○	068Y020012555
		20	14	● ●	○	068Y020014555
		20	16	● ●	○	068Y020016555

FURTHER ACCESSORIES ON REQUEST

COOLANT NOZZLES



several versions

REDUCING SLEEVES

VDI



several sizes and versions

Please contact our BENZ sales team.

PICTOGRAMS AND ABBREVIATIONS

OTHER SPECIFICATIONS	system benefits		
	 setup time	 investment	 easy to handle
	 safe to handle		
adapter options	 IC-capable	 MMS-capable	
	 information	 video	 service
general information	 accessories		

ABBREVIATIONS	
d, D	Diameter
EC	external cooling
i	gear ration
IC	internal cooling
L, B, H	length, width, height
M	thread size
M _{max}	maximum torque
mm	millimeter
n _{max}	maximum speed
p _{max}	maximum pressure (bar)
p.	page
SW	width across flats
TK	pitch circle
✓	possible
-	not possible

BENZ PRODUCT WORLD:

TOOLING & MACHINE TOOLING TECHNOLOGY

TOOLING TECHNOLOGY



METAL

TOOLS FOR TURNING CENTERS

LIVE TOOLS / STATIC TOOLS

- radial heads 90°
- radial heads ≠ 90°
- axial heads
- swivel heads
- multi-spindle heads
- broaching units
- static tools

COMPONENTS. Our comprehensive tool concepts for turning centers and milling centers are ideal for nearly every application. Providing a technological advantage is our goal.

CUSTOMER SPECIFIC. Our modular approach enables customized configurations.

SYSTEMS. We develop special customer-specific tools for OEM and end customers on request.



METAL

TOOLS FOR MACHINING CENTERS

- angle heads 90°
- angle heads ≠ 90°
- swivel heads
- multi-spindle heads
- broaching units
- high-speed spindles
- rotating tool holders

KNOWLEDGE AND EXPERIENCE. Our knowledge of the metalworking industry and decades of development partnership make us ideal for new tasks anywhere in the world.

COMPONENTS. We deliver a vast array of standard components from stock and develop innovative, customized systems for OEM and end customers

VARIETY. Whether in machining centers in the automotive, aerospace or wind energy industries, units from BENZ can be used anywhere. Numerous customers choose us as their systems and innovation partner.



WOOD / COMPOSITE & ALUMINUM

TOOLS FOR MACHINING CENTERS

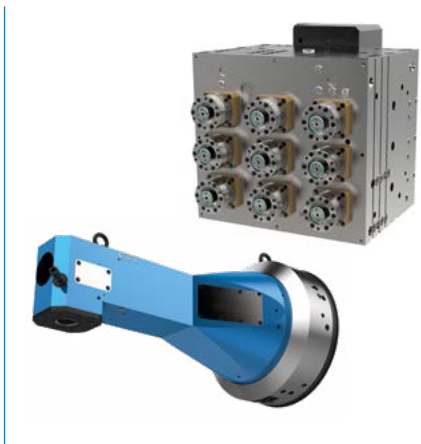
- angle heads 90°
- swivel heads
- multi-spindle heads
- multi-axis heads
- sanding units
- floating head units
- rotating tool holders

FOR ANY APPLICATION. Cost-effectively process and machine wood, composites and aluminium: We provide series production angle heads for drilling, milling, sawing and grinding in addition to other units for special applications.

FROM BASIC TO HIGH-END. BENZ units are available in a variety of performance classes, ideal for everything from light machining to high-performance continuous operation.

SYSTEMS. We have the solution for your special applications: Customized BENZ units for machining centers. Put us to the test!

MACHINE TOOLING TECHNOLOGY



METAL

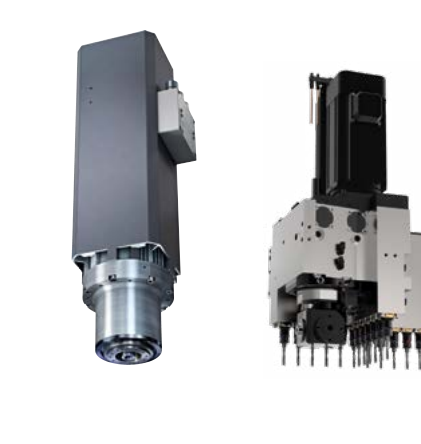
MULTI-SPINDLE HEADS & LARGE DRILL HEADS

- large angle heads
- large drill heads
- XXL multi-spindle heads

DEVELOPMENT PARTNER. We accompany you from brainstorming to inspection of the final machine, always to your expectations. Our assortment ranges from compact heads to XXL units.

SYSTEMS. BENZ Tooling stands for high-end solutions in the fields of machine tooling technology, specialty solutions, custom assemblies and mechanical modules. We manufacture and configure multiple-spindle and large-angle heads as well as large drill heads.

COMPONENTS. Attachment units complete our range.



METAL / WOOD / COMPOSITE & ALUMINUM

SYSTEM TECNOLOGY

- multiple-spindle drill heads
- motor spindles
- 5-axis technology
- C-axes
- swivel axes
- Z-axes

COMPONENTS. Our range includes standard products in an assortment of shapes and sizes

THE PERFECT ADDITION. Our system additions provide you with even more efficiency. Perfect your existing solutions with BENZ products!

SYSTEMS. We develop the technology of tomorrow. Your individual requirements for the efficiency of your machine tools and the suitability of the tools in use provide our benchmark for new, innovative solutions.

SERVICES



METAL / WOOD / COMPOSITE & ALUMINUM

SERVICE

- service evaluation and repair
- rapid repair kit
- preventive maintenance
- spare part management
- worldwide on-site service

DO NOT LOSE A SECOND. Speed is the order of the day when unexpected breakdowns occur. Our service center ensures Immediate assistance around the world. We ensure your machine has as little downtime as possible.

SERVICE QUALITY. We guarantee top service quality reflecting our expertise as a manufacturer.

VORAUSSCHAUEND. We go one step further: Preventive maintenance, customized Rapid Repair Kit and our spare part management service ensure you have the best setup to face any emergency. We look to the future to keep you at your peak.

ARE YOU ALREADY FAMILIAR WITH OUR EXPERTISE?

- + teams of experts with industry experience
- + internationally networked through world-wide locations and partners
- + the highest quality for all products and services
- + precise, customer-specific solutions
- + constant development of our industry expertise

YOUR DIRECT LINE
YOUR CONTACTS WORLDWIDE



General terms and conditions

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