EMAG BMT 55-83

Live Tools & Static Holders

Tooling & Machine Tooling Technology

Metal machining





AT BENZ GMBH WERKZEUGSYSTEME, 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 WOOD-WORKING, METAL MACHINING AND COMPOSITE MATERIAL PROCESSING FOR MORE THAN 30 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 PRODUC-TION PROCESSES AND LOWER YOUR MANUFACTURING COSTS - AND ULTIMATELY IM-PROVE YOUR COMPETITIVENESS AS A RESULT.



BENZ TOOLING TECHNOLOGY
FOR EMAG LATHES BMT 55-83

BENZ STANDARD PRODUCT RANGE - FITS FOR:

MACHINES		SW	AL	TYPE
EMAG VL	2 4	330	83	STD
EMAG VLC	100 (VL2)	340	83	HSP
EMAG VT2		360	83	STD
EMAG VTC	100 (VT2)	360	83	HSP

i Further tools upon request



More information about our BENZ products and accessories can be found at the download area of our website.
https://www.benztooling.com/en/services/downloads

BMT 55-83

Live Tools | Static Holders



LIVE TOOLS



AXIAL 6



AXIAL, 1:2 7



RADIAL 8



RADIAL, 1:2 9



ADJUSTABLE 10



BROACHING UNIT AXIAL 11

STATIC HOLDERS



STANDARD 12



BENZ CAPTO™ 13

LIVE TOOL BMT 55-83
AXIAL

TECHNICAL DATA



OUTPUT SPINDLES



BENZ Solidfix®



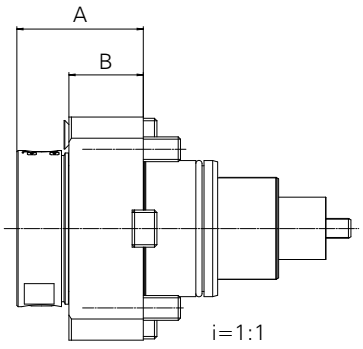
Collet chuck System ER DIN 6499



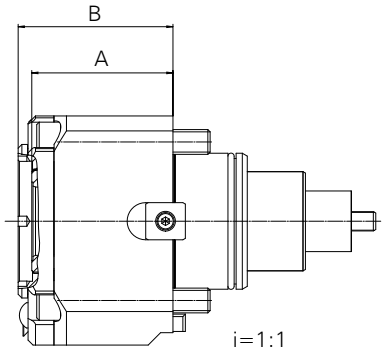
BENZ CAPTO™

i Other output spindles available upon request

BENZ Solidfix® / Collet chuck



BENZ CAPTO™



Output spindle	Size Spindle	i	EC	IC p_{max} [bar]	$n_{1\,max}$ / $n_{2\,max}$ [rpm]	$M_{1\,max}$ / $M_{2\,max}$ [Nm]	A_{max} [mm]	B [mm]	Order No.	
	Technical Data									
BENZ Solidfix®	S4	1:1	✓	-	6000 / 6000	50 / 50	51	30	113DA07800S4	
	S4	1:1	✓	70	6000 / 6000	50 / 50	51	30	113EA07800S4	
	S3	1:1	✓	-	12000 / 12000	50 / 50	49	30	113DA07800S3	■
	S3	1:1	✓	70	12000 / 12000	50 / 50	49	30	113EA07800S3	■
Collet chuck	ER32	1:1	✓	-	6000 / 6000	50 / 50	55,1	30	113DA07800E6A	
	ER32	1:1	✓	70	6000 / 6000	50 / 50	60,2	30	113EA07800E6A	
	ER25	1:1	✓	-	12000 / 12000	50 / 50	42,9	30	113DA07800E5A	■
	ER25	1:1	✓	70	12000 / 12000	50 / 50	47,9	30	113EA07800E5A	■
BENZ CAPTO™	C4	1:1	✓	-	6000 / 6000	50 / 50	57	62,5	113DA07800L4BD	
	C4	1:1	✓	70	6000 / 6000	50 / 50	57	62,5	113EA07800L4BD	
	C3	1:1	✓	-	12000 / 12000	50 / 50	49	53,5	113DA07800L3BD	■
	C3	1:1	✓	70	12000 / 12000	50 / 50	49	53,5	113EA07800L3BD	■

■ High Speed

LIVE TOOL BMT 55-83
AXIAL, 1:2

TECHNICAL DATA



OUTPUT SPINDLES



BENZ Solidfix®

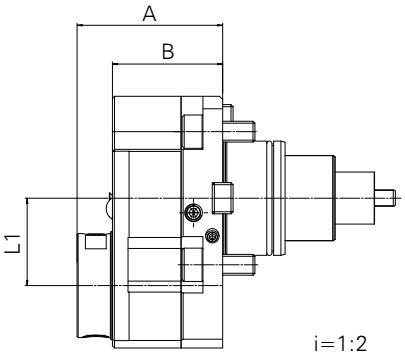


Collet chuck System ER DIN 6499

BENZ CAPTO™

i Other output spindles available upon request

BENZ Solidfix® / Collet chuck



Output spindle	Technical Data Size Spindle	i	EC	IC p_{max} [bar]	$n_{1\,max}$ / $n_{2\,max}$ [rpm]	$M_{1\,max}$ / $M_{2\,max}$ [Nm]	A_{max} [mm]	B [mm]	L1 [mm]	Order No.
BENZ Solidfix®	S3	1:2	✓	-	6000 / 12000	30 / 15	70	53	42	113DI07894S3D
	S3	1:2	✓	100	6000 / 12000	30 / 15	77	60	42	113EI07894S3D
Collet chuck	ER25	1:2	✓	-	6000 / 12000	30 / 15	71,9	53	42	113DI07894E5AD
	ER25	1:2	✓	100	6000 / 12000	30 / 15	83,9	60	42	113EI07894E5AD

LIVE TOOL BMT 55-83
RADIAL

TECHNICAL DATA



LENGTH L1

85

OUTPUT SPINDLES



BENZ Solidfix®



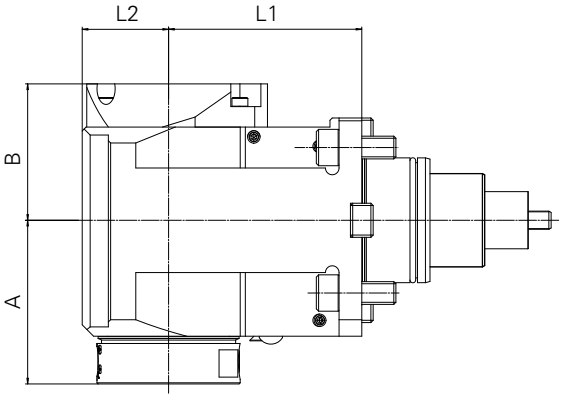
Collet chuck System ER DIN 6499



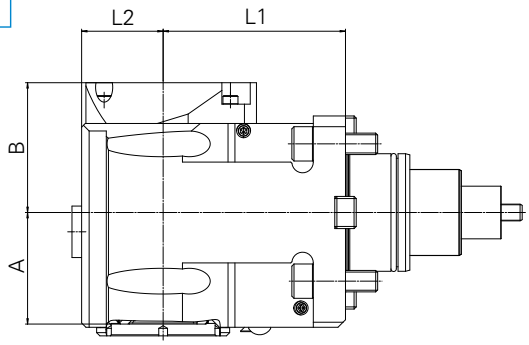
BENZ CAPTO™

Other output spindles available upon request

BENZ Solidfix® / Collet chuck



BENZ CAPTO™



Output spindle	Size Spindle	i	EC	IC p_{max} [bar]	$n_{1\,max}$ / $n_{2\,max}$ [rpm]	$M_{1\,max}$ / $M_{2\,max}$ [Nm]	A_{max} [mm]	B [mm]	L1 [mm]	L2 [mm]	Order No.	
BENZ Solidfix®	S4	1:1	✓	-	6000 / 6000	70 / 70	72	52	85	38	113FAX07849S4D-85	
	S4	1:1	✓	100	6000 / 6000	70 / 70	72	60	85	38	113GAX07849S4D-85	
	S3	1:1	✓	-	12000 / 12000	30 / 30	56	40	85	28	113FAX07839S3D-85	■
	S3	1:1	✓	100	12000 / 12000	30 / 30	56	58	85	28	113GAX07839S3D-85	■
Collet chuck	ER32	1:1	✓	-	6000 / 6000	70 / 70	69,1	52	85	38	113FAX07849E6AD-85	
	ER32	1:1	✓	100	6000 / 6000	70 / 70	74,2	60	85	38	113GAX07849E6AD-85	
	ER25	1:1	✓	-	12000 / 12000	30 / 30	56,9	40	85	28	113FAX07839E5AD-85	■
	ER25	1:1	✓	100	12000 / 12000	30 / 30	61,9	58	85	28	113GAX07839E5AD-85	■
BENZ CAPTO™	C4	1:1	✓	-	6000 / 6000	70 / 70	52	54	85	38	113FAX07849L4BD-85	
	C4	1:1	✓	100	6000 / 6000	70 / 70	52	60,5	85	38	113GAX07849L4BD-85	
	C3	1:1	✓	-	12000 / 12000	30 / 30	42	45	85	32	113FAX07839L3BD-85	■
	C3	1:1	✓	100	12000 / 12000	30 / 30	42	67,5	85	32	113GAX07839L3BD-85	■

■ High Speed

LIVE TOOL BMT 55-83
RADIAL, 1:2

TECHNICAL DATA



LENGTH L1

85

OUTPUT SPINDLES



BENZ Solidfix®



Collet chuck System ER DIN 6499

BENZ CAPTO™

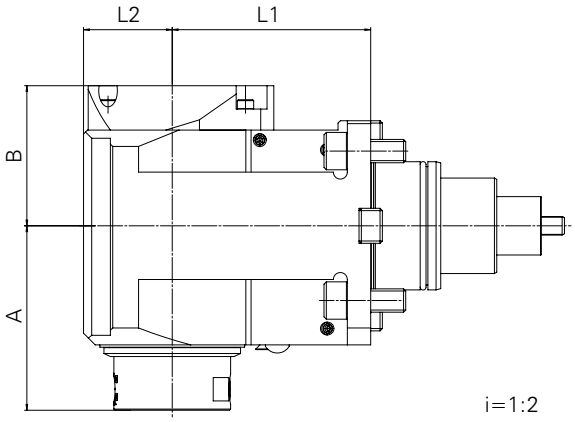
i Other output spindles available upon request



BENZ Solidfix® / Collet chuck



BENZ CAPTO™



Output spindle	Size Spindle	i	EC	IC p_{max} [bar]	$n_{1\,max}$ / $n_{2\,max}$ [rpm]	$M_{1\,max}$ / $M_{2\,max}$ [Nm]	A_{max} [mm]	B [mm]	L1 [mm]	L2 [mm]	Order No.
BENZ Solidfix®	S3	1:2	✓	-	5000 / 10000	40 / 20	79	52	85	38	113FWX07849S3D-85
	S3	1:2	✓	✓	5000 / 10000	40 / 20	79	60	85	38	113GWX07849S3D-85
Collet chuck	ER25	1:2	✓	-	5000 / 10000	40 / 20	78,6	52	85	38	113FWX07849E5AD-85
	ER25	1:2	✓	✓	5000 / 10000	40 / 20	83,6	60	85	38	113GWX07849E5AD-85

LIVE TOOL BMT 55-83
ADJUSTABLE

TECHNICAL DATA



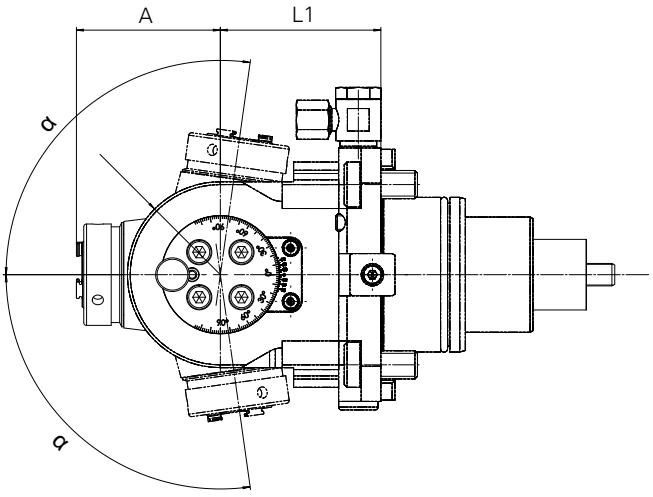
OUTPUT SPINDLE



Collet chuck
System ER
DIN 6499

Other output spindles available upon request

Collet chuck



Output spindle	Size Spindle	i	EC	IC p_{max} [bar]	$n_{1\,max}$ / $n_{2\,max}$ [min^{-1}]	$M_{1\,max}$ / $M_{2\,max}$ [Nm]	A_{max} [mm]	L1 [mm]	α [°]	Order No.
	Technical Data									
BENZ Solidfix®	S1	1:0,879	✓	-	8000 / 7000	10 / 12	46	57	98	113FDX09439S1
	S1	1:0,879	✓	50	8000 / 7000	10 / 12	46	57	98	113GDX09439S1
Collet Chuck	ER16	1:0,879	✓	-	8000 / 7000	10 / 12	51,1	57	98	113FDX09439E3A
	ER16	1:0,879	✓	50	8000 / 7000	10 / 12	56	57	98	113GDX09439E3A

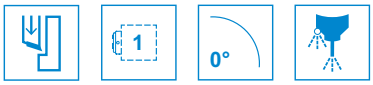
*Internal cooling p_{max} = 50 bar

LIVE TOOL BMT 55-83
AXIAL, BROACHING UNIT - BENZ LINA 4.0

TECHNICAL DATA



i.com



LENGTH L1

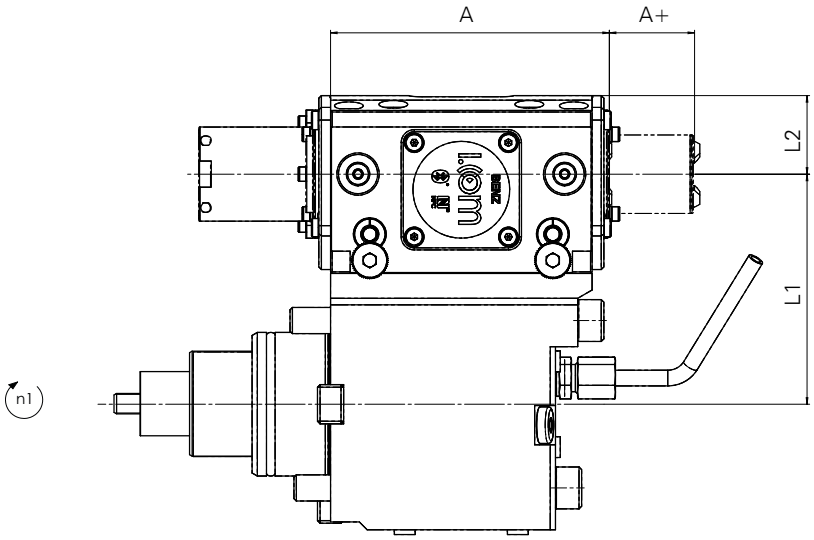
88

OUTPUT SPINDLE



Prism-shaped
profile
Ø 30 mm

For questions regarding BENZ i.com
please contact our BENZ Sales Team



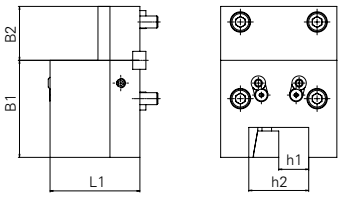
	Performance Data		
Type	$n_{1\,max}$ / $*n_{2\,max}$ [min^{-1}]	$M_{1\,max}$ / $F_{c\,max}$ [Nm]	f [mm]	Groove $width_{max}$ [mm]
ES	1500 / 1500	30 / 1700	0,02 - 0,10	12

	Technical Data								
Type	Size Plunger	i	EC	IC p_{max} [bar]	**A+ [mm]	A [mm]	L1 [mm]	L2 [mm]	Order No.
ES	30	1:1	✓	50	32 / 34	106,5	88	30	113ES07807B2D-88-IB

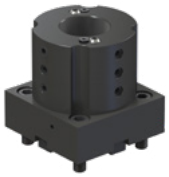
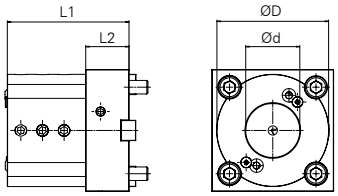
*number of double stroke per minute
**usable working stroke / total stroke

STATIC HOLDERS – BMT 55

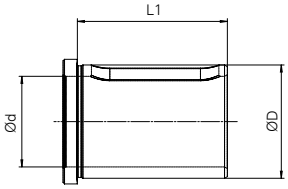
O.D. TURNING TOOL | SINGLE

Model	Drawing	Technical Data h1 [mm]	h2 [mm]	L1 [mm]	B1 [mm]	B2 [mm]	EC	IC	Order No.
		25	50	75	81	45	✓	✓	113A078560001
		25	50	75	81	45	✓	✓	113A078560001-IC

BORING BAR HOLDER | SINGLE

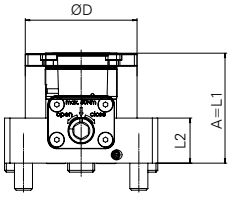
Model	Drawing	Technical Data Ød [mm]	ØD [mm]	L1 [mm]	L2 [mm]	EC	IC	Order No.
		40	83	90	32	✓	✓	113A078576005

REDUCING SLEEVE

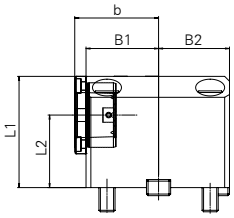
Model	Drawing	Technical Data Ød [mm]	ØD [mm]	L1 [mm]	Order No.*
		32	40	69	B571-403269L
		25	40	69	B571-402569G
		20	40	69	B571-402069G
		16	40	69	B571-401669G

*Versions: L= with slotted hole / G= with threads

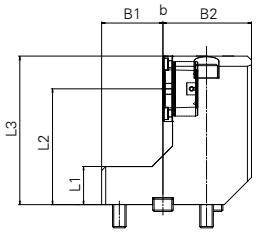
AXIAL HOLDER | SINGLE - BENZ CAPTO™

Model	Drawing	Technical Data Size Adapter	A [mm]	ØD [mm]	L1 [mm]	L2 [mm]	IC	Order No.
		C4	61	62	61	25	✓	113AA078L4BDU-61
		C5	73	77	73	25	✓	113AA078L5BDU-73

RADIAL HOLDER | SINGLE - BENZ CAPTO™

Model	Drawing	Technical Data Size Adapter	L1 [mm]	L2 [mm]	b [mm]	B1 [mm]	B2 [mm]	IC	Order No.
		C4	69	45	52	45	44	✓	113AP078L4BDU-45
		C5	77	45	58	45	44	✓	113AP078L5BDU-45

RADIAL HOLDER | SINGLE - BENZ CAPTO™

Model	Drawing	Technical Data Size Adapter	L1 [mm]	L2 [mm]	L3 [mm]	b [mm]	B1 [mm]	B2 [mm]	IC	Order No.
		C4	28	85	109	0	45	65	✓	113AR078L4BDU-85
		C5	28	85	117	0	45	77	✓	113AR078L5BDU-85

PRODUCT GROUPS
TOOLING & MACHINE TOOLING TECHNOLOGY

TOOLING TECHNOLOGY



METAL

LIVE TOOLS/TOOL HOLDERS

- Radial heads 90°
- Radial heads ≠ 90°
- Axial heads
- Swivel heads
- Multi-spindle heads
- Broaching units
- Rotating tool holders
- Static tool holders

COMPONENTS. Our comprehensive tool concepts for turning centers and milling centers are ideal for nearly every application. Providing a technological advantage is our goal.
SPECIFIC TO THE CUSTOMER. Our modular approach enables customized configurations.
SYSTEMS. We develop special customer-specific tools for OEM and end customers on request.



METAL

EXCHANGEABLE UNITS

- Angle heads 90°
- Angle heads ≠ 90°
- Swivel heads
- Multi-spindle heads
- Broaching units
- High-speed spindles

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.



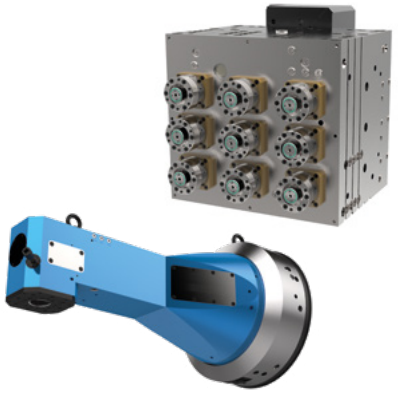
WOOD / COMPOSITE AND ALUMINIUM

EXCHANGEABLE UNITS

- Angle heads 90°
- Swivel heads
- Multi-spindle heads
- Multi-axis heads
- Sanding units
- Floating head units

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, making them 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

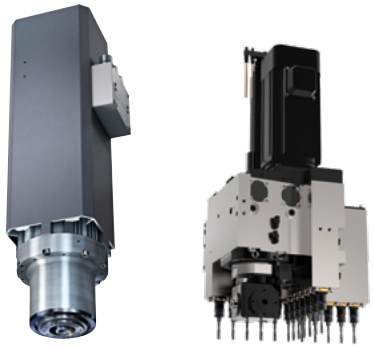


METAL

MULTI-SPINDLE HEADS AND 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 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 AND ALUMINIUM

SYSTEM TECHNOLOGY

- Multiple-spindle drill heads
- Motor spindles
- Motors
- 5-axis technology
- C-axes
- Swivel axes
- Rotary distributors
- 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.

SERVICE



METAL / WOOD / COMPOSITE AND ALUMINIUM

SERVICE

- Repair service
- Rapid Repair Kit
- Preventive maintenance
- Spare part management
- Global service
- Service hotline

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.
FORESIGHT. We go one step further: Preventive maintenance, customized Rapid Repair Kits 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.

OVERVIEW
PICTOGRAMS & ABBREVIATIONS

UNIT SPECIFICATIONS

Type of machining	 **Drilling** is suitable for boring machining	 **Milling** is suitable for milling machining	 **Threading** is suitable for thread machining	 **Broaching and slotting** is suitable for machining by broaching and slotting
Number of output spindles (tool holding fixtures)	 **1** one output spindle			
Axis angle	 **0°** Unit for machining tasks at a 0° angle	 **90°** Unit for machining tasks at a 90° angle	 **± 0** Unit for machining tasks at an adjustable angle 0° ±max. α°	
Drive for spindle Direction of rotation	 **clockwise / clockwise** synchronized rotation	 **clockwise / counterclock-wise** counter-rotation		
Coolant feed for cutting blade	 **Extern (EC)** The tool is cooled using anexternal feed line (spray nozzle)	 **Combination (EC+IC)** The tool is cooled by a combination of both internal and external systems		
Turret data	 **Width across/** Turret width	 **Drive length** of the tools shank in the turret	 **Turret type**	

ABBREVIATIONS

M_{max}	Maximum torque
i	Gear ratio
n_{max}	Maximum speed
f_c	Feed
p_{max}	Maximum pressure (bar)
EC	External cooling
IC	Internal cooling
p.	Page
✓	Possible
-	Not possible
SW	Width across flats
mm	Millimeter

Usage note – general

The contents of this catalog are not legally binding and are intended solely for informational purposes. Any final agreement will be in the
form of a written order confirmation from BENZ GmbH, which occurs only subject to the respective current General Terms and Conditions
of Sale and Delivery of BENZ GmbH. These can be found online at www.benz-tools.de.

All of the products listed in this catalog are designed for their intended use, e.g. machines for precision machining. The recognized technical regulations for safety and professional work must be followed for use and installation.

Furthermore, the respective laws, guidelines from TÜV, guidelines from the respective trade association and VDE stipulations shall apply.

The technical data listed in this catalog must be observed by the user. The conditions of use may not fall below or exceed the specified data. If information is missing, it cannot be assumed that there are no upper or lower limits or no limitations for specific use cases. Consultation is required in these cases.

Disposal is not included in the price, which would have to be taken into account accordingly in the event of return to or disposal by BENZ GmbH.

TECHNICAL DATA AND FIGURES

The technical data and figures have been compiled with great care and to the best of our knowledge. We cannot guarantee that the information is up to date, correct or complete.

The specifications and information - such as figures, drawings, descriptions, dimensions, weights, materials, technical and other performance data and the described products and services - contained in general product descriptions, BENZ GmbH catalogs, brochures and price lists in any form are subject to change and may be modified or updated at any time without prior notification. They are binding only to the extent expressly specified in a contract or order confirmation. Slight deviations from such descriptive product information shall be considered approved and shall not affect fulfillment of agreements insofar as they are reasonable for the customer.

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