

2020

IN 3 PART

Werkzeuge für STAR - Maschinen
Tools for STAR - machines



passion for clamping

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Werkstückspannung
Workpiece Clamping

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Werkzeugspannung
Tool Clamping

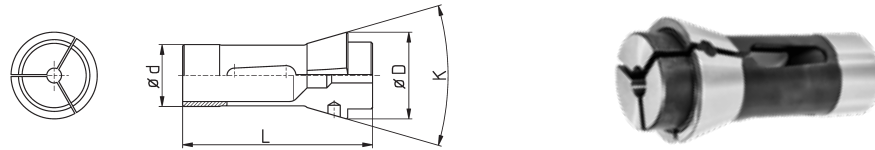
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Zubehör
Accessories

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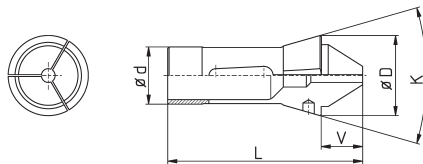
Dead Length Collets



Bestell-Nr. order-no.	F-Nummer F-type	d	D	L	K	max Ø	max. 6-kt max. hex	max. 4-kt max square
101E	F8 76-577	8	12	42	32°	6,35		
109E	F10 76-86	10	15,5	47,5	40°	8,0	7,0	5,5
116E	F13 76-357	13	19	63,5	32°	10,0	8,0	7,0
120E	F15 76-580	15	21	64	32°	13,0	11,0	9,0
1212E	F16 76-1076	16	21	64	32°	13,0	10,0	8,0
136E	F20 76-201	20	26	54	30°	16,0	14,0	10,0
138E	F20 76-87	20	28	67	32°	16,0	14,0	11,0
140E	F22 76-71	22	30	55	30°	16,0	15,0	10,0
145E	F25 76-64	25	35	77	32°	20,0	17,0	14,0
147E	F27 76-22	27	38	73	30°	23,0	20,0	16,0
1536E	F37 76-740	37	47	92	32°	32,0	27,0	22,0
F40	F40	40	47	92	32°	36,0	30,0	25,0
171E	F42 76-99	42	55	94	30°	37,0	32,0	26,0
173E	F48 76-81	48	60	94	30°	42,0	38,0	30,0

Vorbauspannzangen

Extended Nose Collets



Bestell-Nr. order-no.	F-Nummer F-type	d	D	L	V	K	max Ø
120E-VS	F15 76-580	15	21	64		32°	
1212E-VS	F16 76-1076	16	21	64		32°	
136E-VS	F20 76-201	20	26	54		30°	
138E-VS	F20 76-87	20	28	67		32°	
1446E-VS	F30 76-101	30	38	65		30°	
145E-VS	F25 76-64	25	35	77		32°	1,5 - 16
1536E-VS	F37 76-740	37	47	92	20	32°	2 - 19
173E-VS	F48 76-81	48	60	94		30°	8 - 43

4-kt / 6-Kt Profile auf Anfrage

Square / Hex shapes on request

kaltvulkanisiert - vulcanized

Notfall-Spannzange - Emergency Collet



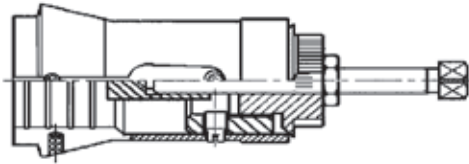
Kunststoffeinsatz - Polymere Insert

Weitere Informationen auf Anfrage More Information on request



Innenanschlage

- Schnelle Montage und dennoch absolut fester Sitz
- Anschlagteller konnen fur Hohlteile und an kleinste Bohrungen angepasst werden
- Fur 6-kt verwendbar, egal ob 3 oder 4 Schlitzze
- Verringert Zangenbruch bei Stufenzangen



Backstop for Collets

- Easy and quick fitting
- Suitable for 3 or 4 slot collets
- stop pins can be turned to any specific diameter
- Prevents breakage of stepped collets

Bestell-Nr. order-no.	Fur Spannzange E-Nr. for collet E-no.	F-Nr. F-no.
HDAN-140E	140E	F22 76-71
HDAN-145E	145E	F25 76-64
HDAN-1536E	1536E	F37 76-740
HDAN-171E	171E	F42 76-99
HDAN-173E	173E	F48 76-81

Im Lieferumfang enthalten: 2 Anschlagteller

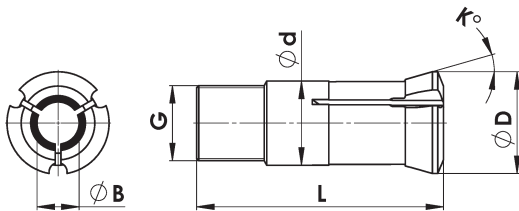
Supplied with: 2 stop pins

Montagehinweis:

Die drei (bzw. vier) Querschrauben ganz eindrehen und anschließend den Anschlag in die Spannzange einfuhren, so dass sich die Querschrauben mit den Spannzangenschlitzzen decken. Jetzt die Querschrauben herausdrehen und den Anschlag mit der Kontermutter festziehen.

Assembly:

Screw in the three (resp. four) cross screws totally and insert the stop into the collet, so that the cross screws are visible in the slots of the collet. Now screw out the cross screws and tighten the stop with the lock-nut.

Verstellbare Fuhrungsbuchen
mit HM-EinsatzAdjustable Guide Bushes
with Carbide Insert

Bestell-Nr. order-no.	EURO codes	US code	d	D	G	L	K	B
I 353	T16-59 / 8.001 / J6R	TD10	16	20,5	M14 x 1	59	16°	1,0 - 12,0
F853	T18-59-M16.1 / 166.001 / B212A		18	21,8	M16 x 1	59	30°	1,0 - 13,0
T221	T21-75.4 / 450.001 / B301	SNC15	21	24	M18 x 1	57,5	12°	3,0 - 15,0
F391	T22-68-M22.1 / 39.001 / J7AR	TD20R	22	29	M22 x 1	68	16°	3,0 - 18,0
T223	T28-82-M25.1 / 22.001 / B261	TD25S	28	34	M25 x 1	82	16°	3,0 - 21,0
T223S	erw. Durchlass / spindle expansion		28	34	M27 x 1	82	16°	21,0 - 23,0
T227	T34-87.5 / 451.001 / B227	CD25	34	41	M34 x 1	87,5	10°	3,0 - 26,0
T229	T42-82-C16 / 28.001 / J9	TD32S	42	49	M40 x 1	82	16°	3,0 - 32,0
T229S	erw. Durchlass / spindle expansion		42	49	M42 x 1	82	16°	30,0 - 36,0
T248	T48-82 / 464.001	STM38	48	54	M46 x 1	82	16°	2,0 - 38,0

Auch erhaltlich:

- Zwischenmae 0,1 stg
- verlangerter HM-Einsatz (30mm / 40mm)
- Sechskant Fuhrungsbuchen
- UP Rundlaufgenauigkeit
- weitere Typen auf Anfrage

Also available:

- intermediate sizes 0,1 inc.
- extended carbide length (30mm / 40mm)
- hexagon guide bushes
- UP runout accuracy
- more types on request



Spannhülsen für Lademagazine

Typ D mit Querstift
Type D with pin



Typ "Longlife"
Type "Longlife"



Bar Feed Collets for Bar Feeders

Typ TD "Turbo"
Type TD "Turbo"



mit Aufschraubgewinde
with thread



Innenprofil 4-kant / 6-kant
Inner Profile sqr / hex



Vulkanisiert
vulcanized



Gummi Spannhülsen
Rubber-Fix Collets



Spanndorne
Collets for Internal Gripping

Unser gesamtes Produktportfolio finden Sie im Katalog - Werkstück & Werkzeugspannung -
For the entire product portfolio look in our catalogue - Workpiece & Tool Clamping -



Spannhülsenlagerungen für viele
Lademagazine im Langdrehbereich

Revolving Ends for many Bar Feeders

Drehende Enden
Revolving Ends



für LNS Mini-Sprint
for LNS Mini-Sprint



für TRAUB, FMB
for TRAUB, FMB



für FMB, IEMCA, BREUNING IRCO, TRAUB
for FMB, IEMCA, BREUNING IRCO, TRAUB



für TORNOS, ROBOBAR
for TORNOS, ROBOBAR



für IEMCA, EDGE, BOSS
for IEMCA, EDGE, BOSS



ER-Spannzangen DIN 6499 B

Rundlaufgenauigkeit 10 µm
Runout Accuracy 10 µm



Zange ER / Best.-Nr. collet ER / order-no.	stg. step	Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ER08 (4004E) 1,0 - 5,0 1/16", 1/8", 3/16"	0,5	ER25 (430E) 1,0 - 16,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8"	0,5
ER11 (4008E) 1,0 - 7,0 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"	0,5	ER32 (470E) 2,0 - 20,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16"	0,5
ESX12 (424E) 1,0 - 7,0	0,5	ER40 (472E) 3,0 - 10,0 11,0 - 26,0	0,5 1,0
ER16 (426E) 1,0 - 10,0 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32"	0,5	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 1"	
ER20 (428E) 1,0 - 13,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2"	0,5		

ER-Collets ISO 15488

ER-Spannzangen DIN 6499 B, HP High Precision

Rundlaufgenauigkeit 5 µm
Runout Accuracy 5 µm



Zange ER / Best.-Nr. collet ER / order-no.	stg. step	Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ER08HP (4004E) 1,0 - 5,0 1/16", 1/8", 3/16"	0,5	ER25HP (430E) 1,0 - 16,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8"	0,5
ER11HP (4008E) 1,0 - 7,0 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4"	0,5	ER32HP (470E) 2,0 - 20,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16"	0,5
ER16HP (426E) 1,0 - 10,0 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 13/32"	0,5	ER40HP (472E) 3,0 - 10,0 11,0 - 26,0	0,5 1,0
ER20HP (428E) 1,0 - 13,0 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2"	0,5	3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", 11/16", 3/4", 13/16", 7/8", 1"	

ER-Collets ISO 15488, HP High Precision

ER-Spannzangen DIN 6499 B, UP Ultra Precision

Rundlaufgenauigkeit 2 µm
Runout Accuracy 2 µm



Zange ER / Best.-Nr. collet ER / order-no.	stg. step	Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ER08UP (4004E) 1,0 - 5,0	0,5	ER25UP (430E) 1,0 - 16,0	0,5
ER11UP (4008E) 1,0 - 7,0	0,5	ER32UP (470E) 2,0 - 20,0	0,5
ER16UP (426E) 1,0 - 10,0	0,5	ER40UP (472E) 3,0 - 26,0	0,5
ER20UP (428E) 1,0 - 13,0	0,5		

ER-Collets ISO 15488, UP Ultra Precision

ER-Spannzangen DIN 6499 B Übergrößen

ER-Collets ISO 15488 Oversized

Rundlaufgenauigkeit 12 µm
Runout Accuracy 12 µm



Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ER11 (4008E) 7,5 - 8,0	0,5
ER16 (426E) 10,5 - 12,0	0,5
ER20 (428E) 13,5 - 15,0	0,5

Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ER25 (430E) 16,5 - 20,0	0,5
ER32 (470E) 21,0 - 22,0	1
ER40 (472E) 27,0 - 30,0	1

ER-Spannzangen Mini Spannzangen mit Mikrobohrung

ER-Collets Mini Collets with Microbore



Zange ER / Best.-Nr. collet ER / order-no.	Bohrung bore	stg. step
ER08MB 0.2-RE - ER08MB 0.9-RE	0,2 - 0,9	0,1
ER11MB 0.2-RE - ER11MB 0.9-RE	0,2 - 0,9	0,1
ER16MB 0.2-RE - ER16MB 0.9-RE	0,2-0,9	0,1

Bei allen Spannzangen:
Nicht über Nennmaß spannen
Möglichst die gesamte Spannlänge der Zange nutzen

For all collets:
Do not clamp collets over nominal size
If possible use total clamping length

ER-Zangensätze, Zangen DIN 6499 B

ER-Collet Sets ISO 15488



Zangensatz im Kasten
Collet-set in box



Zangensatz auf Holzträger
Collet-set on wooden board

Rundlaufgenauigkeit 10 / 5 / 2 µm
Runout Accuracy 10 / 5 / 2 µm

Typ type	Rundlauf runout	Satz set	von-bis range	stg. step	Auf Holzbrett on wooden board	Im Kasten in box
					Bestell-Nr. order-no.	Bestell-Nr. order-no.
ER08 (4004E)	10 µm	9-teilig / pcs	1,0 - 5,0	0,5	ZWTER08	ZWTER08K
	5 µm				ZWTER08HP	ZWTER08HPK
ER11 (4008E)	10 µm	13-teilig / pcs	1,0 - 7,0	0,5	ZWTER11	ZWTER11K
	5 µm				ZWTER11HP	ZWTER11HPK
	2 µm				ZWTER11UP	ZWTER11UPK
ER16 (426E)	10 µm	10-teilig / pcs	1,0 - 10,0	1	ZWTER16	ZWTER16K
	5 µm				ZWTER16HP	ZWTER16HPK
	2 µm	ZWTER16UP	ZWTER16UPK			
ER20 (428E)	10 µm	12-teilig / pcs	2,0 - 13,0	1	ZWTER20	ZWTER20K
	5 µm				ZWTER20HP	ZWTER20HPK
	2 µm				ZWTER20UP	ZWTER20UPK
ER25 (430E)	10 µm	15-teilig / pcs	2,0 - 16,0	1	ZWTER25	ZWTER25K
	5 µm				ZWTER25HP	ZWTER25HPK
	2 µm				ZWTER25UP	ZWTER25UPK
ER32 (470E)	10 µm	18-teilig / pcs	3,0 - 20,0	1	ZWTER32	ZWTER32K
	5 µm				ZWTER32HP	ZWTER32HPK
	2 µm				ZWTER32UP	ZWTER32UPK
ER40 (472E)	10 µm	23-teilig / pcs	4,0 - 26,0	1	ZWTER40	ZWTER40K
	5 µm				ZWTER40HP	ZWTER40HPK
	2 µm				ZWTER40UP	ZWTER40UPK

Abgedichtete ER-Spannzangen DIN 6499 A

Sealed ER-Collets ISO 15488

Rundlaufgenauigkeit 12 µm
Runout Accuracy 12 µm



Zange ER / Best.-Nr. collet ER / order-no.	stg. step	Zange ER / Best.-Nr. collet ER / order-no.	stg. step
ERS11 (4012E) 3,0 - 7,0 1/8", 3/16", 1/4"	0,5	ERS25 (429E) 3,0 - 16,0 ERS25 (429E) 18,0 / 20,0	0,5
ERS16 (425E) 3,0 - 9,5 ERS16 (425E) 10,0 - 11,0	0,5 1	ERS32 (469E) 3,0 - 20,0	1
ERS20 (427E) 3,0 - 14,0	0,5	ERS40 (471E) 3,0 - 26,0	1

Bis 60 bar
Zollmaße lieferbar

Up to 60 bar
Inch sizes also available

Hohe Präzision - 5 µm Rundlauf

High Precision - 5 µm Runout Accuracy



Bestell-Nr. order-no.	Zange type	Ø d	stg. step
ERS16HP (425E)	ER16	3,0 - 10,0 1/8" / 3/16" / 1/4" / 5/16" / 3/8"	1
ERS20HP (427E)	ER20	3,0 - 12,0 1/8" / 3/16" / 1/4" / 5/16" / 3/8" / 7/16" / 1/2"	1
ERS25HP (429E)	ER25	3,0 - 14,0 1/8" / 3/16" / 1/4" / 5/16" / 3/8" / 7/16" 1/2" / 9/16" / 5/8"	0,5
ERS32HP (469E)	ER32	3,0 - 18,0 3/16" / 1/4" / 5/16" / 3/8" / 7/16" 1/2" / 9/16" / 5/8" / 3/4"	1
ERS40HP (471E)	ER40	6,0 - 22,0 / 25,0	2

Bis 60 bar

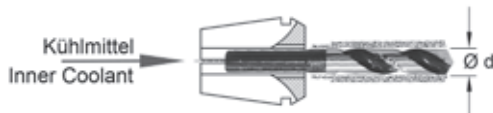
Up to 60 bar

Bestell-Nr. - Beispiele: ERS16HP 6,0 od. ERS16HP 1/4"
Order-no. - examples:

Nur für Werkzeugschäfte ohne Spannfläche - Only for tools without clamping flat
Auch in UP - Ausführung (2 µm) verfügbar - Also available in type UP (2 µm)

mit Kühlmittelbohrungen

for Coolant Through Spread Holes



Rundlaufgenauigkeit 12 µm
Runout Accuracy 12 µm

Bestell-Nr. order-no.	Zange collet	Ø d	stg. step
ERS11JET	ER11	3,0 - 7,0	0,5
ERS16JET	ER16	3,0 - 10,0	0,5
ERS20JET	ER20	3,0 - 12,0	0,5
ERS25JET	ER25	3,0 - 16,0	0,5
ERS32JET	ER32	3,0 - 20,0	1
ERS40JET	ER40	6,0 - 25,0	1

Zollmaße lieferbar

Inch sizes also available

• Der Kühlmittelaustritt ist direkt am Schaft des Werkzeugs

The coolant flow is directly next to the shank

• Es sollten nur Werkzeugschäfte mit Nennmaß gespannt werden

Only clamp the nominal diameter

ER-Spannzangen DIN 6499 A metallisch abgedichtet

ER-Collets ISO 15488 metallic sealed



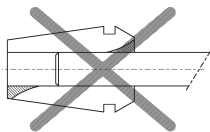
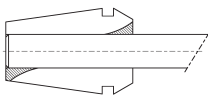
Bestell-Nr. order-no.	Zange collet	Ø d	stg. step
ERS11MD	ER11	3,0 - 6,0	1,0
ERS16MD	ER16	2,0 - 12,0	0,5
ERS20MD	ER20	2,0 - 14,0	1,0
ERS25MD	ER25	3,0 - 16,0	1,0
ERS32MD	ER32	3,0 - 20,0	1,0
ERS40MD	ER40	6,0 - 20,0 25,0 + 26,0	2,0

Rundlaufgenauigkeit 8 µm
Runout Accuracy 8 µm

Bis 120 bar
Up to 120 bar

Auch als HP (5 µm) + UP (2 µm) lieferbar.
HP (5 µm) + UP (2 µm) also available.

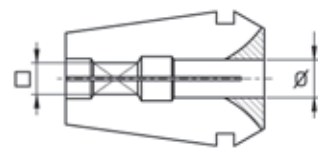
Das Werkzeug muss mindestens bündig oder tiefer in die Spannzange eingeführt werden!
The tool must be inserted flush or deeper in the collet!



Gewindebohrerspannzangen DIN 6499 A mit Vierkantmitnahme

Tapping Collets ISO 15488 with Internal Driver Square

Bestell-Nr. order-no.	Ø / □
ERG08	2,2/1,8; 2,5/2,1; 2,8/2,1; 3,5/2,7 4,0/3,0
ERG11	2,5/2,1; 2,8/2,1; 3,5/2,7; 4,0/3,2; 4,5/3,4; 5,0/4,0; 5,5/4,5; 6,0/5,0
ERG16	2,5/2,1; 2,8/2,1; 3,5/2,7; 4,0/3,2; 4,5/3,55; 5,0/4,0; 5,5/4,3; 6,0/5,0; 7,0/5,5; 8,0/6,3; 9,0/7,1; 10,0/8,0
ERG20	2,8/2,25; 3,5/2,7; 4,0/3,2; 4,5/3,55; 5,0/4,0; 5,5/4,5; 6,0/4,9; 7,0/5,5; 8,0/6,3; 9,0/7,1; 10,0/8,0; 11,0/9,0; 12,0/9,0
ERG25	2,5/2,1; 2,8/2,1; 3,5/2,7; 4,0/3,2; 4,5/3,55; 5,0/4,0; 5,5/4,3; 6,0/5,0; 6,3/5,0; 7,0/5,5; 8,0/6,3; 9,0/7,1; 10,0/8,0; 11,0/9,0; 12,0/9,0; 14,0/11,2; 15,0/12,0; 16,0/12,5
ERG32	3,5/2,7; 4,0/3,2; 4,5/3,55; 5,0/4,0; 5,5/4,3; 6,0/4,9; 7,0/5,5; 8,0/6,3; 9,0/7,1; 10,0/8,0; 11,0/9,0; 12,0/9,0; 14,0/11,2; 15,0/12,0; 16,0/12,5; 18,0/14,5; 20,0/16,0
ERG40	4,5/3,55; 6,0/4,9; 7,0/5,5; 8,0/6,3; 9,0/7,1; 10,0/8,0; 11,0/9,0; 12,0/9,0; 14,0/11,2; 16,0/12,5; 18,0/14,5; 20,0/16,0 22,0/18,0;

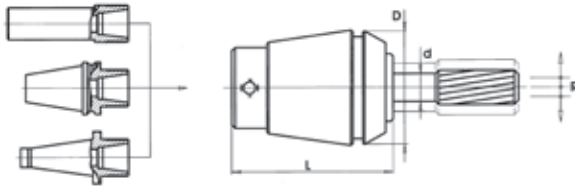


Bei allen Spannzangen:
Nicht über Nennmaß spannen
Möglichst die gesamte Spannlänge der Zange nutzen

For all collets:
Do not clamp collets over nominal size
If possible use total clamping length

Spannzangen DIN 6499 mit pendelndem Ausgleich

Floating Reamer Collets ISO 15488



- Spannzangen für schwimmende Halterung von Reibahlen und für starres Gewindebohren mit pendelndem Ausgleich
- Pendelnde Spannzangen ersetzen Pendelhalter
- Vorzugsweise Einsatz in angetriebenen Werkzeugen

- Collets for floated clamping of reamers and for rigid tapping with floated adjustment
- Floating collets replacing a floating holder
- Particularly used with driven tools

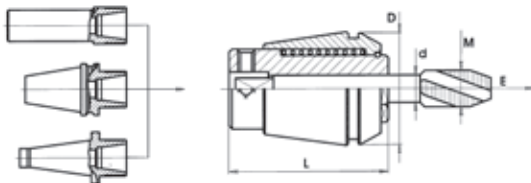
Bestell-Nr. order-no.	Zange collet	D	L	Pendelweg ges. total amplitude of floating R	Bereich - range d
ERP16	ER16	17	29	1	2 / 3 / 4 / 5 / 6 / 7
ERP16	ER16	17	29	1	1,5 / 2,5 / 3,2 / 3,5 / 3,55 / 4,5 / 5,5 / 5,6 / 6,2 / 6,3
ERP20	ER20	21	32	1	2 / 3 / 4 / 5 / 6 / 7 / 8
ERP20	ER20	21	32	1	1,5 / 2,5 / 2,8 / 3,2 / 3,5 / 3,55 / 4,5 / 5,5 / 5,6 / 6,3 / 7,1
ERP25	ER25	26	35	1,2	2 / 3 / 4 / 5 / 6 / 7 / 8 / 9 / 10
ERP25	ER25	26	35	1,2	1,5 / 2,5 / 2,8 / 3,2 / 3,5 / 3,55 / 4,5 / 5,5 / 5,6 / 6,3 / 7,1
ERP32	ER32	33	44	0,7	3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14
ERP32	ER32	33	44	0,7	2,5 / 3,2 / 3,5 / 3,55 / 4,5 / 5,5 / 5,6 / 6,3 / 12,5
ERP40	ER40	41	56	0,7	3 / 4 / 5 / 6 / 7 / 8 / 9 / 10 / 11 / 12 / 13 / 14 / 15 / 16
ERP40	ER40	41	56	0,7	2,5 / 3,2 / 3,5 / 3,55 / 4,5 / 5,5 / 5,6 / 6,3

Nur für IK bis 30 bar nutzbar

Only usable for inner coolant up to 30 bar

Gewindebohrerspannzangen DIN 6499 mit Längenausgleich

Tapping Collets ISO15488 with Length Adjustment



Mit Kerbverzahnung! Für besonders stabiles Gewindebohren
Höheres Drehmoment
Exaktere Führung

With Spline drive
Higher torque
Exact guiding

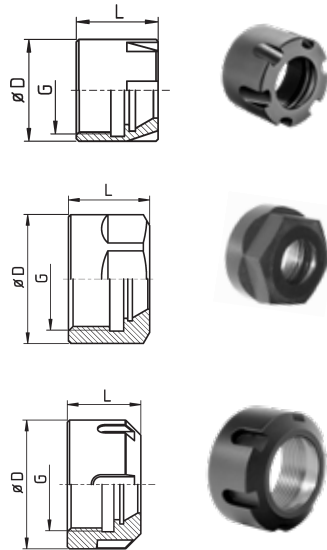
Bestell-Nr. order-no.	Zange collet	D	L	E	Bereich - range d
ETR11 *	ER11	11,5	23	5,5	0,9 / 1,4 / 1,5 / 1,6 / 1,8 / 2 / 2,2 / 2,3 / 2,5 / 2,8 / 3 / 3,15 / 3,5 / 3,55 / 4 / 4,5
ETR12	ESX12	11,5	21,5	5,5	0,9 / 1,4 / 1,5 / 1,6 / 1,8 / 2 / 2,2 / 2,3 / 2,5 / 2,8 / 3 / 3,15 / 3,5 / 3,55 / 4
ETR16	ER16	17	27	7	1,4 / 1,6 / 1,8 / 2 / 2,2 / 2,5 / 2,8 / 3 / 3,15 / 3,5 / 3,55 / 4 / 4,5 / 5 / 5,5 / 5,6 / 6 / 6,1 / 6,3
ETR20	ER20	21	31	7	2,2 / 2,5 / 2,8 / 3 / 3,15 / 3,5 / 3,55 / 4 / 4,5 / 5 / 5,5 / 5,6 / 6 / 6,2 / 6,3 / 7 / 8
ETR25	ER25	26	34	8	2,5 / 2,8 / 3 / 3,15 / 3,5 / 3,55 / 4 / 4,5 / 5 / 5,5 / 5,6 / 6 / 6,2 / 6,3 / 7 / 7,1 / 8 / 8,5 / 9 / 10
ETR32	ER32	33	43	10	4,5 / 5 / 5,5 / 5,6 / 6 / 6,2 / 6,3 / 7 / 7,1 / 8 / 8,5 / 9 / 10 / 10,5 / 11 / 11,2 / 12 / 12,5 / 14
ETR40	ER40	41	54	13	4,5 / 5,5 / 5,6 / 6 / 6,2 / 6,3 / 7 / 8 / 9 / 10 / 10,5 / 11 / 11,2 / 12 / 12,5 / 14 / 15 / 16 / 17

Bei allen Spannzangen:
Nicht über Nennmaß spannen
Möglichst die gesamte Spannlänge der Zange nutzen

For all collets:
Do not clamp collets over nominal size
If possible use total clamping length

ER Spannmuttern DIN 6499

ER Nuts ISO 15488



Bestell-Nr. order-no.	Max. Anzugsmoment max. torque [Nm]	D	L	G	Schlüssel spanners
ER08M	8	12	10,8	M10x0,75	E08M
ER11M	16	16	12	M13x0,75	E11M
ESX12M	16	17	14	M13x0,75	GS15
ER16M	24	22	18,4	M19x1	E16M
ER20M	28	28	19	M24x1	E20M
ER25M	32	35	20	M30x1	E25M
UM/ER11	24	19	11,3	M14x0,75	GS17
ESX12	24	19	14	M14x0,75	GS17
UM/ER16	56	28	17,5	M22x1,5	GS25
UM/ER20	80	34	19	M25x1,5	GS30
UX/ER16	56	32	17,5	M22x1,5	E16
UX/ER20	80	35	19	M25x1,5	E20
UM/ER25	104	42	20	M32x1,5	E25
UM/ER32	136	50	22,5	M40x1,5	E32
UM/ER40	176	63	25,5	M50x1,5	E40
UM/ER50	240	78	35,3	M64x2,0	E50

Standard: Alle Muttern sind vorgewuchtet

Standard: All nuts are balanced

Abgedichtete Muttern, System Regofix

Sealed Nuts, System Regofix



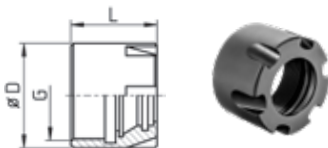
Bestell-Nr. order-no.	Max. Anzugsmoment max. torque [Nm]	Bild picture	D	L	G
ERC16	8 - 56	1	28	22,5	M22x1,5
ERC20	16 - 80	1	34	24,0	M25x1,5
ERC25	24 - 104	2	42	25,0	M32x1,5
ERC32	24 - 136	2	50	27,5	M40x1,5
ERC40	176	2	63	30,5	M50x1,5

ER Spannmuttern DIN 6499 / ISO 15488
für Dichtscheiben DS/ER

ER Nuts DIN 6499 / ISO 15488
for Sealing Disks DS/ER

ER Minimuttern für Dichtscheiben DS/ER

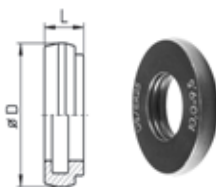
ER Mini-Nuts for Sealing Disks DS/ER



Bestell-Nr. order-no.	Max. Anzugsmoment max. torque [N/m]	D	L	G
ERC16M	8 - 24	22	22,0	M19x1,0
ERC20M	16 - 28	28	24,0	M24x1,0
ERC25M	24 - 32	35	25,0	M30x1,0

Dichtscheiben DS/ER

Sealing Disks DS/ER



Bestell-Nr. order-no.	D	L	Bereich von - bis range	stg. step
DS/ER16	13,0	4	1,0 - 10,0	0,5
DS/ER20	16,0	4	3,0 - 13,0	0,5
DS/ER25	21,0	4	3,0 - 16,0	0,5
DS/ER32	27,0	4	3,0 - 20,0	0,5
DS/ER40	33,5	4	3,0 - 26,0	0,5

DS/ER 16 ab 1mm lieferbar

DS/ER 16 available from 1mm



Schlüssel spanners	Für Muttern for nuts
E08M	ER08M
E11M	ER11M
E16M	ER16M
E20M	ER20M
E25M	ER25M
GS17	UM/ER11
GS25	UM/ER16
GS30	UM/ER20



Schlüssel spanners	Für Muttern for nuts
E16	UX/ER16
E20	UX/ER20
E25	UM/ER25
E32	UM/ER32
E40	UM/ER40

Dünne Gabelschlüssel

- Dicke 4mm
- Für schmale Schlüsselflächen
- Exakt gearbeitet



- Thickness 4mm
- For narrow key areas
- Exact worked

Thin Spanners

Schlüssel spanners	Länge length	Breite width
SW27	200	58
SW30	200	62,5
SW32	200	64

Steckschlüssel

Vorteile:

- Leichtere Handhabung
- Geringere Abrutschgefahr/Verletzungsgefahr
- Bessere Erreichbarkeit der Werkzeuge
- Höheres Anzugsmoment

Mit Drehmomentschlüssel verwenden.



Advantages:

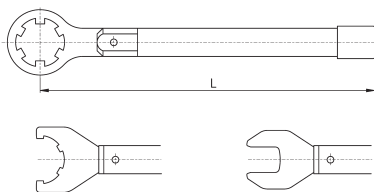
- Easy handling
- Reduced risk of slipping
- Better access to tools
- Higher torque

Used with a torque spanner.

Socket Spanners

Schlüssel spanners
E08M-STH-DMS
E11M-STH-DMS
E16M-STH-DMS
E20M-STH-DMS
E25M-STH-DMS

Drehmomentschlüssel



Torque Spanners



Bestell-Nr. order-no.	Mutter nut	Bild picture	Werkzeug Ø mm tool Ø mm	Drehmoment torque [Nm]	Werkzeug Ø mm tool Ø mm	Drehmoment torque [Nm]	Ges.länge total length
DMS-ER08M	ER08M	1	1,0 - 5,0	8			140
DMS-ER11MS	ER11M	1	1,0 - 2,9	9			150
DMS-ER11M	ER11M	1	3,0 - 7,0	18			150
DMS-ER16MS	ER16M	1	1,5 - 3,5	20			150
DMS-ER16M	ER16M	1	4,0 - 10,0	28			150
DMS-ER20M	ER20M	1	1,5 - 13,0	35			150
DMS-ER25M	ER25M	1	4,0 - 17,0	40			150
DMS-UM/ER11	UM/ER11	3	3,0 - 7,0	18			150
DMS-UM/ER16	UM/ER16	3	4,0 - 4,5	35	5,0 - 10,0	55	340
DMS-UX/ER16	UX/ER16	2	4,0 - 4,5	35	5,0 - 10,0	55	340
DMS-UM/ER20	UM/ER20	3	1,5 - 6,5	40	7,0 - 13,0	70	350
DMS-UX/ER20	UX/ER20	2	1,5 - 6,5	40	7,0 - 13,0	70	340
DMS-UM/ER25	UM/ER25	2	4,0 - 4,5	55	5,0 - 17,0	90	390
DMS-UM/ER32	UM/ER32	2	3,0 - 4,5	70	5,0 - 22,0	130	395



Zangenspannfutter
Collet Holders

ab Seite 19 - *from page 19*



Pendelhalter
Reamer Holders

ab Seite 29 - *from page 29*



Gewindeschneidfutter
Tap Holders

ab Seite 30 - *from page 30*



Schneideisenkappen
Button Die Holders

ab Seite 35 - *from page 35*



Fräsdorne
Milling Arbors

ab Seite 36 - *from page 36*

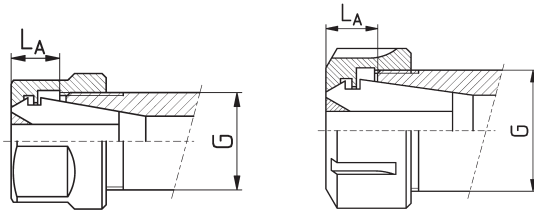
- Alle Zangenspannfutter werden incl. Standard-Mutter geliefert
- Zangenspannfutter mit "AK" werden incl. abgedichteter Mutter (System Rego-fix) geliefert.
- Abkürzungen bei den Halter-Bezeichnungen:

- All holders will be supplied with clamping nut (standard)
- Holders with "AK" will be supplied with sealed nut type Rego-fix
- List of abbreviations:

IK	axialer Kühlmittelanschluss	<i>axial inner coolant inlet</i>
AK	seitlicher (radialer) Kühlmittelanschluss	<i>radial inner coolant inlet</i>
WD	durchgehende Spannfläche	<i>throughout flat</i>
FL	abgesetzte Spannfläche	<i>no throughout flat</i>
OS	ohne Anschlagschraube	<i>without inner stop screw</i>
B	kleinster Durchmesser	<i>smallest diameter</i>

- Überstandsmaße von Muttern bei Zangenspannfuttern:

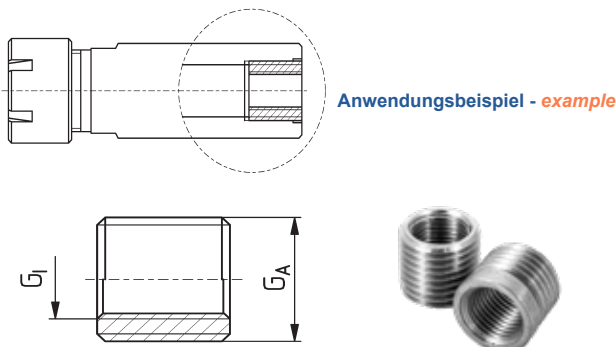
- Collet holders: Overlap of nuts:



Mutter nut	G	LA
ER08M	M10x0,75	4,3 - 6,1
ER11M	M13x0,75	5,7 - 7,5
ER16M	M19x1	8 - 11,5
ER20M	M24x1	8 - 11,5
ER25M	M30x1	8,5 - 12
UM/ER11	M14x0,75	4,9 - 6,6
UM/ER16	M22x1,5	7 - 10,5
UM/ER20	M25x1,5	8 - 11,5
UX/ER16	M22x1,5	7 - 10,5
UX/ER20	M25x1,5	8 - 11,5
UM/ER25	M32x1,5	8,5 - 12
UM/ER32	M40x1,5	9,5 - 13
UM/ER40	M50x1,5	11,5 - 15
UM/ER50	M64x2,0	14 - 21

- IK-Reduzierungen:

- Inner coolant reducers:



Bestell-Nr. order-no.	GA	GI
RED1/4 - 1/8	G1/4"	G1/8"
RED1/4 - M10x1	G1/4"	M10 x 1
RED1/4 - M8x1	G1/4"	M8 x 1
RED1/8 - M8x1	G1/8"	M8 x 1
REDM12x1,5 - G1/8	M12 x 1,5	G1/8"
REDM12x1,5 - M10x1	M12 x 1,5	M10 x 1
REDM12x1,5 - M8x1	M12 x 1,5	M8 x 1
RED1/8 - 1/8NPT	G1/8"	1/8"NPT
REDM8x1 - 1/8NPT	M8 x 1	1/8"NPT

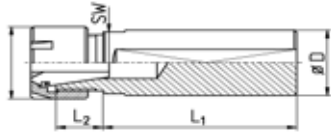
ER-Zangenspannfutter
ER08M / ER11M / ER16M
ER-Collet Holders
ER08M / ER11M / ER16M


Bild 1 (WD)



Bild 2 (FL)

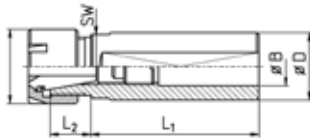


Bild 3 (B)

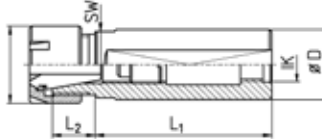


Bild 4 (IK)

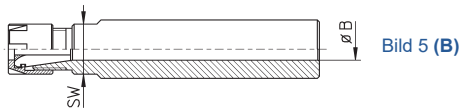


Bild 5 (B)



ER08M = M10 x 0,75

ER11M = M13 x 0,75

ER16M = M19 x 1

Abbildungen können abweichen - catalog drawings may differ

Bestell-Nr. order-no.	STAR NR. STAR No.	Zange collet	D	L ₁	L ₂	IK / B ic / B	SW	Bild picture	Mutter nut	Schlüssel spanner
EM081645WD		ER08	16	45	9,5	7	14	5	ER08M	E08M
EM111620WD		ER11	16	20	12	7	14	3	ER11M	E11M
EM111636IKWD		ER11	16	36	12	G1/8"	14	4	ER11M	E11M
EM111655IKWD		ER11	16	55	12	G1/8"	14	4	ER11M	E11M
EM111680IKFL	691-21	ER11	16	80	12	G1/8"	14	2 / 4	ER11M	E11M
EM111698IKWD		ER11	16	98	15	G1/8"	14	4	ER11M	E11M
EM1116125FL		ER11	16	125	12	6	14	2 / 3	ER11M	E11M
EM112270IKWD		ER11	22	70	12	G1/8"	19	4	ER11M	E11M
EM112290IKSWD**		ER11	22	90	12	G1/4"	-	4	ER11M	E11M
EM1122120WD		ER11	22	120	12	7	19	3	ER11M	E11M
EM161630FL		ER16	16	30	25	10	17	2 / 3	ER16M	E16M
EM161635FL		ER16	16	35	25	10	17	2 / 3	ER16M	E16M
EM161670FL		ER16	16	70	25	10	17	2 / 3	ER16M	E16M
EM161680FL		ER16	16	80	27	9	17	2 / 3	ER16M	E16M
EM1616100FL		ER16	16	100	25	9	17	2 / 3	ER16M	E16M
EM162238IKWD		ER16	22	38	16	G1/4"	19	4	ER16M	E16M
EM162246WD #	OT1-21	ER16	22	46	16	10,5	-	3	ER16M	E16M
EM162250IKWD	671-26	ER16	22	50	16	G1/8"	19	4	ER16M	E16M
EM162270IKWD	301-25-00	ER16	22	70	16	G1/4"	19	4	ER16M	E16M
EM162290IKWD		ER16	22	90	16	G1/8"	19	4	ER16M	E16M
EM1622105IKWD	301-24-00	ER16	22	105	16	G1/8"	19	4	ER16M	E16M
EM1622114IKWD		ER16	22	114	16	G1/8"	19	4	ER16M	E16M
EM1622120IKFL	681-21	ER16	22	120	16	G1/8"	19	2 / 4	ER16M	E16M
EM1622140IKWD		ER16	22	140	16	G1/8"	19	4	ER16M	E16M

* = ohne Spannfläche - without flat

** = ohne Schlüsselfläche - without spanner flat

für STAR SR20RIV (mit Bund und Nut für Dichtring, Spannfläche schräg zulaufend)
for STAR SR20RIV (with flange and groove for sealing, clamping flat aslope)

ER-Zangenspannfutter ER20M / ER25M

ER-Collet Holders ER20M / ER25M

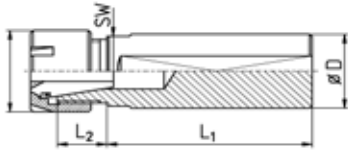


Bild 1 (WD)

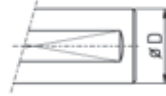


Bild 2 (FL)

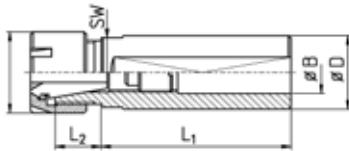


Bild 3 (B)

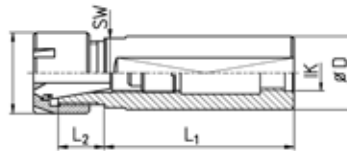


Bild 4 (IK)



ER20M = M24 x 1



ER25M = M30 x 1

Abbildungen können abweichen
catalog drawings may differ

Bestell-Nr. order-no.	STAR NR. STAR No.	Zange collet	D	L ₁	L ₂	IK / B ic / B	SW	Bild picture	Mutter nut	Schlüssel spanner
EM201650WD		ER20	16	50	32	11	22	3	ER20M	E20M
EM2016100FL		ER20	16	100	32	-	22	1 / 2	ER20M	E20M
EM202270IKFL		ER20	22	70	25	G1/4"	22	2 / 4	ER20M	E20M
EM202270IKWD		ER20	22	70	25	G1/4"	22	4	ER20M	E20M
EM202290IKWD	451-22-00	ER20	22	90	22	G1/4"	22	4	ER20M	E20M
EM203250IKWD		ER20	32	50	17	G1/4"	27	4	ER20M	E20M
EM203255IKWD	101-25 / 581-26	ER20	32	55	17	G1/4"	27	4	ER20M	E20M
EM203280IKWD	431-13-00	ER20	32	80	17	G1/8"	27	4	ER20M	E20M
EM2032100IKWD	671-21-00 671-25-00	ER20	32	101	18	G1/4"	27	4	ER20M	E20M
EM2516100FL		ER25	16	100	36	-	27	1 / 2	ER25M	E25M
EM252275IKFL		ER25	22	75	27	G1/4"	27	2 / 4	ER25M	E25M
EM253250WD	581-23	ER25	32	50	24	18	-	3	ER25M	E25M
EM253262WD	101-26	ER25	32	62	16	18	27	3	ER25M	E25M
EM253280IKWD		ER25	32	80	16	G1/4"	27	4	ER25M	E25M
EM2532180FL		ER25	32	180	16	18	27	2 / 3	ER25M	E25M

ER-Zangenspannfutter
 ER11 / ER16 / ER20 / ER25 / ER32

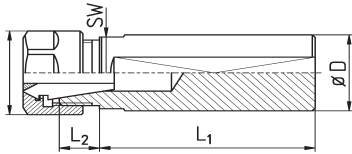
ER-Collet Holders
 ER11 / ER16 / ER20 / ER25 / ER32


Bild 1 (WD)

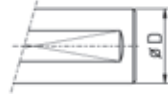


Bild 2 (FL)

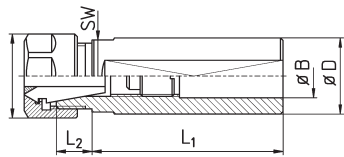


Bild 3 (B)

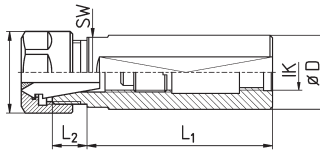


Bild 4 (IK)



UM/ER25 = M32 x 1,5



UM/ER32 = M40 x 1,5



UM/ER11 = M14 x 0,75



UM/ER16 = M22 x 1,5



UM/ER20 = M25 x 1,5

Abbildungen können abweichen - catalog drawings may differ

Bestell-Nr. order-no.	STAR NR. STAR No.	Zange collet	D	L ₁	L ₂	IK / B ic / B	SW	Bild picture	Mutter nut	Schlüssel spanner
EU112270IKFL	301-22-00	ER11	22	70	13	G1/4"	19	2 / 4	UM/ER11	GS17
EU112290IKWD	301-21-00	ER11	22	90	12	G1/4"	19	4	UM/ER11	GS17
EU161660FL		ER16	16	60	25	10	19	2 / 3	UM/ER16	GS25
EU162255IKWD	736-21-00	ER16	22	54	12	G1/4"	19	4	UM/ER16	GS25
EU1622105WD		ER16	22	103	12	10	19	3	UM/ER16	GS25
EU163240WD		ER16	32	40	16	12	-	3	UM/ER16	GS25
EU163260IKFL	781-25	ER16	32	60	16	G1/4"	27	2 / 4	UM/ER16	GS25
EU2022100WD		ER20	22	104	13	12	19	3	UM/ER20	GS30
EU2532115FL		ER25	32	115	14	18	27	2 / 3	UM/ER25	E25
EU3232100FL		ER32	32	100	27	20	36	2 / 3	UM/ER32	E32

Pinolenanschlätze
 für Bohrspindeln, Bohrverlängerungen

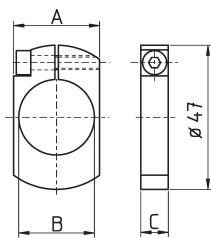
Collet Holder Stops
 for Pre Setting


Bild 1

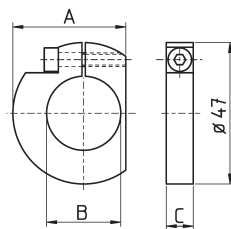
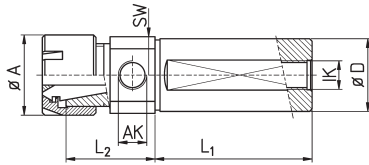


Bild 2

Bestell-Nr. order-no.	B	A	C	Bild picture
EM-PA16	16	23,5	7	1
EM-PA20	20	23	8	1
EM-PA22	22	25	8	1
EM-PA22B	22	34	8	2
EM-PA32	32	40	8	1

**ER-Zangenspannfutter
mit seitlichem und rückseitigem
Kühlmittelanschluss**

**ER-Collet Holders
with Inner Coolant,
Side and Rear**



ERC16M = M19 x 1

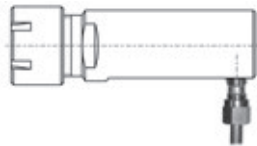
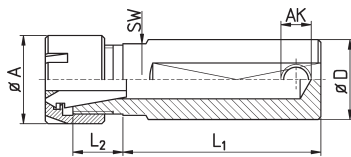
ERC20M = M24 x 1

Lieferung incl. Mutter für Dichtscheiben - supplied with nut for sealing disks

Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂	A	AK	IK	Mutter nut	Schlüssel spanner
EM161650AK1WD	ER16	16	50	30	22	G1/8"	M8x1	ERC16M	E16M
EM162250AK1WD	ER16	22	50	27	22	G1/8"	G1/8"	ERC16M	E16M
EM162270AK1WD	ER16	22	70	27	22	G1/8"	G1/8"	ERC16M	E16M
EM202250AK0WD	ER20	22	50	34	28	M12x1,5	G1/8"	ERC20M	E20M

**ER-Zangenspannfutter
mit seitlichem Kühlmittelanschluss**

**ER-Collet Holders
with Side Coolant Inlet**



ERC16M = M19 x 1

Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂	A	SW	AK ic	Mutter nut	Schlüssel spanner
EM162260WDAKS1	ER 16	22	60	16	22	19	G1/8"	ERC16M	E16M
EM162270WDAKS1	ER 16	22	70	16	22	19	G1/8"	ERC16M	E16M
EM162280WDAKS1	ER 16	22	80	16	22	19	G1/8"	ERC16M	E16M

ER-Zangenspannfutter
für STAR-Maschinen / Rückseitenbearbeitung

ER-Collet Holders
for STAR-Machines / Backworking

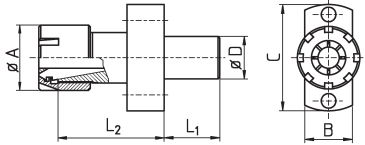


Bild 1

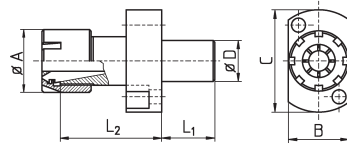


Bild 2

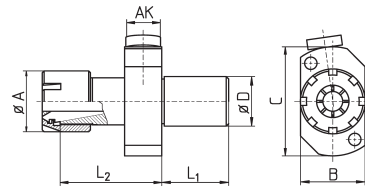


Bild 3

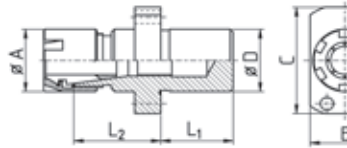


Bild 4

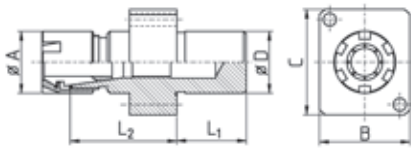


Bild 5

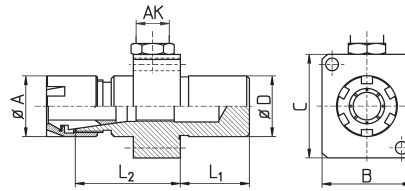


Bild 6

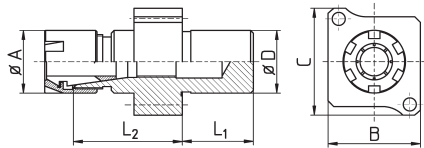


Bild 7

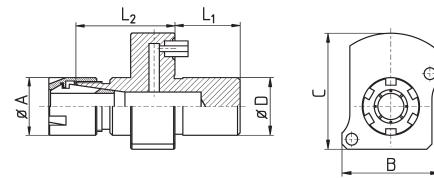


Bild 8

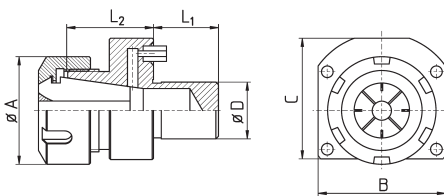


Bild 9

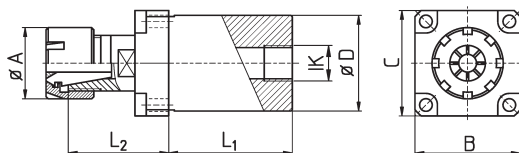


Bild 10

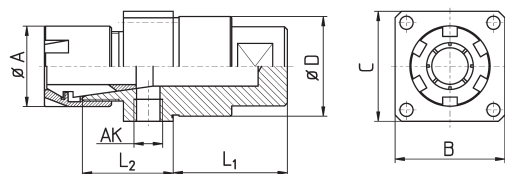


Bild 11



Bestell-Nr. order-no.	STAR NR. STAR No.	Zange collet	D	L ₁	L ₂	A	B	C	AK	Bild picture	Mutter nut	Maschinen-Typ machine type	
EM1116SRJ	691-25	ER11	16	10	45	16	17	41	--	1	ER11M	SR10J (Pos T21 + T23)	
EM1116SR		ER11	16	20	17	16	24	40	--	2	ER11M	SR16 ; SR20	
EU1116SR		ER11	16	20	17	20	24	40	--	2			
EM1616SRMS		ER16	16	20	17	22	24	40	--	2	ER16M		
EM1616SROS*		ER16	16	20	17	22	24	40	--	2	ER16M		
EM1116SRR		ER11	16	10	18	16	17	41	--	2	ER11M		SR16R
EM1122SRR	691-24	ER11	22	25	46	16	28	49	--	2	ER11M	SR10J (Pos T22+ T24) ; SB12 / 20R ; SB16 / 20 ; SR20J / JN ; SR32J / JN ; SR20 R / II / III ; SV20R ; SW12RII ; ECAS12/20 SR20RIV (Pos T21 - T24 verbaut / overlaps T25 - T28)	
EM1622SRR	541-21-00	ER16	22	25	30	22	28	49	--	2	ER16M		
EM1622SRR-L		ER16	22	25	45	22	28	49	--	2	ER16M		
EM1622SRR-AK1		ER16	22	25	29	22	28	49	G1/8"	3	ERC16M		
EM1622SRR-AK2		ER16	22	25	29	22	28	49	M8x1	3	ERC16M		
EM1622SRR-c		ER16	22	25	21	22	28	49	--	2	ER16M		
EM2022SRR	671-22-00	ER20	22	25	27	28	28	49	--	2	ER20M		
EM2022SRR-AK1		ER20	22	25	30	28	28	49	G1/8"	3	ERC20M		
EM2022SRR-AK2		ER20	22	25	30	28	28	49	M8x1	3	ERC20M		
EM1622SW		ER16	22	25	38	22	32,5	37,5	--	5	ER16M		SW20 ; SW12RII ; SV20R ; SR20RIV ; SB12 / 20R ; SR38
EM1622SW-OS*		ER16	22	25	40	22	32,5	37,5	--	5*	ER16M		
EM1622SW-AK1		ER16	22	25	40	22	32,5	37,5	G1/8"	6	ERC16M		
EM1622SW-AK2		ER16	22	25	38	22	32,5	37,5	M8x1	6	ERC16M		
EM1622SW2-OS*	101-04	ER16	22	25	40	22	32,5	37,5	--	7*	ER16M		
EM2022SW		ER20	22	25	32	28	32,5	37,5	--	5	ER20M		
EM2022SW-AK1		ER20	22	25	32	28	32,5	37,5	G1/8"	6	ERC20M		
EM2022SW2-OS*	101-05	ER20	22	25	27	28	32,5	37,5	--	7*	ER20M		
EM2022SW-AK1		ER20	22	25	32	28	32,5	37,5	G1/8"	6	ERC20M		
EM1622SWS	OR1-21	ER16	22	25	31	22	24	37,5	--	4	ER16M	SW20 (Pos T24 + T28)	
EM2022SR		ER20	22	25	28	28	38	48	--	2	ER20M	SR32 ; SR32J	
EM1622SWIK		ER16	22	25	35	22	37,5	44	--	8	ERC16M	SR38 ; SR32JII	
EM2022SWIK		ER20	22	25	33	28	37,5	44	--	8	ERC20M		
EU2522SWIK		ER25	22	25	33	42	49	47	--	9	ERC25		
EM1634MK		ER16	34	19,5	26	22	37,5	37,5	G1/4"	10	ER16M	STAR ECAS32T ST38 SV38R	
EM1634MM		ER16	34	44	26	22	37,5	37,5	M14x1,5	10	ER16M		
EM1634MS		ER16	34	19	22	22	37,5	37,5	M11x1	10	ER16M		
EM2034MK		ER20	34	19,5	25	28	37,5	37,5	G1/4"	10	ER20M		
EM2034MK-AK1		ER20	34	19,5	34	28	37,5	37,5	G1/8"	11	ER20M		
EM2034MM		ER20	34	44	25	28	37,5	37,5	G1/4"	10	ER20M		
EM2534MK		ER25	34	19,5	5	35	37,5	37,5	G1/4"	10	ER25M		
EM2534MK-AK1		ER25	34	19,5	42	35	37,5	37,5	G1/8"	11	ER25M		
EM2534MM		ER25	34	44	28	35	37,5	37,5	G1/4"	10	ER25M		
EM2034SV38R-AK1		ER20	34	39	31	28	37,5	37,5	G1/8"	11	ERC20M		
EM2034SV38R-AK2		ER20	34	39	31	28	37,5	37,5	M8x1	11	ERC20M		

* Ohne Innengewinde für Stellschraube

* Without thread for backstop screw



ER11M = M13 x 0,75



ER16M = M19 x 1



ERC16M = M19 x 1



ER20M = M24 x 1



ERC20M = M24 x 1



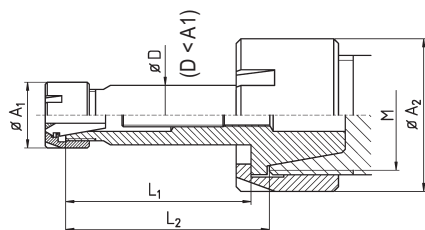
ERC25M = M32 x 1,5



ER25M = M30 x 1

Spannzangenreduktionen mit Überwurfmutter UF

Collet Reduction with Cap Nut UF



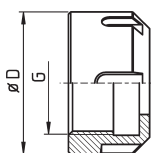
Bestell-Nr. order-no.	Kegel cone	Zange collet	UF-Mutter, Gewinde cap nut, thread M	A ₁	A ₂	L ₁	L ₂	L	G
EQ11M/ER08	ER11	ER08	M13 x 0,75	12	19	8		28	M4
EQ16M/ER11M	ER16	ER11	M19 x 1	16	SW22	16	19	38	M8
EQ16/ER11M	ER16	ER11	M22 x 1,5 *	16	28	16	19	38	M8
EQ16M/ER11ML	ER16	ER11	M19 x 1	16	SW22	32	35	57	M8
EQ16M/ER11MXL	ER16	ER11	M19 x 1	16	SW22	53	56	78	M8
EQ20M/ER11M	ER20	ER16	M24 x 1	16	28	22	25	42	M8
EQ20M/ER16M	ER20	ER16	M24 x 1	22	28	22	25	48	M10
EQ25M/ER16M	ER25	ER16	M30 x 1	22	35	25	28	55	M12
EQ25M/ER20	ER25	ER20	M30 x 1	34	35	16	19	50	M10

Incl. Überwurfmutter
Viele weitere Spannzangenreduktionen im
Katalog - Halter für Schneidwerkzeuge -

Supplied with cap nut
More collet Reductions in our
catalog - Holders for Cutting Tools -

ER Überwurfmuttern UF

ER Cap Nuts UF

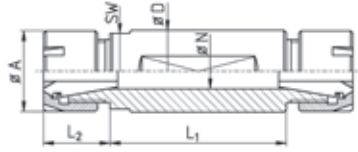


Bestell-Nr. order-no.	D	Gewinde thread G	Schlüssel spanner
UF/ER11M	19,5	M13x0,75	GS17
UF/ER16	28	M22x1,5	GS25
UF/ER16M	SW22	M19x1	GS22
UF/ER20M	28	M24x1	E20M-XX
UF/ER25M	35	M30x1	E25M-XX

ER-Doppelhalter
für CNC-Maschinen mit Abgreifspindel

ER-Double Holders
for CNC-Lathes with Subspindle

FL: Spannfläche abgesetzt
FL: Enclosed clamping flat



WD: Spannfläche durchgehend
WD: Clamping flat throughout



Bestell-Nr. order-no.	STAR NR. STAR No.	Zange collet	D	L ₁	L ₂	A	N	SW	Mutter nut	Schlüssel spanner
ED111650WD		ER11	16	50	12	16	7,5	14	ER11M	E11M
ED111672WD	691-22	ER11	16	72	12	16	7,5	14	ER11M	E11M
ED1116100WD		ER11	16	100	12	16	7,5	14	ER11M	E11M
EDU112295WD		ER11	22	95	12	16	7,5	19	UM/ER11	GS17
EDU1122100WD		ER11	22	100	12	16	7,5	19	UM/ER11	GS17
ED162248WD		ER16	22	48	15	22	11	19	ER16M	E16M
ED162255WD		ER16	22	55	15	22	11	19	ER16M	E16M
ED162262WD		ER16	22	62	15	22	11	19	ER16M	E16M
ED162267WD	421-22-00	ER16	22	67	14	22	11	19	ER16M	E16M
ED162275WD		ER16	22	75	15	22	11	19	ER16M	E16M
ED162284WD		ER16	22	84	16	22	11	19	ER16M	E16M
ED162290WD	421-27-00	ER16	22	90	16	22	11	19	ER16M	E16M
ED162295WD		ER16	22	95	16	22	11	19	ER16M	E16M
ED1622100WD		ER16	22	100	16	22	11	19	ER16M	E16M
ED1622120WD		ER16	22	120	15	22	11	19	ER16M	E16M
ED203235WD		ER20	32	35	18	28	14	-	ER20M	E20M
ED203243WD		ER20	32	43	18	28	14	27	ER20M	E20M
ED203248WD		ER20	32	48	18	28	14	27	ER20M	E20M
ED203255WD	421-21-00	ER20	32	55	18	28	14	27	ER20M	E20M
ED203285WD	421-26-00	ER20	32	85	18	28	14	27	ER20M	E20M

ER-Doppelhalter können gegen Aufpreis auf AK1-Anschluss (G1/8") umgearbeitet werden
ER-double holders can be changed to AK1-inner-coolant (G1/8") for extra charge



ER11M = M13 x 0,75



UM/ER11 = M14 x 0,75



ER16M = M19 x 1

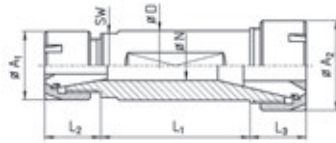


ER20M = M24 x 1

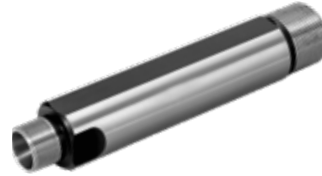
ER-Doppelhalter mit unterschiedlichen Zangengrößen

ER-Double Holders with Different Collet Sizes

FL: Spannfläche abgesetzt
FL: Enclosed clamping flat



WD: Spannfläche durchgehend
WD: Clamping flat throughout



Bestell-Nr. order-no.	Zangen collets	D	L ₁	L ₂	L ₃	A ₁	A ₂	N	SW	Mutter nut	Schlüssel spanner
ED11/161680FL	ER11/16	16	80	12	21	16	22	7,5	17	ER11M / ER16M	E11M / E16M
EDU11/162292FL	ER11/16	22	92	12	16	19	22	7,5	19	UM/ER11 / ER16M	GS17 / E16M
ED16/202265	ER16/20	22	65	23	25	22	28	11	19	ER16M / ER20M	E16M / E20M
ED20/253255WD	ER20/25	32	55	25	25	28	35	14	27	ER20M / ER25M	E20M / E25M



ER11M = M13 x 0,75



UM/ER11 = M14 x 0,75



ER16M = M19 x 1



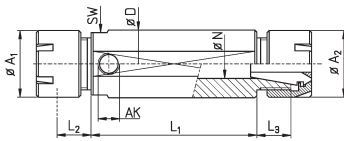
ER20M = M24 x 1



ER25M = M30 x 1

ER-Doppelhalter mit innerer Kühlmittelzufuhr

ER-Double Holders with Inner Coolant



Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂	L ₃	A	N	AK	SW	Mutter nut	Schlüssel spanner
ED11/162280AK1WD	ER11/16	22	80	13	16	19/22	7,5	G1/8"	-	ER11M/ERC16M	E11M/E16M
ED11/162295AK1WD	ER11/16	22	91	13	16	19/22	7,5	G1/8"	-	ER11M/ERC16M	E11M/E16M
ED162267AK1WD	ER16	22	67	16	16	22	11	G1/8"	-	ERC16M	E16M
ED162270AK1WD	ER16	22	70	16	16	22	11	G1/8"	19	ERC16M	E16M
ED162289AK1WD	ER16	22	89	16	16	22	11	G1/8"	-	ERC16M	E16M
ED162294AK1WD	ER16	22	94	15	15	22	11	G1/8"	-	ERC16M	E16M
ED1622100AK1WD	ER16	22	100	16	16	22	11	G1/8"	-	ERC16M	E16M
ED16/202260AK1WD	ER16/20	22	60	16	18	22/28	11	G1/8"	-	ERC16M/ERC20M	E16M/E20M
ED16/202265AK1WD	ER16/20	22	65	16	18	22/28	11	G1/8"	-	ERC16M/ERC20M	E16M/E20M
ED16/202270AK1WD	ER16/20	22	70	15	15	22/28	11	G1/8"	19	ERC16M/ERC20M	E16M/E20M
ED203255AK1WD	ER20	32	55	18	18	28	14	G1/8"	27	ERC20M	E20M
ED203265AK1WD	ER20	32	64	18	18	28	14	G1/8"	-	ERC20M	E20M
ED203285AK1WD	ER20	32	85	18	18	28	14	G1/8"	27	ERC20M	E20M



ER11M = M13 x 0,75



ERC16M = M19 x 1



ERC20M = M24 x 1

für Dichtscheiben - for sealing disks

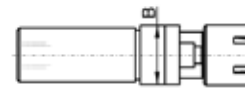
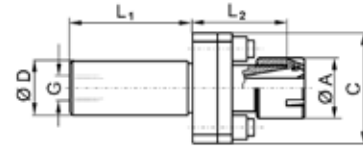
Reamer Holders

Pendelhalter ER11 / ER16 mit Kühlmittelsanschluss

- 1 mm Pendelweg in alle Richtungen
- Exakt paralleles Pendeln
- Selbstzentrierend
- Kein Abkippen möglich
- Incl. Standardmutter ER11M / ER16M
- 1 mm float in all directions
- Self-centering
- Non tilting possible
- Incl. standard nut ER11M / ER16M

Reamer Holders ER11 / ER16 with Inner Coolant

Bestell-Nr. order-no.	D	C	B	L ₁	L ₂	G
PH111650IK	16	45	24	50	32	G1/8"
PH111680IK	16	45	24	80	32	G1/8"
PH112250IK	22	45	24	50	32	G1/8"
PH112270IK	22	45	24	70	32	G1/8"
PH1122120IK	22	45	24	120	32	G1/8"
PH111650AK1	16	45	24	50	40	G1/8"
PH112250AK1	22	45	24	50	37	G1/8"
PH1122SRAK1**	22	45	24	25	37	G1/8"
PH161650IK	16	45	24	50	32	G1/8"
PH161680IK	16	45	24	80	38	G1/8"
PH162250IK	22	45	24	50	32	G1/8"
PH162270IK	22	45	24	70	38	G1/8"
PH1622120IK	22	45	24	120	32	G1/8"
PH161650AK1	16	45	24	50	46	G1/8"
PH162250AK1	22	45	24	50	37	G1/8"
PH1622SRAK1**	22	45	24	25	37	G1/8"



ER16M = M19 x 1



ER11M = M13 x 0,75

** STAR Maschinen-Typ / machine type:

SR10J (Pos T22+ T24); SB12 / 20R; SB16 / 20;
SR20J / JN; SR32J / JN; SR20 R / II / III; SV20R; SW12RII;
ECAS12/20; SR20RIV
(Pos T21 - T24 verbaut / overlaps T25 - T28)



Ausführung IK
version IK

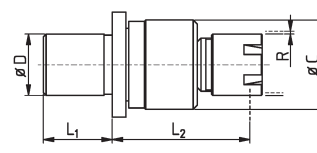
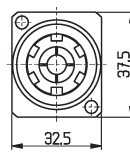
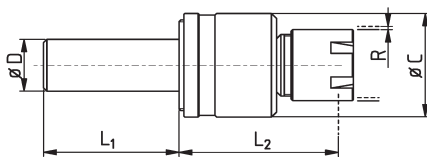


Ausführung AK
version AK

Pendelhalter, einstellbar mit Zangenspannung

- Exaktes Parallelpendeln
- Federkraft (Zentrierkraft) verstellbar
- Incl. Standardmutter
- No axial float possible
- Spring pressure adjustable
- Incl. standard nut

Adjustable Reamer Holders with Collet Clamping



Beisp. - expl.: V155.622SW Rückseitenbearbeitung - Backworking

Bestell-Nr. order-no.	Zange collet	Mutter nut	D	C	L ₁	L ₂	R
V155.516	ER11	UM/ER11	16	32	46	40	1
V155.516L	ER11	UM/ER11	16	32	60	40	1
V155.522	ER11	UM/ER11	22	32	46	40	1
V155.522SW #	ER11	UM/ER11	22	32	25	40	2
V155.522L	ER11	UM/ER11	22	32	70	40	1
V155.616	ER16	ER16M	16	32	46	44	1
V155.616L	ER16	ER16M	16	32	60	44	1
V155.622	ER16	ER16M	22	32	46	46	1
V155.622SW #	ER16	ER16M	22	32	25	44	2



UM/ER11 = M14 x 0,75



ER16M = M19 x 1

Für STAR Maschinen-Typ / machine type:

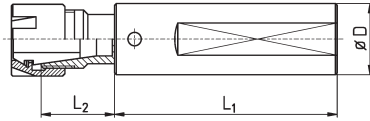
SW20; SR20RIV; SB12/20R; SR38; SV20R; SW12RII

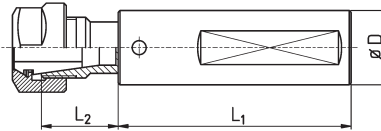
auch mit IK lieferbar - also available with inner coolant

Gewindeschneidfutter
 ER08M / ER11M / ER11

Tap Holders
 ER08M / ER11M / ER11

 Beispiel - *example:*

 Halter GFM mit durchgehender Spannfläche WD
 Holder GFM with clamping flat throughout WD

 Beispiel - *example:*

 Halter GFU mit abgesetzter Spannfläche FL
 Holder GFU with enclosed clamping flat FL


Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂	Auszug pullout	Bereich range	Mutter nut
GFM081650WD	ER08	16	50	10	7	M1 - M6	ER08M
GFM111650WD	ER11	16	50	18	7	M1 - M8	ER11M
GFM111645BU		16	45	10			ER11M
GFM112225SRR		22	25	10			ER11M
GFM112250FL		22	50	10			ER11M
GFM112270WD		22	70	10			ER11M
GFM1122100WD		22	100	10			ER11M

Bestell-Nr. order-no.	STAR NR. STAR No.	D	L ₁	L ₂	Mutter nut
GFU1122100WD	301-31-00	22	100	9	UM/ER11



ER08M = M10 x 0,75

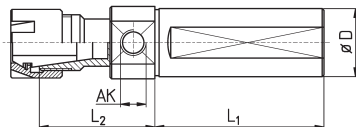
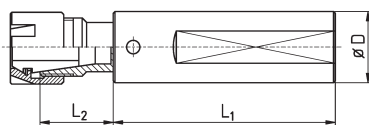


ER11M = M13 x 0,75



UM/ER11 = M14 x 0,75

Gewindeschneidfutter
 ER16 / ER16M / ER20M

Tap Holders
 ER16 / ER16M / ER20M


ER16M = M19 x 1

Bestell-Nr. order-no.	STAR NR. STAR No.	D	L ₁	L ₂	Mutter nut
GFM161645BU		16	45	19	ER16M
GFM162225SRR**	541-32-00	22	25	19	ER16M
GFM162250FL		22	50	19	ER16M
GFM162270WD	541-31-00	22	70	19	ER16M
GFM1622100WD		22	100	19	ER16M

 **Rückseitenbearbeitung - *Backworking*

 Für STAR Maschinen-Typ / *machine type:*

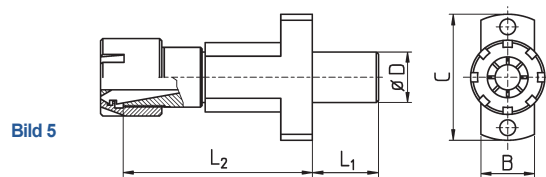
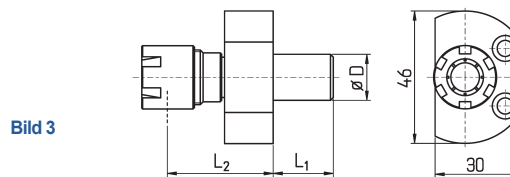
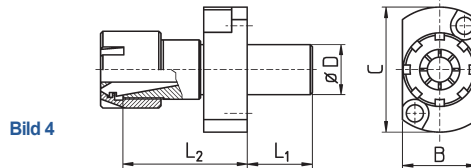
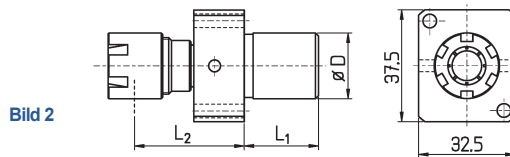
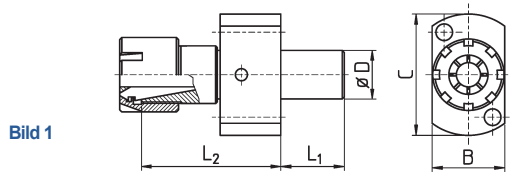
** SW20 ; SR20RIV ; SB12/20R ; SR38 ; SV20R ; SW12RII

Bestell-Nr. order-no.	Bereich range	Auszug pullout	D	L ₁	L ₂	AK	Zange collet	Mutter nut
GFM161645AK1WD	M1 - M8	7 mm	16	45	36	G1/8"	ER16	ER16M
GFM162270AK1WD	M1 - M8	7 mm	22	70	36	G1/8"	ER16	ER16M

Tap Holders

Gewindeschneidfutter ER11 / ER11M
ER16 / ER16M für STAR

Tap Holders ER11 / ER11M
ER16 / ER16M for STAR



Bestell-Nr. order-no.	D	L ₁	L ₂	B	C	Bild picture	Mutter nut	Maschinen-Typ machine type
GFM111610SRJ	16	10	43	17	40	5	ER11M	SR10J (Pos T21 + T23)
GFU111610SRJ	16	10	43	17	40	5	UM/ER11	
GFM161610SRJ	16	10	53	17	40	5	ER16M	
GFU161610SRJ	16	10	53	17	40	5	UM/ER16	
GSM111621SR	16	21	24,5	24	40	4	ER11M	SR16 ; SR20
GSU111621SR	16	21	24,5	24	40	4	UM/ER11	
GSM161621SR	16	21	42	24	40	4	ER16M	
GSU161621SR	16	21	42	24	40	4	UM/ER16	
GSM161621RNC	16	21	45	30	46	3	ER16M	SR16
GSU161621RNC	16	21	45	30	46	3	UM/ER16	
GFM112225SRR	22	25	20,5	28	49	1	ER11M	SR10J (Pos T22+ T24) ; SB12 / 20R ; SB16 / 20 ; SR20J / JN ; SR32J / JN ; SR20 R / II / III ; SV20R ; SW12RII ; ECAS12/20 SR20RIV (Pos T21 - T24 verbaut / overlaps T25 - T28)
GFU112225SRR	22	25	29,5	28	49	1	UM/ER11	
GFM162225SRR	22	25	29,5	28	49	1	ER16M	
GFU162225SRR	22	25	29,5	28	49	1	UM/ER16	
GSM162225SRR	22	25	29,5	28	49	1	ER16M	
GSU162225SRR	22	25	29,5	28	49	1	UM/ER16	
GFM112225SW	22	25	27			2	ER11M	
GFU112225SW	22	25	36	32,5	37,5	2	UM/ER11	SW20 ; SW12RII ; SV20R ; SR20RIV ; SB12 / 20R ; SR38
GFM162225SW	22	25	36			2	ER16M	
GFU162225SW	22	25	36	32,5	37,5	2	UM/ER16	
GFM112225SR	22	25	19	38	48	1	ER11M	
GFU112225SR	22	25	28	38	48	1	UM/ER11	
GFM162225SR	22	25	28	38	48	1	ER16M	
GFU162225SR	22	25	28	38	48	1	UM/ER16	



ER11M = M13 x 0,75



ER16M = M19 x 1



UM/ER11 = M14 x 0,75

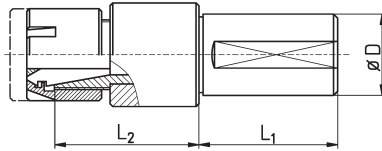


UM/ER16 = M22 x 1,5

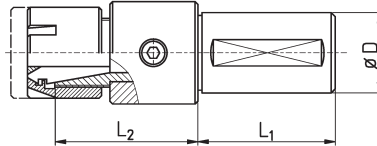
Gewindeschneidfutter ER20M / ER25M
 kugelgelagert

Tap Holders ER20M / ER25M
 Ball Bearing Guided

WD: Spannfläche durchgehend
 WD: Clamping flat throughout



FL: Spannfläche abgesetzt
 FL: Enclosed clamping flat



Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂
GKM201650FL	ER20	16	50	47
GKM202275FL	ER20	22	75	47
GKM203260WD	ER20	32	60	47

Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂
GKM251650FL	ER25	16	50	45
GKM252275FL	ER25	22	75	45
GKM253260WD	ER25	32	60	45

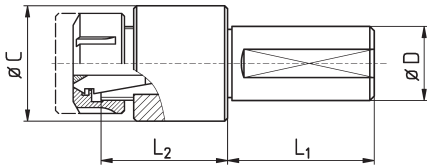


ER20M = M24 x 1



ER25M = M30 x 1

Gewindeschneidfutter ER32
 kugelgelagert

Tap Holders ER32
 Ball Bearing Guided


Bestell-Nr. order-no.	Zange collet	D	L ₁	L ₂	C	AK	Bereich range	Mutter Nut
GKU323260FLDZ	ER32	32	60	54	50	-	M6 - M28	UM/ER32



UM/ER32 = M40 x 1,5

Doppel-Gewindeschneidfutter

beidseitiger Auszug, für CNC-Maschinen mit Abgreifspindel (CITIZEN, MANUHRIN, STAR)

Double Ended Tap Holders

Non Reversing Both Ends for CNC-Machines with Sub Spindle (CITIZEN, MANUHRIN, STAR)

Einsätze - inserts							
Bezeichnung title	Zange collet	L_2 / L_3	Bereich range	Mutter nut	A	Gewinde thread	Schlüssel spanner
M11	ER11	10	M1 - M6	ER11M	16	M13x0,75	E11M
M16	ER16	19	M1 - M8	ER16M	22	M19x1	E16M



ER11M = M13 x 0,75



ER16M = M19 x 1

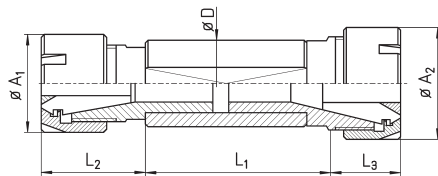
Beliebige Kombinationsmöglichkeiten! - Any possible combinations!

z. B. 2 gleiche Zangen (und Muttern)

For example 2 identical collets (and nuts)

oder unterschiedliche Zangen (und Muttern)

or different collets (and nuts)



Bestell-Schlüssel - Key to order:

GD	Einsatz 1 <i>insert 1</i>	Einsatz 2 <i>insert 2</i>	Halter <i>holder</i>
-----------	-------------------------------------	-------------------------------------	--------------------------------

Beispiel- Example:

GD M11 M16 2240

Halter - holders		
Bezeichnung title	D	L_1
1650WD	16	50
16100FL	16	100
2248FL	22	48
2260FL	22	60
2275FL	22	75
2285WD	22	85
2295WD	22	95
22100WD	22	100

Alle Gewindeschneidfutter werden incl. Standard-Mutter geliefert - all tap holders will be supplied with clamping Nut (standard)

Auf alle Doppel-Gewindeschneidfutter passen unsere Schneideisenköpfe - all double tap holders can be also used for button die holders

Zangenspannfutter-Gewindeschneidfutter

1. Seite: Feste Zangenaufnahme
2. Seite: Gewindeschneidfutter

Collet Holders-Tap Holders

- Side 1: Drill Holder
- Side 2: Tap Holder

Einsätze - inserts							
Bezeichnung title	Zange collet	L ₂	Bereich range	Mutter nut	A	Gewinde thread	Schlüssel spanner
M11	ER11	10	M1 - M6	ER11M	16	M13x0,75	E11M
M16	ER16	19	M1 - M8	ER16M	22	M19x1	E16M

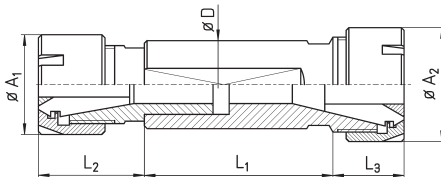


ER11M = M13 x 0,75



ER16M = M19 x 1

Jeder Halter kann mit jedem Einsatz kombiniert werden
Each holder can be combined with each insert



Bestell-Schlüssel - key to order:

GE	Einsatz insert	Halter holder
----	-------------------	------------------

Beispiel - Example:

GEM11M162270FL

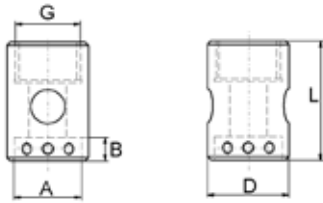
Halter - holders						
feste Seite - drill holder						
Bezeichnung title	Zange collet	Mutter nut	D	L ₁	L ₃	
M111640WD	ER11	ER11M	16	40	13	
M162250FL	ER16	ER16M	22	50	16	
M162270FL	ER16	ER16M	22	70	16	
M1622100WD	ER16	ER16M	22	100	16	
M1622120FL	ER16	ER16M	22	120	16	

Alle Gewindeschneidfutter werden incl. Standard-Mutter geliefert - holders will be supplied with clamping Nut (standard)
Auf alle Doppel-Gewindeschneidfutter passen unsere Schneideisenköpfe - All double tap holders can be also used for button die holders

Button Die Holders

Schneideisenkappen, extra kurz für Gewindebohrfutter ER11, ER11M

Besonders schlanke und kurze Form
Very slim and short version



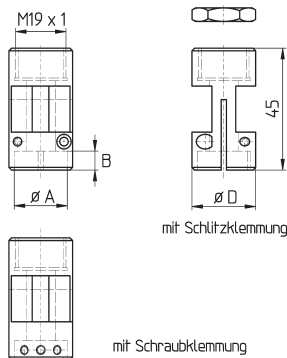
Button Die Holders, extra short for Tapping Holders ER11, ER11M

Keine Kontermutter nötig - *No counter nut necessary*
 Eingearbeitete Sicherungsschrauben - *Lock screw included*

Bestell-Nr. order-no.	A	B	D	L	Gewinde thread	max. Gew.länge max. thread length
SK11MK-08	08	3	22	23	M13x0,75	
SK11MK-12	12	4	22	23	M13x0,75	
SK11MK-16	16	5	22	23	M13x0,75	32
SK11MK-20	20	7	27	25	M13x0,75	34
SK11MK-25	25	9	32	30	M13x0,75	39
SK11MK-30	30	11	40	30	M13x0,75	

Schneideisenkappen für Gewindebohrfutter ER16M

Lange Ausführung - *Long version*
 besonders schlanke Form - *Slim dimensions*



Button Die Holders for Tapping Holders ER16M

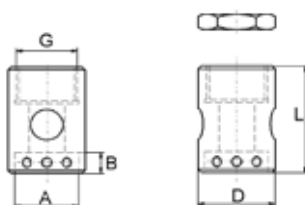
Bestell-Nr. order-no.	A	B	D	Gewinde thread	max. Gew.länge max. thread length
SK16M-16A	16	3,5	25	M19x1	56
SK16M-16	16	5	25	M19x1	56
SK16M-20A	20	5	27	M19x1	56
SK16M-20	20	7	27	M19x1	56
SK16M-25	25	9	33	M19x1	56
SK16M-30	30	11	40	M19x1	56

ESM16M Kontermutter - *counter nut*

Alle Halter sind auch für Rolleisen geeignet
All button die holders are suitable for rolling dies

Schneideisenkappen, extra kurz für Gewindebohrfutter ER16M

Besonders schlanke und kurze Form
Slim and short version



Button Die Holders, extra short for Tapping Holders ER16M

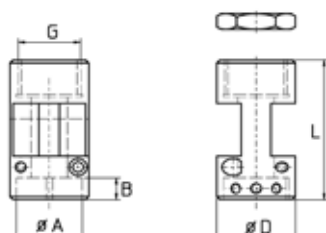
Bestell-Nr. order-no.	A	B	D	L	Gewinde thread	max. Gew.länge max. thread length
SK16MK-16	16	5	22	23	M19x1	37
SK16MK-20A	20	5	27	25	M19x1	39
SK16MK-20	20	7	27	27	M19x1	39
SK16MK-25	25	9	32	30	M19x1	42
SK16MK-30	30	11	40	30	M19x1	42

ESM16M Kontermutter - *counter nut*

Alle Halter sind auch für Rolleisen geeignet
All button die holders are suitable for rolling dies

Schneideisenkappen für Gewindebohrfutter ER20M

Besonders schlanke Form
Very slim version



Button Die Holders for Tapping Holders ER20M

Bestell-Nr. order-no.	A	B	D	L	Gewinde thread	max. Gew.länge max. thread length
SK20M-16B	16	5	32	45	M24x1	70
SK20M-20	20	7	32,5	45	M24x1	66
SK20M-20B	20	7	29	45	M24x1	66
SK20M-25	25	9	34	45	M24x1	65
SK20M-30B	30	11	40	45	M24x1	60

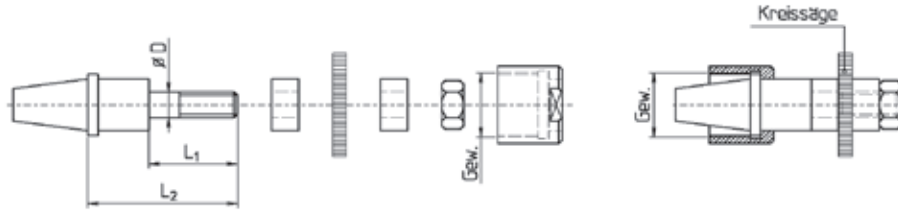
ESM20M Kontermutter - *counter nut*

Alle Halter sind auch für Rolleisen geeignet
All button die holders are suitable for rolling dies

Fräsdorne

für Zangenaufnahmen ER08 / ER11 / ER16
mit Überwurfmutter UF

Milling Arbors
for Collet Taper ER08 / ER11 / ER16
with Cap Nut UF



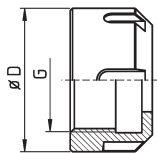
Bestell-Nr. order-no.	Typ type	Mutter nut	Gewinde der Mutter thread of nut	D	L ₁	L ₂
FD/ER08M-05	ER08	UF/ER08M	M10x0,75	5	25	29
FD/ER11M-05K	ER11	UF/ER11M	M13x0,75	5	18	23
FD/ER11M-05	ER11	UF/ER11M	M13x0,75	5	25	31
FD/ER11M-08	ER11	UF/ER11M	M13x0,75	8	25	30
FD/ER11-05K	ER11 *	UF/ER11	M14x0,75	5	18	23
FD/ER11-05	ER11 *	UF/ER11	M14x0,75	5	25	31
FD/ER11-08	ER11 *	UF/ER11	M14x0,75	8	25	30
FD/ER16M-05K	ER16	UF/ER16M	M19x1	5	13	33
FD/ER16M-05	ER16	UF/ER16M	M19x1	5	15	42
FD/ER16M-08	ER16	UF/ER16M	M19x1	8	26	42
FD/ER16M-10	ER16	UF/ER16M	M19x1	10	26	44
FD/ER16-08	ER16	UF/ER16	M22x1,5	8	26	42

Passende Schlüssel auf Anfrage
Incl. Überwurfmutter
* Auch für ESX12-Futter lieferbar

Compatible spanners on request
Supplied with cap nut
* Also available for ESX12 chuck

ER Überwurfmuttern UF

ER Cap Nuts UF



Bestell-Nr. order-no.	D	Gewinde thread G	Schlüssel spanner
UF/ER08M	16	M10x0,75	GS14
UF/ER11	19	M14x0,75	GS17
UF/ER11M	19,5	M13x0,75	GS17
UF/ER16	28	M22x1,5	GS25
UF/ER16M	SW22	M19x1	GS22



Bohrstangenaufnahmen
Boring bar Sleeves

ab Seite 38 - *from page 38*

Bild 1

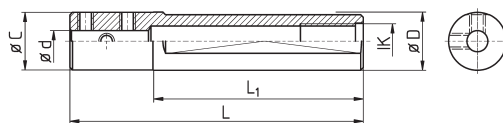
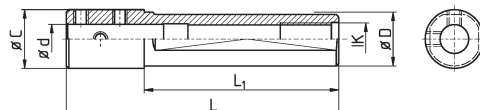


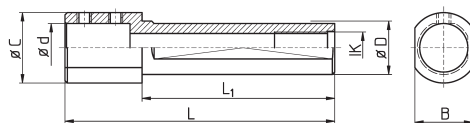
Bild 2



Zahl der Spannflächen und Gewindebohrungen
kann von den Musterzeichnungen abweichen!

Number of clamping flats and thread holes
may vary from the shown drawings!

Bild 3



Bestell-Nr. order-no.	STAR NR. STAR No.	d	D	C	B	L ₁	L	IK	Maschinen machines	Bild picture
WD061650		6	16	18	--	50	70	9		2
WD081650IK		8	16	18	--	50	70	G1/8"	STAR	2
WD101650IK		10	16	20	--	50	70	G1/8"	SR10J	2
WD121650		12	16	22	--	50	70	9	SW7	2
ABS691-03IK		3	16	15,8	--	80	90	G1/8"		1
ABS691-41	691-41	4	16	15,8	--	80	90	8,4	STAR	1
ABS691-05IK		5	16	15,8	--	80	90	G1/8"	SR10J	1
ABS691-42	691-42	6	16	15,8	--	80	90	G1/8"	SW12R II	1
ABS691-08IK		8	16	15,8	--	80	90	G1/8"		1
ABS736-44IK	736-44-00	6	22	24	--	70	105	G1/4"		2
ABS736-40IK	736-40-00	8	22	24	--	70	105	G1/4"		2
ABS736-41IK	736-41-00	10	22	24	--	80	105	G1/4"		2
ABS736-42IK	736-42-00	12	22	24	--	80	105	G1/4"		2
WD032280IK		3	22	21,7	--	80	112	G1/4"		1
WD312280IK		1/8"	22	31,7	--	80	112	G1/4"		1
WD042280IK		4	22	21,7	--	80	112	G1/4"		1
WD052280IK		5	22	21,7	--	80	112	G1/4"		1
WD062280IK		6	22	21,7	--	80	112	G1/4"	STAR	1
WD632280IK	411-44	1/4"	22	21,7	--	80	112	G1/4"	RNC 16B SR16/20/32	1
WD072280IK		7	22	21,7	--	80	112	G1/4"	KNC SNC	1
WD792280IK	301-44	5/16"	22	21,7	--	80	112	G1/4"	SV12/20/32	1
WD082280IK		8	22	21,7	--	80	112	G1/4"	SA12/16 SE12/16	1
WD952280IK	301-45	3/8"	22	21,7	--	80	112	G1/4"	ECAS12 / 20 ; SB12 / 20R	1
WD102280IK		10	22	21,7	--	80	112	G1/4"	SB16C / D / E	1
WD122280IK		12	22	24	--	80	112	G1/4"	SR20J / JN ; SR20 R / II / III / IV	1
WD132280IK		1/2"	22	24	--	80	112	G1/4"	SR32J / JN ; SR38A / B	2
WD142280IK		14	22	29	24	80	112	G1/4"	ST20 ; ECAS20T	2
WD582280IK		5/8"	22	29	24	80	112	G1/4"	SV20R ; SW20	3
WD162280IK		16	22	29	24	80	112	G1/4"	ST38 ; SV32J ; SV38R	3
WD192280IK		19	22	32	24	80	112	G1/4"		3
WD202280IK		20	22	32	24	80	112	G1/4"		3
ABS301-41	301-41-00	6	22	21,7	--	85	125,8	12,4		1
ABS301-42	301-42-00	8	22	21,7	--	85	125,8	12,4		1
ABS301-43IK	301-43-00	10	22	21,7	--	80	120	G1/4"		1
ABS301-44IK	671-44-00	12	22	21,7	--	80	120	G1/4"		1
WD203275IK		20	32	31,8	--	75	106	G1/4"		1
WD253280IK		25	32	40	34	80	106	G1/4"	STAR SR32JN	3
WD3132105IK		1/8"	32	31,6	--	91	105	G1/4"		1
WD0632105IK		6	32	31,6	--	95	105	G1/4"		1
WD6332105IK		1/4"	32	31,6	--	95	105	G1/4"		1
WD7932105IK		5/16"	32	31,6	--	95	105	G1/4"		1
WD0832105IK		8	32	31,6	--	95	105	G1/4"		1
WD9532105IK		3/8"	32	31,6	--	95	105	G1/4"		1
WD1032105IK		10	32	31,6	--	95	105	G1/4"	STAR SR32J	1
WD1232105IK		12	32	31,6	--	95	105	G1/4"		1
WD1432105IK		14	32	31,6	--	95	105	G1/4"		1
WD5832105IK	781-43D	5/8"	32	31,6	--	91	105	G1/4"		1
WD1632105IK	781-43-00	16	32	31,6	--	95	105	G1/4"		1
WD1932105IK		3/4"	32	31,6	--	95	105	G1/4"		1
WD2032105IK		20	32	31,6	--	95	105	G1/4"		1

Bohrstangenaufnahmen für Rückseitenbearbeitung STAR

Boring Bar Sleeves for STAR backworking

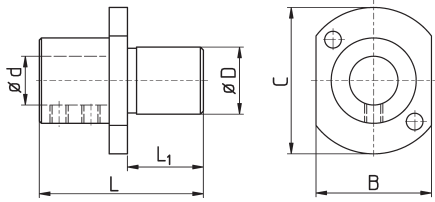


Bild 1

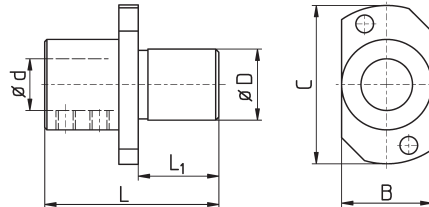


Bild 2



Bestell-Nr. order-no.	STAR NR. STAR No.	d	D	C	B	L ₁	L	Maschinen machines	Bild picture
WD0616SR		6	16	40	24	20	46		1
WD0816SR		8	16	40	24	20	46	SR16 / 20	1
WD1016SR		10	16	40	24	20	46		1
WD1216SR		12	16	40	24	20	46		1
WD0622SRR	541-71-00	6	22	49	28	25	59		2
WD0722SRR		7	22	49	28	25	59	SR10J (Position T22 + T24)	2
WD0822SRR	541-72-00	8	22	49	28	25	59	SB16 / 20 Type C / Type E	2
WD0922SRR		9	22	49	28	25	59	SB20R Type E / Type G / Type N	2
WD1022SRR	541-73-00	10	22	49	28	25	59	SR20J / JN ; SW12RII	2
WD1222SRR	671-74-00	12	22	49	28	25	59	SR20 R / II / III ; SV20R	2
WD1422SRR		14	22	49	28	25	59	SR32J / JN	2
WD1622SRR	671-75-00	16	22	49	28	25	59	SR20R IV (Pos. T21 - T24, verbaut - overlaps T25 - T28)	2
WD1922SRR		3/4"	22	49	28	25	59		2
WD2022SRR		20	22	49	28	25	59		2
WD0622SR		6	22	48	38	25	63		1
WD0822SR		8	22	48	38	25	63		1
WD1022SR		10	22	48	38	25	63		1
WD1222SR		12	22	48	38	25	63	SR32	1
WD1422SR		14	22	48	38	25	63		1
WD1622SR		16	22	48	38	25	63		1
WD2022SR		20	22	48	38	25	63		1

mit innerer Kühlmittelzufuhr

with inner coolant inlet

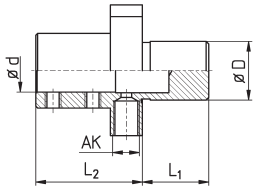


Bild 3

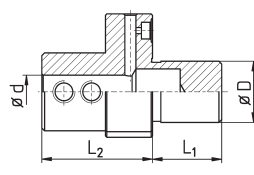
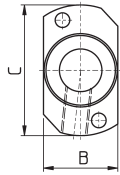


Bild 5

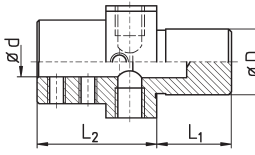
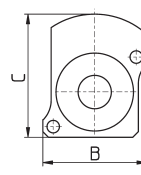


Bild 4

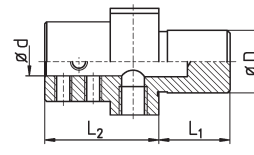
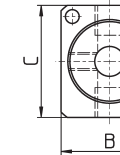
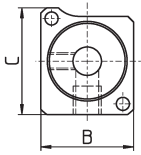


Bild 4b



Bestell-Nr. order-no.	STAR NR. STAR No.	d	D	L ₁	L ₂	C	B	AK	Maschinen machines	Bild picture
WD2522SR-AK1		25	22	25	44	48	38	G1/8"	SR32	--
WD0322SRR-AK1		3	22	25	42	49	28	G1/8"		3
WD0422SRR-AK1	571-71-00	4	22	25	42	49	28	G1/8"		3
WD0522SRR-AK1		5	22	25	42	49	28	G1/8"		3
WD0622SRR-AK1		6	22	25	42	49	28	G1/8"		3
WD0722SRR-AK1		7	22	25	42	49	28	G1/8"		3
WD0822SRR-AK1		8	22	25	42	49	28	G1/8"		3
WD1022SRR-AK1		10	22	25	42	49	28	G1/8"		3
WD1222SRR-AK1		12	22	25	42	49	28	G1/8"	SR10J (Position T22 + T24)	3
WD1422SRR-AK1		14	22	25	42	49	28	G1/8"	SB16 / 20 Type C / Type E	3
WD1622SRR-AK1		16	22	25	42	49	28	G1/8"	SB20R Type E / Type G / Type N	3
WD2022SRR-AK1		20	22	25	42	49	28	G1/8"	SR20J / JN ; SW12RII	3
WD3122SRR-AK1		1/8"	22	25	42	49	28	G1/8"	SR20 R / II / III ; SV20R	3
WD4722SRR-AK1		3/16"	22	25	42	49	28	G1/8"	SR32J / JN ; ECAS12/20	3
WD6322SRR-AK1	541-75	1/4"	22	25	42	49	28	G1/8"	SR20R IV (Pos. T21 - T24, verbaut - overlaps T25 - T28)	3
WD7922SRR-AK1	541-76	5/16"	22	25	42	49	28	G1/8"		3
WD9522SRR-AK1	541-77	3/8"	22	25	42	49	28	G1/8"		3
WD1322SRR-AK1		1/2"	22	25	42	49	28	G1/8"		3
WD5822SRR-AK1		5/8"	22	25	42	49	28	G1/8"		3
WD1922SRR-AK1		3/4"	22	25	42	49	28	G1/8"		3
WD0322SW-AK1		3	22	25	42	37,5	32,5	G1/8"		4
WD0422SW-AK1	OR1-47	4	22	25	42	37,5	32,5	G1/8"		4
WD0522SW-AK1		5	22	25	42	37,5	32,5	G1/8"		4
WD0622SW-AK1	OR1-41	6	22	25	42	37,5	32,5	G1/8"		4
WD0822SW-AK1	OR1-42	8	22	25	42	37,5	32,5	G1/8"		4b
WD1022SW-AK1	OR1-43	10	22	25	42	37,5	32,5	G1/8"		4
WD1222SW-AK1		12	22	25	42	37,5	32,5	G1/8"		4b
WD1422SW-AK1		14	22	25	42	37,5	32,5	G1/8"		4
WD1622SW-AK1	101-11	16	22	25	42	37,5	32,5	G1/8"	SW12R II ; SW20	4
WD2022SW-AK1		20	22	25	42	37,5	32,5	G1/8"	SV20R ; SR20R IV SB12/20R ; SR38	4
WD3122SW-AK1		1/8"	22	25	40	37,5	32,5	G1/8"		4
WD4722SW-AK1		3/16"	22	25	40	37,5	32,5	G1/8"		4
WD6322SW-AK1	OR1-44; 101-12	1/4"	22	25	40	37,5	32,5	G1/8"		4
WD7922SW-AK1	OR1-46; 101-14	5/16"	22	25	40	37,5	32,5	G1/8"		4
WD9522SW-AK1	OR1-45; 101-13	3/8"	22	25	40	37,5	32,5	G1/8"		4
WD1322SW-AK1		1/2"	22	25	40	37,5	32,5	G1/8"		4
WD5822SW-AK1		5/8"	22	25	40	37,5	32,5	G1/8"		4
WD1922SW-AK1		3/4"	22	25	40	37,5	32,5	G1/8"		4

Bestell-Nr. order-no.	STAR NR. STAR No.	d	D	L ₁	L ₂	C	B	AK	Maschinen machines	Bild picture
WD0422SW-IK		4	22	25	40	44,2	37	Ø 6	SR38 SR32J-II	5
WD0622SW-IK		6	22	25	40	44,2	37	Ø 6		5
WD0822SW-IK		8	22	25	40	44,2	37	Ø 6		5
WD1022SW-IK		10	22	25	40	44,2	37	Ø 6		5
WD1222SW-IK		12	22	25	40	44,2	37	Ø 6		5
WD1622SW-IK		16	22	25	40	44,2	37	Ø 6		5
WD2022SW-IK		20	22	25	40	44,2	37	Ø 6		5

Bohrstangenaufnahmen

Rückseitenbearbeitung STAR

Boring Bar Sleeves

for STAR backworking

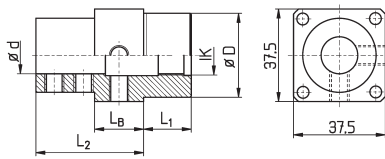


Abbildung dient nur zur Veranschaulichung der Maße !
the picture above is only meant for illustration

FL = Spannfläche Schaft
clamping flat shank

X = Freifräsung für Schrauben
free milling for screws

Bestell-Nr. order-no.	d	D	L ₁	L ₂	LB	AK	IK	Maschinen machines
WDM123444X	12	34	19,5	25	11,6	--	--	MAIER STAR ECAS32 SV38R
WDM123454	12	34	19,5	35	10	--	--	
WDM123463AK2	12	34	19,5	44	20	M8x1	--	
WDM123463AK2FLX	12	34	19,5	44	20	M8x1	--	
WDM163444X	16	34	19,5	25	11,7	--	--	
WDM163454	16	34	19,5	35	10	--	G1/4"	
WDM163455	16	34	19,5	35,5	10	--	--	
WDM163463AK2FLX	16	34	19,5	44	20	M8x1	--	
WDM163479	16	34	44	35	10	--	M16x1	
WDM193444X	3/4"	34	19,5	25	11,9	--	--	
WDM193445X	3/4"	34	19,5	25,5	10	--	--	
WDM193454X	3/4"	34	19,5	35	10	--	--	
WDM193463AK2	3/4"	34	19,5	44	20	M8x1	--	
WDM193469	3/4"	34	44	25	10	--	G1/4"	
WDM193469X	3/4"	34	44	25	10	--	--	
WDM203444X	20	34	19,5	25	11,9	--	--	
WDM203454	20	34	19,5	35	10	--	--	
WDM203454X	20	34	19,5	35	10	--	--	
WDM203463AK2FLX	20	34	19,5	44	20	M8x1	--	
WDM203469	20	34	44	25	10	--	G1/4"	
WDM203479	20	34	44	35	10	--	M16x1	
WDM253444X	25	34	19,5	25	11,9	--	--	
WDM253454X	25	34	19,5	35	10	--	--	
WDM253463AK2FLX	25	34	19,5	44	20	M8x1	--	
WDM253469X	25	34	44	25	10	--	--	
WDM263445X	1"	34	19,5	25,5	10	--	--	
WDM263463AK2X	1"	34	19,5	44	20	M8x1	--	
WDM263469X	1"	34	44	25	10	--	--	

Wenn IK-Angabe vorhanden - auch mit Anschlag verwendbar
If IK - is indicated - also useable with back stop



**Höhenverstellbares
Rückseitensystem**
*Height Adjustable
Backworking System*

ab Seite 43 - *from page 43*



**Wendeplattenhalter für
Rückseitenbearbeitung**
*Insert Holders
for Backworking*

ab Seite 53 - *from page 53*

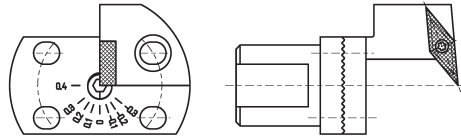


VHM-Bohrstangen
Carbide Boring Bars

ab Seite 57 - *from page 57*

Technische Informationen

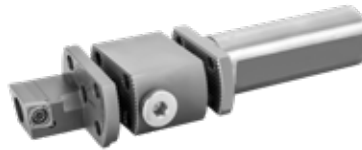
**Exakte
Höheneinstellung
+/- 0,4 mm mit Skala,
Teilung je 0,1 mm**



Technical Information

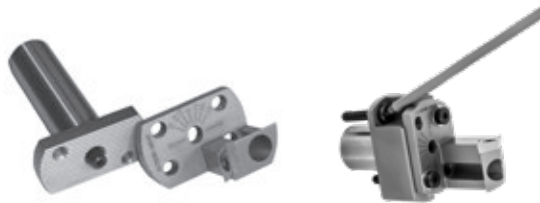
**Exact height
adjustment
+/- 0,4 mm with scale,
step 0,1 mm**

Systemaufbau



System design

Bei Schäften mit tieferen Taschen für die Befestigungsschrauben, kann der Halter ohne Lösen des Kopfes abgeschraubt werden



Insert holders on shanks with deeper slots for the screws can be disassembled without unscrew the shank.

Schrauben für Wendeplatten

Wendeplattentyp insert type	Schlüssel / Best.-Nr. spanner / order-no.	Schraube / Best.-Nr. screw / order-no.
16ER-xx / 16EL-xx	T9	A12-W6030082
CC .. 0602..	T8	A12-W6025060
CC .. 09T3..	T15	A12-W6040108
DC .. 0702..	T8	A12-W6025060
DC .. 11T3..	T15	A12-W6040108
TC/TP .. 1102/1103..	T8	A12-W6030082
VB .. 1102/1103..	T8	A12-W6025060
VC .. 1103..	T8	A12-W6025060

Screws for Inserts

Wendeplattentyp insert type	Schlüssel / Best.-Nr. spanner / order-no.	Schraube / Best.-Nr. screw / order-no.
VC .. 1303..	T9	A12-W6030100
VP .. 10..	T8	A12-W6025060
BIMU-040	T8	A12-W6025060
BIMU-400 X	T9	A12-W6030082
APPLITEC TOP 73/74 X	T8	A12-W4530070
APPLITEC TOP 75/76 X	T15	A12-W4540089
APPLITEC ECO25/26X	T15	A12-W4540089
APPLITEC 33/34 X	T8	A12-W6025078

Höhenverstellbare Wendeplattenhalter Bolzen / Exzenterbolzen

Height Adjustable Backworking Holders Bolts / Eccentric bolts



Bild 1

Bild 2

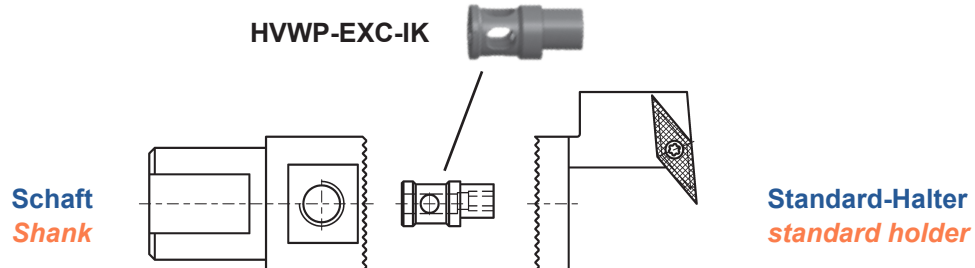
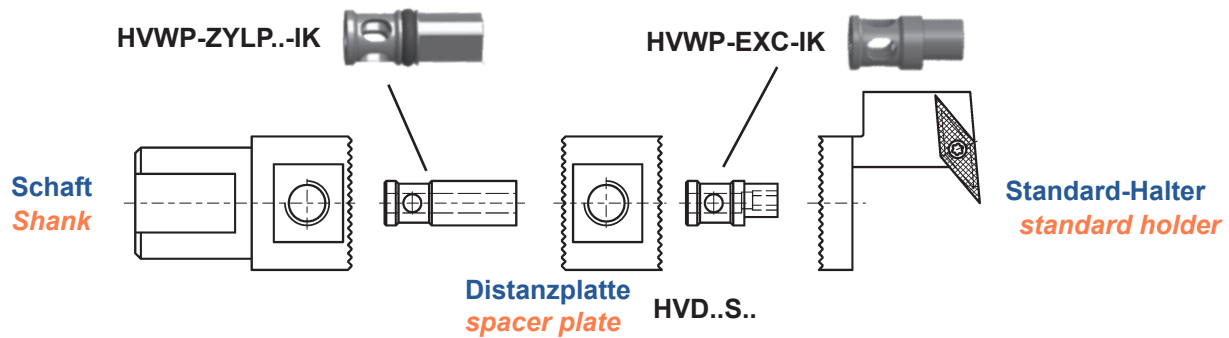
Bild 3

Bestell-Nr. order-no.	L	Bild picture
HVWP-EXC-IK	16,5	1
HVWP-ZYLP10-IK	9,4	2
HVWP-ZYLP15-IK	14,6	2
HVWP-ZYLP20-IK	19,6	2
HVWP-ZYLP25-IK	24,6	2
HVWP-ZYLP30-IK	29,6	2
HVWP-IK-PIN20	20,0	3
HVWP-IK-PIN22	21,7	3
HVWP-IK-PIN30	27,0	3
HVD-PIN-SW20-2	21,0	

HVWP-IK-PIN20 = Standardhalter / standard holders
 HVWP-IK-PIN22 = für / for HVWP-1010 + HVD3266SPI-ZG
 HVWP-IK-PIN30 = für / for HVWP-1212
 HVD-PIN-SW20-2 = für / for HVD2225SW2-AK2

Zusammenbau

Assembling

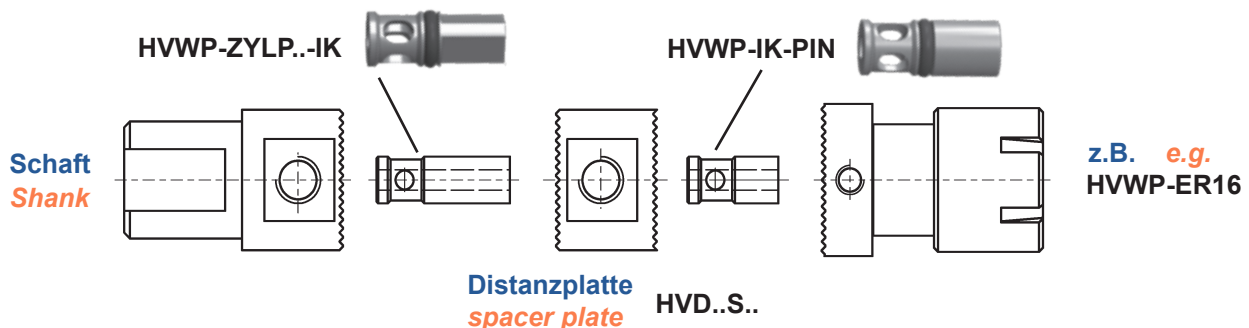
Schaft + Standard-Halter
Shank + standard holder

Schaft + Distanzplatte + Standard-Halter
Shank + spacer plate + standard holder


Länge muss entsprechend der Höhe der Distanzplatte gewählt werden
(z. B. / e. g.

HVWP-ZYLP.-IK

Length must be elected by height of spacer plate

(z. B. / e. g. HVD20S <====> HVWP-ZYLP20-IK)

Schaft + Distanzplatte + Kopf ohne Exzenterverstellung
Shank + spacer plate + holder without eccentric bolt


Ob ein Schaft oder eine Distanzplatte einen Kühlmittelanschluss hat oder nicht, macht für den Zusammenbau keinen Unterschied.

There is no difference in assembling a shank or spacer plate with or without coolant

Höhenverstellbare Wendepplattenhalter Schäfte

Height Adjustable Backworking Holders Shanks

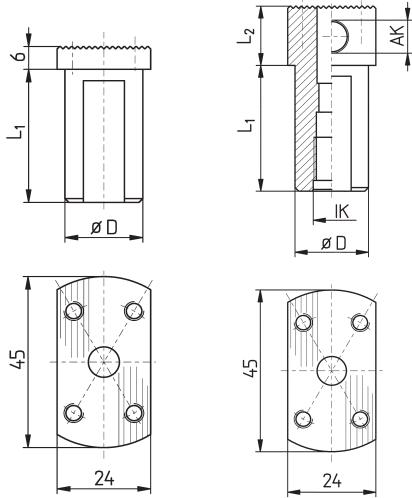


Bild 1

Bild 2



Standardschaft
Standard shank



Standardschaft mit innerer
Kühlmittelzufuhr (AK / IK)
Standard shank with inner
coolant (AK / IK)

Bestell-Nr. order-no.	D	L ₁	L ₂	Bild picture	AK	IK	Maschine machine
HVD1660	16	60		1	--	--	
HVD2270	22	70		1	--	--	STAR
HVD2270-AK2	22	70	10	2	M8x1	M12x1,5	STAR
HVD22100	22	100		1	--	--	

AK : mit radialem Kühlmittelanschluss

AK : With inner coolant, radial

Höhenverstellbare Wendepplattenhalter Distanzplatten

Height Adjustable Backworking Holders Spacer Plates

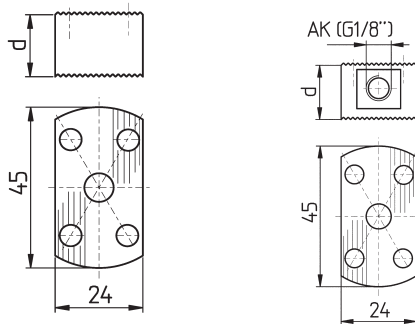


Bild 1

Bild 2



Bestell-Nr. order-no.	D	Bild picture
HVD10S	10	1
HVD15S	15	1
HVD20S	20	1
HVD25S	25	1
HVD30S	30	1

Mit Kühlmittelanschluss with inner coolant		
Bestell-Nr. order-no.	D	Bild picture
HVD15S-AK1	15	2
HVD20S-AK1	20	2
HVD25S-AK1	25	2
HVD30S-AK1	30	2

Inkl. Schrauben und Bolzen HVWP-ZYLP...IK

Supplied with screws and cylindrical bolt HVWP-ZYLP...IK

Schäfte für STAR

Shanks for STAR

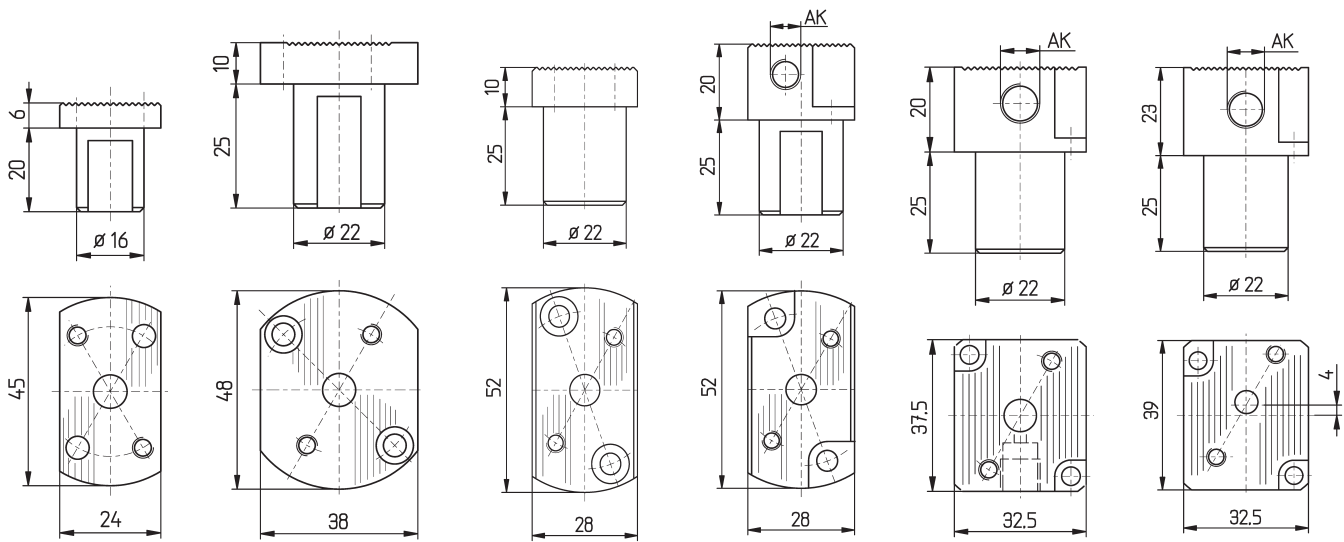


Bild 1

Bild 2

Bild 3

Bild 4 #

Bild 5 #

Bild 6 # **

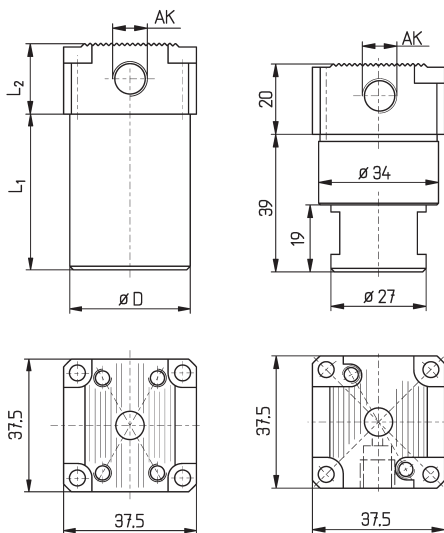


Bild 7

Bild 8

Bestell-Nr. order-no.	D	L ₁	L ₂	Bild pic	AK	Maschine machine
HVD1620SR	16	20		1	--	STAR SR16; SST16
HVD2225SR	22	25		2	--	STAR SR32
HVD2225SRR	22	25		3	--	
HVD2225SRRWD	22	25		3	--	*
HVD2225SRR-AK2 #	22	25		4	M8x1	
HVD2225SW1-AK1 #	22	25		5	G1/8"	
HVD2225SW2-AK2 #**	22	25		6	M8x1	**
HVD3045	30	45		1	--	
HVD3419	34	19,5	10	7	--	
HVD3419-AK1	34	19,5	20	7	G1/8"	STAR SV38R; ECAS32 MAIER
HVD3444	34	44	10	7	--	
HVD3444-AK1	34	44	19	7	G1/8"	
HVD34SV38	34	44		8		
HVD34SV38-AK1	34	39		8	G1/8"	STAR SV38-R

WD = mit Fläche - with flat

* Für STAR-Maschinen / for STAR machines:

SR10J (Position T22 / T24); SB16 / 20 Typ C / Typ E; SB20 R Typ E / Typ G / Typ N; SR20J / JN; SR20 R / II / III; SR32J / JN; ECAS12 / 20 SR20R IV (Positionen T21 - T24, *verbaut - overlaps* - T25 - T28)

** Für STAR-Maschinen / for STAR machines:

SB12R / 20R; SR20R IV; SW20; SV20R; SR32J II; SR38; SW12R II; SR20J II

Halter können ohne Lösen des Kopfes an- bzw. abgeschraubt werden, vgl. techn. Informationen zu Beginn des Kapitels.

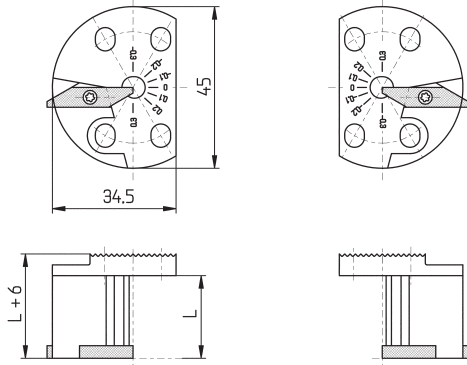
Holder can be screwed or unscrewed without removing the head, see technical information at the beginning of the chapter.

*** nicht höhenverstellbar - 4mm außer Mitte

*Höhenverstellbarer Halter verbaut bei SR20RIV, SW20 und SB20R die Position darunter. Dieser Halter ist nach oben versetzt, um dies zu verhindern.**Höhenverstellung nur über Y-Achse.**not height adjustable - 4mm out of center**Height adjustable holder overlaps at the SR20RIV, SW20 and SB20R the position below. This holder is out of center in upper direction to prevent this problem.**Height adjustment only by Y-axis.*

Höhenverstellbare Wendeplattenhalter für BIMU-040 - Platten

Height Adjustable Backworking Holders for BIMU-040 Inserts



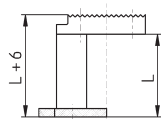
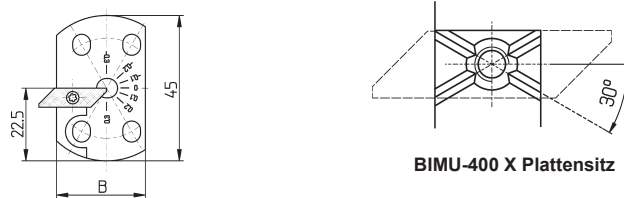
Ausführung links
Version left

Ausführung rechts
Version right

Bestell-Nr. order-no.	Ausf. type	Platten inserts	L
HVWP-BI040R	rechts - <i>right</i>	BIMU-040	23
HVWP-BI040L	links - <i>left</i>	BIMU-040	23
Schraube / screw:		Schlüssel / spanner:	
A12-W6025060		T8	

für BIMU-400 X Platten

for BIMU-400 X Inserts



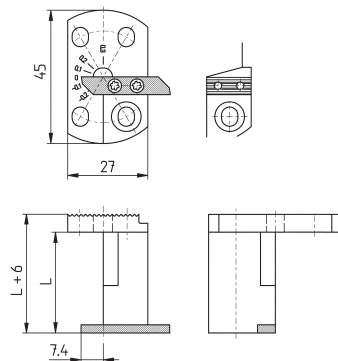
Ausführung links
Version left

Bestell-Nr. order-no.	Ausf. type	Platten inserts	B	L
HVWP-BIX-R	rechts - <i>right</i>	BIMU-400 X	27,5	23
HVWP-BIX-L	links - <i>left</i>	BIMU-400 X	27,5	23
Schraube / screw:		Schlüssel / spanner:		
A12-W6030082		T9		

Höhenverstellbare Wendeplattenhalter für APPLITEC - Wendeplatten

Height Adjustable Backworking Holders for APPLITEC - Inserts

TOP - Line



HVWP-APL-TOP740-R

Bestell-Nr. order-no.	L	Für Schneidplatten Serie for insert series
HVWP-APL-TOP740-R	26	TOP 74X
HVWP-APL-TOP740-R	43	TOP 74X
Schraube / screw:		Schlüssel / spanner:
A12-W4530070		T9

Höhenverstellbare Wendeplattenhalter für Gewindeplatten ER16

Height Adjustable Backworking Holders for Threading Inserts ER16

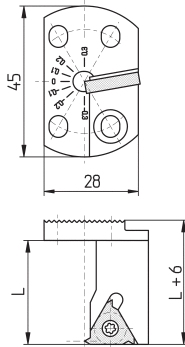


Bild 1
(Ausführung rechts)
(Version right)

Platten - inserts: 16ER/L ISO

Ausführung links - version left



Bestell-Nr. order-no.	Ausf. type	Winkel angle	L	Bild picture
HVWP-16ER-0	rechts - <i>right</i>	0°	31	1
HVWP-16ER-15	rechts - <i>right</i>	1,5°	31	1
HVWP-16ER-3	rechts - <i>right</i>	3°	31	1
HVWPL-16ER-0	rechts - <i>right</i>	0°	40	1
HVWPL-16ER-15	rechts - <i>right</i>	1,5°	40	1
HVWPL-16ER-3	rechts - <i>right</i>	3°	40	1

Schraube / screw:	Schlüssel / spanner:
A12-W6030082	T9

Steigungswinkel berechnen:

$$\text{Steigungswinkel} = \frac{20 \times \text{Gewindesteigung}}{\text{Gewindedurchmesser}}$$

Häufigste Anwendung ist 1,5°

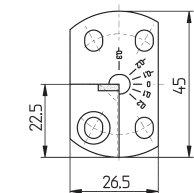
pitch angle evaluation:

$$\text{pitch angle} = \frac{20 \times \text{pitch of thread}}{\text{diameter of thread}}$$

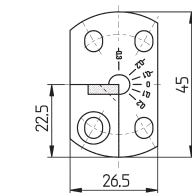
Most common is 1,5°

Höhenverstellbare Wendeplattenhalter Typ SCLC

Height Adjustable Backworking Holders Type SCLC



SCLC06
(Ausführung
links)
(Version left)



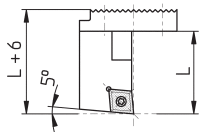
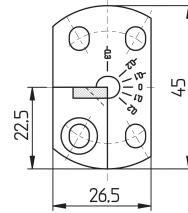
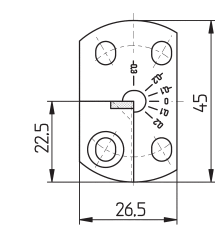
SCLC09
(Ausführung
links)
(Version left)



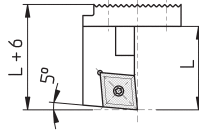
Bestell-Nr. order-no.	Ausf. type	Platten inserts	L	Schlüssel spanner	Schraube screw
HVWP-SCLCR06	rechts - <i>right</i>	CC..0602..	23	T8	A12-W6025060
HVWP-SCLCL06	links - <i>left</i>	CC..0602..	23	T8	A12-W6025060
HVWP-SCLCR09	rechts - <i>right</i>	CC..09T3..	23	T15	A12-W6040108
HVWP-SCLCL09	links - <i>left</i>	CC..09T3..	23	T15	A12-W6040108

Höhenverstellbare Wendeplattenhalter Typ SCLC

Height Adjustable Backworking Holders Type SCLC



SCLCL06
(Ausführung links)
(Version left)

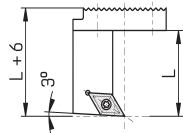
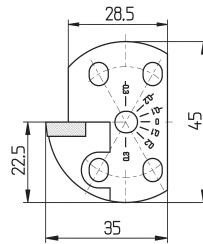
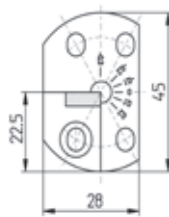
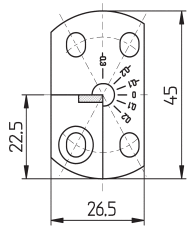


SCLCL09
(Ausführung links)
(Version left)

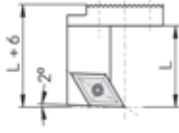
Bestell-Nr. order-no.	Ausf. type	Platten inserts	L	Schlüssel spanner	Schraube screw
HVWP-SCLCR06	rechts - <i>right</i>	CC..0602..	23	T8	A12-W6025060
HVWP-SCLCL06	links - <i>left</i>	CC..0602..	23	T8	A12-W6025060
HVWP-SCLCR09	rechts - <i>right</i>	CC..09T3..	23	T15	A12-W6040108
HVWP-SCLCL09	links - <i>left</i>	CC..09T3..	23	T15	A12-W6040108

Typ SDJC

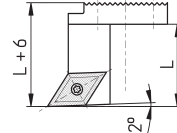
Type SDJC



SDJCL07
(Ausführung links)
(Version left)



SDJCL11
(Ausführung links)
(Version left)

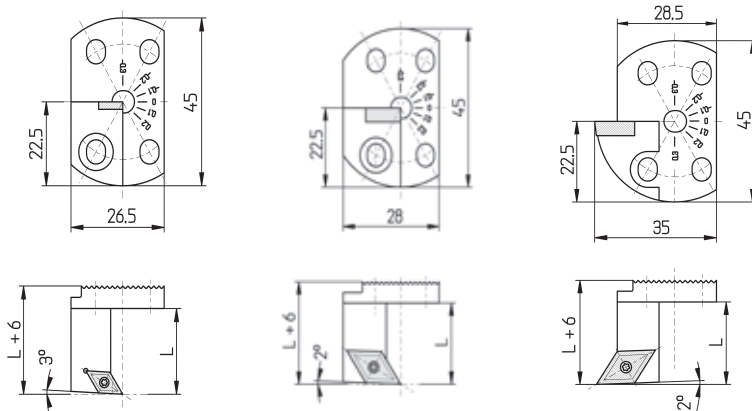


HVWPA-SDJCR11
(Ausführung rechts außen)
(Version right external)

Bestell-Nr. order-no.	Ausf. type	Platten inserts	L	Schlüssel spanner	Schraube screw
HVWP-SDJCR07	rechts - <i>right</i>	DC..0702..	23	T8	A12-W6025060
HVWP-SDJCL07	links - <i>left</i>	DC..0702..	23	T8	A12-W6025060
HVWP-SDJCR11	rechts - <i>right</i>	DC..11T3..	23	T15	A12-W6040108
HVWP-SDJCL11	links - <i>left</i>	DC..11T3..	23	T15	A12-W6040108
HVWPL-SDJCR11	rechts - <i>right</i>	DC..11T3..	40	T15	A12-W6040108
HVWPL-SDJCL11	links - <i>left</i>	DC..11T3..	40	T15	A12-W6040108
HVWPA-SDJCR11	rechts - <i>right</i>	DC..11T3..	23	T15	A12-W6040108
HVWPA-SDJCL11	links - <i>left</i>	DC..11T3..	23	T15	A12-W6040108

Typ SDJC

Type SDJC



HWWA-SDJCR11
(Ausführung rechts außen)
(Version right external)

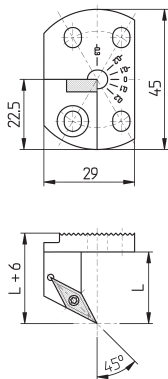
SDJCL07
(Ausführung links)
(Version left)

SDJCL11
(Ausführung links)
(Version left)

Bestell-Nr. order-no.	Ausf. type	Platten inserts	L	Schlüssel spanner	Schraube screw
HVWP-SDJCR07	rechts - <i>right</i>	DC..0702..	23	T8	A12-W6025060
HVWP-SDJCL07	links - <i>left</i>	DC..0702..	23	T8	A12-W6025060
HVWP-SDJCR11	rechts - <i>right</i>	DC..11T3..	23	T15	A12-W6040108
HVWP-SDJCL11	links - <i>left</i>	DC..11T3..	23	T15	A12-W6040108
HVWPL-SDJCR11	rechts - <i>right</i>	DC..11T3..	40	T15	A12-W6040108
HVWPL-SDJCL11	links - <i>left</i>	DC..11T3..	40	T15	A12-W6040108
HVWPA-SDJCR11	rechts - <i>right</i>	DC..11T3..	23	T15	A12-W6040108
HVWPA-SDJCL11	links - <i>left</i>	DC..11T3..	23	T15	A12-W6040108

Typ SVQC

Type SVQC



Ausführung links
Version left

Bestell-Nr. order-no.	Ausf. type	Platten inserts	L
HVWP-SVQCR11	rechts - <i>right</i>	VC..1103..	22
HVWP-SVQCL11	links - <i>left</i>	VC..1103..	23
Schraube / screw:		Schlüssel / spanner:	
A12-W6025060		T8	

Typ SVJB, SVJC

Type SVJB, SVJC

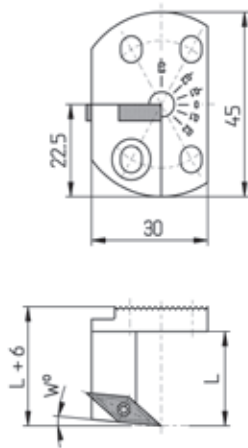


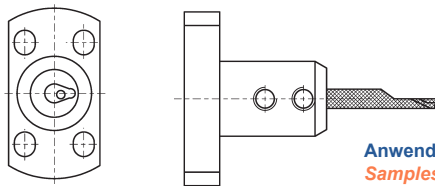
Bild 1

SVJCL11
(Ausführung links)
(Version left)

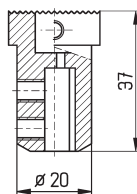
Bestell-Nr. order-no.	Bild picture	Ausf. type	Platten inserts	L	W°	Schlüssel spanner	Schraube screw
HVWP-SVJBR11	1	rechts - <i>right</i>	VB..1103..	23	5	T8	A12-W6025060
HVWP-SVJCR11	1	rechts - <i>right</i>	VC..1103..	23	5	T8	A12-W6025060
HVWP-SVJCL11	1	links - <i>left</i>	VC..1103..	23	5	T8	A12-W6025060
HVVPL-SVJCR11	1	rechts - <i>right</i>	VC..1103..	40	5	T8	A12-W6025060
HVVPL-SVJCL11	1	links - <i>left</i>	VC..1103..	40	5	T8	A12-W6025060

Höhenverstellbare Werkzeugsysteme
Halter für HORN Schneideinsätze
Typ105 + 105 mit verlängertem Spannschaft

Height Adjustable Backworking Holders
Holders for HORN Inserts
Type 105 + 105 with Extended Clamping Shank



Anwendungsbeispiel
Samples of application



Bestell-Nr. order-no.	L	Für Schneideinsatz Typ for insert type
HVWP-H105	34	105

Höhenverstellbare Werkzeugsysteme

Aufnahme für Wendplattenhalter

10 x 10 und 12 x 12

Height Adjustable Backworking Holders

Mounting for Insert Tool holders

10 x 10 and 12 x 12

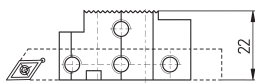
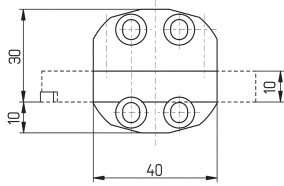


Bild 1 R + L + überkopf einsetzbar
Useable r, l. + overhead

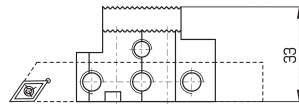
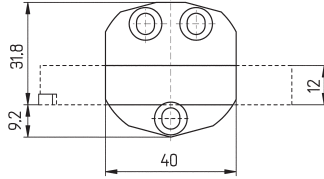


Bild 2: R + L + überkopf einsetzbar
Useable r, l. + overhead



Ausführung
version HVWP-1212IK

HVWP-1010 ohne IK
without IK

Bestell-Nr. order-no.	Für Schaft for shank	Bild picture
HVWP-1010	10 x 10	1
HVWP-1212IK	12 x 12	2

Höhenverstellbare Werkzeugsysteme

Zangenspannfutter ER 11, ER16

Height Adjustable Backworking Holders

Collet Holders ER 11, ER16

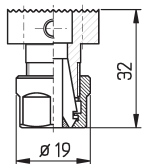
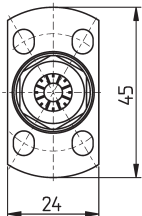


Bild 1

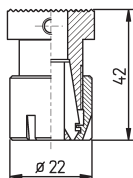
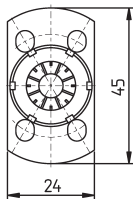


Bild 2



Bestell-Nr. order-no.	Ausf. / Spannbereich type / range	Bild picture
HVWP-ER11	ER11 / 0,5-7mm	1
HVWP-ER16	ER16 / 1-10mm	2

Wendepplattenhalter SCLCR/L09 für Rückseitenbearbeitung mit AK (Kühlung)

Insert Holder SCLCR/L09 for Backworking with AK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SCLCR09-SW WP-STAR-SCLCL09-SW	rechte - right linke - left	Ausführung - version	für - for:	SW12RII; SW20; SR20JII SV20R; SR20RIV; SR32JII; SR38
Platte: Insert:	CC..09T3		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendepplattenhalter SCLCR/L09 für Rückseitenbearbeitung mit IK (Kühlung)

Insert Holder SCLCR/L09 for Backworking with IK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SCLCR09-SWIK WP-STAR-SCLCL09-SWIK	rechte - right linke - left	Ausführung - version	für - for:	SR38; SR32JII; SR20JII
Platte: Insert:	CC..09T3		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendepplattenhalter SDUCR/L11 für Rückseitenbearbeitung mit AK (Kühlung)

Insert Holder SDUCR/L11 for Backworking with AK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SDUCR11-SW WP-STAR-SDUCL11-SW	rechte - right linke - left	Ausführung - version	für - for:	SW12RII; SW20; SR20JII SV20R; SR20RIV; SR32JII; SR38
Platte: Insert:	DC..11T3		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendeplattenhalter SDUCR/L11 für Rückseitenbearbeitung mit IK (Kühlung)

Insert Holder SDUCR/L11 for Backworking with IK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SDUCR11-SWIK WP-STAR-SDUCL11 -SWIK	rechte - right linke - left	Ausführung - version	für - for:	SR38; SR32JII; SR20JII
Platte: Insert:	DC..11T3		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendeplattenhalter SVUBR16 für Rückseitenbearbeitung mit AK (Kühlung)

Insert Holder SVUBR16 for Backworking with AK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SVUBR16-SW	(rechte Ausführung) (right version)		für - for:	SW12RII; SW20; SR20JII SV20R; SR20RIV; SR32JII; SR38
Platte: Insert:	VB..1604		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendeplattenhalter SVUBR16 für Rückseitenbearbeitung mit IK (Kühlung)

Insert Holder SVUBR16 for Backworking with IK (coolant)

Bestell-Nr.: order-no.:	WP-STAR-SVUBR16-SWIK	(rechte Ausführung) (right version)		für - for:	SR38; SR32JII; SR20JII
Platte: Insert:	VB..1604		Schraube: Screw:	A12-W6040082	Schlüssel: Wrench:
					T15

Wendepplattenhalter SVUCR11 für Rückseitenbearbeitung mit AK (Kühlung)

Insert Holder SVUCR11 for Backworking with AK (coolant)

Bestell-Nr.: <i>order-no.:</i>	WP-STAR-SVUCR11-SW	(rechte Ausführung) (right version)	für - for:	SW12R11; SW20; SR20J11 SV20R; SR20R1V; SR32J11; SR38	
Platte: <i>Insert:</i>	VC..1103	Schraube: <i>Screw:</i>	A12-W6025060	Schlüssel: <i>Wrench:</i>	T8

auch in linker Ausführung verfügbar - also available in left version

Wendepplattenhalter SVUCR11 für Rückseitenbearbeitung mit IK (Kühlung)

Insert Holder SVUCR11 for Backworking with IK (coolant)

Bestell-Nr.: <i>order-no.:</i>	WP-STAR-SVUCR11-SWIK	(rechte Ausführung) (right version)	für - for:	SR38; SR32J11; SR20J11	
Platte: <i>Insert:</i>	VC..1103	Schraube: <i>Screw:</i>	A12-W6025060	Schlüssel: <i>Wrench:</i>	T8

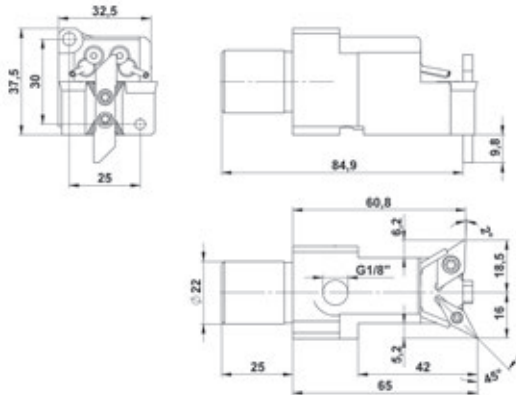
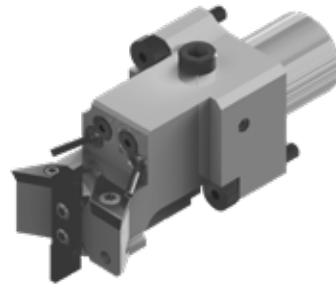
Wendepplattenhalter SCLCR09 / SDUCL11 für Rückseitenbearbeitung mit AK (Kühlung)

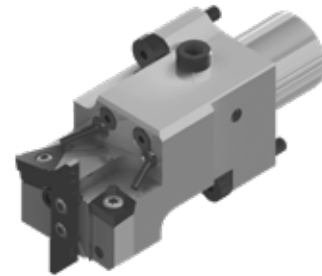
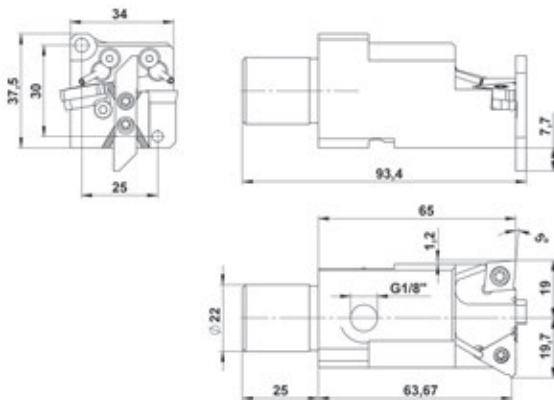
Insert Holder SCLCR09 / SDUCL11 for Backworking with AK (coolant)

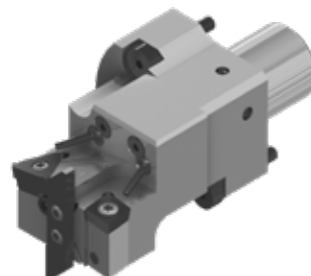
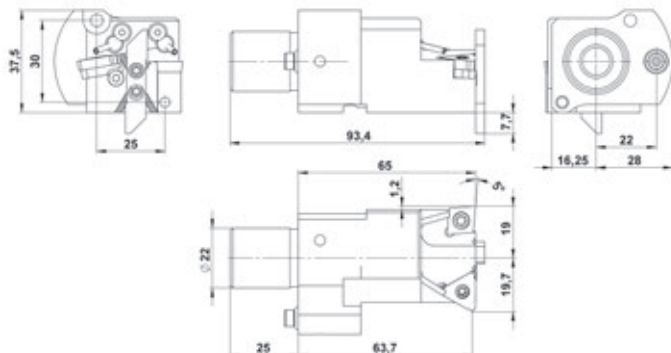
Bestell-Nr.: <i>order-no.:</i>	WP-STAR-SCLCR09-SDUCL11- <i>OXOSW</i> (BIMU-Platte - <i>insert</i>)	für - for:	SW12R11; SW20; SR20J11 SV20R; SR20R1V; SR32J11; SR38		
Platte rechts - <i>insert right:</i>	CC..09T3	Platte links - <i>insert left:</i>	DC..11T3	Einstichplatte stirnseitig - <i>cut-in insert frontal:</i>	BIMU 1040 R / L

Schneidpositionen aller Platten sind auf dem Halter beschriftet
Cutting positions of all inserts are marked on the holder

**Wendplattenhalter SVQCR11 / SDUCL11
für Rückseitenbearbeitung mit AK (Kühlung)**
**Insert Holder SVQCR11 / SDUCL11
for Backworking with AK (coolant)**
Bestell-Nr.: WP-STAR-SVQCR11-SDUCL11-OXOSW (BIMU-Platte - insert)
order-no.:
für - for: SW12RII; SW20; SR20JII
 SV20R; SR20RIV; SR32JII; SR38

 Platte rechts - *Insert right:* VC..1103 Platte links - *Insert left:* DC..11T3 Einstichplatte stirnseitig - *cut-in insert frontal:* BIMU 1040 R / L

 Schneidpositionen aller Platten sind auf dem Halter beschriftet
Cutting positions of all inserts are marked on the holder

**Wendplattenhalter ER16 / SCLCL09
für Rückseitenbearbeitung mit AK (Kühlung)**
**Insert Holder ER16 / SCLCL09
for Backworking with AK (coolant)**
Bestell-Nr.: WP-STAR-ER16-SCLCL09-OXOSW (BIMU-Platte - insert)
order-no.:
für - for: SW12RII; SW20; SR20JII
 SV20R; SR20RIV; SR32JII; SR38

 Platte rechts - *Insert right:* Gewindeplatte ER16 - *threading insert ER16* Platte links - *Insert left:* CC..09T3
 Einstichplatte stirnseitig - *cut-in insert frontal:* BIMU 1040 R / L

**Wendplattenhalter ER16 / SCLCL09
für Rückseitenbearbeitung mit IK (Kühlung)**
**Insert Holder ER16 / SCLCL09
for Backworking with IK (coolant)**
Bestell-Nr.: WP-STAR-ER16-SCLCL09-OXOSWIK (BIMU-Platte - insert)
order-no.:
für - for: SR38; SR32JII, SR20JII

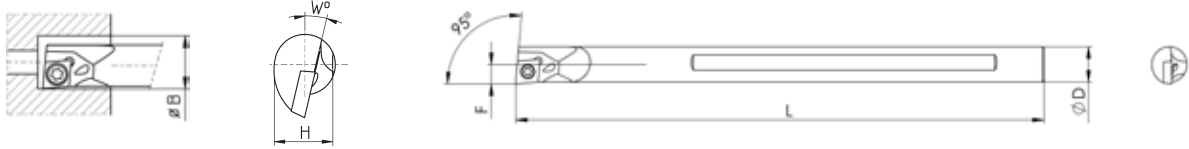
 Platte rechts - *insert right:* Gewindeplatte ER16 - *threading insert ER16* Platte links - *insert left:* CC..09T3
 Einstichplatte stirnseitig - *cut-in insert frontal:* BIMU 1040 R / L


VHM - Bohrstangen
mit Innenkühlung, für höchste Präzision

Carbide Boring Bars
also with inner coolant, for highest precision

E...SCLC R/L ...SCLP R/L

Freiwinkel 7° / 11° Clearance angle 7° / 11°



Bestell-Nr. order-no.	Platte insert	D	L	F	W [°]	H	B _{min}	IK
BS-E06J-SCLPR/L04	CP... 04T1	6	110	3,5	7	5,5	6,9	✓
BS-E08K-SCLCR/L06	CC... 0602	8	125	4	10	7,5	8,9	✓
BS-E10K-SCLCR/L06	CC... 0602	10	125	5,5	7	9,5	11	✓
BS-E10M-SCLCR/L06	CC... 0602	10	150	5,5	7	9,5	11	✓
BS-E12M-SCLCR/L06	CC... 0602	12	150	6,5	7	11,5	12	✓
BS-E12Q-SCLCR/L06	CC... 0602	12	180	7,5	7	11,5	14	✓
BS-E16R-SCLCR/L09	CC... 09T3	16	200	9	7	15,5	17,5	✓

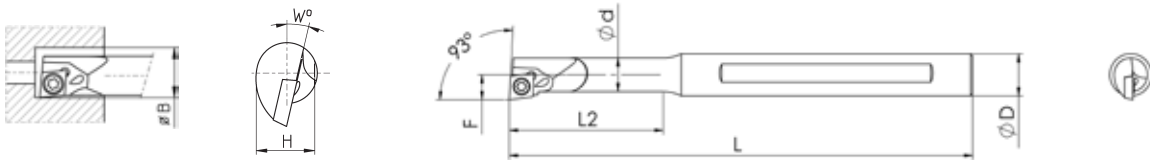
* mit innerer Kühlmittelzufuhr auf Anfrage

* with inner coolant on request



E...SCUC R/L ..SCUT R/L

Freiwinkel 7° Clearance angle 7°



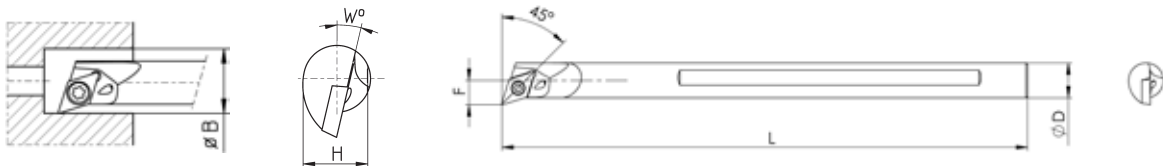
Ausführung BS-E0810J-SCUPR05
Version BS-E0810J-SCUPR05

Bestell-Nr. order-no.	Platte insert	D	d	L	L2	F	W [°]	H	B _{min}	IK
BS-E08K-SCUCR/L06	CC... 0602	8	--	125	--	4,8	10	7,5	9,2	✓
BS-E0810J-SCUPR/L05	CP... 05T1	10	8	125	36	5,8	5	9,5	10,2	✓



E...SDQC R/L

Freiwinkel 7° Clearance angle 7°



Bestell-Nr. order-no.	Platte insert	D	d	L	L2	F	W [°]	H	B _{min}	IK
BS-E10K-SDQCR/L07	DC... 0702	10	--	125	--	7	10	9,5	12,5	✓
BS-E10M-SDQCR/L07	DC... 0702	10	--	150	--	7	10	9,5	12,5	✓

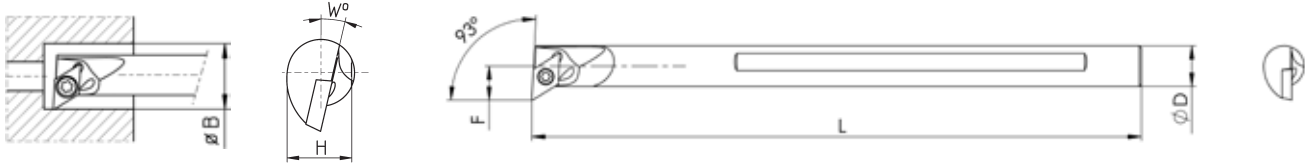


VHM - Bohrstangen
mit Innenkühlung, für höchste Präzision

Carbide Boring Bars
also with inner coolant, for highest precision

E...SDUC R/L

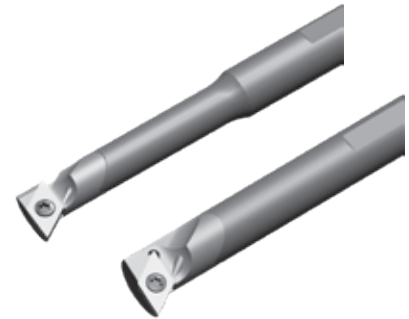
Freiwinkel 7° Clearance angle 7°



Bestell-Nr. order-no.	Platte insert	D	d	L	L2	F	W [°]	H	B _{min}	IK
BS-E10K-SDUCR/L07	DC... 0702	10	--	125	--	7	10	9,5	12,5	✓

* mit innerer Kühlmittelzufuhr auf Anfrage

* with inner coolant on request



Weitere Bohrstangen im Katalog :

Wendeplattensysteme

Find all our Carbide Boring Bars in the catalog : [Insert Systems](#)



Druckhülsen
Collet Sleeves

ab Seite 60 - *from page 60*



Überwurfmuttern
Cap Nuts

ab Seite 65 - *from page 65*



Druckfedern
Pressure Springs

ab Seite 69 - *from page 69*



**Führungsbüchsen-
Anzugsmuttern**
Guide Bush Nuts

ab Seite 70 - *from page 70*



Spannfinger
Toggles / Chuck Levers

ab Seite 73 - *from page 73*

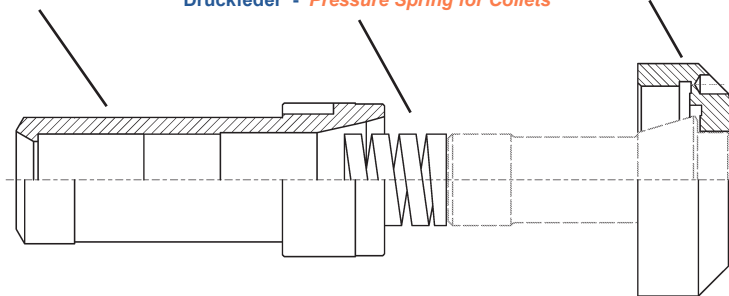
Ein Set besteht aus:

Set consists of:

Druckhülse - Collet Sleeve

Druckfeder - Pressure Spring for Collets

Überwurfmutter - Cap Nut for Collet Sleeves



+ Führungsbüchsen-Anzugsmutter - nur bei Hauptspindelerweiterung und nur falls vorhanden
+ Guide Bush Nut - only for main spindle extension and only if available

Bestell-Nr. bei Set-Bestellung:

Order-no. to order a set:

SET - Maschinenhersteller - Maschinentyp / Haupt- (A) oder Gegenspindel (B) / Zange
SET - machine manufacturer - machine type / main (A) or sub (B) spindle / collet

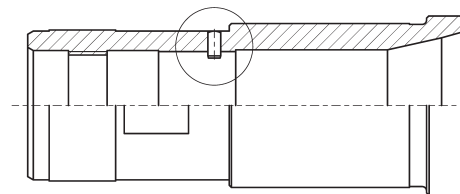
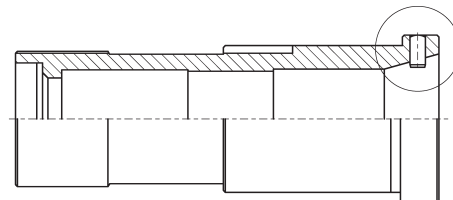
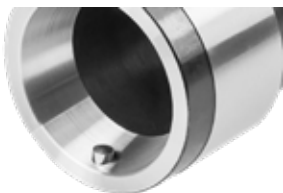
Beispiel:

Example:

SET - STAR - SR20R / B / F27

Verstiften von Druckhülsen

Pinned Collet Sleeves



auf Wunsch gegen Aufpreis

optional for extra charge

Druckhülsen, STAR

Collet Sleeves, STAR

Identische Druckhülsen unterschiedlicher Maschinentypen Identical collet sleeves for different machine types

Spindel spindle	A	B	Standardzange standard collet		Spindel spindle	A	B	Standardzange standard collet		Spindel spindle	A	B	Standardzange standard collet
Maschine machine					Maschine machine					Maschine machine			
SW7	1		F15 / 120E		ECAS20	7	12	F25 / 145E		ECAS32	13	15	F37 / 1536E
SR10J	1				KNC20	10				JNC32	14	15	
SB12RE	19	21	F16 / 1212E		SB20	8	11			KNC32	14	15	
SB12RG	19	21			SB20RE	7	11			SR32	14	15	
SB12RN	19	21			SB20RN	9	11			SR32J (alt)	14	15	
SW12RII	19				SB20RG	9	11			SR32J (neu)	13	15	
					SR20	10	11			SR32JII	20	22	
SA12	2	4	F20 / 138E		SR20J	8	11			SR32JN	13	15	
SA16	2	4			SR20JII	9	12			SV32	13	15	
SB12	2	4			SR20JN	11				SV32J	13	15	
SB16	2	4			SR20R I / II / III	7	11		VNC32	14	15		
ECAS12	3	5			SR20R IV	9	12						
ECAS16		5			SV20	8	11		ST38		16	F48 / 173E	
SV12	3	4			SV20-R	9	12		SV38R	18	16		
SW12R					SW20	7	12		SR38	18	16		
JNC16	2				ST20	7	12						
KJR16	2	6			VNC20	10							
RNC16 (neu)	2												
SA16R	3	4											
SR16	2	6											
SR16R	7 _{red}	11 _{red}											
SST16	2	6											

Hauptspindel (A)
Gegenspindel (B)

Maschinen mit gleicher Nummer haben identische Druckhülsen.

Ist keine Nummer angegeben, gibt es keine weiteren kompatiblen Maschinen.

Sind die Druckhülsen mehrerer Maschinen miteinander kompatibel, werden nur die Druckhülsen der grau unterlegten Maschinen in den Maßtabellen aufgeführt.

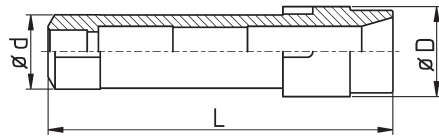
main spindle (A)
sub spindle (B)

Machines with identical number have identical collet sleeves.

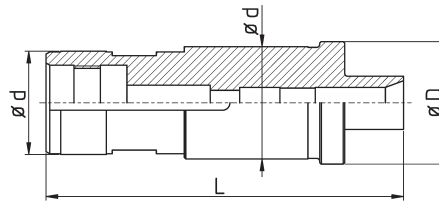
If there is no number written there is no further machine compatible.

If collet sleeves of different machines are identical only the grey marked machine types will be found in the list on the next pages.

DH-STAR-SR10J/B/F13v10



DH-STAR-ECAS20/B/F10v15



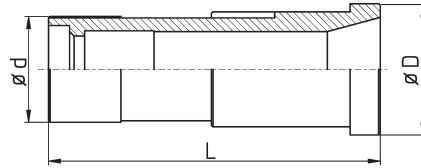
DH-STAR-SA12/B/F15



DH-STAR-ECAS20/B/F10v15

Bestell-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	kleinster ID smallest inner diam.	D	d	L	verl. ext. [mm]	Zange collet	Feder spring
DH-STAR-SW7/B/F7v15	STAR SW7	B	5,0	27	21	109	15	1010E / F7	
DH-STAR-SW7/B/F10v17	STAR SW7	B	8,5	27	21	109	17	109E / F10	
DH-STAR-SW7/B/F15	STAR SW7	B	11,5	27	21	90		120E / F15	
DH-STAR-SR10J/A/F8	STAR SR10J	A	6,5	27	21	83		101E / F8	
DH-STAR-SR10J/A/F15	STAR SR10J	A	11,0	27	21	83		120E / F15	DF15F 11.5-28
DH-STAR-SR10J/B/F8v10	STAR SR10J	B	6,5	24	20	92,5	10	101E / F8	DF07R 5.5-24
DH-STAR-SR10J/B/F10v15	STAR SR10J	B	8,5	24	20	97,5	15	109E / F10	
DH-STAR-SR10J/B/F13	STAR SR10J	B	10,5	24	20	81		116E / F13	
DH-STAR-SR10J/B/F13v10	STAR SR10J	B	10,5	24	20	92,5	10	116E / F13	DF13R 10-36
DH-STAR-SR10J/B/F13v15	STAR SR10J	B	10,5	24	20	97,5	15	116E / F13	
DH-STAR-SR10J/B/F15	STAR SR10J	B	11,5	24	20	81		120E / F15	DF15F 11.5-28
DH-STAR-SA12/A/F20	STAR SA12	A	16,5	42	34	87		138E / F20	DF20F 16.5-30
DH-STAR-SA12/A/F22	STAR SA12	A		42	34	87		140E / F22	
DH-STAR-SA12/A/144E	STAR SA12	A		42	34	87		144E / F25	DF25F 22-33
DH-STAR-SA12/B/F10v15	STAR SA12	B	8,5	31,5	31,5	104,7	15	109E / F10	
DH-STAR-SA12/B/F15	STAR SA12	B	15,0	31,5	31,5	88,5		120E / F15	
DH-STAR-SA12/B/F20	STAR SA12	B	19,4	31,5	31,5	87,5		138E / F20	DF20F 17-25
DH-STAR-SB12RG/A/F10	STAR SB12R-G	A	8,5	30	27	90		109E / F10	
DH-STAR-SB12RG/A/F15	STAR SB12R-G	A	13,2	30	27	90		120E / F15	
DH-STAR-SB12RG/A/F16	STAR SB12R-G	A	13,5	30	27	90		1212E / F16	DF15F 11.5-33
DH-STAR-SB12RG/A/136E	STAR SB12R-G	A	16,5	30	27	90		136E / F20	
DH-STAR-SB12RG/B/F15	STAR SB12R-G	B	15,0	42	35	106		120E / F15	
DH-STAR-SB12RG/B/F16	STAR SB12R-G	B	15,8	42	35	106		1212E / F16	
DH-STAR-ECAS12/B/F20	STAR ECAS12	B	19,0	37,5	34	96		138E / F20	
DH-STAR-SV12/A/F10v48	STAR SV12	A	10,0	38,5	34	144	48	109E / F10	
DH-STAR-SV12/A/F20	STAR SV12	A	16,8	39,5	34	93		138E / F20	
DH-STAR-SW12R/B/F10v10	SW12R II	B	8,5	29,5	27	101	10	109E / F10	
DH-STAR-SW12R/B/F10v15	SW12R II	B	8,3	29,5	27	106,5	15	109E / F10	
DH-STAR-SW12R/B/F13	SW12R II	B	13	29,5	27	90,5		116E / F13	
DH-STAR-SW12R/B/F15	SW12R II	B	15,0	29,5	27	90,5		120E / F15	
DH-STAR-SW12R/B/F16	SW12R II	B	16,0	29,5	27	90,5		1212E / F16	
DH-STAR-SW12R/B/136E	SW12R II	B	17,0	29,5	27	90,5		136E / F20	
DH-STAR-SR16/B/F20	STAR SR16	B		35	31	122		138E / F20	
DH-STAR-SR16R/B/F20	STAR SR16R	B	19,0	42	35	101		138E / F20	
DH-STAR-RNC16/B/F20	STAR RNC16	B	14,0	31	26	90		138E / F20	
DH-STAR-RNC16alt/B/F15v15	STAR RNC16 alt	B	14,0	25	24	105		120E / F15	

DH-STAR-SR20R/A/F25

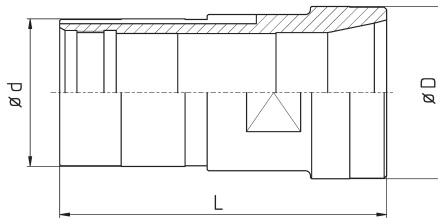


DH-STAR-SR20R/A/F25

Bestell-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	kleiner ID smalles inner diam.	D	d	L	verl. ext. [mm]	Zange collet	Feder spring
DH-STAR-ECAS20/B/F8v15	STAR ECAS20	B	6,5	41,5	38/35	122	15	101E / F8	
DH-STAR-ECAS20/B/F10v15	STAR ECAS20	B	8,5	41,5	38/35	121,5	15	109E / F10	DF10R 7-24
DH-STAR-ECAS20/B/F13v15	STAR ECAS20	B	10,5	41,5	38/35	120,8	15	116E / F13	
DH-STAR-ECAS20/B/F15v15	STAR ECAS20	B	12,0	41,5	38/35	120,8	15	120E / F15	DF15F 11.5-33
DH-STAR-ECAS20/B/F16v15	STAR ECAS20	B	13,0	41,5	38/35	120,8	15	1212E / F16	DF16F 12.5-34
DH-STAR-ECAS20/B/136E	STAR ECAS20	B	20,5	41,5	38/35	104,5		136E / F20	
DH-STAR-ECAS20/B/F25	STAR ECAS20	B	24,0	41,5	38/35	101,5		145E / F25	DF25F 22-25
DH-STAR-ECAS20/B/F27	STAR ECAS20	B	24,0	41,5	38/35	101,6		147E / F27	DF27F 23-28
DH-STAR-ECAS20/B/F27L #	STAR ECAS20	B	24,0	41,5	38/35	104,5		147E / F27	DF27F 23-35
DH-STAR-ECAS20HS/B/F20	STAR ECAS20	B	17	41,5	35	106,7		138E / F20	
DH-STAR-SR20/A/F10v15	STAR SR20	A		42	35	122	15	109E / F10	
DH-STAR-SR20/A/F25	STAR SR20	A	24,0	42	35	104,5		145E / F25	DF25F 22-44
DH-STAR-SR20JN/A/F25	STAR SR20JN	A	21,0	42	35	101		145E / F25	
DH-STAR-SR20JN/A/F27	STAR SR20JN	A	23,5	42	35	103		147E / F27	DF27F 23-32
DH-STAR-SR20R/A/F15	STAR SR20R I / II / III	A	13,0	43,4	38/34	114		120E / F15	
DH-STAR-SR20R/A/F20	STAR SR20R I / II / III	A	17,5	43,4	38/34	110		138E / F20	
DH-STAR-SR20R/A/F25	STAR SR20R I / II / III	A	22,0	43,4	38/34	110		145E / F25	DF25F 22-44
DH-STAR-SR20R/A/F27	STAR SR20R I / II / III	A	24,0	43,4	38/34	110		147E / F27	DF27F 23-35
DH-STAR-SR20R/B/F8v15	STAR SR20R I / II / III	B	6,5	42	35	121,5	15	101E / F8	DF07R 5.5-24
DH-STAR-SR20R/B/F10v15	STAR SR20R I / II / III	B	8,5	42	35	121,5	15	109E / F10	DF10R 7-24
DH-STAR-SR20R/B/F15v10	STAR SR20R I / II / III	B	12,0	42	35	104	10	120E / F15	
DH-STAR-SR20R/B/F15v15	STAR SR20R I / II / III	B	12,0	42	35	120,3	15	120E / F15	
DH-STAR-SR20R/B/F16v10	STAR SR20R I / II / III	B	13,0	42	35	115,3	10	1212E / F16	
DH-STAR-SR20R/B/F16v15	STAR SR20R I / II / III	B	13,0	42	35	120,3	15	1212E / F16	
DH-STAR-SR20R/B/F20	STAR SR20R I / II / III	B	20,0	42	35	104		138E / F20	
DH-STAR-SR20R/B/136E	STAR SR20R I / II / III	B	17,0	42	35	106		136E / F20	
DH-STAR-SR20R/B/F25	STAR SR20R I / II / III	B	23,0	42	35	101		145E / F25	DF25F 22-25
DH-STAR-SR20R/B/F27	STAR SR20R I / II / III	B	24,0	42	35	101		147E / F27	DF27F 23-28
DH-STAR-SR20R/B/F27L #	STAR SR20R I / II / III	B	24,0	42	35	103		147E / F27	
DH-STAR-SR20R4/A/F15v15	STAR SR20R IV	A	12,0	43,5	38/35	126,3	15	120E / F15	DF15F 11.5-28
DH-STAR-SR20R4/A/F25	STAR SR20R IV	A	20,5	43,5	38/35	107		145E / F25	DF25F 22-44
DH-STAR-SR20R4/A/F27	STAR SR20R IV	A	24,0	43,5	38/35	109		147E / F27	DF27F 23-35
DH-STAR-SV20/A/F20	STAR SV20	A	17,5	42	35	104		138E / F20	
DH-STAR-SV20/A/F25	STAR SV20	A	22,0	42	35	104		145E / F25	
DH-STAR-SV20/A/F27	STAR SV20	A	24,5	42	35	104		147E / F27	DF27F 23-35
DH-STAR-SR32/A/F37	STAR SR32	A	33,0	56	48	136		1536E / F37	DF37F 33-80
DH-STAR-SR32JII/A/F37	STAR SR32JII	A	32,8	55	51	140		1536E / F37	
DH-STAR-SR32JII/A/F40	STAR SR32JII	A	36,5	55	51	140		F40	
DH-STAR-SR32JII/B/F37	STAR SR32JII	B	36,5	55	51	125		1536E / F37	
DH-STAR-SR32JII/B/F40	STAR SR32JII	B	36,5	55	51	125		F40	

A = Hauptspindel - main spindle B = Abgreifspindel - sub spindle
 # verlängert auf normale Länge - extended to normal length

DH-STAR-ST38/B/F48



Bestell-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	kleiner ID smaller inner diam.	D	d	L	verl. ext. [mm]	Zange collet	Feder spring
DH-STAR-SV32/A/F25	STAR SV32	A		56	48	140		145E / F25	
DH-STAR-SV32/A/F30	STAR SV32	A	26,6	56	48	140		1446E / F30	
DH-STAR-SV32/A/F37	STAR SV32	A	33,0	56	48	135		1536E / F37	
DH-STAR-SV32/A/F40	STAR SV32	A	36,5	56	48	140		F40	DF40F 36-60
DH-STAR-SV32/B/F20v20	STAR SV32	B	17,0	55	51	148	20	138E / F20	
DH-STAR-SV32/B/F25	STAR SV32	B	22,0	55	51	125		145E / F25	DF25F 22-25
DH-STAR-SV32/B/F30	STAR SV32	B	26,6	55	51	129		1446E / F30	
DH-STAR-SV32/B/F37	STAR SV32	B	37,0	55	51	125		1536E / F37	DF37F 34-44
DH-STAR-SV32/B/F40	STAR SV32	B	37,0	55	51	125		F40	DF40F 36.5-37
DH-STAR-ST38/A/F37	STAR ST38	A	33,0	70	63,5/60	131,5		1536E / F37	
DH-STAR-ST38/A/F42	STAR ST38	A	36,0	70	63,5/60	133		171E / F42	
DH-STAR-ST38/A/F48	STAR ST38	A	43,0	70	63,5/60	133		173E / F48	
DH-STAR-ST38/B/F37	STAR ST38	B	37,0	70	63,5/60	131,5		1536E / F37	
DH-STAR-ST38/B/F25v20	STAR ST38	B	21,0	70	63,5/60	153	20	145E / F25	DF25F 22-44
DH-STAR-ST38/B/F42	STAR ST38	B	42,0	70	63,5/60	133		171E / F42	
DH-STAR-ST38/B/F48	STAR ST38	B	48,0	70	63,5/60	133		173E / F48	
DH-STAR-SV38R/A/F37	STAR SV38 R	A	33,0	61	61,5	131,5		1536E / F37	
DH-STAR-SV38R/A/F48	STAR SV38 R	A	43,0	69,5	61,5	133		173E / F48	

A = Hauptspindel - main spindle B = Abgreifspindel - sub spindle

Überwurfmuttern für Druckhülsen, STAR

Cap Nuts for Collet Sleeves, STAR

Identische Überwurfmuttern unterschiedlicher Maschinentypen
Identical cap nuts for collet sleeves for different machine types

Spindel spindle	A	B	Standardzange standard collet	Spindel spindle	A	B	Standardzange standard collet	Spindel spindle	A	B	Standardzange standard collet
Maschine machine				Maschine machine				Maschine machine			
SW7	1		F15 / 120E	SR16R	10	14		ECAS32	17		
SR10J				ECAS20	10	15		JNC32	18		
SB12RG	24	26	F16/ 1212E	KNC20	13	16	F25 / 145E	KNC32	18	F37 / 1536E	
SB12RN	24	26		SB20	11	14		SR32	17		19
SB12RE	24	26		SB20RE	10	14		SR32J (neu)	17		19
SW12RII	24	25		SB20RN	12	14		SR32JII	27		28
SA12	2	6		SB20RG	12	14		SR32JN			19
SA16	2	6	SR20	13	16	SV32		17	19		
SB12	2	6	SR20J	11	14	SV32J		17	19		
SB16	2	6	SR20JII		15	VNC32		18			
ECAS12		7	SR20JN		14	ST38			23		
ECAS16		7	SR20R I / II / III	10	14	SV38R		22	23		
SV12	4	6	SR20R IV	29	15	SR38	22	23			
SW12R	5	8	F20 / 138E	SV20	11	14					
KJR16				SV20R	29	15					
RNC16 (neu)				SW20	10	15					
RNC16 (alt)				ST20	10	15					
SA16R				VNC20	13						
SR16											
SST16											

Hauptspindel (A)
 Gegenspindel (B)

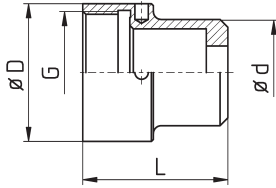
Maschinen mit gleicher Nummer haben identische Überwurfmuttern.

Ist keine Nummer angegeben, gibt es keine weiteren kompatiblen Maschinen.
 Sind die Muttern mehrerer Maschinen miteinander kompatibel, werden nur die Muttern der grau unterlegten Maschinen in den Maßtabellen aufgeführt.

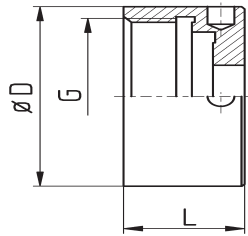
main spindle (A)
 sub spindle (B)

Machines with identical number have identical nuts.

If a number is not specified there is no other compatible machine.
 If nuts of different machines are identical only the grey marked machine types will be found in the list.



MU-STAR-SW7/B/F10v17



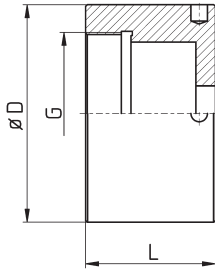
MU-STAR-SA12/B/F15



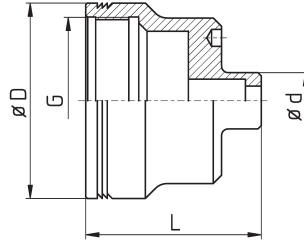
MU-STAR-SA12/B/F15

Bestell.-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	D	G	L	d	verl. ext. [mm]	Zange collet
MU-STAR-SW7/B/F7v15	STAR SW7	B	42	M36x1,5	42,5	18	15	1020E / F7
MU-STAR-SW7/B/F10v17	STAR SW7	B	42	M36x1,5	44,5	24	17	109E / F10
MU-STAR-SW7/B/F15	STAR SW7	B	42	M36x1,5	27,5			120E / F15
MU-STAR-SR10J/A/F8	STAR SR10J	A	42	M36x1,5	23			109E / F8
MU-STAR-SR10J/A/F15	STAR SR10J	A	42	M36x1,5	23			120E / F15
MU-STAR-SR10J/B/F8	STAR SR10J	B	35	M31x1,5	18			101E / F8
MU-STAR-SR10J/B/F8v10	STAR SR10J	B	35	M31x1,5	28	17	10	101E / F8
MU-STAR-SR10J/B/F10v15	STAR SR10J	B	35	M31x1,5	33	24	15	109E / F10
MU-STAR-SR10J/B/F13	STAR SR10J	B	35	M31x1,5	18			116E / F13
MU-STAR-SR10J/B/F13v10	STAR SR10J	B	35	M31x1,5	29	28	10	116E / F13
MU-STAR-SR10J/B/F13v15	STAR SR10J	B	35	M31x1,5	34	28	15	116E / F13
MU-STAR-SR10J/B/F15	STAR SR10J	B	35	M31x1,5	18			120E / F15
MU-STAR-SA12/A/F15	STAR SA12	A	55	M44x1,5	42			120E / F15
MU-STAR-SA12/A/F20	STAR SA12	A	55	M44x1,5	42			138E / F20
MU-STAR-SA12/B/F10v10	STAR SA12	B	46	M40x1,5	33	24	10	109E / F10
MU-STAR-SA12/B/F10v15	STAR SA12	B	46	M40x1,5	38	24	15	109E / F10
MU-STAR-SA12/B/F15	STAR SA12	B	46	M40x1,5	23			120E / F15
MU-STAR-SA12/B/F20	STAR SA12	B	46	M40x1,5	23			138E / F20
MU-STAR-SB12RG/A/136E	STAR SB12R-G	A	44	M38x1,5	35			136E / F20
MU-STAR-SB12RG/A/F10	STAR SB12R-G	A	44	M38x1,5	35			109E / F10
MU-STAR-SB12RG/A/F15	STAR SB12R-G	A	44	M38x1,5	35			120E / F15
MU-STAR-SB12RG/A/F16	STAR SB12R-G	A	44	M38x1,5	35			1212E / F16
MU-STAR-SB12RG/B/F16	STAR SB12R-G	B	59	M50x1	41			1212E / F16
MU-STAR-ECAS12/B/F20	STAR ECAS12	B	55	M45x1,5	38			138E / F20
MU-STAR-SV12/A/F10v48	STAR SV12	A	55	M45x1,5	86	23,8	48	109E / F10
MU-STAR-SV12/A/F20	STAR SV12	A	55	M45x1,5	38			138E / F20
MU-STAR-SW12R/B/F10v10	STAR SW12R II	B	46	M40x1,5	46	25	10	109E / F10
MU-STAR-SW12R/B/F10v15	STAR SW12R II	B	46	M40x1,5	51	24	15	109E / F10
MU-STAR-SW12R/B/F13	STAR SW12R II	B	46	M40x1,5	36			116E / F13
MU-STAR-SW12R/B/F15	STAR SW12R II	B	46	M40x1,5	36			120E / F15
MU-STAR-SW12R/B/F16	STAR SW12R II	B	46	M40x1,5	36			1212E / F16
MU-STAR-SW12R/B/136E	STAR SW12R II	B	46	M40x1,5	36			136E / F20
MU-STAR-SB16/A/F20	STAR SB16	A	49,5	M44x1,5	40			138E / F20
MU-STAR-RNC16/A/F20	STAR RNC16	A	49,5	M44x1,5	40			138E / F20
MU-STAR-RNC16alt/B/F15	STAR RNC16 alt	B	39,5	M33x1,5	25			120E / F15
MU-STAR-SST16/B/F20	STAR SST16	B	50	M44x1,5	30			138E / F20

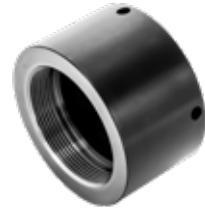
A = Hauptspindel - main spindle B = Abgreifspindel - sub spindle



MU-STAR-SR20R/A/F16



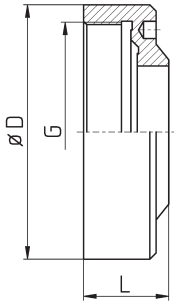
MU-STAR-SR20/B/F8v12



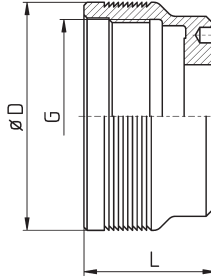
MU-STAR-SR20R/A/F25

Bestell-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	D	G	L	d	verl. ext. [mm]	Zange collet
MU-STAR-SB20RN/A/F25	STAR SB20RN	A	65	M50x1,5	37			145E / F25
MU-STAR-SB20RN/A/F27	STAR SB20RN	A	65	M50x1,5	37			147E / F27
MU-STAR-SB20RN/B/F25	STAR SB20RN	B	59	M50x1	41			145E / F25
MU-STAR-SB20RN/B/F27	STAR SB20RN	B	59	M50x1	39			147E / F27
MU-STAR-SB20RN/B/F27L	STAR SB20RN	B	59	M50x1	41			147E / F27
MU-STAR-ECAS20/B/F8v15	STAR ECAS20	B	59	M50x1,5	54	17	15	101E / F8
MU-STAR-ECAS20/B/F10v15	STAR ECAS20	B	59	M50x1,5	54	24	15	109E / F10
MU-STAR-ECAS20/B/F13v15	STAR ECAS20	B	59	M50x1,5	54	28	15	116E / F13
MU-STAR-ECAS20/B/F15v15	STAR ECAS20	B	59	M50x1,5	54	28	15	120E / F15
MU-STAR-ECAS20/B/F16v15	STAR ECAS20	B	59	M50x1,5	54	28	15	1212E / F16
MU-STAR-ECAS20/B/136E	STAR ECAS20	B	59	M50x1,5	39			136E / F20
MU-STAR-ECAS20/B/F25	STAR ECAS20	B	59	M50x1,5	39			145E / F25
MU-STAR-ECAS20/B/F27	STAR ECAS20	B	59	M50x1,5	36			147E / F27
MU-STAR-ECAS20/B/F27L	STAR ECAS20	B	59	M50x1,5	39			147E / F27
MU-STAR-SR20/A/F27	STAR SR20	A	64	M56x1,5				147E / F27
MU-STAR-SR20/B/F10v15	STAR SR20	B	59	M50x1	56	24	15	109E / F10
MU-STAR-SR20/B/F25	STAR SR20	B	59	M50x1	41			145E / F25
MU-STAR-SR20/B/F27	STAR SR20	B	59	M50x1	41			147E / F27
MU-STAR-SR20JN/A/F25	STAR SR20JN	A	67	M56x1,5	28			145E / F25
MU-STAR-SR20JN/A/F27	STAR SR20JN	A	67	M56x1,5	28			147E / F27
MU-STAR-SR20JII/A/F25	STAR SR20JII	A	65	M50x1,5	37			145E / F25
MU-STAR-SR20JII/A/F27	STAR SR20JII	A	65	M50x1,5	37			147E / F27
MU-STAR-SR20R/A/F16	STAR SR20R I / II / III	A	67	M50x1,5	40			1212E / F16
MU-STAR-SR20R/A/F20	STAR SR20R I / II / III	A	67	M50x1,5	40			138E / F20
MU-STAR-SR20R/A/F25	STAR SR20R I / II / III	A	67	M50x1,5	40			145E / F25
MU-STAR-SR20R/A/F27	STAR SR20R I / II / III	A	67	M50x1,5	40			147E / F27
MU-STAR-SR20R/B/F8v15	STAR SR20R I / II / III	B	59	M50x1	53	17	15	101E / F8
MU-STAR-SR20R/B/F10v15	STAR SR20R I / II / III	B	59	M50x1	56	24	15	109E / F10
MU-STAR-SR20R/B/F13v15	STAR SR20R I / II / III	B	59	M50x1	56	28	15	116E / F13
MU-STAR-SR20R/B/F15v8	STAR SR20R I / II / III	B	59	M50x1	49	28	8	120E / F15
MU-STAR-SR20R/B/F15v15	STAR SR20R I / II / III	B	59	M50x1	56	28	15	120E / F15
MU-STAR-SR20R/B/136E	STAR SR20R I / II / III	B	59	M50x1	41			136E / F20
MU-STAR-SR20R/B/F20	STAR SR20R I / II / III	B	59	M50x1				138E / F20
MU-STAR-SR20R/B/F25	STAR SR20R I / II / III	B	59	M50x1	41			145E / F25
MU-STAR-SR20R/B/F27	STAR SR20R I / II / III	B	59	M50x1	39			147E / F27
MU-STAR-SR20R/B/F27L	STAR SR20R I / II / III	B	59	M50x1	41			147E / F27
MU-STAR-SR20R4/A/F25	STAR SR20RIV	A	65	M50x1,5	37			145E / F25
MU-STAR-SR20R4/A/F27	STAR SR20RIV	A	65	M50x1,5	37			147E / F27
MU-STAR-SR20R4/A/F15v15	STAR SR20RIV	A	65	M50x1,5	52	28	15	120E / F15

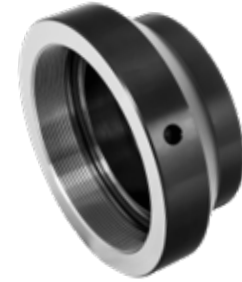
A = Hauptspindel - main spindle B = Abgreifspindel - sub spindle



MU-STAR-SR32JN/A/F37



MU-STAR-KNC32/B/F30



MU-STAR-SR38/A/F37

Bestell-Nr. order-no.	Maschine / Typ machine / type	A / B - Spindel	D	G	L	d	verl. ext. [mm]	Zange collet
MU-STAR-SV20/A/F25	STAR SV20	A	67	M56x1,5	28			145E / F25
MU-STAR-SV20/A/F27	STAR SV20	A	67	M56x1,5	28			147E / F27
MU-STAR-ECAS32/B/F20v23	STAR ECAS32	B	85	M62x1	63	38	23	138E / F20
MU-STAR-ECAS32/B/F37	STAR ECAS32	B	85	M62x1	43			1536E / F37
MU-STAR-KNC32/A/F37	STAR KNC32	A	88	M76x1,5	42			1536E / F37
MU-STAR-KNC32/B/F25	STAR KNC32	B	73	M62x1	42			145E / F25
MU-STAR-KNC32/B/F37	STAR KNC32	B	73	M62x1	42			1536E / F37
MU-STAR-SR32JN/A/F37	STAR SR32JN	A	81	M70x1,5	27			1536E / F37
MU-STAR-SR32JN/A/F40	STAR SR32JN	A	81	M70x1,5	27			F40
MU-STAR-SR32JII/A/F37	STAR SR32JII	A	81	M68x1,5	52			1536E / F37
MU-STAR-SR32JII/A/F40	STAR SR32JII	A	81	M68x1,5	52			F40
MU-STAR-SR32JII/B/F37	STAR SR32JII	B	73	M62x1	42			1536E / F37
MU-STAR-SR32JII/B/F40	STAR SR32JII	B	73	M62x1	42			F40
MU-STAR-SV32/A/F25	STAR SV32	A	90	M76x1,5	35			145E / F25
MU-STAR-SV32/A/F37	STAR SV32	A	90	M76x1,5	35			1536E / F37
MU-STAR-SV32/A/F40	STAR SV32	A	90	M76x1,5	35			F40
MU-STAR-SV32/B/F20v20	STAR SV32	B	73	M62x1	63	38	20	138E / F20
MU-STAR-SV32/B/F25	STAR SV32	B	73	M62x1				145E / F25
MU-STAR-SV32/B/F30	STAR SV32	B	73	M62x1				1446E / F30
MU-STAR-SV32/B/F37	STAR SV32	B	73	M62x1	43			1536E / F37
MU-STAR-SV32/B/F40	STAR SV32	B	73	M62x1	43			F40
MU-STAR-ST38/A/F37	STAR ST38	A	105	M85x1,5	46,5			1536E / F37
MU-STAR-ST38/A/F42	STAR ST38	A	105	M85x1,5	46,5			171E / F42
MU-STAR-ST38/A/F48	STAR ST38	A	105	M85x1,5	46,5			173E / F48
MU-STAR-ST38/B/F25v20	STAR ST38	B	105	M85x1,5	47,5		20	145E / F25
MU-STAR-ST38/B/F37	STAR ST38	B	105	M85x1,5	47,5			1536E / F37
MU-STAR-ST38/B/F42	STAR ST38	B	105	M85x1,5	47,5			171E / F42
MU-STAR-ST38/B/F48	STAR ST38	B	105	M85x1,5	47,5			173E / F48
MU-STAR-SV38R/A/F37	STAR SV38-R	A	94	M80x1,5	70			1536E / F37
MU-STAR-SV38R/A/F48	STAR SV38-R	A	94	M80x1,5	70			173E / F48

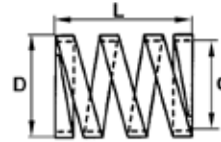
A = Hauptspindel - main spindle B = Abgreifspindel - sub spindle

Druckfedern für Spannzangen Flachdraht

Springs for Collets Flat Wire

Bestell-Nr. order-no.	D	L _{ca}	d
DF13F 10-28	13	28	10
DF15F 11.5-22	15	22	11,5
DF15F 11.5-28	15	28	11,5
DF15F 11.5-33	15	33	11,5
DF16F 12.5-24	16	24	12,5
DF16F 12.5-34	16	34	12,5
DF20F 16-15	20	15	16
DF20F 16-28	20	28	16
DF20F 16.5-30	20	30	16,5
DF20F 16.5-37	20	37	16,5
DF20F 18-45	20	45	18
DF25F 21.5-25	25	25	21,5
DF25F 21.5-33	25	33	21,5
DF25F 22-44	25	44	22
DF25F 22-48	25	48	22
DF25F 20.5-50	25	50	20,5
DF27F 23-25	27	25	23
DF27F 23-28	27	28	23
DF27F 23-32	27	32	23
DF27F 23-35	27	35	23
DF27F 23-40	27	40	23
DF27F 23-45	27	45	23
DF27F 24-50	27	50	24

Tw. nur noch Restbestände, bitte anfragen



D = Nennmaß, reales Maß kleiner
nominal size, real size less

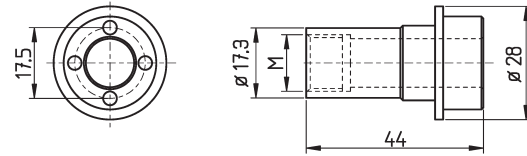
d, L = ungefähre Angaben, ohne Gewähr
approximately, no guarantee

Bestell-Nr. order-no.	D	L _{ca}	d
DF37F 32-50	37	50	32
DF37F 32-73	37	73	32
DF37F 32.5-40	37	40	32,5
DF37F 33-38	37	38	33
DF37F 33-72	37	72	33
DF37F 33-84	37	84	33
DF40F 36-45	40	45	36
DF40F 36-48	40	48	36
DF40F 36-92	40	92	36
DF40F 36-60	40	60	36
DF40F 36.5-37	40	37	36,5
DF42F 36.5-46	42	46	36,5
DF48F 42-32	48	32	42
DF48F 43-46	48	46	43
DF48F 43-73	48	73	43
DF48F 44-42	48	42	44

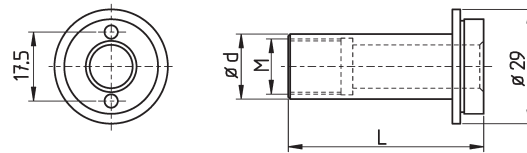
Partially remainders only, please request

**Führungsbüchsen-Anzugsmuttern
STAR**
**Guide Bush Nuts
STAR**

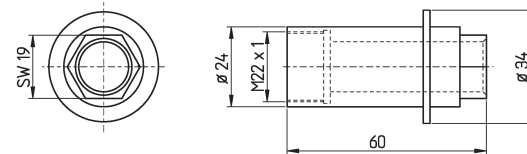
STAR SR10J	
Bestell-Nr. order-no.	M
FVM.SR10J-M14	M14 x 1
FVM.SR10J-M15	M15 x 1



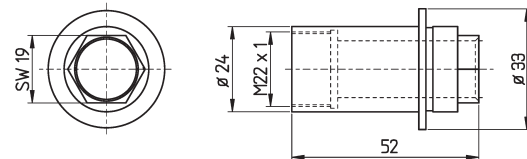
STAR SW7			
Bestell-Nr. order-no.	L	d	M
FVM.38701060	51	15	M10 x 0,75
FVM.38701220	50	16,5	M14 x 1
FVM.38701330	45	16,5	M14 x 1



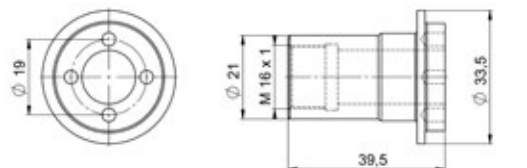
STAR RNC16 - 10017	
Bestell-Nr. order-no.	
FVM.RNC16	



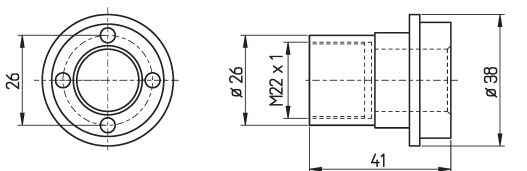
STAR SST16	
Bestell-Nr. order-no.	
FVM.SST16	



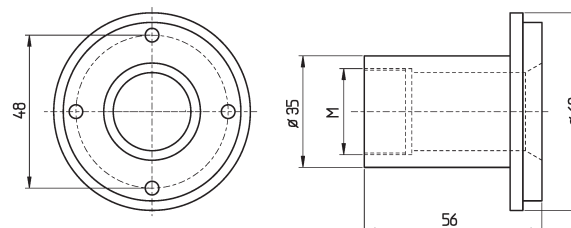
STAR SB12R	
Bestell-Nr. order-no.	M
FVM.SB12R	M16 x 1



STAR SB16	
Bestell-Nr. order-no.	
FVM.SB16	

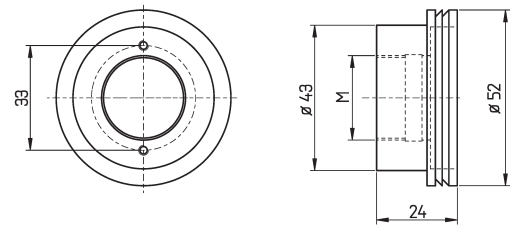


STAR SV20	
Bestell-Nr. order-no.	M
FVM.SV20	M25 x 1
FVM.SV20-M27	M27 x 1
erweitert - enlarged to M27 x 1	

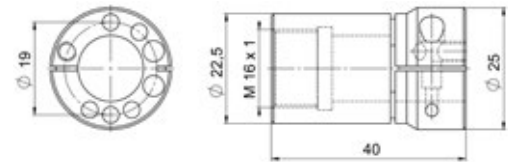


Guide Bush Nuts

Star SR20J / SR20RIII	
Bestell-Nr. order-no.	M
FVM.SR20J	M25 x 1
FVM.SR20J-M27	M27 x 1
erweitert - enlarged to M27 x 1	

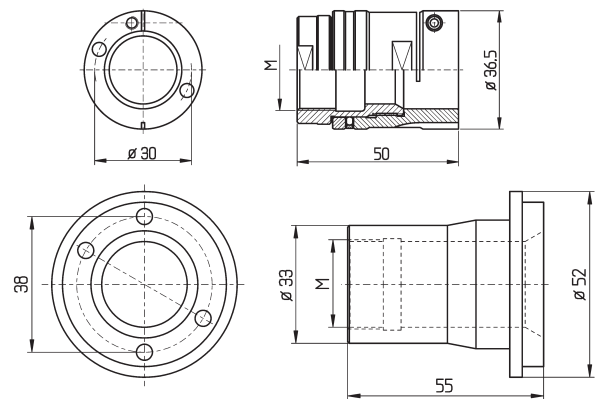


Star SW12RII	
Bestell-Nr. order-no.	M
FVM.SW12RII	M16 x 1

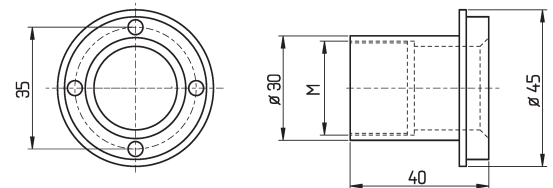


Star SW20 / SR20RIV	
Bestell-Nr. order-no.	M
FVM.SW20	M25 x 1
FVM.SW20-M27 *	M27 x 1
FVM.SW20-2-M25 Type 2	M25 x 1
FVM.SW20-M27-2 * Type 2	M27 x 1
FVM.SW20-3 Type 3	M25 x 1
FVM.SW20-M27-3 * Type 3	M27 x 1
Einsatz von Typ 2 nur mit original Umbaukit von STAR möglich Use of type 2 is possible with original kit from STAR only.	
* erweitert - enlarged to M27 x 1	

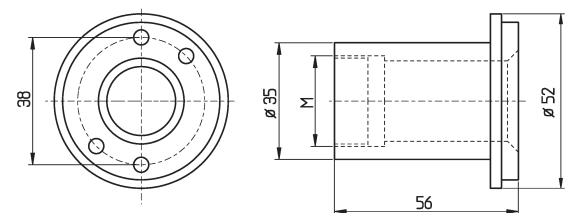
Typ 2:



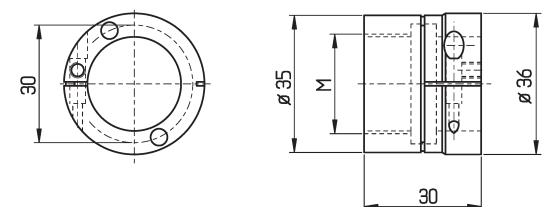
STAR SR20	
Bestell-Nr. order-no.	M
FVM.SR20	M25 x 1
FVM.SR20-M27	M27 x 1
erweitert - enlarged to M27 x 1	



STAR SB20	
Bestell-Nr. order-no.	M
FVM.SB20	M25 x 1
FVM.SB20-M27	M27 x 1
erweitert - enlarged to M27 x 1	

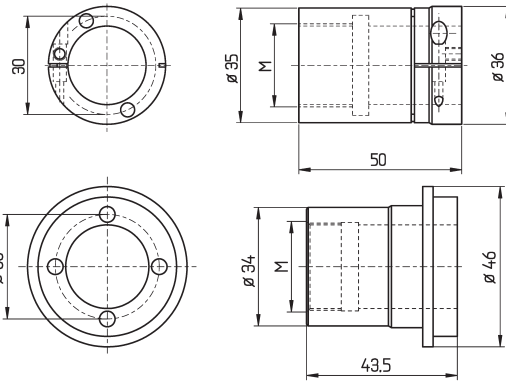


STAR SB20RE	
Bestell-Nr. order-no.	M
FVM.SB20RE	M25 x 1
FVM.SB20RE-M27	M27 x 1
erweitert - enlarged to M27 x 1	

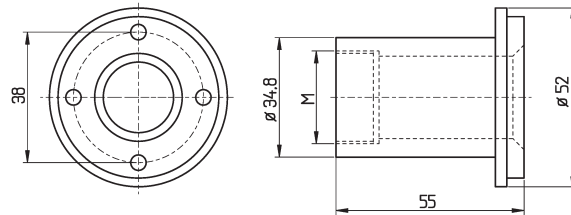


STAR SB20RG	
Bestell-Nr. order-no.	M
FVM.SB20RG	M25 x 1
FVM.SB20RG-M27 *	M27 x 1
Ab - from S/N 540:	
FVM.SB20RG-new	M25 x 1
FVM.SB20RG-M27-new *	M27 x 1
* erweitert - enlarged to M27 x 1	

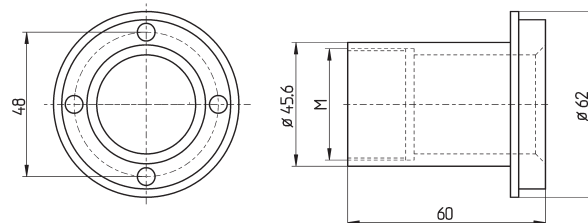
Typ "new":



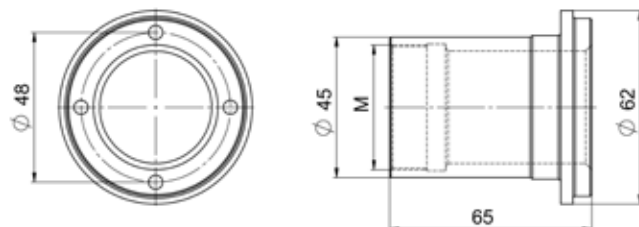
STAR ECAS20 / SR20R/III / ST20	
Bestell-Nr. order-no.	M
FVM.ECAS20	M25 x 1
FVM.ECAS20-M27	M27 x 1
erweitert - enlarged to M27 x 1	

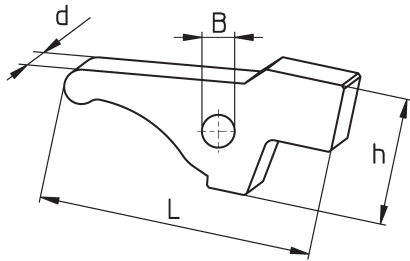


STAR ECAS32 / SV32 / SR32	
Bestell-Nr. order-no.	M
FVM.ECAS32	M40 x 1
FVM.ECAS32-M42	M42 x 1
erweitert - enlarged to M42 x 1	



STAR SR32JII	
Bestell-Nr. order-no.	M
FVM.SR32JII	M40 x 1
FVM.SR32JII-M42	M42 x 1





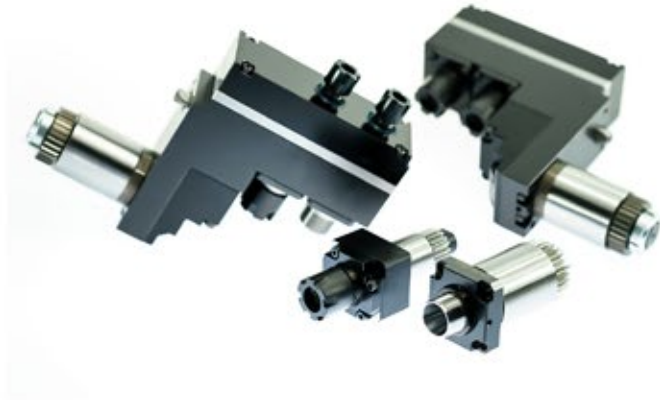
	Bestell-Nr. order-no.	Maschine machine	Spindel spindle	Orig. Ersatzteil-Nr. orig. spare part no.	d	L	h	B	Pin
STAR									
	SF10.2651	ECAS 20	B	540-39-600/620	10,0	67,0		8,0	9
	SF10.2654	ECAS 32T	A	580-320-70	12,0	89,7		8,0	4
	SF10.2655	ECAS 32T A48	B	580-840-70	12,0	77,0		8,0	4
	SF10.2601	JNC16	A	025-32-060/080	10,0	72,5		6,0	3
	SF10.2602	JNC25/32		052-32-070/090	14,0	69,0		8,0	5
	SF10.2609	KJR16	A	250-32-090/100	10,0	68,0		6,0	3
	SF10.2616	KJR16	B	252-32-070/090	8,0	34,4		6,0	2
	SF10.2622	KJR25	A	260-32-070/090	12,0	80,0		8,0	4
	SF10.2622	KJR25	B	262-32-070/090	12,0	80,0		8,0	4
	SF10.2622	KJR25 II	A	360-32-070/090	12,0	80,0		8,0	4
	SF10.2622	KJR25 II	B	362-32-080/100	12,0	80,0		8,0	4
	SF10.2606	KNC16 / 20	B	222-32-230/250	12,0	50,0		8,0	6
	SF10.2615	KNC16 / 20 mit Fase)	A	220-32-070/090	12,0	77,0		8,0	4
	SF10.2602	KNC25 / 32	A	200-32-070/090	14,0	69,0	30,0	8,0	5
	SF10.2608	KNC25 / 32	B	202-32-230/250	12,0	50,0	25,5	8,0	6
	SF10.2602	KNC25 / 32 II	A	340-32-070/090	14,0	69,0		8,0	5
	SF10.2608	KNC25 / 32 II	B	342-32-230/250	12,0	50,0		8,0	6
	SF10.2620	KNC32 II	B	342-32-231/250	12,0	54,0		8,0	6
	SF10.2609	RNC16	A	210-32-060/080	10,0	68,0		6,0	3
	SF10.2610	RNC16	B	270-82-080/100	6,0	32,5		5,0	1
	SF10.2620	RNC32	B	342-32-231/250	12,0	54,0		8,0	6
	SF10.2609	SA12 / 16	A	460-32-100/120	10,0	68,0		6,0	3
	SF10.2624	SA12 / 16	B	460-82-080/100	8,0	39,0		6,0	2
	SF10.2658	SB12RE / RN	A+B	0M0-83-070	8,0	39,0		6,0	
	SF10.2658	SB12RG		IL0-32-820	8,0	39,0		6,0	
	SF10.2624	SB16	B	480-82-070	8,0	39,0		6,0	2
	SF10.2609	SB16	A	460-32-100/120	10,0	68,0		6,0	3
	SF10.2609	SE / SH16	A	400-32-100/120	10,0	68,0		6,0	3
	SF10.2619	SH 7		410-32-100/120	8,0	56,0		6,0	8
	SF10.2601	SNC15		196-32-060/080	10,0	72,5		6,0	3
	SF10.2611	SNC25		091-32-060/080	14,0	85,0		8,0	5
	SF10.2624	SR10J	A	460-82-080/100	8,0	39,0		6,0	2
	SF10.2625	SR10J	B	690-83-070/090	5,0	40,0		6,0	10
	SF10.2607/9	SR16	A	310-32-090/100	10,0	68,0		6,0	3
	SF10.2613	SR16	B	312-32-070/090	8,0	39,0		6,0	2
	SF10.2651	SR16R	A/B	540-39-100	10,0	67,0		8,0	9
	SF10.2606	SR20	B	322-32-070/090	12,0	50,0		8,0	6
	SF10.2606	SR20J	B	322-32-070/090	12,0	50,0		8,0	6
	SF10.2607/9	SR20J	A	460-32-100/120	10,0	68,0		6,0	3
	SF10.2650	SR20R	B	540-84-050/070	12,0	57,0		8,0	6
	SF10.2651	SR20R	A	540-39-600/620	10,0	67,0		8,0	9
	SF10.2650	SR20R II / III	B	660-84-050	12,0	57,0		8,0	6
	SF10.2651	SR20R II / III	A	660-39-600	10,0	67,0		8,0	9
	SF10.2622	SR20 / 32		330-32-090/100	12,0	80,0		8,0	4

Bestell-Nr. order-no.	Maschine machine	Spindel spindle	Orig. Ersatzteil-Nr. orig. spare part no.	d	L	h	B	Pin
SF10.2620	SR32	B	332-32-090/110	12,0	54,0		8,0	6
SF10.2653	SR32J	A+B	670-32-090/110	12,0	67,6		8,0	6
SF10.2609	SST16		300-32-090/100	10,0	68,0		6,0	3
SF10.2609	SST16	A	210-32-060/080	10,0	68,0		6,0	3
SF10.2612	SST16	B	302-32-070/090	8,0	39,0		6,0	2
SF10.2656	ST38	A+B	0B0-32-130/100					11
SF10.2651	SV12	A	540-39-600/620	10,0	67,0		8,0	9
SF10.2652	SV12	B	452-32-100/120	10,0	72,0		8,0	9
SF10.2652	SV12		823-00-306	10,0	72,0		8,0	9
SF10.2621	SV20	A+B	420-32-060/080	12,0	78,0		8,0	4
SF10.2651	SV20R	B	1B0-83-130	10,0	67,0		8,0	9
SF10.2622	SV32	A	440-32-090	12,0	80,0		8,0	4
SF10.2622	SV32	A	430-32-090	12,0	80,0		8,0	4
SF10.2623	SV32J	B	442-32-090/110	12,0	62,0		8,0	6
SF10.2619	SW7 / R	A	380-32-130/150	8,0	56,0		6,0	8
SF10.2619	SW7 / R	B	382-32-110/130	8,0	56,0		6,0	8
SF10.2659	SW12R II	B	1H0-83-120	10,0	67,0		8,0	10
SF10.2651	SW20	A	540-39-600/620					
SF10.2616	VNC20	B	749-21-180/190	8,0	34,4		6,0	2
SF10.2615	VNC20 ohne Fase	A	750-32-060/080	12,0	77,0		8,0	4
SF10.2602	VNC32		780-32-060/080	14,0	69,0		8,0	5

Stifte passend für STAR *suitable pins*

Stift pin	Bestell-Nr. order-no.	Ø x l
1	SF11.2601	5 x 28,5
2	SF11.2602	6 x 31
3	SF11.2603	6 x 46
4	SF11.2604	8 x 48
5	SF11.2605	8 x 58
6	SF11.2606	8 x 36
8	SF11.2608	6 x 34
9	SF11.2609	8 x 50
10	SF11.2610	6 h7 x 30,5
11	SF11.2611	12 h7 x 46,5





Angetriebene Werkzeuge
Life Tools

ab Seite 76 - *from page 76*



Bohrpinolenträger
Boring Bar Holders

ab Seite 77 - *from page 77*



Klemmbunde
Aufbau-Stahlhalter
Clamping Flanges
Tool Holder Overhang

ab Seite 78 - *from page 78*

Übersicht

Overview

**STAR331-50-ER16**

für - for

SV12, ECAS12/20, SB12/20R,
SBSR20J/JN/RII-IV, SV20
SW20, SV32, SV32J, SV32JII
SR32, SR32J/JN, SV38R, SR32JII

**STAR541-51-ER16**

ER16 3-fach / 2-fold

für - for

SR20J/JN/RII-IV
SB12/20R

**STAR331-50-ER20**

für - for

SV12, ECAS12/20, SB12/20R,
SR20J/JN/RII-IV, SV20,
SW20, SV32, SV32J, SV32JII,
SR32, SR32J/JN, SV38R

**STAR661-59-ER11**

ER11/ER11 2/2-fach / 2/2-fold

für - for

SR20J/JN/RII-IV

**STAR331-50-WD**

mit - with Ø 8 / 12 für - for

SV12, ECAS12/20, SB12/20R,
SR20J/JN/RII-IV, SV20,
SW20, SV32, SV32J, SV32JII
SR32, SR32J/JN, SV38R

**STAR661-59-ER16**

ER16/ER11 2/2-fach / 2/2-fold

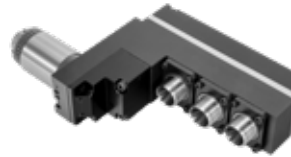
für - for

SR20J/JN/RII-IV

**STAR541-61-ER11**

für - for

SR10J, ECAS12/20, SB12/20R,
SW12RII, SR20J/JN/RII-IV
SR32J/JN, SR32JII

**STAR661-51-ER16**

ER16 3-fach / 3-fold

für - for

SR20J/JN/RII-IV
SB12/20R

**STAR571-55-ER16**

für - for

ECAS12/20, SB12/20R,
SR20J/JN/RII-IV, SW20,
ECAS32T, SV38R

**STAR7.074.006-ER11**

ER11/ER11 3/3-fach / 3/3-fold

für - for

SR20RII, SR20RIV

**STAR571-55-ER20**

für - for

ECAS12/20, SB12/20R,
SR20J/JN/RII-IV, SW20,
ECAS32T, SV38R

**STAR7.074.006-ER16**

ER16/ER11 3/3-fach / 3/3-fold

für - for

SR20RII, SR20RIV

**STAR571-61-ER16**

für - for

ECAS12/20, SB12/20R, SW12RII,
SR20J/JN/RII-IV, SR32J/JN, SR32JII

**STAR671-59-ER16**

ER16/ER11 3/3-fach / 3/3-fold

für - for

SR32J/JN, SR32JII

**STAR-OR1-61-ER16**

für - for

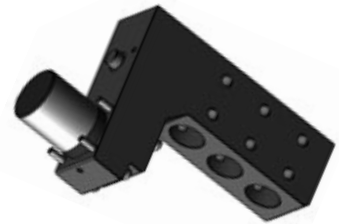
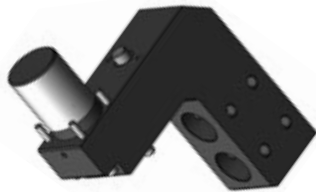
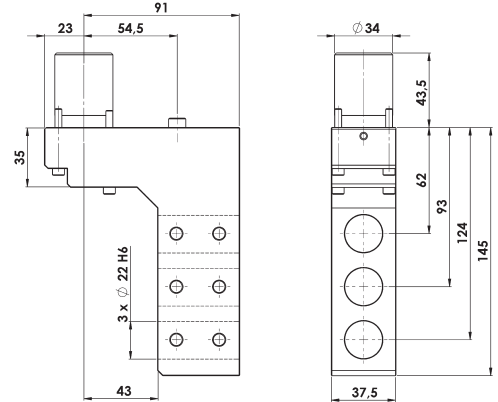
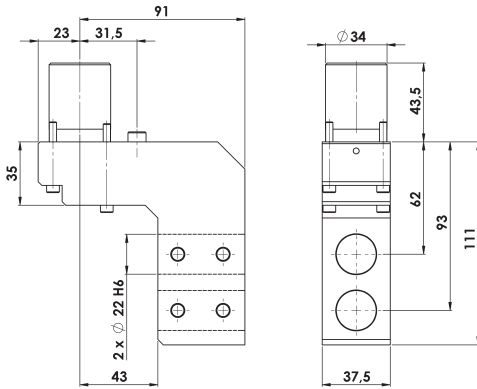
SB12/20R, SW12RII, SW20,
SV20R, SR38, SR32JII

Übersicht

Overview

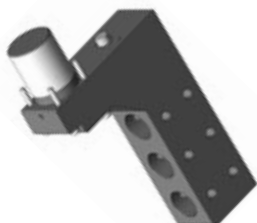
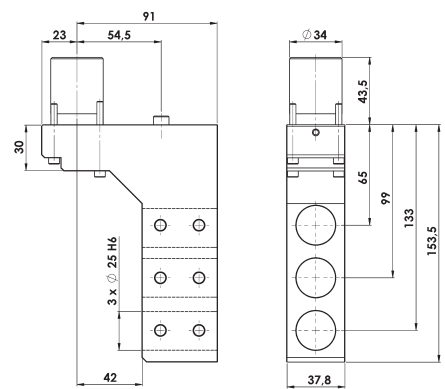
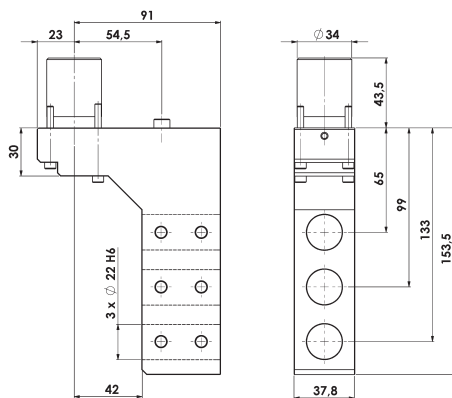
Bestell-Nr.: STAR-DP-SR20R **Bohrpinolenträger 2 x Ø 22**
order-no.: *Boring Bar Holder 2 x Ø 22*
für - for: SB16D/E; SR20RII-IV; SB12/20R;
 SR20J/JN

Bestell-Nr.: STAR-TP-SR20R-22 **Bohrpinolenträger 3 x Ø 22**
order-no.: *Boring Bar Holder 3 x Ø 22*
für - for: SB16D/E; SR20RII / IV; SB12/20R;
 SR20J/JN



Bestell-Nr.: STAR-TP-SR32-22 **Bohrpinolenträger 3 x Ø 22**
order-no.: *Boring Bar Holder 3 x Ø 22*
für - for: SR32J / JN

Bestell-Nr.: STAR-TP-SR32-25 **Bohrpinolenträger 3 x Ø 25**
order-no.: *Boring Bar Holder 3 x Ø 25*
für - for: SR32J / JN



Klemmbunde für Rückseitenbearbeitung

Clamping Flanges for Backworking

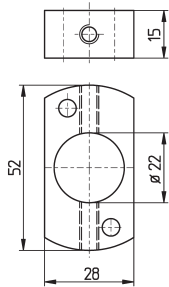


Bild 1

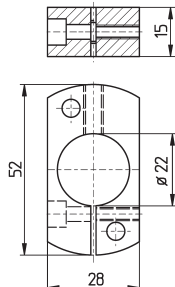


Bild 2

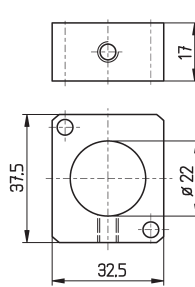


Bild 3

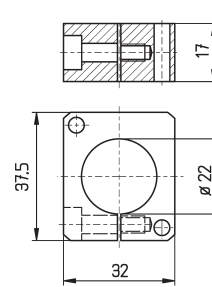


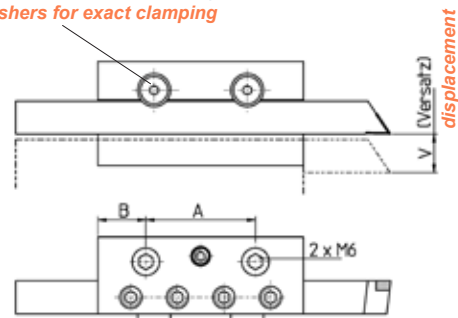
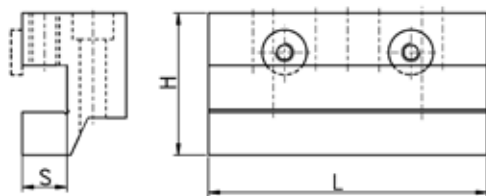
Bild 4

- Beidseitig geschliffen
- Exakte Befestigung der Werkzeuge direkt an der Maschine

- Grinded on both sides
- Exact fixing directly at the machine

Bestell-Nr. order-no.	Bild	Maschine machine
STAR-KB1-22SRR	1	SR10J (Position T22 + T24); SB16 / 20 Type C / Type E; SB20R Type E / Type G / Type N; SR20J / JN; SW12RII; SR20 R / II / III; SV20R; SR32J / JN; SR20R IV (Pos. T21 - T24, verbaut - overlaps T25 - T28)
STAR-KB2-22SRR	2	
STAR-KB1-22SW	3	SW12R II; SW20; SV20R; SR20R IV
STAR-KB2-22SW	4	SB12/20R; SR38

Stützscheiben zur exakteren Spannung
Supporting washers for exact clamping



Bestell-Nr. order-no.	Stahl steel	S	L	H	A	B	V	Maschine machine
STAR 431-08	8 x 8	8	60	29,5	30	15		SW7
STAR 541-03	12 x 12	12	75	38	40	17,5	15	ECAS20 SB16 SR20 SV20 SR20RII
STAR 311-01	12 x 12	12	75	44	40	17,5	20	SV12 SV20
STAR 671-01	16 x 16	16	75	46	40	17,5	17	SR32J SR32JN
STAR 331-01	16 x 16	16	80	41	47	17,5	17	SV12 SV20 SV32 SV32JII
STAR 481-05	10 x 10	10	75	42	40	17,5	15	SB12/20R SB16D/E
STAR 431-08	12 x 12	12	75	42	40	17,5	15	SB12RG

Klemmprofile für STAR-Werkzeughalter

Clamping Wedges for STAR Tool Holder

Bestell-Nr. order-no.	L	A	B	C	D	Maschine machine	Bild
STAR-KP5428b	54	28	18	13,5	13		2
STAR-KP6030	60	30	15	10,5	11		1
STAR-KP6538	65	38,5	8	18	13	SB16	1
STAR-KP6540	65	40	18	13,5	13	SR20	1
STAR-KP7540a	75	40	18	18	14	SR32J neu	1
STAR-KP7540b	75	40	17,5	18	12	SB16	1
STAR-KP7540c	75	40	16,5	13,5	9,5	SA12 / 16	1
STAR-KP7640	76	40	18	13,5	13	SR20	1

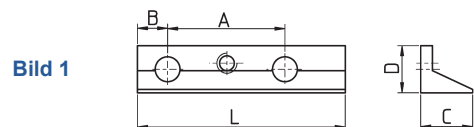


Bild 1

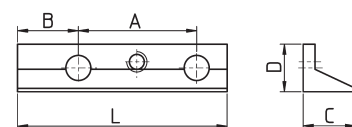


Bild 2



Innen-Räumhalter
Internal Broaching Heads

ab Seite 80 - *from page 80*

Räumdorne
Wobble Broaches

ab Seite 81 - *from page 81*



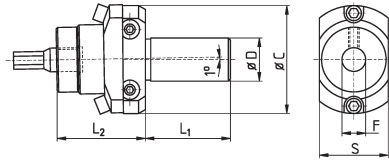
Mitlaufende Spitzen
Revolving Centers

ab Seite 82 - *from page 82*



Unsere Rändelhalter finden Sie im Katalog
- **Sonstige Werkzeughalter**
Find all of our Knurl Holders in the catalog
- **Additional Tools**

Räumhalter, taumelnd, einstellbar



Broaching Heads, Adjustable



Dorn - broach: Ø 8mm Länge variabel - length variable						
Bestell-Nr. order-no.	D	L ₂	L ₁	C	F	S
U175.116	16	35	40	50	8	30
U175.122c	22	35	35	50	8	30
U175.122	22	35	80	50	8	30
U175.122SRJ	22	37	25	50	8	28
U175.122SRR	22	37	25	50	8	30

Dorn - broach: Ø 12 Länge variabel - length variable						
Bestell-Nr. order-no.	D	L ₂	L ₁	C	F	S
U175.216	16	52	50	62	12	40,5
U175.222	22	52	50	62	12	40,5
U175.222a	22	51,5	70	62	12	40,5
U175.232	32	52	50	62	12	40,5

Anpressdruck max.
Max. pushing force 200 daN

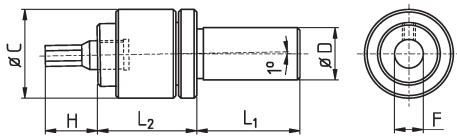
Anpressdruck max.
Max. pushing force 1200 daN

Für STAR-Maschinen
for STAR-machines

U175.122SRJ	für for STAR SR 10 J
U175.122SRR	für for STAR SB 16 / 20; SB20R; SR 20 J; SR 20 R; SR 32 J; SR 20 R4

Anpressdruck max.
Max. pushing force 1200 daN

Räumhalter, taumelnd, fest



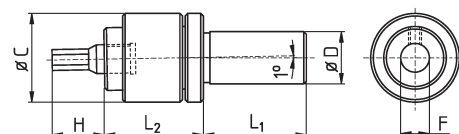
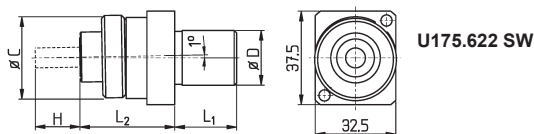
Broaching Heads, Fixed



Anpressdruck max.
Max. pushing force 800 daN

Dorn - broach: Ø 12 x 40mm						
Bestell-Nr. order-no.	D	L ₂	L ₁	C	F	H
U175.716	16	46	50	44	12	25
U175.722	22	46	50	44	12	25
U175.732	32	46	50	44	12	25

passende Räumdorne: V812 - suitable Wobble Broaches: V812



Dorn - broach: Ø 8 x 28mm (PCM)						
Bestell-Nr. order-no.	D	L ₂	L ₁	C	F	H
U175.616	16	38	35	33	8	18
U175.622	22	38	50	33	8	18
U175.622 SW*	22	38	25	32	8	18
U175.622 SW*	22	38	25	32	8	18

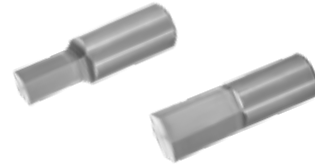
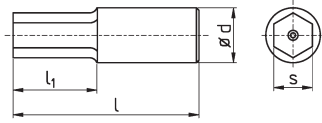
* Für for Star SW20; SR 20 R4
passende Räumdorne: V828 - suitable Wobble Broaches: V828

Dorn - broach: Ø 5 x 17mm						
Bestell-Nr. order-no.	D	L ₂	L ₁	C	F	H
U175.516	16	34	35	22	5	10
U175.522	22	33,5	67	22	5	10

passende Räumdorne: V805 - suitable Wobble Broaches: V805

Anpressdruck max.
Max. pushing force 120 daN

Anpressdruck max.
Max. pushing force 300 daN



S = Sechskant - *hexagonal* V = Vierkant - *square* T = Torx K = Kernbohrung (Idealmaß) - *core drilling*
 Weitere Formen und Maße auf Anfrage - *Other shapes and sizes available on request*

Bestell-Nr. order-nr.	d	l	l ₁	K	S / V / T
V805.015S	5	20	5,5	1,53	S1,5
V805.020S	5	20	5,5	2,03	S2
V805.025S	5	20	5,5	2,53	S2,5
V805.030S	5	20	5,5	3,05	S3
V805.035S	5	20	5,5	3,55	S3,5
V805.040S	5	20	5,5	4,05	S4
V805.050S	5	20	5,5	5,08	S5
V805.060S	5	20	5,5	6,10	S6
V808.010S	8	30	3,0	1,02	S1
V808.012S	8	30	3,0	1,23	S1,2
V808.013S	8	30	3,0	1,33	S1,3
V808.015S	8	30	3,4	1,53	S1,5
V808.020S	8	30	5,4	2,03	S2
V808.025S	8	30	6,0	2,53	S2,5
V808.028S	8	30	6,0	2,83	S2,8
V808.030S	8	30	7,0	3,05	S3
V808.0317S	8	30	7,0	3,25	S3,175
V808.035S	8	30	7,3	3,55	S3,5
V808.040S	8	30	9,0	4,05	S4
V808.045S	8	30	9,0	4,55	S4,5
V808.0476S	8	30	9,0	4,80	S4,76
V808.050S	8	30	10,0	5,10	S5
V808.055S	8	30	10,0	5,60	S5,5
V808.060S	8	30	11,0	6,10	S6
V808.0635S	8	30	11,0	6,45	S6,35
V808.070S	8	30	11,0	7,10	S7
V808.080S	8	30	13,0	8,10	S8
V808.06T	8	30	5,0	1,3	T6
V808.07T	8	30	5,0		T7
V808.08T	8	30	5,0	1,77	T8
V808.09T	8	30	5,0		T9
V808.10T	8	30	5,0	2,07	T10
V808.15T	8	30	5,0	2,44	T15
V808.20T	8	30	5,0		T20
V808.25T	8	30	5,0		T25
V808.30T	8	30	5,0		T30
V808.40T	8	30	5,0		T40
V828.015S	8	28	3,1	1,53	S1,5
V828.020S	8	28	5,4	2,03	S2
V828.025S	8	28	5,8	2,53	S2,5
V828.030S	8	28	7,0	3,05	S3
V828.035S	8	28	7,3	3,55	S3,5

Bestell-Nr. order-nr.	d	l	l ₁	K	S / V / T
V828.040S	8	28	7,6	4,05	S4
V828.050S	8	28	9,1	5,08	S5
V828.060S	8	28	10,0	6,1	S6
V828.080S	8	28	12,5	8,1	S8
V828.07T	8	28	5,0		T7
V812.015S	12	40	4,5	1,53	S1,5
V812.020S	12	40	6,0	2,03	S2
V812.025S	12	40	6,5	2,53	S2,5
V812.030S	12	40	7,0	3,05	S3
V812.0317S	12	40	7,0	3,25	S3,17
V812.035S	12	40	7,0	3,55	S3,5
V812.040S	12	40	9,0	4,05	S4
V812.0476S	12	40	10,0	4,8	S4,76
V812.050S	12	40	12,0	5,1	S5
V812.055S	12	40	12,0	5,6	S5,5
V812.060S	12	40	12,0	6,1	S6
V812.635S	12	40	12,0	6,45	S6,35
V812.070S	12	40	12,5	7,1	S7
V812.0793S	12	40	12,5	8,03	S7,93
V812.080S	12	40	13,0	8,1	S8
V812.090S	12	40	14,5	9,1	S9
V812.095S	12	40	14,5	9,6	S9,5
V812.0952S	12	40	14,5	9,62	S9,52
V812.100S	12	40	16,0	10,15	S10
V812.120S	12	40	19,0	12,15	S12
V812.130S	12	40	19,0	13,2	S13
V812.150S	12	40	19,0	15,2	S15
V812.170S	12	40	19,0	17,2	S17
V855.025S	12	55	5,8	2,53	S2,5
V855.030S	12	55	6,0	3,05	S3
V855.040S	12	55	8,3	4,05	S4
V855.050S	12	55	10,5	5,1	S5
V855.060S	12	55	11,1	6,1	S6
V855.070S	12	55	12,7	7,1	S7
V855.080S	12	55	12,8	8,1	S8
V855.100S	12	55	15,8	10,15	S10

Alle Räumdorne auch TIN / ALTIN beschichtet lieferbar, auch lieferbar in ASP oder HM

Achtung S19 und größer - keine Gewährleistung!

Nur geeignet für leicht zerspanbare Materialien, große Vorbohrungen oder bei Einsatz mit Presse.

Viele weitere Größen, Sondergrößen und -Formen auf Anfrage lieferbar

All broaches available TIN / ALTIN coated, also available in ASP or HM

Attention S19 and larger - no warranty!

Only suitable for materials easy to cut, large pilot holes or use with presses

Many special sizes and shapes available on request

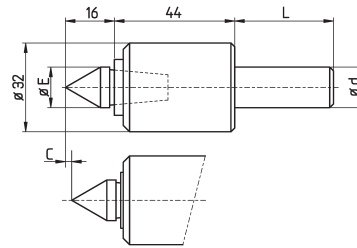
Mitlaufende Spitzen, gefedert

Bestell-Nr. order-no.	d	E	L
V172.316	16	14	35
V172.322	22	14	46

Lieferung mit Spitze V172.301
 Provided with insert V172.301

C = 3 mm = **Andruckweg / Kompensation**
 Compensation

Revolving Centers, Sprung



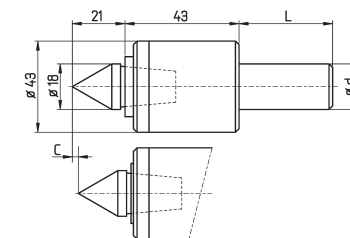
Mitlaufende Spitzen, gefedert

Bestell-Nr. order-no.	d	L
V172.422	22	46
V172.432	32	46

Lieferung mit Spitze V172.401
 Provided with insert V172.401

C = 3 mm = **Andruckweg / Kompensation**
 Compensation

Revolving Centers, Sprung

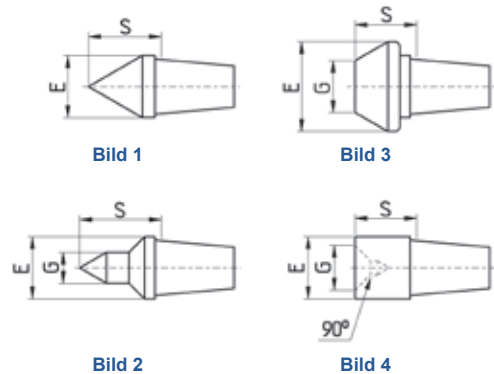


Einsätze für mitlaufende Spitzen für V172.4..

Bestell-Nr. order-no.	Bild	E	S	G	Spitze center
V172.401	1	18	21	--	60°
V172.401 090	1	18	28	--	90°
V172.402	2	18	27	7	60°
V172.402B	2	18	38	9	60°
V172.403	3	30	21	14	60°
V172.404	4	26	20	20	-

V172.411 Schlüssel - **spanner**

Interchangeable Centers for V172.4..

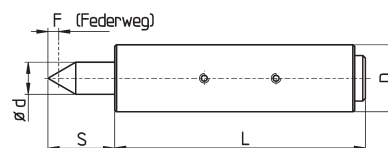


Mitlaufende Spitzen, gefedert, besonders schlanke Bauform, auswechselbare Spitzen

Bestell-Nr. order-no.	D	d	F	L	S
V172.522	22	8	2,5	79	25
V172.522L	22	8	2,5	150	25
V172.532	32	18	4,7	116	35

Typ V172.5xx Rundlauf 0,003
 Lieferbar in 3 verschiedenen Härten der Andruckfedern:
 Standard ca. 150 N, weich ca. 50 N, extra weich ca. 10 N
 (je schwächer die Feder, desto schlechter der Rundlauf)
 Kleinste Baumaße
 Sondereinsätze auf Wunsch!

Revolving Centers, Sprung, Extra Slim Version, Interchangeable Centers



Concentric runout 0,003
 Available in 3 different spring-grades:
 standard ca. 150 N, soft ca. 50 N, extra soft ca. 10 N
 (the weaker the spring, the worse the runout)
 Smallest dimensions
 Special inserts on demand

