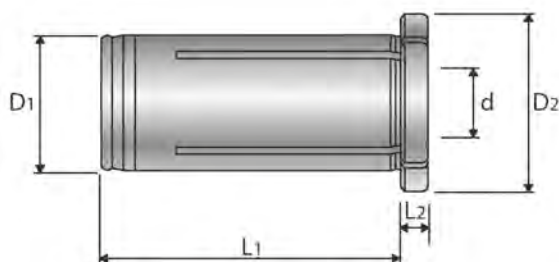

Zubehör Accessories

für Dehnspannfutter for Hydro Chucks	Seite 161 Page 161
für Kraftspannfutter for Milling Chucks	Seite 164 Page 164
für Spannzangenfutter for Collet Chucks	Seite 167 Page 167
für Gewindeschneidfutter for Tap Holders	Seite 170 Page 170
HCL Kompaktspanner HCL Clamper	Seite 173 Page 173

PHC·SA PHZ·S

Spannhülsen für Dehnspannfutter superschlank Collets for Slim Hydro Chucks



HS-OH

HS Spannhülsen | zur Durchmesserreduzierung HS Straight Collets | for diameter reduction

Hülse Collet	D1	D2	L1	L2	d
HS -12-d-OH	12	26	44	4	3, 4, 6, 8, 10
HS -20-d-OH	20	25	54	4	3, 4, 6, 8, 10, 12, 16

weitere Durchmesser auf Anfrage erhältlich

more sizes available on request



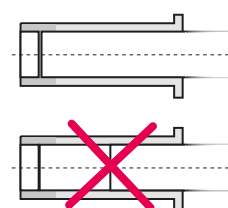
HS-CF

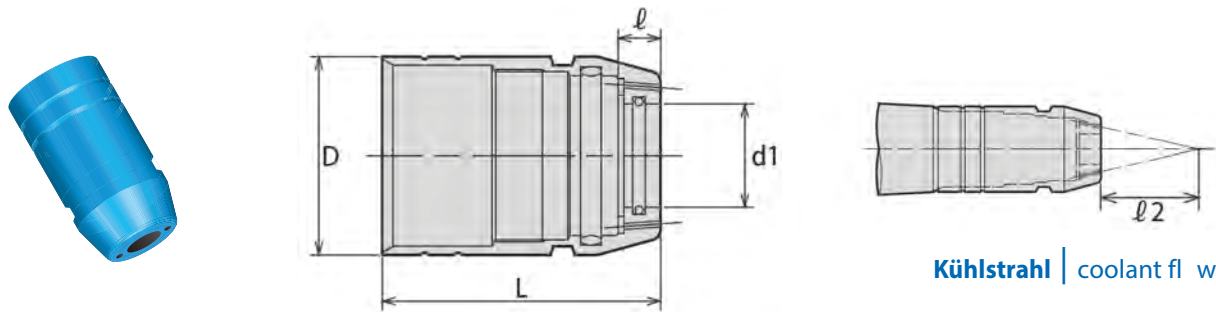
HS-CF Spannhülsen | für Peripheriekühlung HS-CF Straight Collets | for side-through coolant

Hülse Collet	D1	D2	L1	L2	d
HS -12-d-CF	12	16	44	4	3, 4, 6, 8
HS -20-d-CF	20	25	54	4	3, 4, 6, 8, 10, 12, 16



- Werkzeug in voller Länge der Reduzierhülse einsetzen.
- insert tools the full length of the reduction sleeve.

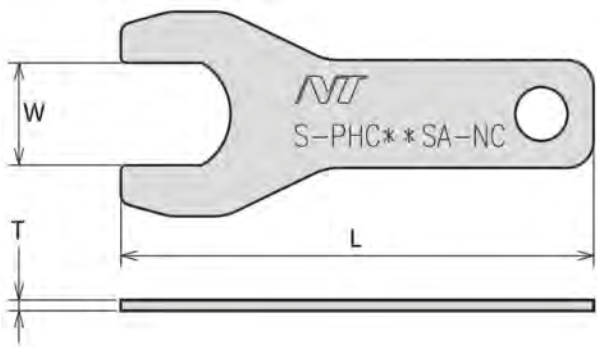




Cap for PHC·SA-NC

Model	Halter Holder	d ₁	D	L	ℓ	ℓ ₂
CP-PHC04SA-NC	PHC04SA-NC	4	15	33	5	20
CP-PHC06SA-NC	PHC06SA-NC	6	17	33	5	30
CP-PHC08SA-NC	PHC08SA-NC	8	19	33	5	40
CP-PHC10SA-NC	PHC10SA-NC	10	21	33	5	50
CP-PHC12SA-NC	PHC12SA-NC	12	23	33	5	60

Bestellbeispiel | Ordering Example: CP - PHC04SA - NC



Spannschlüssel für Jet-Cap

Spanner for Jet-Cap

Model	W	L	T
S-PHC04SA-NC	13	77.5	2
S-PHC06SA-NC	15	83.5	2
S-PHC08SA-NC	17	89.5	2
S-PHC10SA-NC	19	90.5	2
S-PHC12SA-NC	21	91.5	3

Bestellbeispiel | Ordering Example: S - PHC04SA - NC

Reinigungsbürste

Inner Shank Cleaner Brush

auf Anfrage | on request



Prüfwelle

Torque check gauge

auf Anfrage | on request



Einstellschraube

Preset Screw

auf Anfrage | on request

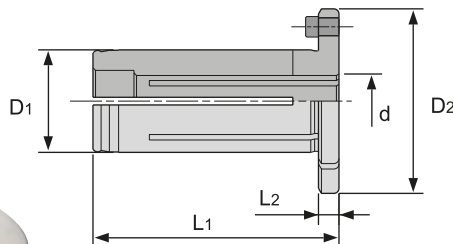


PHC·A

Spannhülsen für Dehnspannfutter

PHC·H | PHC·Z

Collets for Hydro Chucks



PHS-OH

PHS-OH Spannhülsen | für innere Kühlmittelzufuhr
PHS-OH Straight Collets | for inner coolant supply

Hülse Collet	D1	D2	L1	L2	d
PHS -12-d-OH	12	26	49	4	3, 4, 5, 6, 7, 8, 9, 10
PHS -20-d-OH	20	36	49	4	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18

passend für PHC-A und PHC-Z Dehnspannfutter

suitable for PHC-A und PHC-Z Hydro Chucks



PHS-C

PHS-C Spannhülsen | für Peripheriekühlung
PHS-C Straight Collets | for side-through coolant supply

Hülse Collet	D1	D2	L1	L2	d
PHS -12-d-C	12	26	49	4	3, 4, 5, 6, 7, 8, 9
PHS -20-d-C	20	36	49	4	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

passend für PHC-A und PHC-Z Dehnspannfutter

suitable for PHC-A und PHC-Z Hydro Chucks



PHS-H-OH

PHS-H-OH Spannhülsen | für PHC-H Dehnspannfutter
PHS-H-OH Straight Collets | for PHC-H Collet Chucks

Hülse Collet	D1	D2	L1	L2	d
PHS -20H-d-OH	20	41	60	4	6, 8, 10, 12, 16
PHS -30H-d-OH	32	55	72	4	6, 8, 10, 12, 16, 20, 25

PHS-H-C

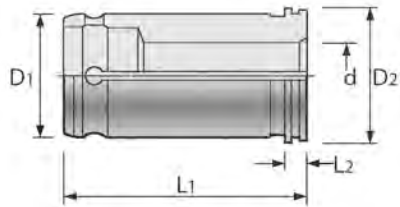
PHS-H-C Spannhülsen | für PHC-H Dehnspannfutter
PHS-H-C Straight Collets | for PHC-H Collet Chucks

Hülse Collet	D1	D2	L1	L2	d
PHS -20H-d-C	20	41	60	4	6, 8, 10, 12, 16
PHS -32H-d-C	32	55	72	4	6, 8, 10, 12, 16, 20, 25

CT·SA

Spannhülsen für Kraftspannfutter

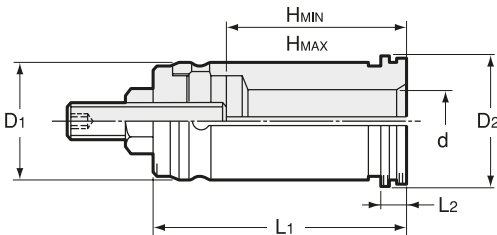
Straight Collets for Milling Chucks



MC

MC Spannhülsen
MC Straight Collets

Hülse Collet		D1	D2	L1	L2	d													
MC	-16-d	16	19	50	4	-	-	6	8	10	12	-	-	-	-	-	-	-	-
	-20-d	20	24	60	4	-	4	6	8	10	12	14	16	18	-	-	-	-	-
	-25-d	20	24	60	4	3	5	7	9	11	13	15	17	-	-	-	-	-	-
	-32-d	25	29	60	4	-	-	6	8	10	12	-	16	-	20	-	-	-	-
	-42-d	32	36	72	4	-	4	6	8	10	12	14	16	18	20	25	-	-	-
		42	47	85	4	-	-	6	8	10	12	-	16	-	20	25	32	40	

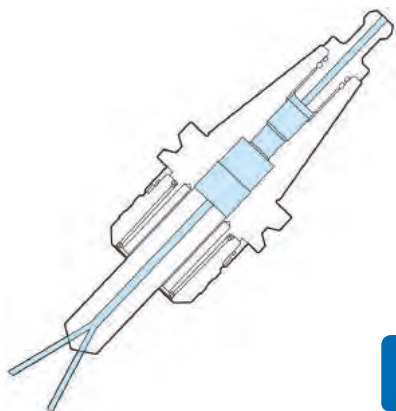


MC-A

MC-A Spannhülsen | mit Stellschraube zur Einstellung der Auskraglänge
MC-A Straight Collets | with a bolt to adjust the tool-length

Hülse Collet		D1	D2	L1	L2	Hmax	d												
MC-A	-16-d	16	19	55	4	45	6	8	10	12	-	-	-	-	-	-	-	-	-
	-20-d	20	24	65	4	55	6	8	10	12	16	-	-	-	-	-	-	-	-
	-25-d	20	29	65	4	55	6	8	10	12	16	20	-	-	-	-	-	-	-
	-32-d	32	36	79	4	66	6	8	10	12	16	20	25	-	-	-	-	-	-
	-42-d	42	47	92	4	79	6	8	10	12	16	20	25	32	-	-	-	-	-

Hülse Collet		Hmin							
D1		6	8	10	12	16	20	25	32
MC-A	16	30	30	40	40	-	-	-	-
	20	30	34	40	40	45	-	-	-
	25	30	34	40	40	45	45	-	-
	32	34	34	40	40	45	45	50	-
	42	34	38	40	45	45	45	50	50



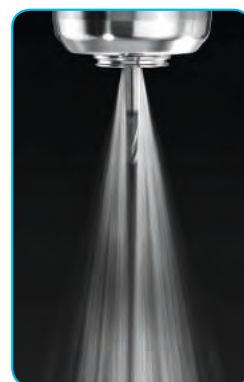
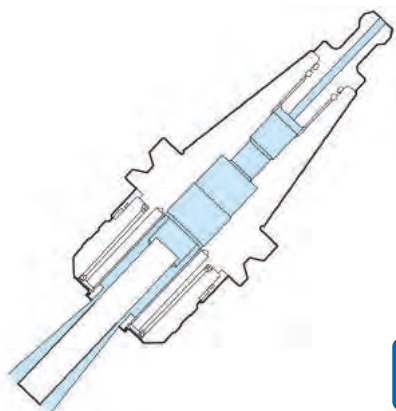
Spannhülsen für innere Kühlmittelzufuhr
Straight Collets for inner coolant supply

MC-OH

MC-OH Spannhülsen

MC-OH Straight Collets

Hülse Collet	D1	D2	L1	L2	d											
MC	-16-d-OH	16	19	50	4	-	6	8	10	12	-	-	-	-	-	-
	-20-d-OH	20	24	60	4	4	6	8	10	12	14	16	18	-	-	-
	-25-d-OH	20	24	60	4	5	7	9	11	13	15	17	-	-	-	-
	-32-d-OH	25	29	60	4	-	6	8	10	12	-	16	-	20	-	-
	-42-d-OH	32	36	72	4	4	6	8	10	12	14	16	18	20	25	-
	-42-d-OH	42	47	85	4	-	6	8	10	12	-	16	-	20	25	32
	-20-d-OH SL	20	24	50	4	-	6	8	10	12	-	16	-	-	-	-



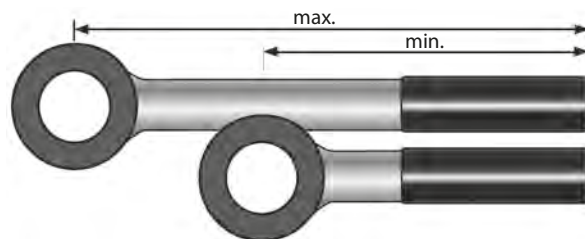
Spannhülsen für Peripheriekühlung
Straight Collets for side-through coolant

MC-C

MC-C Spannhülsen

MC-C Straight Collets

Hülse Collet	D1	D2	L1	L2	d											
MC	-16-d-c	16	19	50	4	-	6	8	10	12	-	-	-	-	-	-
	-20-d-c	20	24	60	4	4	6	8	10	12	14	16	-	-	-	-
	-25-d-c	25	29	60	4	-	6	8	10	12	-	16	-	20	-	-
	-32-d-c	32	36	72	4	4	6	8	10	12	14	16	18	20	25	-
	-42-d-c	42	47	85	4	-	6	8	10	12	-	16	-	20	25	32



Spannschlüssel für Kraftspannfutter CT-S Series
Spanners for Milling Chucks CT-S Series

HS

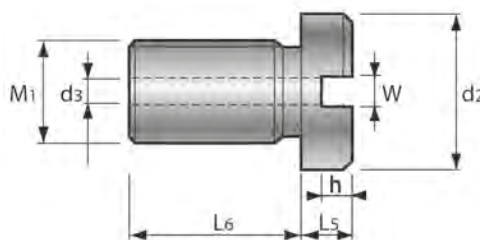
Hakenschlüssel
Hook Spanner

Halter Holder	Hakenschlüssel Hook Spanner
CT16SA	HS-1-16
CT20SA	CT20SA-C HS-2-20
CT25SA	CT25SA HS-2.5-25
CT32SA	CT32SA HS-3-32
CT42SA	CT42SA HS-4-42

RS

RS Rollenschlüssel
Teleskopausführung
RS Roller Spanner
Telescope type

Halter Holder	Rollenschlüssel Roller Spanner	min. max.
CT20SA	CT20S-P CT20SA-C RS-20	250-370
CT25SA	CT25S-P RS-25	280-400
CT32SA	CT32S-P RS-32	280-400



BL

BL Anschlagschraube | für Kraftspannfutter mit SK, BT, Polygon-Schaft
BL Back-up screw | for Milling Chucks with SK, BT, Polygon-interface

Schraube Screw	d2	d3	L5	L6	M1 P = 1.0	W	h	Halter Holder
BL -16-L5	24	4.5	5, 15, 25	14	10	5	3.5	CT16SA
-20-L5	22	4.5	5, 15, 25	14	12	5	3.5	CT20SA, CT25SA
-32-L5	22	4.5	10, 20, 35	14	18	5	5	CT32SA, CT42SA

BL

BL Anschlagschraube | für Kraftspannfutter mit HSK-A-Schaft
BL Back-up screw | for Milling Chucks with HSK-A-interface

Schnittstelle Interface	d2	d3	L5	L6	M1	W	h
HSK-A 40 50	13	2.5	5, 15, 25	8.5	M5 x0.8	5	2.5
HSK-A 63 80	15	4	5	5.5	M8 x1.25	5	3
HSK-A 63 80	15	4	15, 25	7.5	M8 x1.25	5	3
HSK-A 100 125	15	4.5	5, 15, 25	14.0	M10 x1.5	5	3.5

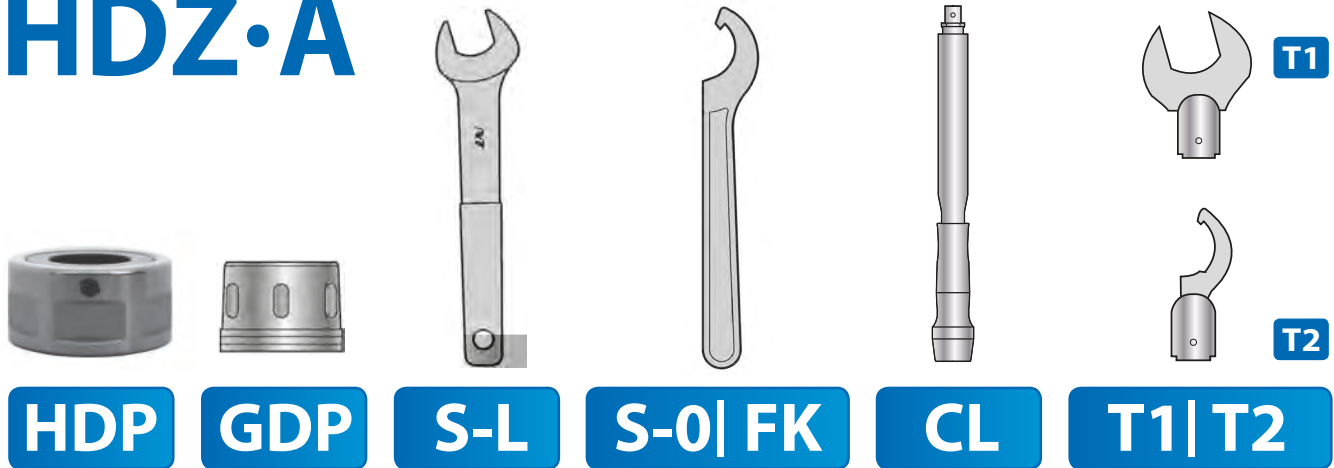
HDC·A GDC·A HDZ·A

Zubehör für Spannzangenfutter

Accessories for Collet Chucks

Drehmomentschlüssel

Torque wrench

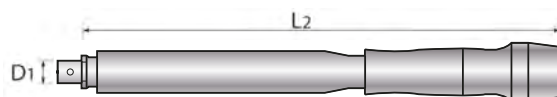


Halter Holder	Spannmutter Cap nut HDP GDP	Einstellschraube Preset screw HDS	Spannschlüssel Spanner S-L S-0 FK	Dremo-Schlüssel Torque wrench CL	Einsteckwerkzeug Spanner head SH
HDC07A GDC07A HDZ07	HDP-07A -	HDS-07A	- S-0	CL25N5-10D	SH-23-10 T2
GDC09A	- GDP-09	HDS-09	- S-0	CL50N x 15D	SH-25-15 T2
HDC09A HDZ09	HDP-09 -	HDS-09	S-1L -	CL100N x 15D	SH-1A-15 T1
GDC12A	- GDP-12	HDS-12	- FK-0034		SH-30-15 T2
HDC12A HDZ12	HDP-12 -	HDS-12	S-3L -		SH-3A-15 T1
GDC16A	- GDP-16	HDS-16	- FK-0034		SH-34-10 T1
HDC16A HDZ16	HDP-16 -	HDS-16	S-4L -		SH-2A-15 T1
GDC22A	- GDP-22	HDS-22	- FK-0034		SH-45-15 T2
HDC22A HDZ22A	HDP-22 -	HDS-22	S-5L -		SH-5A-15 T1

CL

CL Drehmomentschlüssel | für HDP | GDP | ERP

CL Torque wrench | for HDP | GDP | ERP

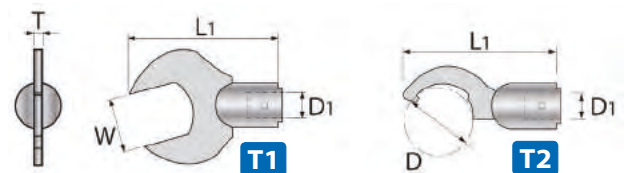


Dremo Torque wrench	Messbereich Range	D1	L2
CL 25N	5-25 Nm	10	189
CL 50N	10-50 Nm	15	219
CL 100N	20-100 Nm	15	294

SH

SH Einsteckwerkzeug

SH Spanner head



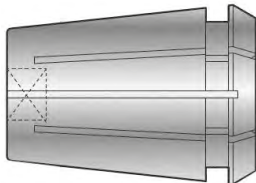
T1 T2		Type	W	T	D	D ₁	L ₁	Passende Spannmutter Suitable cap nut	Anzugsmoment Tightening torque	Dremo-Schlüssel Torque wrench	Messbereich Range
SH	-1A-15	T1	24	4.5	-	15	78	HDP-09	30-35 Nm	CL50N x15D	10-50 Nm
	-3A-15	T1	30	4.5	-	15	83	HDP-12	34-40 Nm	CL100N x15D	20-100 Nm
	-4A-15	T1	33	4.5	-	15	84	HDP-16	40-45 Nm	CL100N x15D	20-100 Nm
	-5A-15	T1	42	5.5	-	15	89	HDP-22	55-60 Nm	CL100N x15D	20-100 Nm
	-23-10	T2	-	-	23	10	60	HDP-07A	10-15 Nm	CL25N-10D	5-25 Nm
	-25-15	T2	-	-	29	15	77	GDP-09	30-35 Nm	CL50N x15D	10-50 Nm
	-30-15	T2	-	-	34	15	79	GDP-12 ERP-16	35-40 Nm	CL100N x15D	20-100 Nm
	-34-15	T2	-	-	38	15	82	GDP-16	44-45 Nm	CL100N x15D	20-100 Nm
	-45-15	T2	-	-	49	15	86	GDP-22 ERP-25	55-60 Nm	CL100N x15D	20-100 Nm

HDC·A

Ultra Präzisions-Spannzangen für

GDC·A | HDZ·A

Ultra Precision Collets for



UltraPräzision-Spannzangen
UltraPrecision Collets

FDC

Spannzange Collet	Spanndurchmesser	
	0.5 std. steps	1.0 std. steps
FDC-07	Ø 1.0-7.0	-
FDC-07-OH	Ø 3.0-7.0	-
FDC-07-C	Ø 3.0-7.0	-
FDC-07-MS	-	Ø 3.0-5.0
FDC-09	Ø 3.0-9.0	-
FDC-09-OH	Ø 3.0-9.0	-
FDC-09-C	Ø 3.0-9.0	-
FDC-09-MS	-	Ø 3.0-8.0
FDC-12	Ø 3.0-12.0	-
FDC-12-OH	Ø 3.0-12.0	-
FDC-12-C	Ø 3.0-12.0	-
FDC-12-MS	-	Ø 3.0-12.0
FDC-16	Ø 4.0-16.0	-
FDC-16-OH	Ø 6.0-16.0*	-
FDC-16-C	Ø 6.0-16.0	-
FDC-16-MS	-	Ø 6.0-14.0
FDC-22	Ø 4.0-22.0	-
FDC-22-OH	Ø 6.0-22.0	-
FDC-22-C	Ø 6.0-22.0	-
FDC-22-MS	-	Ø 6.0-20.0

*Ø 3.0-5.0 = 1.0 std.|steps



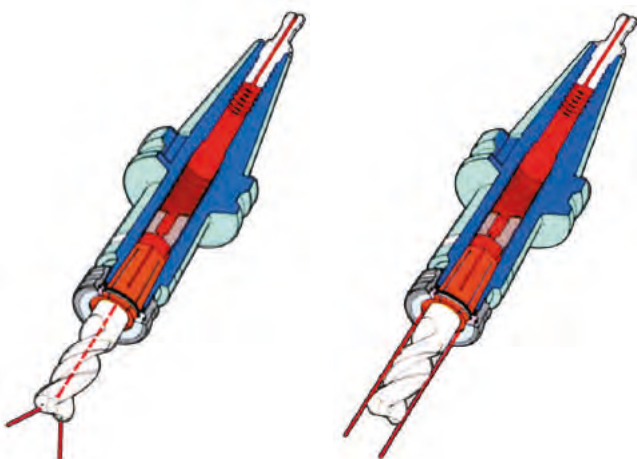
FDC-OH Spannzangen
metallisch dichtend für innere Kühlmittelzufuhr
FDC-OH Collets
metallic sealed for inner coolant supply



FDC-C Spannzangen
metallisch dichtend mit innenliegenden
Kühlmittelnuten für effektive Peripheriekühlung
FDC-C Collets
metallic sealed with coolant channels
for efficient side through coolant

FDC-OH

FDC-C



FDC-MS Spannzangen
für MMS-Bearbeitung
FDC-MS Collets
for MQL applications

Mini ERP

ES

ERP

S-E

HS

CL

SH

Halter Holder	Spannmutter Cap nut		Einstellschraube Preset screw	Spannschlüssel Spanner		Einsteckwerkzeug Spanner head
	Mini ERP	ERP				
ERC8	ERP-8	-	ES-8	S-8E	-	SH-8E-10 ¹
ERC11S	ERP-11S	-	ES-11	S-11E	-	SH-11E-10 ¹
ERZ16	-	ERP-16	ES-16	-	FK-0034	CL100N x 15D + SH-25-15
ERZ32	-	ERP-32	ES-32	-	HS-2-20	CL200N x 19D + SH-45-15

Drehmomentschlüssel inkl. Einsteckwerkzeug

Torque wrench incl. Spanner head

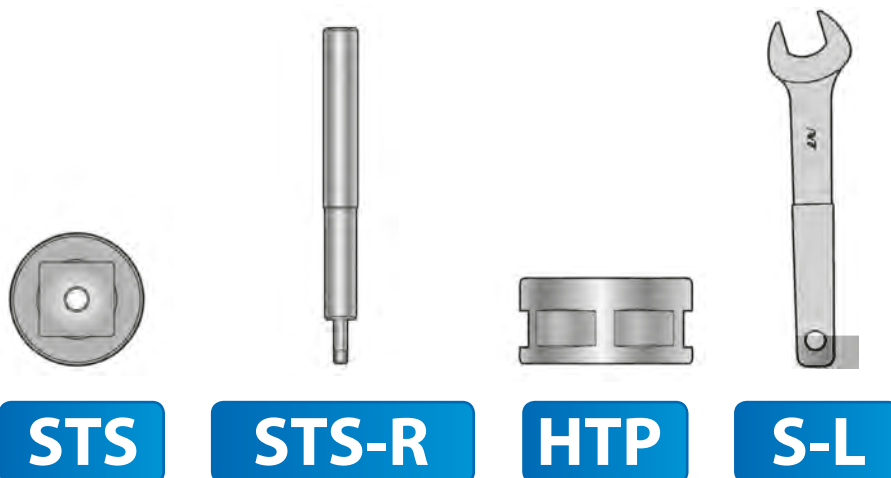
Präzisions-Spannzangen
Precision Collets



ER ER Spannzangen
ER Collets

DIN 6499 | ISO 15488

Halter Holder		Spann-ø Clamping range 0.5 stgd. steps	kühlmitteldicht sealed 1.0 stgd. steps
ERC8	ER-8	Ø 1.0-5.0	auf Anfrage
ERC11S	ER-11	Ø 1.0-7.0	Ø 3.0-7.0
ERZ16	ER-16	Ø 1.0-10.0	Ø 3.0-10.0
ERZ32	ER-32	Ø 3.0-20.0	Ø 6.0-20.0



Halter Holder		Schneidbereich Tapping range	4kant-Mitnehmer Square driver	Einschraubwerkzeug Tool changer		Spannmutter Cap nut	
SFH12	DIN 371	M3	STS12-□2.7	STS-M2	FSC-03509	HTP-09	S-1L
		M4	STS12-□3.4	STS-R1	FSC-04509	HTP-09	S-1L
		M5	STS12-□4.9	STS-R1	FSC-06009	HTP-09	S-1L
		M6	STS12-□4.9	STS-R1	FSC-06009	HTP-09	S-1L
SFH18	DIN 371	M8	STS12-□6.2	STS-R1	FSC-08009	HTP-09	S-1L
		M5	STS18-□4.9	STS-R1	FSC-06016	HTP-16	S-4L
		M6	STS18-□4.9	STS-R1	FSC-06016	HTP-16	S-4L
		M8	STS18-□6.2	STS-R1	FSC-08016	HTP-16	S-4L
	DIN376	M10	STS18-□8.0	STS-R2	FSC-10016	HTP-16	S-4L
		M12	STS18-□7.0	STS-R2	FSC-09016	HTP-16	S-4L
		M14	STS18-□9.0	STS-R2	FSC-11016	HTP-16	S-4L
		M16	STS18-□9.0	STS-R2	FSC-12016	HTP-16	S-4L
		M18	STS18-□11.0	STS-R2	FSC-14016	HTP-16	S-4L
		M20	STS18-□12.0	STS-R2	FSC-16016	HTP-16	S-4L

i Gewindebohrerschaftmaße siehe Seite 191
Tap dimensions see Page 191

FSC-OH Spannzangen | Collets

kühlmitteldicht für innere Kühlmittelzufuhr
sealed for inner coolant supply



FSC-C Spannzangen | Collets

für effektive Peripheriekühlung
for effective side-through coolant





Mini ERP

ERP

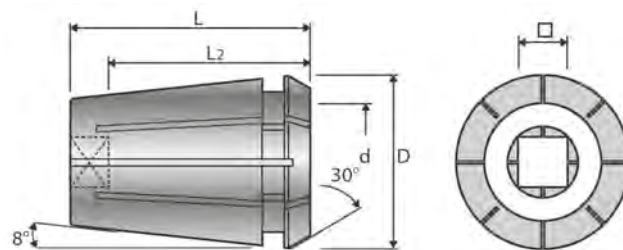


S-E



HS

Halter Holder	Spannmutter Cap nut	Spannschlüssel Spanner
SFH8S	ERP-11S	S-11E
SFH12S	ERP-16	FK-0034
SFH18S	ERP-25	HS-1-16
SFH30S	ERP-32	HS-2-20



DIN 371

DIN 376



ER-GB

DIN 6449B | ISO 15488

ER-GB Gewindebohrspannzangen

ER-GB Tapping Collets

Spannzange Collet	d	4kant Square	D x L	L2	Größe Size	
ER11-GB	Ø 2.5 mm	□ 2.1 mm	11.3 x 18.0	-	M 1	M 3.5
ER11-GB	Ø 2.8 mm	□ 2.1 mm	11.3 x 18.0	12	M 2	M 4
ER11-GB	Ø 3.5 mm	□ 2.7 mm	11.3 x 18.0	14	M 3	M 5
ER11-GB	Ø 4.5 mm	□ 3.4 mm	11.3 x 18.0	14	M 4	M 6
ER11-GB	Ø 6.0 mm	□ 4.9 mm	11.3 x 18.0	18	M 5, M6	M 8
ER16-GB	Ø 2.8 mm	□ 2.1 mm	16.7 x 27.5	18	M 2	M 4
ER16-GB	Ø 3.5 mm	□ 2.7 mm	16.7 x 27.5	18	M 3	M 5
ER16-GB*	Ø 4.5 mm	□ 3.4 mm	16.7 x 27.5	18	M 4	M 6
ER16-GB*	Ø 6.0 mm	□ 4.9 mm	16.7 x 27.5	18	M 5, M6	M 8
ER16-GB	Ø 7.0 mm	□ 5.5 mm	16.7 x 27.5	18	M 7	M 10
ER16-GB	Ø 8.0 mm	□ 6.2 mm	16.7 x 27.5	22	M 8	M 11
ER16-GB	Ø 9.0 mm	□ 7.0 mm	16.7 x 27.5	22	M 9	M 12
ER25-GB	Ø 4.5 mm	□ 3.4 mm	25.7 x 34	18	M 4	M 6
ER25-GB*	Ø 6.0 mm	□ 4.9 mm	25.7 x 34	18	M 5, M6	M 8
ER25-GB	Ø 7.0 mm	□ 5.5 mm	25.7 x 34	18	M 7	M 10
ER25-GB*	Ø 8.0 mm	□ 6.2 mm	25.7 x 34	22	M 8	M 11
ER25-GB*	Ø 9.0 mm	□ 7.0 mm	25.7 x 34	22	M 9	M 12
ER25-GB*	Ø 10.0 mm	□ 8.0 mm	25.7 x 34	25	M 10	-
ER25-GB*	Ø 11.0 mm	□ 9.0 mm	25.7 x 34	25	-	M 14
ER25-GB*	Ø 12.0 mm	□ 9.0 mm	25.7 x 34	25	-	M 16
ER25-GB*	Ø 14.0 mm	□ 11.0 mm	25.7 x 34	25	-	M 18
ER25-GB*	Ø 16.0 mm	□ 12.0 mm	25.7 x 34	25	-	M 20
ER32-GB	Ø 4.5 mm	□ 3.4 mm	32.7 x 40	18	M 4	M 6
ER32-GB*	Ø 6.0 mm	□ 4.9 mm	32.7 x 40	18	M 5, M6	M 8
ER32-GB	Ø 7.0 mm	□ 5.5 mm	32.7 x 40	18	M 7	M 10
ER32-GB*	Ø 8.0 mm	□ 6.2 mm	32.7 x 40	22	M 8	M 11
ER32-GB*	Ø 9.0 mm	□ 7.0 mm	32.7 x 40	22	M 9	M 12
ER32-GB*	Ø 10.0 mm	□ 8.0 mm	32.7 x 40	25	M 10	-
ER32-GB*	Ø 11.0 mm	□ 9.0 mm	32.7 x 40	25	-	M 14
ER32-GB*	Ø 12.0 mm	□ 9.0 mm	32.7 x 40	25	-	M 16
ER32-GB*	Ø 14.0 mm	□ 11.0 mm	32.7 x 40	25	-	M 18
ER32-GB*	Ø 16.0 mm	□ 12.0 mm	32.7 x 40	25	-	M 20
ER32-GB*	Ø 18.0 mm	□ 14.5 mm	32.7 x 40	30	-	M 20, M24
ER32-GB*	Ø 20.0 mm	□ 16.0 mm	32.7 x 40	30	-	M 27

* auch in kühlmitteldichter Ausführung lieferbar (Typ ER-GB-OH)

* also available for inner coolant (Typ ER-GB-OH)



Gewindebohrerschaftmaße siehe Seite 191

Tap dimensions see Page 191