

GUHRING

The Tool Company

GM 300

TOOLHOLDERS, CLAMPING SYSTEMS
AND ACCESSORIES



MQL

GUHRING MQL SYSTEMS

DELIVERING
ONLY THE
REQUIRED AMOUNT



As one of the pioneers of MQL technology we have an extensive knowledge of minimal quantity lubrication. Guhring standard MQL Chucks have been supplied a thousand fold throughout the world and are recognized by the automotive industry as ideal MQL solutions as either the one or two channel systems.

Higher cutting speeds and longer tool life are possible thanks to adapted cooling as well as highest surface qualities thanks to the pure lubricant. Work pieces and chips remain dry! Save the cost of de-greasing your work pieces as well as disposal of chips and soluble oil.

1 MQL BY GÜHRING

Our products for the MQL 1-channel technology are identified by this symbol.

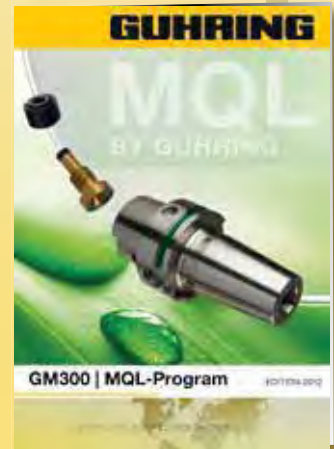
Visual feature of the 1-channel system is the gold colored MQL length setting screw.



2 MQL BY GÜHRING

Our products for the MQL 2-channel technology are identified by this symbol.

Visual feature of the 2-channel system is the black colored MQL length setting screw.



YOU CAN NOW
REQUEST THE
MQL CATALOG!

All Guhring tool holders as well as much information on MQL technology applications in the new MQL catalog at a glance.

HYDRAULIC CHUCKS



from page	9
Chucks	13
Reduction sleeves	24
Accessories	28

SHRINK FIT TECHNOLOGY



from page	31
Chucks	34
Extensions	47
Accessories	49
Shrink-fit systems	54

HPC CLAMPING CHUCKS



from page	63
Chucks	67
Reduction sleeves	69

TAPPING CHUCKS



from page	73
GUHROSynC	80
Synchro-chucks	87
Quick-change chucks	101

TOOL HOLDERS



from page	105
Side lock holders	108
Collet holders	117
Face mill arbors	132
Shell milling arbors	135
Semi-finished products	137

HOLDERS FOR FINE MACHINING

HSK CLAMPING TECHNOLOGY

MEASURING TOOLS AND GENERAL ACCESSORIES

TECHNICAL INFORMATION



from page	139	from page	159	from page	187	from page	201
Modul 6x6	143	MQL-4-point clamping sets	165	Measuring and inspection instruments spindle holders	188	Overview tool holders	202
Modul 4x4	148	M-contour clamping sets for MQL and IC	168	Measuring and inspection instruments cooling lubrication	191	HSK	204
Floating holders	153	4-point clamping sets for conventional cooling	172	General accessories	193	Shrink fit technology	212
		Power clamp sets	181			Hydraulic chucks	214
		HSK spindle adaptors	182			Installation dimensions for HSK adaptors	216
						Guhring no. index	226

SYSTEM FINDER

		HSK-A	HSK-C	HSK-E
HMC 3000/ Hydraulic chucks		4296 with radial length setting, p. 16 4299 with increased clamping force, p. 14 4618 HMC 3000, p. 13	4267 with increased clamping force, p. 17 4295 with radial length setting, p. 18	
HPC clamping chucks		4300 , p. 67		
Side lock holders "Weldon"/"Whistle-Notch"		4232 GÜHROJET Weldon, p. 108 4329 Weldon, p. 109 4334 Whistle-Notch, p. 110 4343 use with straight shank GÜHROSYNC p. 84	4333 Whistle-Notch, p. 111	
Collet holders ER		4304 , p. 117 4324 sealed, p. 118	4303 , p. 119 4323 sealed, p. 120	4397 , p. 121
Tapping chucks		4601 GÜHROSYNC p. 80 4602 GÜHROSYNC p. 87 4603 GÜHROSYNC p. 88 4604 GÜHROSYNC p. 89 4327 Synchro chuck with IC, p. 99 4328 Quick-change tapping chuck with IC, p. 102		
Shrink fit chucks		4736 p. 34 4755 GÜHROJET, p. 37	4758 p. 38	4737 p. 39

ISO taper	MAS/BT	CAT taper	Straight shank
4619 HMC 3000, p. 19 4213 with increased clamping force, p. 20	4620 HMC 3000, p. 21 4221 with increased clamping force, p. 22	4216 with increased clamping force, p. 23	
4301 , p. 67	4244 MAS/BT, p. 68	4243 p. 68	
4317 GÜHROJET Weldon, p. 112 4322 Whistle-Notch, p. 113	4234 GÜHROJET Weldon, p. 114 4233 Whistle-Notch, p. 115	4087 use with straight shank GÜHROSYNC p. 84	
4318 , p. 122	4245 , p. 122		
4576 GÜHROSYNC p. 81	4577 GÜHROSYNC p. 82		4525 GÜHROSYNC p. 83 4524 GÜHROSYNC MQL p. 90 4326 Synchro chuck, straight shank with IC, p. 99 4340 Quick-change tapping chuck w/o IC, p. 101 4342 Quick-change tapping chuck with IC, p. 101
4729 GÜHROJET with peripheral cooling, p. 42 4738 p. 40	4739 p. 43	4764 p. 45 4765 GÜHROJET p. 46	4719 p. 47

HMC 3000 MICRO- PRECISION DRILLS HR 500

PERFECT CLAMPING

HMC 3000 HYDRAULIC CHUCKS
TOGETHER WITH SOLID CARBIDE
MICRO-PRECISION DRILLS OR HR
500 HIGH-PERFORMANCE REAMERS



- ⇒ direct hydraulic clamping of shanks from Ø 3 mm
- ⇒ quick, simple and accurate length setting
- ⇒ perfect concentricity $R < 3 \mu\text{m}$ with 10 x d1

Please request our "HMC 3000", "HR 500" and "solid carbide micro-precision drills" brochures.

HMC 3000

HYDRAULIC CHUCKS



HMC 3000

EXTREMELY FAST

EXTREMELY ACCURATE

EXTREMELY SMALL



WATERWAY
CONSTRUCTION
FIRM



CONCRETE
WORK



WATER
CONSTRUCTION
FIRM
CONCRETE
WORK

powertap

UNIVERSAL TAPS

MADE BY
GUHRING

POWERTAP ABSOLUTELY PERFECT

It is a true **universal tap** covering a **broad range of applications** and provides **optimal machining results**.

- High-tensile steels
- Stainless and acid-resistant steels
- Aluminum and aluminum alloys
- General steels
- Cast materials

**TOP QUALITY
FROM GERMANY**
at a Power Price

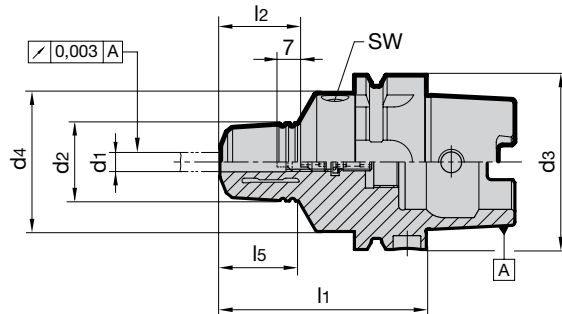
HSK-A hydraulic chucks HMC 3000 for clamping small diameters

Product information

- perfect concentricity: $< 3 \mu\text{m}$ at $10 \times d_1$
- balancing quality: G2.5 / 25,000 rev./min or $U < 1\text{mm}$
- HSK-A to DIN 69893
- high clamping force
- quick, simple handling and accurate length setting
- IC and GÜHROJET peripheral cooling ensure optimal chip evacuation and tool lubrication

Scope of delivery

- incl. length adjustment screw
- incl. hexagon chuck key Guhring no. 4912
- order coolant delivery set Guhring no. 4949 separately



GÜHROJET

Series Number

4618

HSK-A d_3	for shank $\varnothing$ $d_{1\text{ h6}}$ mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	l_5 mm	SW	Order Code	EDP Numbers
32	3	28	40	84	34	33	4	3.032	9046180030320
32	4	28	40	84	34	33	4	4.032	9046180040320
32	5	28	40	84	34	33	4	5.032	9046180050320
40	3	28	33.5	74	34	40	4	3.040	9046180030400
40	4	28	33.5	74	34	40	4	4.040	9046180040400
40	5	28	33.5	74	34	40	4	5.040	9046180050400
50	3	28	40	74	34	32	4	3.050	9046180030500
50	4	28	40	74	34	32	4	4.050	9046180040500
50	5	28	40	74	34	32	4	5.050	9046180050500
63	3	28	50	74	34	28.5	5	3.063	9046180030630
63	4	28	50	74	34	28.5	5	4.063	9046180040630
63	5	28	50	74	34	28.5	5	5.063	9046180050630
100	3	28	50	79	34	30	5	3.100	9046180031000
100	4	28	50	79	34	30	5	4.100	9046180041000
100	5	28	50	79	34	30	5	5.100	9046180051000

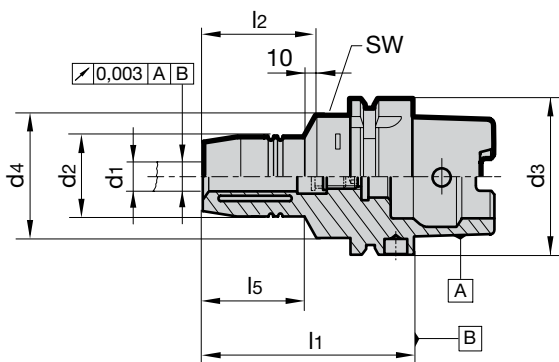
HSK-A hydraulic chucks with increased clamping force

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- axial length setting
- max. deviation f. concentricity 3 µm
- for tool shank tolerance h6
- to DIN 69882-7
- also available in extra-long lengths
l1 = 150 / 160 mm and 200 mm

Scope of delivery

- incl. adjustment screw Guhring no. 4900
- incl. hexagon chuck key Guhring no. 4912
- order coolant delivery set Guhring no. 4949 separately



Series Number **4299**

HSK-A d ₃	for shank Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw 4900	SW	kg	Order Code	EDP Numbers
32	6	26	40	80	37	29	9049000060140	4	0.44	6.032	9042990060320
32	8	28	40	80	37	29	9049000080140	4	0.40	8.032	9042990080320
32	10	30	40	85	41	35	9049000080140	4	0.40	10.032	9042990100320
32	12	32	40	90	46	40	9049000080140	4	0.40	12.032	9042990120320
40	6	26	33.5	70	37	36	9049000060140	4	0.60	6.040	9042990060400
40	8	28	33.5	70	37	36	9049000080140	4	0.60	8.040	9042990080400
40	10	30	33.5	75	41	42	9049000080140	4	0.60	10.040	9042990100400
40	12	32	33.5	80	46	48	9049000080140	4	0.60	12.040	9042990120400
50	6	26	40	70	37	28	9049000060140	4	0.80	6.050	9042990060500
50	8	28	40	70	37	28	9049000080140	4	0.80	8.050	9042990080500
50	10	30	40	75	41	34	9049000100140	4	0.80	10.050	9042990100500
50	12	32	40	85	46	44	9049000120140	4	0.80	12.050	9042990120500
50	14	34	40	85	46	44	9049000120140	5	0.80	14.050	9042990140500
50	16	38	40	90	49	30	9049000160140	5	0.80	16.050	9042990160500
50	18	40	40	90	49	30	9049000160140	5	1.10	18.050	9042990180500
50	20	42	40	90	51	29	9049000201140	5	1.10	20.050	9042990200500
63	6	26	50	70	37	24.5	9049000060140	5	0.97	6.063	9042990060630
63	8	28	50	70	37	24.5	9049000080140	5	1.00	8.063	9042990080630
63	10	30	50	80	41	35.5	9049000100140	5	1.00	10.063	9042990100630
63	12	32	50	85	46	41.5	9049000120140	5	1.10	12.063	9042990120630
63	14	34	50	85	46	41.5	9049000120140	5	1.10	14.063	9042990140630
63	16	38	50	90	49	45.5	9049000160140	5	1.20	16.063	9042990160630
63	18	40	50	90	49	48.5	9049000160140	5	1.20	18.063	9042990180630
63	20	42	50	90	51	47.5	9049000201140	5	1.20	20.063	9042990200630
63	25	57	63	120	57	55.3	9049000201140	6	2.10	25.063	9042990250630
63	32	64	75	125	61	63	9049000201140	6	2.40	32.063	9042990320630
63	6	26	50	150	37	103	9049000060140	5	1.50	6.163	9042990061630
63	8	28	50	150	37	104	9049000080140	5	1.50	8.163	9042990081630
63	10	30	50	150	41	104	9049000100140	5	1.50	10.163	9042990101630
63	12	32	50	150	46	105	9049000120140	5	1.50	12.163	9042990121630
63	14	34	50	150	46	105	9049000120140	5	1.70	14.163	9042990141630
63	16	38	50	150	49	106	9049000160140	5	1.80	16.163	9042990161630
63	18	40	50	150	49	107	9049000160140	5	1.90	18.163	9042990181630
63	20	42	50	150	51	108	9049000201140	5	1.90	20.163	9042990201630

HSK-A hydraulic chucks with increased clamping force

Series Number											4299
HSK-A d ₃	for shank Ø d _{1h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw 4900	SW	kg	Order Code	EDP Numbers
63	6	26	50	200	37	153	9049000060140	5	1.70	6.263	9042990062630
63	8	28	50	200	37	154	9049000080140	5	1.70	8.263	9042990082630
63	10	30	50	200	41	154	9049000100140	5	1.80	10.263	9042990102630
63	12	32	50	200	46	155	9049000120140	5	1.80	12.263	9042990122630
63	14	34	50	200	46	155	9049000120140	5	2.00	14.263	9042990142630
63	16	38	50	200	49	156	9049000160140	5	2.20	16.263	9042990162630
63	18	40	50	200	49	157	9049000160140	5	2.30	18.263	9042990182630
63	20	42	50	200	51	158	9049000201140	5	2.50	20.263	9042990202630
80	6	26	50	70	37	24	9049000060140	5	1.50	6.080	9042990060800
80	8	28	50	70	37	24	9049000080140	5	1.50	8.080	9042990080800
80	10	30	50	80	41	35	9049000100140	5	1.50	10.080	9042990100800
80	12	32	50	85	46	40	9049000120140	5	1.60	12.080	9042990120800
80	14	34	50	85	46	40	9049000120140	5	1.60	14.080	9042990140800
80	16	38	50	95	49	51	9049000160140	5	1.70	16.080	9042990160800
80	18	40	50	95	49	51	9049000160140	5	1.80	18.080	9042990180800
80	20	42	50	95	51	52	9049000201140	5	1.80	20.080	9042990200800
80	25	57	63	110	57	65	9049000201140	6	2.60	25.080	9042990250800
80	32	64	75	125	61	63	9049000201140	6	3.20	32.080	9042990320800
100	6	26	50	75	37	26	9049000060140	5	2.40	6.100	9042990061000
100	8	28	50	75	37	26	9049000080140	5	2.40	8.100	9042990081000
100	10	30	50	90	41	42	9049000100140	5	2.50	10.100	9042990101000
100	12	32	50	95	46	47	9049000120140	5	2.50	12.100	9042990121000
100	14	34	50	95	46	47	9049000120140	5	2.50	14.100	9042990141000
100	16	38	50	100	49	53	9049000160140	5	2.70	16.100	9042990161000
100	18	40	50	100	49	53	9049000160140	5	2.70	18.100	9042990181000
100	20	42	50	105	51	59	9049000201140	5	3.20	20.100	9042990201000
100	25	57	63	110	57	62	9049000201140	6	3.30	25.100	9042990251000
100	32	64	75	110	61	62	9049000201140	6	3.30	32.100	9042990321000
100	6	27	50	160	37	104	9049000060140	5	2.80	106.100	9042991061000
100	8	27	50	160	37	104	9049000080140	5	2.80	108.100	9042991081000
100	10	32	50	160	41	105	9049000100140	5	2.90	110.100	9042991101000
100	12	32	50	160	46	105	9049000120140	5	2.90	112.100	9042991121000
100	14	34	50	160	46	107	9049000120140	5	2.90	114.100	9042991141000
100	16	34	50	160	49	107	9049000160140	5	3.20	116.100	9042991161000
100	18	42	50	160	49	108	9049000160140	5	3.20	118.100	9042991181000
100	20	42	50	160	51	108	9049000201140	5	3.60	120.100	9042991201000
100	25	53	63	160	57	110	9049000201140	6	3.70	125.100	9042991251000
100	32	53	75	160	61	110	9049000201140	6	4.20	132.100	9042991321000
100	6	27	50	200	37	144	9049000060140	5	3.00	206.100	9042992061000
100	8	27	50	200	37	144	9049000080140	5	3.00	208.100	9042992081000
100	10	32	50	200	41	145	9049000100140	5	3.10	210.100	9042992101000
100	12	32	50	200	46	145	9049000120140	5	3.10	212.100	9042992121000
100	14	34	50	200	46	147	9049000120140	5	3.10	214.100	9042992141000
100	16	34	50	200	46	147	9049000160140	5	3.40	216.100	9042992161000
100	18	42	50	200	49	148	9049000160140	5	3.40	218.100	9042992181000
100	20	42	50	200	51	148	9049000201140	5	3.80	220.100	9042992201000
100	25	53	63	200	57	150	9049000201140	6	3.90	225.100	9042992251000
100	32	53	75	200	61	150	9049000201140	6	3.90	232.100	9042992321000

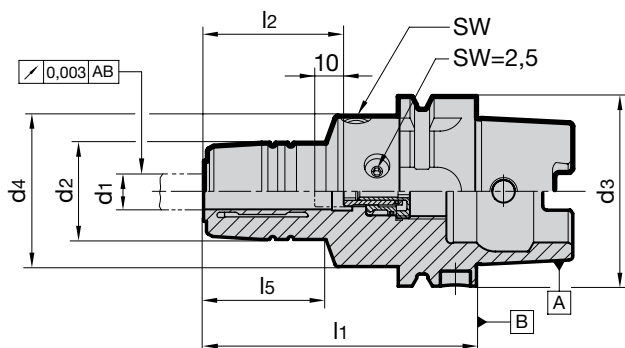
HSK-A hydraulic chucks with radial length setting

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- robust, radially operated length setting
- max. deviation f. concentricity 3 µm
- for tool shank tolerance h6
- to DIN 69882-7

Scope of delivery

- incl. hexagon chuck key Guhring no. 4912
- incl. hexagon key inserts for radial length setting
- order coolant delivery set Guhring no. 4949 separately
- MQL design available as an option



Series Number **4296**

HSK-A d ₃	for shank Ø d ₁ h ₆ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	SW	kg	Order Code	EDP Numbers
50	6	26	40	80	37	35	5	0.80	6.050	9042960060500
50	8	28	40	80	37	36	5	0.80	8.050	9042960080500
50	10	30	40	85	41	38	5	0.90	10.050	9042960100500
50	12	32	40	90	46	47	5	0.90	12.050	9042960120500
50	14	34	40	90	46	46	5	1.00	14.050	9042960140500
50	16	38	53	95	49	36.5	5	1.20	16.050	9042960160500
50	18	40	57	95	49	36.5	5	1.20	18.050	9042960180500
50	20	42	60	100	51	39	5	1.30	20.050	9042960200500
63	6	26	50	80	37	33	5	1.00	6.063	9042960060630
63	8	28	50	80	37	33	5	1.10	8.063	9042960080630
63	10	30	50	85	41	38	5	1.10	10.063	9042960100630
63	12	32	50	90	46	40	5	1.20	12.063	9042960120630
63	14	34	50	90	46	46	5	1.20	14.063	9042960140630
63	16	38	50	95	50.5	51	5	1.30	16.063	9042960160630
63	18	40	50	95	49	52	5	1.30	18.063	9042960180630
63	20	42	50	200	51	58	5	1.40	20.063	9042960200630
63	25	57	63	120	57	59.5	6	2.30	25.063	9042960250630
63	32	64	75	125	61	62.5	6	2.30	32.063	9042960320630
80	6	26	50	85	37	35.5	5	1.50	6.080	9042960060800
80	8	28	50	85	37	36	5	1.50	8.080	9042960080800
80	10	30	50	90	41	38	5	1.50	10.080	9042960100800
80	12	32	50	95	46	40	5	1.60	12.080	9042960120800
80	14	34	50	95	46	41	5	1.60	14.080	9042960140800
80	16	38	50	100	49	46	5	1.60	16.080	9042960160800
80	18	40	50	100	49	46	5	1.80	18.080	9042960180800
80	20	42	50	105	51	51	5	1.80	20.080	9042960200800
80	25	57	63	115	57	58.5	6	2.60	25.080	9042960250800
80	32	64	75	125	61	58.5	6	2.60	32.080	9042960320800
100	6	26	50	85	37	33	5	2.50	6.100	9042960061000
100	8	28	50	85	37	33	5	2.70	8.100	9042960081000
100	10	30	50	90	41	36	5	2.80	10.100	9042960101000
100	12	32	50	95	46	40	5	2.80	12.100	9042960121000
100	14	34	50	95	46	46	5	2.70	14.100	9042960141000
100	16	38	50	100	49	51	5	2.90	16.100	9042960161000
100	18	40	50	100	49	52	5	2.80	18.100	9042960181000
100	20	42	50	105	51	58	5	3.20	20.100	9042960201000
100	25	57	63	115	57	60	6	3.40	25.100	9042960251000
100	32	64	75	120	61	68	6	3.40	32.100	9042960321000

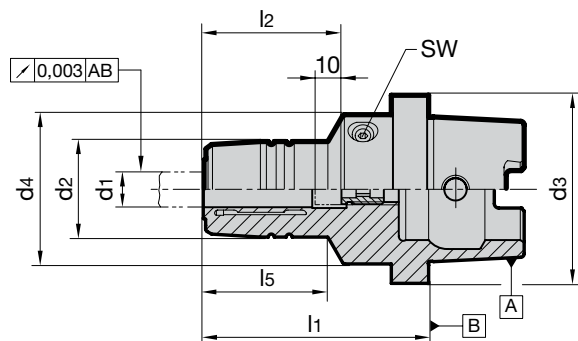
HSK-C hydraulic chucks with increased clamping force

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- axial length setting
- for tool shank tolerance h6

Scope of delivery

- incl. adjustment screw Guhring no. 4900
- incl. hexagon chuck key Guhring no. 4912



Series Number **4267**

HSK-C d ₃	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw 4900	SW	kg	Order Code	EDP Numbers
32	6	26	32	65	37.5	33	9049000060140	4	0.40	6.032	9042670060320
32	8	28	32	67	37.5	34	9049000080140	4	0.40	8.032	9042670080320
32	10	30	32	72.7	42.5	39	9049000080140	4	0.40	10.032	9042670100320
32	12	31.5	32	76	46	45	9049000080140	4	0.40	12.032	9042670120320
40	6	26	33.5	60	37	35	9049000060140	4	0.40	6.040	9042670060400
40	8	28	33.5	60	37	36	9049000080140	4	0.40	8.040	9042670080400
40	10	30	33.5	65	41	41	9049000080140	4	0.50	10.040	9042670100400
40	12	32	33.5	70	46	47	9049000080140	4	0.60	12.040	9042670120400
50	6	26	50	60	37	30	9049000060140	4	0.70	6.050	9042670060500
50	8	28	50	60	37	30	9049000080140	5	0.70	8.050	9042670080500
50	10	30	50	65	41	35	9049000100140	5	0.70	10.050	9042670100500
50	12	32	50	75	46	44	9049000120140	5	0.80	12.050	9042670120500
50	14	34	50	75	46	46	9049000120140	5	0.70	14.050	9042670140500
50	16	38	50	80	49	51	9049000160140	5	0.80	16.050	9042670160500
50	18	40	50	80	49	51	9049000160140	5	1.50	18.050	9042670180500
50	20	42	50	80	51	52	9049000200140	5	1.20	20.050	9042670200500
63	6	26	50	60	37	25	9049000060140	5	1.00	6.063	9042670060630
63	8	28	50	60	37	26	9049000080140	5	1.00	8.063	9042670080630
63	10	30	50	65	41	31	9049000100140	5	1.00	10.063	9042670100630
63	12	32	50	75	46	41	9049000120140	5	1.10	12.063	9042670120630
63	14	34	50	75	46	42	9049000120140	5	1.00	14.063	9042670140630
63	16	38	50	80	49	48	9049000160140	5	1.10	16.063	9042670160630
63	18	40	50	80	49	48	9049000160140	5	1.20	18.063	9042670180630
63	20	42	50	80	51	49	9049000201140	5	1.20	20.063	9042670200630
63	25	50	63	95	57	63	9049000201140	5	2.00	25.063	9042670250630
63	32	62.5	75	100	61	60	9049000201140	5	2.00	32.063	9042670320630

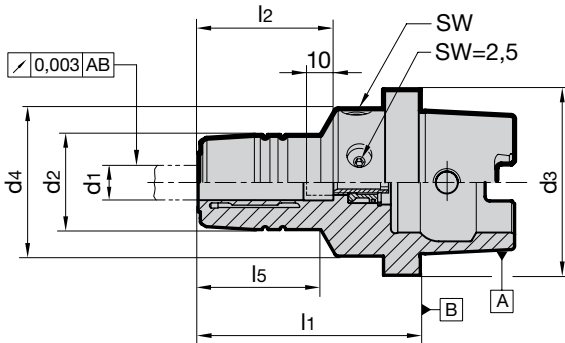
HSK-C hydraulic chucks with radial length adjustment

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- robust, radially operated length setting
- max. deviation f. concentricity 3 µm
- for tool shank tolerance h6
- to DIN 69882-7

Scope of delivery

- incl. hexagon chuck key Guhring no. 4912
- incl. hexagon key inserts for radial length setting



Series Number 4295

HSK-C d ₃	for shank Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	SW	kg	Order Code	EDP Numbers
40	6	26	33.5	60	37	32.5	5	0.50	6.040	9042950060400
40	8	28	33.5	60	37	33	5	0.50	8.040	9042950080400
40	10	30	33.5	65	41	38.5	5	0.50	10.040	9042950100400
40	12	32	33.5	70	46	44	5	0.60	12.040	9042950120400
50	6	26	40	60	37	29.5	5	0.60	6.050	9042950060500
50	8	28	40	60	37	29.5	5	0.60	8.050	9042950080500
50	10	30	40	65	41	35.5	5	0.60	10.050	9042950100500
50	12	32	40	75	46	46	5	0.80	12.050	9042950120500
50	14	34	40	75	46	47	5	0.90	14.050	9042950140500
50	16	38	50	80	49	50	5	0.90	16.050	9042950160500
50	18	40	50	80	49	50	5	1.00	18.050	9042950180500
50	20	42	50	80	51	50	5	1.00	20.050	9042950200500
63	6	26	50	60	37	26	5	1.00	6.063	9042950060630
63	8	28	50	60	37	26	5	1.10	8.063	9042950080630
63	10	30	50	65	41	32	5	1.10	10.063	9042950100630
63	12	32	50	75	46	42.5	5	1.10	12.063	9042950120630
63	14	34	50	75	46	43	5	1.10	14.063	9042950140630
63	16	38	50	80	49	49	5	1.20	16.063	9042950160630
63	18	40	50	80	49	50	5	1.20	18.063	9042950180630
63	20	42	50	80	51	50.5	5	1.20	20.063	9042950200630
63	25	50	63	95	57	52	6	1.80	25.063	9042950250630
63	32	63	63	100	61	60	6	2.30	32.063	9042950320630

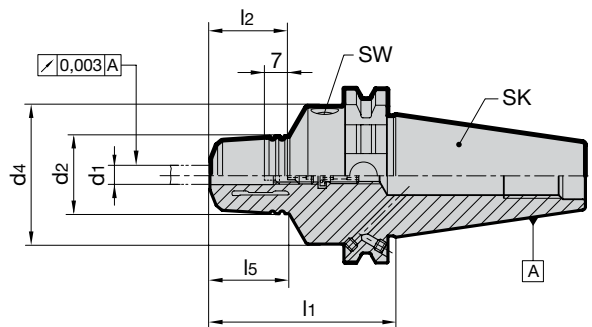
ISO taper hydraulic chucks HMC 3000 for clamping small diameters

Product information

- perfect concentricity: $< 3 \mu\text{m}$ at 10xd1
- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- ISO taper to DIN 69871 form AD/B
- high clamping force
- quick, simple handling and accurate length setting
- IC and GÜHROJET peripheral cooling ensure optimal chip evacuation and tool lubrication

Scope of delivery

- incl. length adjustment screw
- incl. hexagon chuck key Guhring no. 4912
- order pull studs Guhring no. 4925, 4926 separately



GÜHROJET

Series Number

4619

									EDP Numbers
ISO taper	for shank Ø d_1 h6 mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	l_5 mm	SW	Order Code	
40	3	28	49.5	84.5	34	34	5	3.040	9046190030400
40	4	28	49.5	84.5	34	34	5	4.040	9046190040400
40	5	28	49.5	84.5	34	34	5	5.040	9046190050400

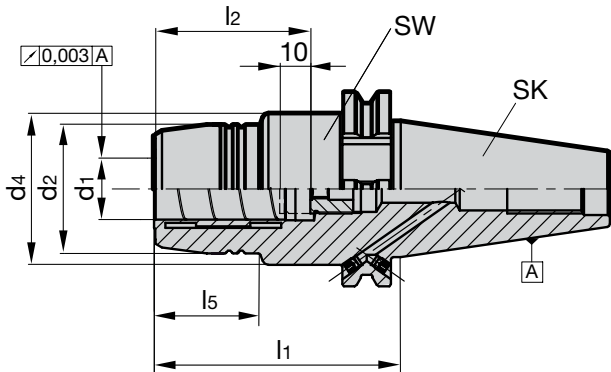
ISO taper hydraulic chucks with increased clamping force

Product information

- ISO taper to DIN 69871 form AD/B
- form B supplied with threaded pins in bores
- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- axial length setting
- for tool shank tolerance h6

Scope of delivery

- incl. adjustment screw Guhring no. 4900
- incl. hexagon chuck key Guhring no. 4912
- order pull studs Guhring no. 4925, 4926 separately



Series Number **4213**

ISO taper	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw 4900 ...	SW	kg	Order Code	EDP Numbers
40	6	26	49.5	80.5	37	29.5	9049000060140	5	1.50	6.040	9042130060400
40	8	28	49.5	80.5	37	30	9049000080140	5	1.50	8.040	9042130080400
40	10	30	49.5	80.5	41	31	9049000100140	5	1.50	10.040	9042130100400
40	12	32	49.5	80.5	46	31.5	9049000120140	5	1.50	12.040	9042130120400
40	14	34	49.5	80.5	46	31.5	9049000120140	5	1.50	14.040	9042130140400
40	16	38	49.5	80.5	49	33	9049000160140	5	1.50	16.040	9042130160400
40	18	40	49.5	80.5	49	33	9049000201140	5	1.50	18.040	9042130180400
40	20	49.5	49.5	64.5	51	-	9049000201140	6	1.50	20.040	9042130200400
40	20	42	49.5	80.5	51	34	9049000201140	6	1.50	20.140	9042130201400
40	20	42	49.5	110	51	34	9049000200140	6	2.00	20.240	9042130202400
40	25	49.5	49.5	80.5	57	61.5	9049000200140	6	2.00	25.040	9042130250400
40	32	63	80	80.5	61	25.5	9049000200140	6	2.00	32.040	9042130320400
50	12	32	49.5	80.5	46	31.5	9049000120140	5	3.50	12.050	9042130120500
50	20	42	49.5	80.5	51	34	9049000201140	6	4.00	20.050	9042130200500
50	20	42	49.5	110	51	34	9049000201140	6	4.00	20.150	9042130201500
50	32	72	72	81	61	-	9049000201140	6	4.00	32.050	9042130320500

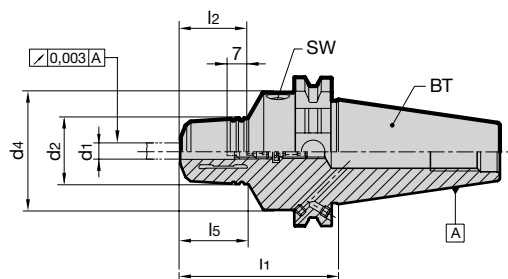
MAS/BT hydraulic chucks HMC 3000 for clamping small diameters

Product information

- perfect concentricity: $< 3 \mu\text{m}$ at 10x d1
- balancing quality: G2.5 / 25,000 rev./min or $U < 1\text{gmm}$
- MAS/BT to JIS B 6339 form AD/B (*: version AD without coolant supply over collar)
- high clamping force
- quick, simple handling and accurate length setting
- IC and GÜHROJET peripheral cooling ensure optimal chip evacuation and tool lubrication

Scope of delivery

- incl. length adjustment screw
- incl. hexagon chuck key Guhring no. 4912
- order pull studs Guhring no. 4927, 4928 separately



GÜHROJET

Series Number

4620

BT	for shank Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	SW	Order Code	EDP Numbers
30*	3	28	-	55	34	22.5	4	3.030	9046200030300
30*	4	28	-	55	34	22.5	4	4.030	9046200040300
30*	5	28	-	55	34	22.5	4	5.030	9046200050300
40	3	28	44.5	94	34	48.5	5	3.040	9046200030400
40	4	28	44.5	94	34	48.5	5	4.040	9046200040400
40	5	28	44.5	94	34	48.5	5	5.040	9046200050400

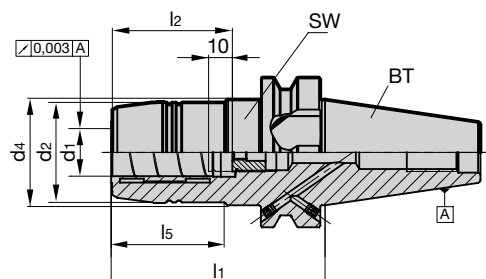
MAS/BT hydraulic chucks with increased clamping force

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- axial length setting
- max. deviation f. concentricity 3 µm
- for tool shank tolerance h6
- MAS/BT to JIS B 6339 form AD/B
(*: version AD without coolant supply over collar)

Scope of delivery

- incl. adjustment screw Guhring no. 4900
- incl. hexagon chuck key Guhring no. 4912
- order pull studs Guhring no. 4927, 4928 separately



Series Number

4221

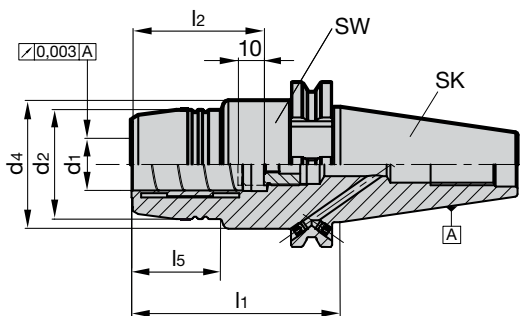
BT	for shank Ø d _{1 h6} mm/inch	d ₂ mm/inch	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw 4900 ...	SW	kg	Order Code	EDP Numbers
30*	6	26	-	51	37	18	9049000060140	4	0.60	6.030	9042210060300
30*	8	28	-	51	37	18.5	9049000120140	4	0.60	8.030	9042210080300
30*	10	30	-	51	41	19	9049000100140	4	0.60	10.030	9042210100300
30*	12	32	-	51	46	19.5	9049000120140	4	0.60	12.030	9042210120300
30*	16	38	-	90	49	50	9049000160140	4	1.00	16.030	9042210160300
30*	20	42	-	90	51	50	9049000201140	5	1.00	20.030	9042210200300
30*	1/4	26	-	75	37	52	9049000060140	4	1.00	106.030	9042211060300
30*	3/8	30	-	80	41	57	9049000120140	4	1.00	109.030	9042211090300
30*	1/2	32	-	90	46	50	9049000120140	4	1.00	112.030	9042211120300
30*	5/8	38	-	90	49	50	9049000160140	4	1.00	115.030	9042211150300
30*	3/4	40	-	90	49	50	9049000160140	5	1.00	119.030	9042211190300
40	6	26	44.5	90	37	43	9049000060140	5	0.25	6.040	9042210060400
40	8	28	44.5	90	37	44.5	9049000080140	5	0.45	8.040	9042210080400
40	10	30	44.5	90	41	44.5	9049000100140	5	0.70	10.040	9042210100400
40	12	32	44.5	90	46	44.5	9049000120140	5	1.40	12.040	9042210120400
40	14	34	44.5	90	46	44.5	9049000120140	5	0.14	14.040	9042210140400
40	16	38	44.5	90	49	47.5	9049000160140	5	0.18	16.040	9042210160400
40	18	40	44.5	90	49	47.5	9049000160140	5	0.23	18.040	9042210180400
40	20	49.5	-	72.5	51	45.5	9049000201140	6	1.40	20.040	9042210200400
40	20	42	44.5	90	51	47.5	9049000201140	6	1.50	20.140	9042210201400
40	25	49.5	49.5	83	57	56	9049000201140	6	0.42	25.040	9042210250400
40	32	63	80	83	61	25.5	9049000201140	6	0.68	32.040	9042210320400
50	12	32	44.5	90	46	34	9049000120500	5	0.12	12.050	9042210120500
50	20	42	44.5	90	51	34	9049000200500	6	4.00	20.050	9042210200500
50	32	72	72	90	61	-	9049000320500	6	4.10	32.050	9042210320500

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- Taper according to ANSI/ASME B 5.50
- Coolant through center and also through flange (plugged with set screws when supplied)
- Axial length setting
- CAT 40 - 5/8 x 11 retention knob thread
- CAT 50 - 1" x 8 retention knob thread

Scope of delivery

- Including setting screw, Guhring no. 4900
- Including hex wrench, Guhring no. 4912
- Special dimensions on request



Series Number 4216

CAT	for clamping dia. d1 in h6 inch	d2 mm	d4 mm	l1 mm	l2 mm	l5 mm	SW	incl. setting screw 4900 ...	Order Code	EDP Numbers
40	1/4	26	44.5	64	37	29.5	5	9049000060140	106.040	9042161060400
40	3/8	30	44.5	64	41	31	5	9049000080140	109.040	9042161090400
40	1/2	32	44.5	64	46	31.5	5	9049000120140	112.040	9042161120400
40	5/8	38	44.5	64	49	33	5	9049000160140	115.040	9042161150400
40	3/4	40	44.5	64	49	33	5	9049000160140	119.040	9042161190400
40	1	49.5	44.5	81	57	40	6	9049000201140	125.040	9042161250400
40	1 1/4	63	80	81	61	25.5	6	9049000201140	131.040	9042161310400
50	1/4	26	69.9	81	37	29.5	5	9049000060140	106.050	9042161060500
50	3/8	30	69.9	81	41	31	5	9049000080140	109.050	9042161090500
50	1/2	32	69.9	81	46	31.5	5	9049000120140	112.050	9042161120500
50	5/8	38	69.9	81	49	33	5	9049000160140	115.050	9042161150500
50	3/4	40	69.9	81	49	33	5	9049000201140	119.050	9042161190500
50	1	57	69.9	81	57	40	6	9049000201140	125.050	9042161250500
50	1 1/4	63	69.9	81	61	45	6	9049000201140	131.050	9042161310500
40	6	26	44.5	64	37	29.5	5	9049000060140	6.040	9042160060400
40	8	28	44.5	64	37	30	5	9049000080140	8.040	9042160080400
40	10	30	44.5	64	41	31	5	9049000100140	10.040	9042160100400
40	12	32	44.5	64	46	31.5	5	9049000120140	12.040	9042160120400
40	14	34	44.5	64	46	31.5	5	9049000120140	14.040	9042160140400
40	16	38	44.5	64	49	33	5	9049000160140	16.040	9042160160400
40	18	40	44.5	64	49	33	5	9049000160140	18.040	9042160180400
40	20	42	44.5	64	51	34	5	9049000201140	20.040	9042160200400
40	25	49.5	44.5	81	57	40	6	9049000201140	25.040	9042160250400
40	32	63	80	81	61	25.5	6	9049000201140	32.040	9042160320400
50	6	26	69.9	81	37	29.5	5	9049000060140	6.050	9042160060500
50	8	28	69.9	81	37	30	5	9049000080140	8.050	9042160080500
50	10	30	69.9	81	41	31	5	9049000100140	10.050	9042160100500
50	12	32	69.9	81	46	31.5	5	9049000120140	12.050	9042160120500
50	14	34	69.9	81	46	31.5	5	9049000120140	14.050	9042160140500
50	16	38	69.9	81	49	33	5	9049000160140	16.050	9042160160500
50	18	40	69.9	81	49	33	5	9049000160140	18.050	9042160180500
50	20	42	69.9	81	51	34	5	9049000201140	20.050	9042160200500
50	25	57	69.9	81	57	40	6	9049000201140	25.050	9042160250500
50	32	63	69.9	81	61	45	6	9049000201140	32.050	9042160320500

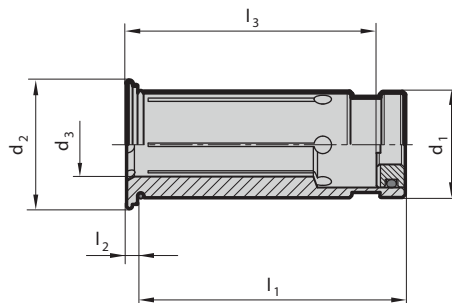
Reduction sleeves for hydraulic chucks, sealed

Product information

- for clamping smaller shank-Ø in hydraulic chucks
- clamping-Ø for tool shank tolerance h6
- concentricity $\leq 2 \mu\text{m}$
- with adjustable limit stop
- the application of reduction sleeves makes it possible to increase the permissible transferable torque by approx. 25% in comparison to direct clamping

Scope of delivery

- incl. stop element
- special dimensions on request



Series Number

4368

d_1 inch/mm	for shank Ø $d_{3 \text{ h6}}$ inch/mm	d_2 mm	l_1 mm	l_2 mm	l_3 mm	Order Code	EDP Numbers
1/2	1/8	16.5	45	2	26.5	3.013	9043680030130
1/2	3/16	16.5	45	2	26.5	4.013	9043680040130
1/2	1/4	16.5	45	2	26.5	6.013	9043680060130
1/2	5/16	16.5	45	2	26.5	8.013	9043680080130
1/2	3/8	16.5	45	2	26.5	9.013	9043680090130
1/2	3	16.5	45	2	26.5	103.013	9043681030130
1/2	4	16.5	45	2	26.5	104.013	9043681040130
1/2	5	16.5	45	2	26.5	105.013	9043681050130
1/2	6	16.5	45	2	26.5	106.013	9043681060130
1/2	8	16.5	45	2	34.5	108.013	9043681080130
3/4	1/8	24	50.5	2	28.5	3.019	9043680030190
3/4	3/16	24	50.5	2	28.5	4.019	9043680040190
3/4	1/4	24	50.5	2	37.5	6.019	9043680060190
3/4	5/16	24	50.5	2	37.5	8.019	9043680080190
3/4	3/8	24	50.5	2	42.5	9.019	9043680090190
3/4	7/16	24	50.5	2	47.5	11.019	9043680110190
3/4	1/2	24	50.5	2	47.5	13.019	9043680130190
3/4	9/16	24	50.5	2	47.5	14.019	9043680140190
3/4	5/8	24	50.5	2	47.5	15.019	9043680150190
3/4	3	24	50.5	2	28.5	103.019	9043681030190
3/4	4	24	50.5	2	28.5	104.019	9043681040190
3/4	5	24	50.5	2	28.5	105.019	9043681050190
3/4	6	24	50.5	2	37.5	106.019	9043681060190
3/4	8	24	50.5	2	37.5	108.019	9043681080190
3/4	10	24	50.5	2	42.5	110.019	9043681100190
3/4	12	24	50.5	2	47.5	112.019	9043681120190
3/4	14	24	50.5	2	47.5	114.019	9043681140190
1 1/4	1/4	35.5	60.5	2	37.5	6.031	9043680060310
1 1/4	5/16	35.5	60.5	2	37.5	8.031	9043680080310
1 1/4	3/8	35.5	60.5	2	37.5	9.031	9043680090310
1 1/4	7/16	35.5	60.5	2	40.5	11.031	9043680110310
1 1/4	1/2	35.5	60.5	2	44.5	13.031	9043680130310
1 1/4	9/16	35.5	60.5	2	44.5	14.031	9043680140310
1 1/4	5/8	35.5	60.5	2	50.5	15.031	9043680150310
1 1/4	11/16	35.5	60.5	2	50.5	17.031	9043680170310
1 1/4	3/4	35.5	60.5	2	50.5	19.031	9043680190310
1 1/4	13/16	35.5	60.5	2	50.5	20.031	9043680200310
1 1/4	7/8	35.5	60.5	2	50.5	22.031	9043680220310
1 1/4	15/16	35.5	60.5	2	58.5	24.031	9043680240310
1 1/4	1	35.5	60.5	2	58.5	25.031	9043680250310
1 1/4	8	35.5	60.5	2	37.5	108.031	9043681080310
1 1/4	10	35.5	60.5	2	40.5	110.031	9043681100310
1 1/4	12	35.5	60.5	2	44.5	112.031	9043681120310
1 1/4	14	35.5	60.5	2	44.5	114.031	9043681140310
1 1/4	16	35.5	60.5	2	50.5	116.031	9043681160310
1 1/4	18	35.5	60.5	2	50.5	118.031	9043681180310

Reduction sleeves for hydraulic chucks, sealed

Series Number							4368
d ₁ inch/mm	for shank Ø d _{3 h6} inch/mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	Order Code	EDP Numbers
1 1/4	20	35.5	60.5	2	50.5	120.031	9043681200310
1 1/4	25	35.5	60.5	2	58.5	125.031	9043681250310
12	1/8	16.5	45	2	26.5	103.012	9043681030120
12	3/16	16.5	45	2	26.5	104.012	9043681040120
12	1/4	16.5	45	2	34.5	106.012	9043681060120
12	5/16	16.5	45	2	34.5	108.012	9043681080120
12	3/8	16.5	45	2	34.5	109.012	9043681090120
12	3	16.5	45	2	26.5	3.012	9043680030120
12	4	16.5	45	2	26.5	4.012	9043680040120
12	5	16.5	45	2	26.5	5.012	9043680050120
12	6	16.5	45	2	34.5	6.012	9043680060120
12	8	16.5	45	2	34.5	8.012	9043680080120
20	1/8	24	50.5	2	28.5	103.020	9043681030200
20	3/16	24	50.5	2	28.5	104.020	9043681040200
20	1/4	24	50.5	2	37.5	106.020	9043681060200
20	5/16	24	50.5	2	37.5	108.020	9043681080200
20	3/8	24	50.5	2	42.5	109.020	9043681090200
20	7/16	24	50.5	2	42.5	111.020	9043681110200
20	1/2	24	50.5	2	47.5	113.020	9043681130200
20	9/16	24	50.5	2	47.5	114.020	9043681140200
20	5/8	24	50.5	2	47.5	115.020	9043681150200
20	3	24	50.5	2	28.5	3.020	9043680030200
20	4	24	50.5	2	28.5	4.020	9043680040200
20	5	24	50.5	2	28.5	5.020	9043680050200
20	6	24	50.5	2	37.5	6.020	9043680060200
20	7	24	50.5	2	37.5	7.020	9043680070200
20	8	24	50.5	2	37.5	8.020	9043680080200
20	9	24	50.5	2	42.5	9.020	9043680090200
20	10	24	50.5	2	42.5	10.020	9043680100200
20	11	24	50.5	2	42.5	11.020	9043680110200
20	12	24	50.5	2	47.5	12.020	9043680120200
20	13	24	50.5	2	47.5	13.020	9043680130200
20	14	24	50.5	2	47.5	14.020	9043680140200
20	15	24	50.5	2	47.5	15.020	9043680150200
20	16	24	50.5	2	47.5	16.020	9043680160200
32	1/4	35.5	60.5	2	37.5	106.032	9043681060320
32	5/16	35.5	60.5	2	37.5	108.032	9043681080320
32	3/8	35.5	60.5	2	37.5	109.032	9043681090320
32	7/16	35.5	60.5	2	40.5	111.032	9043681110320
32	1/2	35.5	60.5	2	44.5	113.032	9043681130320
32	9/16	35.5	60.5	2	50.5	114.032	9043681140320
32	5/8	35.5	60.5	2	50.5	115.032	9043681150320
32	11/16	35.5	60.5	2	50.5	117.032	9043681170320
32	3/4	35.5	60.5	2	50.5	119.032	9043681190320
32	13/16	35.5	60.5	2	50.5	120.032	9043681200320
32	7/8	35.5	60.5	2	50.5	122.032	9043681220320
32	15/16	35.5	60.5	2	50.5	124.032	9043681240320
32	1	35.5	60.5	2	58.5	125.032	9043681250320
32	6	35.5	60.5	2	37.5	6.032	9043680060320
32	8	35.5	60.5	2	37.5	8.032	9043680080320
32	10	35.5	60.5	2	40.5	10.032	9043680100320
32	12	35.5	60.5	2	44.5	12.032	9043680120320
32	14	35.5	60.5	2	44.5	14.032	9043680140320
32	16	35.5	60.5	2	50.5	16.032	9043680160320
32	18	35.5	60.5	2	50.5	18.032	9043680180320
32	20	35.5	60.5	2	50.5	20.032	9043680200320
32	25	35.5	60.5	2	58.5	25.032	9043680250320

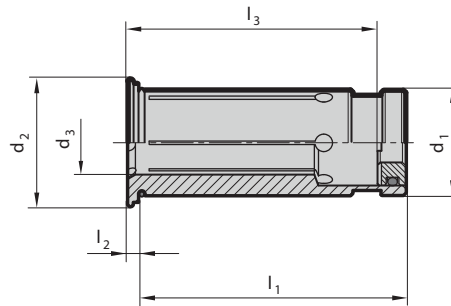
GÜHROJET reduction sleeves for hydraulic chucks with peripheral cooling

Product information

- for clamping smaller shank-Ø in hydraulic chucks
- clamping-Ø for tool shank tolerance h6
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- concentricity $\leq 2 \mu\text{m}$
- with adjustable limit stop
- the application of reduction sleeves makes it possible to increase the permissible transferable torque by approx. 25% in comparison to direct clamping

Scope of delivery

- incl. stop element
- special dimensions on request



Series Number

4369

d_1 inch/mm	for shank Ø $d_{3 \text{ h6}}$ inch/mm	d_2 mm	l_1 mm	l_2 mm	l_3 mm	Order Code	EDP Numbers
1/2	1/8	16.5	45	2	26.5	3.013	9043690030130
1/2	3/16	16.5	45	2	26.5	4.013	9043690040130
1/2	1/4	16.5	45	2	26.5	6.013	9043690060130
1/2	5/16	16.5	45	2	26.5	8.013	9043690080130
1/2	3/8	16.5	45	2	26.5	9.013	9043690090130
3/4	1/8	24	50.5	2	28.5	3.019	9043690030190
3/4	3/16	24	50.5	2	28.5	4.019	9043690040190
3/4	1/4	24	50.5	2	37.5	6.019	9043690060190
3/4	5/16	24	50.5	2	37.5	8.019	9043690080190
3/4	3/8	24	50.5	2	42.5	9.019	9043690090190
3/4	7/16	24	50.5	2	42.5	11.019	9043690110190
3/4	1/2	24	50.5	2	47.5	13.019	9043690130190
3/4	9/16	24	50.5	2	47.5	14.019	9043690140190
3/4	5/8	24	50.5	2	47.5	15.019	9043690150190
1 1/4	1/4	35.5	60.5	2	37.5	6.031	9043690060310
1 1/4	5/16	35.5	60.5	2	37.5	8.031	9043690080310
1 1/4	3/8	35.5	60.5	2	37.5	9.031	9043690090310
1 1/4	1/2	35.5	60.5	2	44.5	13.031	9043690130310
1 1/4	9/16	35.5	60.5	2	44.5	14.031	9043690140310
1 1/4	5/8	35.5	60.5	2	50.5	15.031	9043690150310
1 1/4	11/16	35.5	60.5	2	50.5	17.031	9043690170310
1 1/4	3/4	35.5	60.5	2	50.5	19.031	9043690190310
1 1/4	7/8	35.5	60.5	2	50.5	22.031	9043690220310
1 1/4	1	35.5	60.5	2	58.5	25.031	9043690250310
1/2	5	16.5	45	2	26.5	105.013	9043691050130
1/2	6	16.5	45	2	26.5	106.013	9043691060130
3/4	3	24	50.5	2	28.5	103.019	9043691030190
3/4	4	24	50.5	2	28.5	104.019	9043691040190
3/4	6	24	50.5	2	37.5	106.019	9043691060190
3/4	8	24	50.5	2	37.5	108.019	9043691080190
3/4	10	24	50.5	2	42.5	110.019	9043691100190
3/4	12	24	50.5	2	47.5	112.019	9043691120190
3/4	14	24	50.5	2	47.5	114.019	9043691140190
1 1/4	20	35.5	60.5	2	50.5	120.031	9043691200310
1 1/4	25	35.5	60.5	2	58.5	125.031	9043691250310
12	1/8	16.5	45	2	26.5	103.012	9043691030120
12	3/16	16.5	45	2	26.5	104.012	9043691040120
12	1/4	16.5	45	2	34.5	106.012	9043691060120
12	5/16	16.5	45	2	34.5	108.012	9043691080120
12	3/8	16.5	45	2	34.5	109.012	9043691090120

GÜHROJET reduction sleeves for hydraulic chucks with peripheral cooling

Series Number							4369
d ₁ inch/mm	for shank Ø d _{3 h6} inch/mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	Order Code	EDP Numbers
20	1/8	24	50.5	2	28.5	103.020	9043691030200
20	3/16	24	50.5	2	28.5	104.020	9043691040200
20	1/4	24	50.5	2	37.5	106.020	9043691060200
20	5/16	24	50.5	2	37.5	108.020	9043691080200
20	3/8	24	50.5	2	42.5	109.020	9043691090200
20	7/16	24	50.5	2	42.5	111.020	9043691110200
20	1/2	24	50.5	2	47.5	113.020	9043691130200
20	9/16	24	50.5	2	47.5	114.020	9043691140200
20	5/8	24	50.5	2	47.5	115.020	9043691150200
32	1/2	35.5	60.5	2	44.5	113.032	9043691130320
32	5/8	35.5	60.5	2	50.5	115.032	9043691150320
32	3/4	35.5	60.5	2	50.5	119.032	9043691190320
32	7/8	35.5	60.5	2	50.5	122.032	9043691220320
32	1	35.5	60.5	2	58.5	125.032	9043691250320
12	3	16.5	45	2	26.5	3.012	9043690030120
12	4	16.5	45	2	26.5	4.012	9043690040120
12	5	16.5	45	2	26.5	5.012	9043690050120
12	6	16.5	45	2	34.5	6.012	9043690060120
12	8	16.5	45	2	34.5	8.012	9043690080120
20	3	24	50.5	2	28.5	3.020	9043690030200
20	4	24	50.5	2	28.5	4.020	9043690040200
20	5	24	50.5	2	28.5	5.020	9043690050200
20	6	24	50.5	2	37.5	6.020	9043690060200
20	7	24	50.5	2	37.5	7.020	9043690070200
20	8	24	50.5	2	37.5	8.020	9043690080200
20	9	24	50.5	2	42.5	9.020	9043690090200
20	10	24	50.5	2	42.5	10.020	9043690100200
20	11	24	50.5	2	42.5	11.020	9043690110200
20	12	24	50.5	2	47.5	12.020	9043690120200
20	13	24	50.5	2	47.5	13.020	9043690130200
20	14	24	50.5	2	47.5	14.020	9043690140200
20	15	24	50.5	2	47.5	15.020	9043690150200
20	16	24	50.5	2	47.5	16.020	9043690160200
32	6	35.5	60.5	2	37.5	6.032	9043690060320
32	8	35.5	60.5	2	37.5	8.032	9043690080320
32	10	35.5	60.5	2	40.5	10.032	9043690100320
32	12	35.5	60.5	2	44.5	12.032	9043690120320
32	14	35.5	60.5	2	44.5	14.032	9043690140320
32	16	35.5	60.5	2	50.5	16.032	9043690160320
32	18	35.5	60.5	2	50.5	18.032	9043690180320
32	20	35.5	60.5	2	50.5	20.032	9043690200320
32	25	35.5	60.5	2	58.5	25.032	9043690250320

Extraction key for reduction sleeves

Product information

- for Guhring no. 4368 and 4369
- for the simple removal of reduction sleeves



Series Number		4099
for reduction sleeves d_1		EDP Numbers
12 to 32		9040990010000

Senso 3000

Product information

- accurate, quick and simple measuring of the clamping force of hydraulic chucks
- mobility allows measuring within machines and fixtures
- determines clamping force via a pressure sensitive plug gauge
- display of absolute measuring value or percentage clamping force in relation to reference value

Scope of delivery

- incl. carbide proofing bar for determining the torque
- incl. type CR 2430 battery
- incl. sturdy case

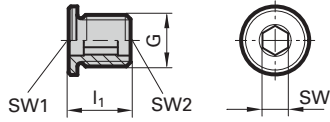


Series Number		4038
clamping diameter mm	kg	EDP Numbers
6.0	1.1	9040380060000
8.0	1.1	9040380080000
10.0	1.3	9040380100000
12.0	1.3	9040380120000
14.0	1.3	9040380140000
16.0	1.3	9040380160000
18.0	1.5	9040380180000
20.0	1.5	9040380200000
25.0	2.0	9040380250000
32.0	2.5	9040380320000

Adjustment screws

Product information

- for hydraulic chucks
- for conventional internal cooling
- with facing stop for standard shank ends
- for HSK 32/40 with clamping-Ø 10.0 and 12.0 mm use code no. 8.014

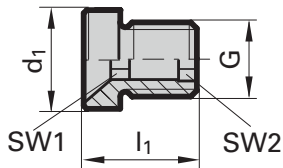


Series Number					4900
for clamping-Ø	l_1 mm	G	SW1	SW2	EDP Numbers
6	14.0	M5	2.5	2.5	9049000060140
8	14.0	M6	3.0	3.0	9049000080140
10	14.0	M8x1	4.0	4.0	9049000100140
12/14	14.0	M10x1	5.0	5.0	9049000120140
16/18	14.0	M12x1	6.0	6.0	9049000160140
20/25/32	14.0	M16x1	6.0	6.0	9049000200140
20/25/32	14.0	M16x1	8.0	6.0	9049000201140

MQL length pre-setting screws for the conversion

Product information

- for hydraulic chucks and shrink fit chucks
- optimised for MQL with special geometry
- with tapered stop for MQL conical shank ends

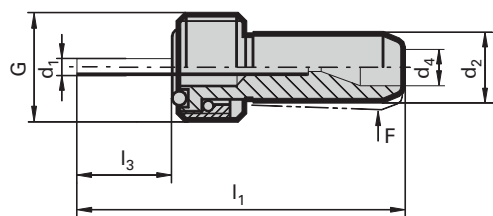


Series Number					4919
d_1 mm	l_1 mm	G	SW1	SW2	EDP Numbers
6	14.8	M5	2.5	2.5	9049190060000
8	15.6	M6	3.0	3.0	9049190080000
10	16.1	M8x1	4.0	4.0	9049190100000
10	16.6	M8x1	3.0	3.0	9049190100400
10	16.6	M6	3.0	3.0	9049190100320
12	16.6	M10x1	5.0	5.0	9049190120000
12	17.6	M6	3.0	3.0	9049190120320
14	17.6	M10x1	5.0	5.0	9049190140000
14	18.6	M6	3.0	3.0	9049190140400
16	18.6	M12x1	5.0	5.0	9049190160000
16	19.6	M6	3.0	3.0	9049190160400
18	19.6	M12x1	5.0	5.0	9049190180000
20	20.6	M16x1	5.0	5.0	9049190200000
25	22.6	M16x1	8.0	6.0	9049190250000
32	26.1	M16x1	8.0	6.0	9049190320000

MQL coolant delivery sets HSK-A for the conversion

Product information

- replace conventional coolant delivery sets, Guhring no. 4949, when applying MQL
- for hydraulic chucks to DIN 69882-7



Scope of delivery

- complete MQL coolant delivery set consisting of :
coolant pipe, cap nut
MQL tube and O-rings



Series Number 4924

for HSK-A	clamping-Ø mm	d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₃ mm	G	EDP Numbers
32	6	2.5	6	3.5	54.2	28.0	M10x1	9049240320100
32	8	3.0	6	3.5	54.3	28.1	M10x1	9049240320300
32	10	3.0	6	3.5	55.8	29.6	M10x1	9049240320500
32	12	3.0	6	3.5	56.6	30.4	M10x1	9049240320700
40	6	2.5	8	4.0	45.1	16.0	M12x1	9049240400100
40	8	3.0	8	4.0	56.2	15.8	M12x1	9049240400300
40	10	3.0	8	4.0	46.3	17.1	M12x1	9049240400500
40	12	3.0	8	4.0	46.7	17.5	M12x1	9049240400700
50	6	2.5	10	4.0	44.6	11.9	M16x1	9049240500100
50	8	3.0	10	4.0	46.1	13.4	M16x1	9049240500300
50	10	4.0	10	4.0	45.7	13.0	M16x1	9049240500500
50	12	5.0	10	4.0	46.1	13.4	M16x1	9049240500700
50	14	5.0	10	4.0	51.5	18.8	M16x1	9049240500900
50	16	5.0	10	4.0	52.8	20.1	M16x1	9049240501100
50	18	5.0	10	4.0	53.2	20.5	M16x1	9049240501300
50	20	5.0	10	4.0	51.5	18.8	M16x1	9049240501500
63	6	2.5	12	4.0	45.7	9.5	M18x1	9049240630100
63	6	2.5	12	4.0	126.9	90.6	M18x1	9049240630110
63	6	2.5	12	4.0	176.9	140.6	M18x1	9049240630120
63	8	3.0	12	4.0	46.0	9.8	M18x1	9049240630300
63	8	3.0	12	4.0	126.1	89.9	M18x1	9049240630310
63	8	3.0	12	4.0	176.2	139.9	M18x1	9049240630320
63	10	4.0	12	4.0	51.7	15.5	M18x1	9049240630500
63	10	4.0	12	4.0	122.2	86.0	M18x1	9049240630510
63	10	4.0	12	4.0	172.2	135.9	M18x1	9049240630520
63	12/14/20	5.0	12	4.0	52.1	15.9	M18x1	9049240630700
63	16/18	5.0	12	4.0	53.8	17.6	M18x1	9049240630900
63	12/14	5.0	12	4.0	117.6	81.4	M18x1	9049240630910
63	12/14	5.0	12	4.0	167.6	131.3	M18x1	9049240630920
63	16	5.0	12	4.0	114.3	78.0	M18x1	9049240631110
63	25/32	6.0	12	4.0	77.0	40.8	M18x1	9049240631200
63	18	5.0	12	4.0	114.6	78.3	M18x1	9049240631310
63	16/18	5.0	12	4.0	164.6	128.3	M18x1	9049240631320
63	20	5.0	12	4.0	112.9	76.6	M18x1	9049240631510
63	20	5.0	12	4.0	162.9	126.6	M18x1	9049240631520
80	6	2.5	14	4.0	44.8	5.5	M20x1.5	9049240800100
80	8	3.0	14	4.0	44.9	5.6	M20x1.5	9049240800300
80	10	4.0	14	4.0	50.9	11.6	M20x1.5	9049240800500
80	12	5.0	14	4.0	51.3	12.0	M20x1.5	9049240800700
80	14	5.0	14	4.0	51.6	12.3	M20x1.5	9049240800900
80	16	5.0	14	4.0	57.9	18.6	M20x1.5	9049240801100
80	18	5.0	14	4.0	58.3	19.0	M20x1.5	9049240801300
80	20	5.0	14	4.0	56.6	17.3	M20x1.5	9049240801500
80	25	6.0	14	4.0	53.1	13.8	M20x1.5	9049240801700
80	32	6.0	14	4.0	77.2	37.9	M20x1.5	9049240801900
100	6	2.5	16	4.0	53.0	9.2	M24x1.5	9049241000100
100	8	3.0	16	4.0	53.7	9.9	M24x1.5	9049241000300
100	10	4.0	16	4.0	63.3	19.5	M24x1.5	9049241000500
100	12	5.0	16	4.0	63.8	20.0	M24x1.5	9049241000700
100	14	5.0	16	4.0	64.2	20.4	M24x1.5	9049241000900
100	16	5.0	16	4.0	65.4	21.6	M24x1.5	9049241001100
100	18	5.0	16	4.0	65.8	22.0	M24x1.5	9049241001300
100	20	5.0	16	4.0	69.2	25.4	M24x1.5	9049241001500
100	25	6.0	16	4.0	68.6	24.8	M24x1.5	9049241001700
100	32	6.0	16	4.0	64.6	20.8	M24x1.5	9049241001900

SHRINK FIT

SHRINK FIT TOOL HOLDERS

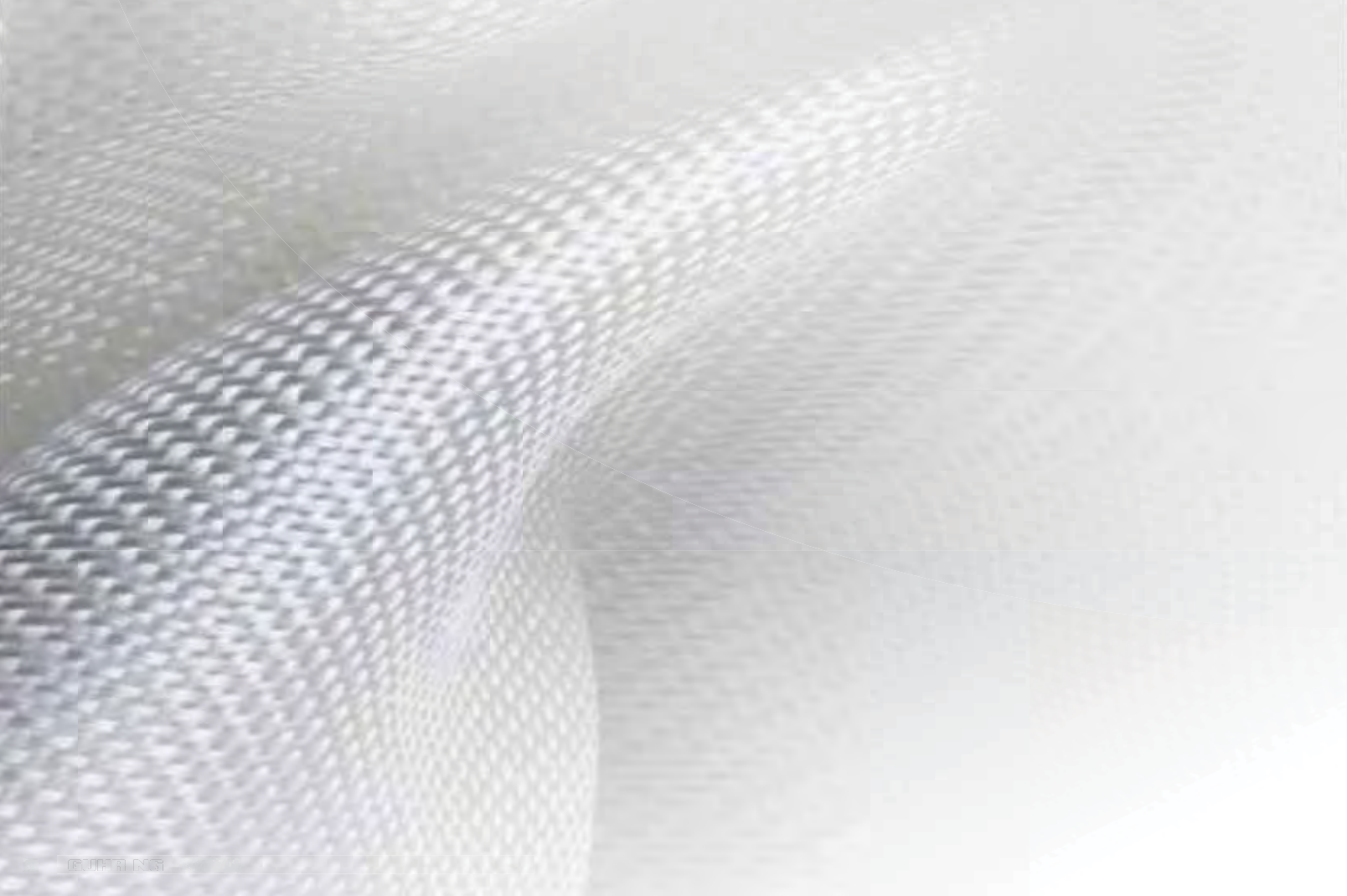


SHRINK FIT

HIGH CLAMPING FORCE

ACCURATE AND UNIVERSAL

HIGH RIGIDITY





*HIGHEST OPERATIONAL
SAFETY THANKS
TO TEMPERATURE
INDICATOR*



*PVD-COATING FOR
LONG TOOL LIFE*



*LENGTH SETTING
SCREW WITH AXIAL
DAMPING*

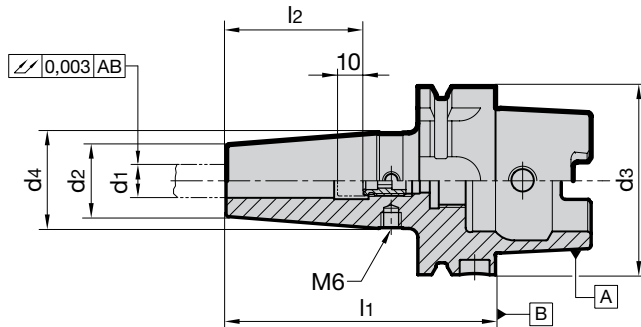
HSK-A shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- to DIN 69882-8
- for tool shank tolerance h6
- also available in the lengths $l_1 = 120$ mm, 160 mm (concentricity 5 μ m) and 200 mm (concentricity 7 μ m)

Scope of delivery

- incl. setting screw Guhring no. 4977 or 4904
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- special dimensions on request



Series Number 4736

HSK-A d_3	for shank $\varnothing$ d_1 h6 mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
32	6	21	26	70	36	9049770060140	0.30	6.032	9047360060320
32	8	21	26	70	36	9049770080140	0.30	8.032	9047360080320
32	10	24	29	75	41	9049770100140	0.30	10.032	9047360100320
32	12	24	29	80	46	9049770120140	0.30	12.032	9047360120320
40	6	21	27	80	36	9049770060140	0.40	6.040	9047360060400
40	8	21	27	80	36	9049770080140	0.40	8.040	9047360080400
40	10	24	32	80	41	9049770100140	0.50	10.040	9047360100400
40	12	24	32	90	46	9049770120140	0.50	12.040	9047360120400
40	14	27	34	90	46	9049770120140	0.60	14.040	9047360140400
40	16	27	34	90	49	9049770160140	0.50	16.040	9047360160400
40	18	33	42	95	49	9049770160140	0.90	18.040	9047360180400
40	20	33	42	100	51	9049770201140	0.90	20.040	9047360200400
50	6	21	27	80	36	9049770060140	0.60	6.050	9047360060500
50	8	21	27	80	36	9049770080140	0.60	8.050	9047360080500
50	10	24	32	85	41	9049770100140	0.70	10.050	9047360100500
50	12	24	32	90	46	9049770120140	0.70	12.050	9047360120500
50	14	27	34	90	46	9049770120140	0.70	14.050	9047360140500
50	16	27	34	95	49	9049770160140	1.00	16.050	9047360160500
50	18	33	42	95	49	9049770160140	0.90	18.050	9047360180500
50	20	33	42	100	51	9049770201140	0.90	20.050	9047360200500
63	1/8	10	18	80	36	9049040050160	0.70	903.063	9047369030630
63	3/16	10	18	80	40	9049040080180	0.70	904.063	9047369040630
63	1/4	20	27	80	36	9049770060140	0.80	906.063	9047369060630
63	5/16	21	27	80	36	9049770080140	0.80	907.063	9047369070630
63	3/8	24	32	85	41	9049770080140	0.80	909.063	9047369090630
63	1/2	24	32	90	46	9049770120140	0.90	912.063	9047369120630
63	5/8	27	34	95	49	9049770120140	1.00	915.063	9047369150630
63	3/4	33	42	100	49	9049770160140	1.20	919.063	9047369190630
63	1	44	53	115	57	9049770201140	1.80	925.063	9047369250630
63	3	10	18	80	30	9049040050160	0.70	3.063	9047360030630
63	4	10	18	80	35	9049040060160	0.70	4.063	9047360040630
63	5	10	18	80	40	9049040080180	0.70	5.063	9047360050630
63	6	21	27	80	36	9049770060140	0.80	6.063	9047360060630
63	8	21	27	80	36	9049770080140	0.80	8.063	9047360080630
63	10	24	32	85	41	9049770100140	0.90	10.063	9047360100630
63	12	24	32	90	46	9049770120140	0.90	12.063	9047360120630
63	14	27	34	90	46	9049770120140	1.00	14.063	9047360140630

HSK-A shrink fit chucks GÜHROJET with peripheral cooling

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- to DIN 69882-8
- for tool shank tolerance h6
- also available in the lengths l₁ = 120 mm, 160 mm (concentricity 5 µm) and 200 mm (concentricity 7 µm)

Scope of delivery

- incl. setting screw Guhring no. 4977 or 4904
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- special dimensions on request

Series Number									4736
HSK-A d ₃	for shank Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
63	16	27	34	95	49	9049770160140	1.00	16.063	9047360160630
63	18	33	42	95	49	9049770160140	1.20	18.063	9047360180630
63	20	33	42	100	51	9049770201140	1.20	20.063	9047360200630
63	25	44	53	115	57	9049770201140	1.80	25.063	9047360250630
63	3	10	25	120	30	9049040050160	0.80	203.063	9047362030630
63	4	10	25	120	35	9049040060160	0.80	204.063	9047362040630
63	5	10	25	120	40	9049040080180	0.80	205.063	9047362050630
63	6	21	27	120	36	9049770060140	0.90	206.063	9047362060630
63	8	21	27	120	36	9049770080140	1.00	208.063	9047362080630
63	10	24	32	120	41	9049770100140	1.10	210.063	9047362100630
63	12	24	32	120	46	9049770120140	1.20	212.063	9047362120630
63	14	27	34	120	46	9049770120140	1.20	214.063	9047362140630
63	16	27	34	120	49	9049770160140	1.20	216.063	9047362160630
63	18	33	42	120	49	9049770160140	1.40	218.063	9047362180630
63	20	33	42	120	51	9049770200140	1.40	220.063	9047362200630
63	32	44	53	120	61	9049770201140	1.70	32.063	9047360320630
63	3	10	31	160	30	9049040050160	0.90	103.063	9047361030630
63	4	10	31	160	35	9049040060160	0.90	104.063	9047361040630
63	5	10	31	160	40	9049040080180	0.90	105.063	9047361050630
63	6	21	27	160	36	9049770060140	1.10	106.063	9047361060630
63	8	21	27	160	36	9049770080140	1.10	108.063	9047361080630
63	10	24	32	160	41	9049770100140	1.30	110.063	9047361100630
63	12	24	32	160	46	9049770120140	1.30	112.063	9047361120630
63	14	27	34	160	46	9049770120140	1.40	114.063	9047361140630
63	16	27	34	160	49	9049770160140	1.40	116.063	9047361160630
63	18	33	42	160	49	9049770160140	1.60	118.063	9047361180630
63	20	33	42	160	51	9049770201140	1.60	120.063	9047361200630
63	25	44	53	160	57	9049770201140	1.80	125.063	9047361250630
63	32	44	53	160	61	9049770201140	1.70	132.063	9047361320630
63	6	21	27	200	36	9049770060140	1.30	306.063	9047363060630
63	8	21	27	200	36	9049770080140	1.30	308.063	9047363080630
63	10	24	32	200	41	9049770100140	1.50	310.063	9047363100630
63	12	24	32	200	46	9049770120140	1.50	312.063	9047363120630
63	14	27	34	200	46	9049770120140	1.70	314.063	9047363140630
63	16	27	34	200	49	9049770160140	1.70	316.063	9047363160630
63	18	33	42	200	49	9049770160140	1.80	318.063	9047363180630
63	20	33	42	200	51	9049770201140	1.80	320.063	9047363200630
63	25	44	53	200	57	9049770201140	2.00	325.063	9047363250630
63	32	44	53	200	61	9049770201140	1.90	332.063	9047363320630
80	6	21	27	85	36	9049770060140	1.30	6.080	9047360060800
80	8	21	27	85	36	9049770080140	1.30	8.080	9047360080800
80	10	24	32	90	41	9049770100140	1.40	10.080	9047360100800
80	12	24	32	95	46	9049770120140	1.40	12.080	9047360120800
80	14	27	34	95	46	9049770120140	1.50	14.080	9047360140800
80	16	27	34	100	49	9049770160140	1.50	16.080	9047360160800
80	18	33	42	100	49	9049770160140	1.70	18.080	9047360180800
80	20	33	42	105	51	9049770201140	1.70	20.080	9047360200800
80	25	44	53	115	57	9049770201140	2.20	25.080	9047360250800
80	32	44	53	120	61	9049770201140	2.10	32.080	9047360320800

HSK-A shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- to DIN 69882-8
- for tool shank tolerance h6
- also available in the lengths l₁ = 120 mm, 160 mm (concentricity 5 µm) and 200 mm (concentricity 7 µm)

Scope of delivery

- incl. setting screw Guhring no. 4977 or 4904
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- special dimensions on request

Series Number

4736

HSK-A d ₃	for shank Ø d ₁ h ₆ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
80	6	21	27	160	36	9049770060140	1.60	106.080	9047361060800
80	8	21	27	160	36	9049770080140	1.60	108.080	9047361080800
80	10	24	32	160	41	9049770100140	1.80	110.080	9047361100800
80	12	24	32	160	46	9049770120140	1.80	112.080	9047361120800
80	14	27	34	160	46	9049770120140	1.90	114.080	9047361140800
80	16	27	34	160	49	9049770160140	1.90	116.080	9047361160800
80	18	33	42	160	49	9049770160140	2.30	118.080	9047361180800
80	20	33	42	160	51	9049770201140	2.30	120.080	9047361200800
80	25	44	53	160	57	9049770201140	3.00	125.080	9047361250800
80	32	44	53	160	61	9049770201140	2.80	132.080	9047361320800
100	1/4	21	27	85	36	9049770060140	2.20	906.100	9047369061000
100	3/8	24	32	90	41	9049770080140	2.20	909.100	9047369091000
100	1/2	24	32	95	46	9049770120140	2.30	912.100	9047369121000
100	5/8	27	34	100	49	9049770120140	2.30	915.100	9047369151000
100	3/4	33	42	105	49	9049770160140	2.30	919.100	9047369191000
100	1	44	53	115	75	9049770201140	3.00	925.100	9047369251000
100	6	21	27	85	36	9049770060140	2.20	6.100	9047360061000
100	8	21	27	85	36	9049770080140	2.20	8.100	9047360081000
100	10	24	32	90	41	9049770100140	2.30	10.100	9047360101000
100	12	24	32	95	46	9049770120140	2.30	12.100	9047360121000
100	14	27	34	95	46	9049770120140	2.30	14.100	9047360141000
100	16	27	34	100	49	9049770160140	2.30	16.100	9047360161000
100	18	33	42	100	49	9049770160140	2.50	18.100	9047360181000
100	20	33	42	105	51	9049770201140	2.50	20.100	9047360201000
100	25	44	53	115	57	9049770201140	3.00	25.100	9047360251000
100	32	44	53	120	61	9049770201140	3.00	32.100	9047360321000
100	6	21	27	160	36	9049770060140	2.60	106.100	9047361061000
100	8	21	27	160	36	9049770080140	2.50	108.100	9047361081000
100	10	24	32	160	41	9049770100140	2.70	110.100	9047361101000
100	12	24	32	160	46	9049770120140	2.70	112.100	9047361121000
100	14	27	34	160	46	9049770120140	2.80	114.100	9047361141000
100	16	27	34	160	49	9049770160140	2.80	116.100	9047361161000
100	18	33	42	160	49	9049770160140	3.20	118.100	9047361181000
100	20	33	42	160	51	9049770201140	3.10	120.100	9047361201000
100	25	44	53	160	57	9049770201140	3.90	125.100	9047361251000
100	32	44	53	160	61	9049770201140	3.70	132.100	9047361321000
100	6	21	27	200	36	9049770060140	2.80	306.100	9047363061000
100	8	21	27	200	36	9049770080140	2.80	308.100	9047363081000
100	10	24	32	200	41	9049770100140	2.90	310.100	9047363101000
100	12	24	32	200	46	9049770120140	2.90	312.100	9047363121000
100	14	27	34	200	46	9049770120140	3.00	314.100	9047363141000
100	16	27	34	200	49	9049770160140	3.00	316.100	9047363161000
100	18	33	42	200	49	9049770160140	3.40	318.100	9047363181000
100	20	33	42	200	51	9049770201140	3.30	320.100	9047363201000
100	25	44	53	200	57	9049770201140	4.00	325.100	9047363251000
100	32	44	53	200	61	9049770201140	3.90	332.100	9047363321000

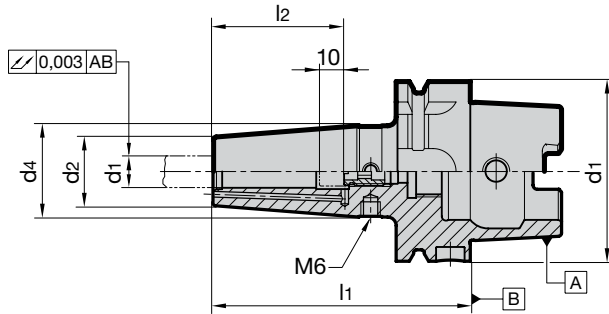
HSK-A shrink fit chucks GÜHROJET with peripheral cooling

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- for tool shank tolerance h6
- to DIN 69882-8
- optimized cooling for tools without internal coolant ducts
- good chip evacuation and increased process reliability

Scope of delivery

- incl. setting screw Guhring no. 4938
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- special dimensions on request



GÜHROJET

Series Number

4755

HSK-A d ₃	for shank Ø d ₁ h ₆ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. 4938 ...	kg	Order Code	EDP Numbers
40	6	21	27	80	36	9049380060000	0.50	6.040	9047550060400
40	8	21	27	80	36	9049380080000	0.50	8.040	9047550080400
40	10	24	32	80	41	9049380100000	0.50	10.040	9047550100400
40	12	24	32	90	46	9049380120000	0.50	12.040	9047550120400
40	14	27	33.5	90	46	9049380120000	0.50	14.040	9047550140400
40	16	27	33.5	90	49	9049380160000	0.50	16.040	9047550160400
50	6	21	27	80	36	9049380060000	0.60	6.050	9047550060500
50	8	21	27	80	36	9049380080000	0.60	8.050	9047550080500
50	10	24	32	85	41	9049380100000	0.60	10.050	9047550100500
50	12	24	32	90	46	9049380120000	0.70	12.050	9047550120500
50	14	27	34	90	46	9049380120000	0.70	14.050	9047550140500
50	16	27	34	95	49	9049380160000	0.70	16.050	9047550160500
50	18	33	41.5	95	49	9049380160000	0.90	18.050	9047550180500
50	20	33	41.5	100	51	9049380200000	0.90	20.050	9047550200500
63	6	21	27	80	36	9049380060000	0.80	6.063	9047550060630
63	8	21	27	80	36	9049380080000	0.80	8.063	9047550080630
63	10	24	32	85	41	9049380100000	0.90	10.063	9047550100630
63	12	24	32	90	46	9049380120000	0.90	12.063	9047550120630
63	14	27	34	90	46	9049380120000	1.00	14.063	9047550140630
63	16	27	34	95	49	9049380160000	1.00	16.063	9047550160630
63	18	33	42	95	49	9049380160000	1.20	18.063	9047550180630
63	20	33	42	100	51	9049380200000	1.20	20.063	9047550200630
63	6	21	27	120	36	9049380060000	0.90	206.063	9047552060630
63	8	21	27	120	36	9049380080000	0.90	208.063	9047552080630
63	10	24	32	120	41	9049380100000	1.10	210.063	9047552100630
63	12	24	32	120	46	9049380120000	1.20	212.063	9047552120630
63	14	27	34	120	46	9049380120000	1.20	214.063	9047552140630
63	16	27	34	120	49	9049380160000	1.20	216.063	9047552160630
63	18	33	42	120	49	9049380160000	1.20	218.063	9047552180630
63	20	33	42	120	51	9049380200000	1.40	220.063	9047552200630
100	6	21	27	85	36	9049380060000	2.20	6.100	9047550061000
100	8	21	27	85	36	9049380080000	2.20	8.100	9047550081000
100	10	24	32	90	41	9049380100000	2.30	10.100	9047550101000
100	12	24	32	95	46	9049380120000	2.30	12.100	9047550121000
100	14	27	34	95	46	9049380120000	2.30	14.100	9047550141000
100	16	27	34	100	49	9049380160000	2.30	16.100	9047550161000
100	18	33	42	100	49	9049380160000	2.50	18.100	9047550181000
100	20	33	42	105	51	9049380200000	2.50	20.100	9047550201000
100	25	44	53	115	57	9049380200000	3.00	25.100	9047550251000
100	32	44	53	120	61	9049380200000	3.00	32.100	9047550321000

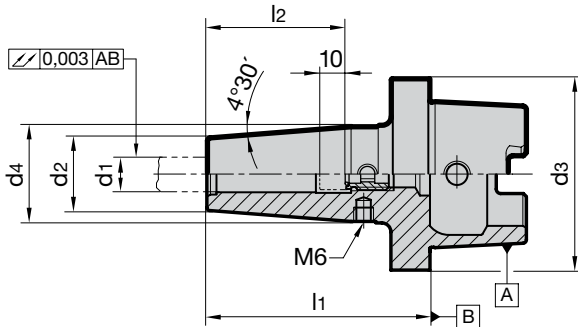
HSK-C shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- for tool shank tolerance h6
- to DIN 69882-8

Scope of delivery

- incl. setting screw Guhring no. 4977
- special dimensions on request



Series Number

4758

HSK-C d ₃	for clamping-Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guhring no. 4977	kg	Order Code	EDP Numbers
32	6	21	26	65	36	9049770060140	0.30	6.032	9047580060320
32	8	21	26	65	36	9049770080140	0.30	8.032	9047580080320
32	10	24	30	65	41	9049770100140	0.30	10.032	9047580100320
32	12	24	32	75	46	9049770120140	0.40	12.032	9047580120320
40	6	21	30	70	36	9049770060140	0.50	6.040	9047580060400
40	8	21	30	70	36	9049770080140	0.30	8.040	9047580080400
40	10	24	34	70	41	9049770100140	0.40	10.040	9047580100400
40	12	24	35	80	46	9049770120140	0.40	12.040	9047580120400
40	14	27	38	80	46	9049770120140	0.50	14.040	9047580140400
40	16	27	38	80	49	9049770160140	0.50	16.040	9047580160400
50	6	21	30	70	36	9049770060140	0.50	6.050	9047580060500
50	8	21	30	70	36	9049770080140	0.40	8.050	9047580080500
50	10	24	33	75	41	9049770100140	0.50	10.050	9047580100500
50	12	24	34	80	46	9049770120140	0.50	12.050	9047580120500
50	14	27	37	80	46	9049770120140	0.60	14.050	9047580140500
50	16	27	39	85	49	9049770160140	0.60	16.050	9047580160500
50	18	33	45	85	49	9049770160140	0.80	18.050	9047580180500
50	20	33	45	90	51	9049770201140	0.80	20.050	9047580200500
63	6	21	30	70	36	9049770060140	0.60	6.063	9047580060630
63	8	21	30	70	36	9049770080140	0.60	8.063	9047580080630
63	10	24	34	75	41	9049770100140	0.70	10.063	9047580100630
63	12	24	34	80	46	9049770120140	0.70	12.063	9047580120630
63	14	27	36	80	46	9049770120140	0.80	14.063	9047580140630
63	16	27	36	85	49	9049770160140	0.80	16.063	9047580160630
63	18	33	44	85	49	9049770160140	1.00	18.063	9047580180630
63	20	33	45	90	51	9049770201140	1.00	20.063	9047580200630
63	25	44	53	100	57	9049770201140	1.50	25.063	9047580250630
63	32	44	53	110	61	9049770201140	3.90	32.063	9047580320630

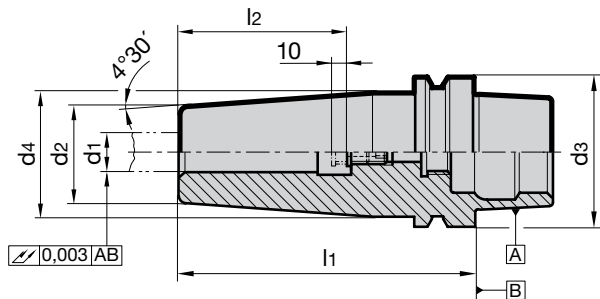
HSK-E shrink fit chucks

Product information

- balancing quality G2.5 / 25,000 rev./min or $U < 1 \text{ gmm}$
- for tool shank tolerance h6

Scope of delivery

- incl. setting screw Guhring no. 4977 or 4904
- for conventional cooling order coolant delivery set, Guhring no. 4949, separately
- special dimensions on request



Series Number

4737

HSK-E d_3	for shank $\varnothing$ d_1 h6 mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
32	3	10	16	60	—	—	0.16	3.032	9047370030320
32	4	10	16	60	—	—	0.16	4.032	9047370040320
32	5	10	16	60	—	—	0.16	5.032	9047370050320
32	6	21	26	70	36	9049770060140	0.18	6.032	9047370060320
32	8	21	26	70	36	9049770080140	0.20	8.032	9047370080320
32	10	24	29	75	41	9049770100140	0.25	10.032	9047370100320
32	12	24	29	80	46	9049770120140	0.25	12.032	9047370120320
40	3	10	19	80	—	—	0.28	3.040	9047370030400
40	4	10	19	80	—	—	0.28	4.040	9047370040400
40	5	10	19	80	—	—	0.27	5.040	9047370050400
40	6	21	27	80	36	9049770060140	0.41	6.040	9047370060400
40	8	21	27	80	36	9049770080140	0.41	8.040	9047370080400
40	10	24	32	80	41	9049770100140	0.48	10.040	9047370100400
40	12	24	32	90	46	9049770120140	0.52	12.040	9047370120400
40	14	27	34	90	46	9049770120140	0.57	14.040	9047370140400
40	16	27	34	90	49	9049770160140	0.55	16.040	9047370160400
50	3	10	18	80	30	9049040050160	0.49	3.050	9047370030500
50	4	10	18	80	35	9049040060160	0.49	4.050	9047370040500
50	5	10	18	80	—	—	0.49	5.050	9047370050500
50	6	21	27	80	36	9049770060140	0.59	6.050	9047370060500
50	8	21	27	80	36	9049770080140	0.58	8.050	9047370080500
50	10	24	32	85	41	9049770100140	0.57	10.050	9047370100500
50	12	24	32	90	46	9049770120140	0.69	12.050	9047370120500
50	14	27	34	90	46	9049770120140	0.74	14.050	9047370140500
50	16	27	34	95	49	9049770160140	0.75	16.050	9047370160500
50	18	33	42	95	49	9049770160140	0.92	18.050	9047370180500
50	20	33	42	100	51	9049770201140	0.94	20.050	9047370200500
63	6	21	27	80	36	9049770060140	0.86	6.063	9047370060630
63	8	21	27	80	36	9049770080140	0.85	8.063	9047370080630
63	10	24	32	85	41	9049770100140	0.94	10.063	9047370100630
63	12	24	32	90	46	9049770120140	0.96	12.063	9047370120630
63	14	27	34	90	46	9049770120140	1.01	14.063	9047370140630
63	16	27	34	95	49	9049770160140	1.02	16.063	9047370160630
63	18	33	42	95	49	9049770160140	1.19	18.063	9047370180630
63	20	33	42	100	51	9049770201140	1.21	20.063	9047370200630
63	25	44	53	115	57	9049770201140	1.80	25.063	9047370250630
63	32	44	53	120	61	9049770201140	1.73	32.063	9047370320630

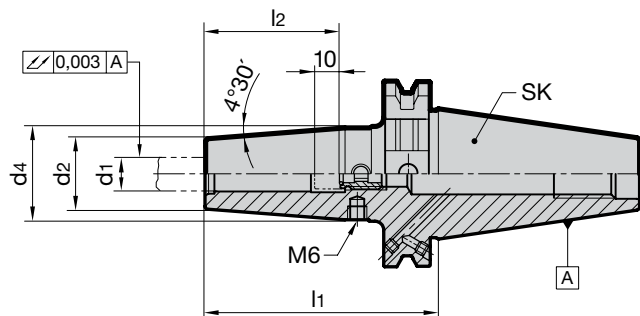
ISO taper shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- ISO taper to DIN 69871 form AD/B
- for tool shank tolerance h6
- also available in the lengths l₁ = 120 mm, 160 mm (concentricity 5 µm) and 200mm (concentricity 7 µm)

Scope of delivery

- incl. setting screw Guhring no. 4977 bzw. 4904
- order pull studs Guhring no. 4925, 4926 separately
- special dimensions on request



Series Number

4738

ISO taper	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
40	3	10	18	80	30	9049040050160	0.90	3.040	9047380030400
40	4	10	18	80	35	9049040060160	0.90	4.040	9047380040400
40	5	10	18	80	40	9049040080180	0.90	5.040	9047380050400
40	6	21	27	80	36	9049770060140	1.00	6.040	9047380060400
40	8	21	27	80	36	9049770080140	1.00	8.040	9047380080400
40	10	24	32	80	41	9049770100140	1.10	10.040	9047380100400
40	12	24	32	80	46	9049770120140	1.00	12.040	9047380120400
40	14	27	34	80	46	9049770120140	1.10	14.040	9047380140400
40	16	27	34	80	49	9049770160140	1.10	16.040	9047380160400
40	18	33	42	80	49	9049770160140	1.20	18.040	9047380180400
40	20	33	42	80	51	9049770201140	1.50	20.040	9047380200400
40	25	44	53	100	57	9049770201140	1.50	25.040	9047380250400
40	32	44	53	100	61	9049770201140	1.50	32.040	9047380320400
40	3	10	24	120	30	9049040050160	1.00	203.040	9047382030400
40	4	10	24	120	35	9049040060160	1.00	204.040	9047382040400
40	5	10	24	120	40	9049040080180	1.00	205.040	9047382050400
40	6	21	27	120	36	9049770060140	1.10	206.040	9047382060400
40	8	21	27	120	36	9049770080140	1.10	208.040	9047382080400
40	10	24	32	120	41	9049770100140	1.20	210.040	9047382100400
40	12	24	32	120	46	9049770120140	1.20	212.040	9047382120400
40	14	27	34	120	46	9049770120140	1.40	214.040	9047382140400
40	16	27	34	120	49	9049770160140	1.40	216.040	9047382160400
40	18	33	42	120	49	9049770160140	1.50	218.040	9047382180400
40	20	33	42	120	51	9049770201140	1.50	220.040	9047382200400
40	3	10	31	160	30	9049040050160	1.10	103.040	9047381030400
40	4	10	31	160	35	9049040060160	1.10	104.040	9047381040400
40	5	10	31	160	40	9049040080180	1.10	105.040	9047381050400
40	6	21	27	160	36	9049770060140	1.30	106.040	9047381060400
40	8	21	27	160	36	9049770080140	1.30	108.040	9047381080400
40	10	24	32	160	41	9049770100140	1.50	110.040	9047381100400
40	12	24	32	160	46	9049770120140	1.50	112.040	9047381120400
40	14	27	34	160	46	9049770120140	1.70	114.040	9047381140400
40	16	27	34	160	49	9049770160140	1.70	116.040	9047381160400
40	18	33	42	160	49	9049770160140	1.90	118.040	9047381180400
40	20	33	42	160	51	9049770201140	1.90	120.040	9047381200400
40	25	44	53	160	57	9049770201140	2.20	125.040	9047381250400

ISO taper shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- ISO taper to DIN 69871 form AD/B
- for tool shank tolerance h6
- also available in the lengths l₁ = 120 mm, 160 mm (concentricity 5 µm) and 200mm (concentricity 7 µm)

Scope of delivery

- incl. setting screw Guhring no. 4977 bzw. 4904
- order pull studs Guhring no. 4925, 4926 separately
- special dimensions on request

Series Number									4738
ISO taper	for shank Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
40	6	21	27	200	36	9049770060140	1.60	306.040	9047383060400
40	8	21	27	200	36	9049770080140	1.60	308.040	9047383080400
40	10	24	32	200	41	9049770100140	1.80	310.040	9047383100400
40	12	24	32	200	46	9049770120140	1.80	312.040	9047383120400
40	14	27	34	200	46	9049770120140	2.10	314.040	9047383140400
40	16	27	34	200	49	9049770160140	2.10	316.040	9047383160400
40	18	33	42	200	49	9049770160140	2.30	318.040	9047383180400
40	20	33	42	200	51	9049770201140	2.30	320.040	9047383200400
40	25	44	53	200	58	9049770201140	2.60	325.040	9047383250400
40	32	44	53	200	61	9049770201140	2.50	332.040	9047383320400
50	3	10	18	80	30	9049040050160	2.60	3.050	9047380030500
50	4	10	18	80	35	9049040060160	2.60	4.050	9047380040500
50	5	10	18	80	40	9049040080180	2.60	5.050	9047380050500
50	6	21	27	80	36	9049770060140	2.90	6.050	9047380060500
50	8	21	27	80	36	9049770080140	2.90	8.050	9047380080500
50	10	24	32	80	41	9049770100140	2.90	10.050	9047380100500
50	12	24	32	80	46	9049770120140	2.90	12.050	9047380120500
50	14	27	34	80	46	9049770120140	3.00	14.050	9047380140500
50	16	27	34	80	49	9049770160140	3.00	16.050	9047380160500
50	18	33	42	80	49	9049770160140	3.00	18.050	9047380180500
50	20	33	42	80	51	9049770201140	3.00	20.050	9047380200500
50	25	44	53	100	57	9049770201140	3.60	25.050	9047380250500
50	32	44	53	100	61	9049770201140	3.50	32.050	9047380320500
50	6	21	27	160	36	9049770060140	3.10	106.050	9047381060500
50	8	21	27	160	36	9049770080140	3.10	108.050	9047381080500
50	10	24	32	160	41	9049770100140	3.40	110.050	9047381100500
50	12	24	32	160	46	9049770120140	3.40	112.050	9047381120500
50	14	27	34	160	46	9049770120140	3.70	114.050	9047381140500
50	16	27	34	160	49	9049770160140	3.70	116.050	9047381160500
50	18	33	42	160	49	9049770160140	4.10	118.050	9047381180500
50	20	33	42	160	51	9049770201140	4.10	120.050	9047381200500
50	25	44	53	160	57	9049770201140	4.70	125.050	9047381250500
50	32	44	53	160	61	9049770201140	4.60	132.050	9047381320500
50	6	21	27	200	36	9049770060140	3.40	306.050	9047383060500
50	8	21	27	200	36	9049770080140	3.40	308.050	9047383080500
50	10	24	32	200	41	9049770100140	3.70	310.050	9047383100500
50	12	24	32	200	46	9049770120140	3.70	312.050	9047383120500
50	14	27	34	200	46	9049770120140	4.00	314.050	9047383140500
50	16	27	34	200	49	9049770160140	4.00	316.050	9047383160500
50	18	33	42	200	49	9049770160140	4.40	318.050	9047383180500
50	20	33	42	200	51	9049770201140	4.40	320.050	9047383200500
50	25	44	53	200	57	9049770201140	5.00	325.050	9047383250500
50	32	44	53	200	61	9049770201140	4.90	332.050	9047383320500

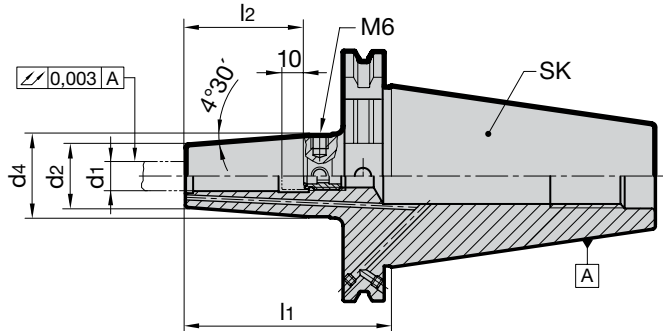
ISO taper shrink fit chucks GÜHROJET

Product information

- balancing quality: G2.5 / 25,000 rev./min or $U < 1 \text{ gmm}$
- incl. balancing thread 4xM6/6xM6
- ISO taper to DIN 69871 form AD/B
- for tool shank tolerance h6
- optimized cooling for tools without internal coolant ducts
- good chip evacuation and increased process reliability

Scope of delivery

- incl. setting screw Guhring no. 4977
- order pull studs Guhring no. 4925, 4926 separately
- special dimensions on request



GÜHROJET

Series Number

4729

ISO taper	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
40	6	21	27	80	36	9049770060140	1.00	6.040	9047290060400
40	8	21	27	80	36	9049770080140	1.00	8.040	9047290080400
40	10	24	32	80	41	9049770100140	1.10	10.040	9047290100400
40	12	24	32	80	46	9049770120140	1.00	12.040	9047290120400
40	14	27	34	80	46	9049770120140	1.10	14.040	9047290140400
40	16	27	34	80	49	9049770160140	1.10	16.040	9047290160400
40	18	33	42	80	49	9049770160140	1.20	18.040	9047290180400
40	20	33	42	80	51	9049770201140	1.50	20.040	9047290200400
50	6	21	27	80	36	9049770060140	2.80	6.050	9047290060500
50	8	21	27	80	36	9049770080140	2.80	8.050	9047290080500
50	10	24	32	80	41	9049770100140	2.80	10.050	9047290100500
50	12	24	32	80	46	9049770120140	2.80	12.050	9047290120500
50	14	27	34	80	46	9049770120140	2.80	14.050	9047290140500
50	16	27	34	80	49	9049770160140	2.80	16.050	9047290160500
50	18	33	42	80	49	9049770160140	3.00	18.050	9047290180500
50	20	33	42	80	51	9049770201140	3.00	20.050	9047290200500
50	25	44	53	100	57	9049770201140	3.50	25.050	9047290250500
50	32	44	53	100	61	9049770201140	3.30	32.050	9047290320500

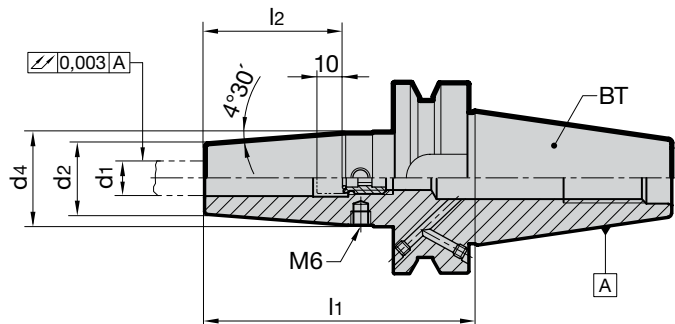
MAS/BT shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- MAS/BT to JIS B 6339 form AD/B
(*: version AD without coolant supply over collar)
- for tool shank tolerance h6

Scope of delivery

- incl. setting screw Guhring no. 4977 bzw. 4904
- order pull studs Guhring no. 4927, 4928 separately
- special dimensions on request



Series Number 4739

MAS/BT	for shank Ø d ₁ h ₆ mm/inch	d ₂ mm	d ₁ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
30*	1/8	10	18	80	34	9049040050160	0.60	103.030	9047391030300
30*	3/16	10	18	80	34	9049040080180	0.60	104.030	9047391040300
30*	1/4	21	27	80	36	9049770060140	0.60	106.030	9047391060300
30*	5/16	21	27	80	36	9049770080140	0.70	107.030	9047391070300
30*	3/8	24	32	80	41	9049770080140		109.030	9047391090300
30*	1/2	24	34	80	46	9049770120140	0.70	112.030	9047391120300
30*	5/8	27	34	80	49	9049770160140	0.80	115.030	9047391150300
30*	3/4	33	42	90	51	9049770160140	0.90	119.030	9047391190300
30*	3	10	18	80	30	9049040050160	0.60	3.030	9047390030300
30*	4	10	18	80	35	9049040060160	0.60	4.030	9047390040300
30*	5	10	18	80	40	9049040080180	0.6	5.030	9047390050300
30*	6	21	27	80	36	9049770060140	0.70	6.030	9047390060300
30*	8	21	27	80	36	9049770080140	0.70	8.030	9047390080300
30*	10	24	32	80	41	9049770100140	0.80	10.030	9047390100300
30*	12	24	32	80	46	9049770120140	0.80	12.030	9047390120300
30*	14	27	34	80	46	9049770120140	0.80	14.030	9047390140300
30*	16	27	34	80	49	9049770160140	0.80	16.030	9047390160300
30*	18	33	42	90	49	9049770160140	0.90	18.030	9047390180300
30*	20	33	42	90	51	9049770201140	0.90	20.030	9047390200300
40	3	10	18	85	30	9049040050160	1.00	3.040	9047390030400
40	4	10	18	85	35	9049040060160	1.00	4.040	9047390040400
40	5	10	18	85	40	9049040080180	1.00	5.040	9047390050400
40	6	21	27	90	36	9049770060140	1.20	6.040	9047390060400
40	8	21	27	90	36	9049770080140	1.20	8.040	9047390080400
40	10	24	32	90	41	9049770100140	1.30	10.040	9047390100400
40	12	24	32	90	46	9049770120140	1.30	12.040	9047390120400
40	14	27	34	90	46	9049770120140	1.40	14.040	9047390140400
40	16	27	34	90	49	9049770160140	1.40	16.040	9047390160400
40	18	33	42	90	49	9049770160140	1.40	18.040	9047390180400
40	20	33	42	90	51	9049770201140	1.70	20.040	9047390200400
40	25	44	53	100	57	9049770201140	1.80	25.040	9047390250400
40	32	44	53	100	61	9049770201140	1.70	32.040	9047390320400
40	6	21	27	130	36	9049770060140	1.30	6.140	9047390061400
40	8	24	32	130	41	9049770080140	1.30	8.140	9047390081400
40	10	24	32	130	46	9049770100140	1.40	10.140	9047390101400
40	12	27	34	130	46	9049770120140	1.40	12.140	9047390121400
40	14	27	34	130	49	9049770120140	1.40	14.140	9047390141400
40	16	33	42	130	49	9049770160140	1.50	16.140	9047390161400

MAS/BT shrink fit chucks

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- incl. balancing thread 4xM6/6xM6
- MAS/BT to JIS B 6339 form AD/B
(*: version AD without coolant supply over collar)
- for tool shank tolerance h6

Scope of delivery

- incl. setting screw Guhring no. 4977 bzw. 4904
- order pull studs Guhring no. 4927, 4928 separately
- special dimensions on request

Series Number									4739
MAS/BT	for shank Ø d ₁ h ₆ mm/inch	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	kg	Order Code	EDP Numbers
40	18	33	42	130	51	9049770160140	1.50	18.140	9047390181400
40	20	44	53	130	57	9049770201140	1.80	20.140	9047390201400
40	25	44	53	130	58	9049770201140	2.00	25.140	9047390251400
40	32	44	53	130	61	9049770201140	1.90	32.140	9047390321400
50	6	21	27	100	36	9049770060140	2.90	6.050	9047390060500
50	8	21	27	100	36	9049770080140	2.90	8.050	9047390080500
50	10	24	32	100	41	9049770100140	2.90	10.050	9047390100500
50	12	24	32	100	46	9049770120140	2.90	12.050	9047390120500
50	14	27	34	100	46	9049770120140	3.00	14.050	9047390140500
50	16	27	34	100	49	9049770160140	3.00	16.050	9047390160500
50	18	33	42	100	49	9049770160140	1.90	18.050	9047390180500
50	20	33	42	100	51	9049770201140	1.90	20.050	9047390200500
50	25	44	53	110	57	9049770201140	2.20	25.050	9047390250500
50	32	44	53	110	61	9049770201140	2.20	32.050	9047390320500

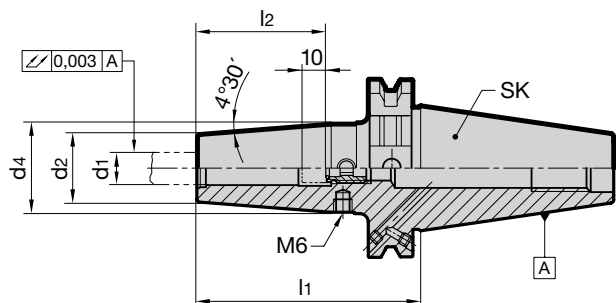
CAT shrink fit holder

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- Including balancing threads 4x M6 / 6xM6
- Taper according to ANSI/ASME B 5.50
- Coolant through center and also through flange (plugged with threaded pins when supplied)
- CAT 40 - 5/8 x 11 retention knob thread
- CAT 50 - 1" x 8 retention knob thread

Scope of delivery

- Including setting screw, Guhring no. 4977 with axial force dampening for perfect runout accuracy
- Special dimensions on request



Series Number

4764

CAT	clamping dia. d1 in h6 inch/mm	d2 mm	d4 mm	l1 mm	l2 mm	incl. setting screw Guh. no. Code no.	Order Code	EDP Numbers
40	1/4	21	27	80	36	9049770060140	106.040	9047641060400
40	3/8	24	32	80	41	9049770080140	109.040	9047641090400
40	1/2	24	32	80	46	9049770120140	112.040	9047641120400
40	5/8	27	34	80	49	9049770160140	115.040	9047641150400
40	3/4	33	42	80	49	9049770160140	119.040	9047641190400
40	1	44	53	100	57	9049770201140	125.040	9047641250400
40	1 1/4	44	53	100	61	9049770201140	131.040	9047641310400
40	6	21	27	80	36	9049770060140	6.040	9047640060400
40	8	21	27	80	36	9049770080140	8.040	9047640080400
40	10	24	32	80	41	9049770100140	10.040	9047640100400
40	12	24	32	80	46	9049770120140	12.040	9047640120400
40	14	27	34	80	46	9049770120140	14.040	9047640140400
40	16	27	34	80	49	9049770160140	16.040	9047640160400
40	18	33	42	80	49	9049770160140	18.040	9047640180400
40	20	33	42	80	51	9049770201140	20.040	9047640200400
40	25	44	53	100	57	9049770201140	25.040	9047640250400
40	32	44	53	100	61	9049770201140	32.040	9047640320400
50	1/4	21	27	80	36	9049770060140	106.050	9047641060500
50	3/8	24	32	80	41	9049770080140	109.050	9047641090500
50	1/2	24	32	80	46	9049770120140	112.050	9047641120500
50	5/8	27	34	80	49	9049770160140	115.050	9047641150500
50	3/4	33	42	80	49	9049770160140	119.050	9047641190500
50	1	44	53	100	57	9049770201140	125.050	9047641250500
50	1 1/4	44	53	100	61	9049770201140	131.050	9047641310500
50	6	21	27	80	36	9049770060140	6.050	9047640060500
50	8	21	27	80	36	9049770080140	8.050	9047640080500
50	10	24	32	80	41	9049770100140	10.050	9047640100500
50	12	24	32	80	46	9049770120140	12.050	9047640120500
50	14	27	34	80	46	9049770120140	14.050	9047640140500
50	16	27	34	80	49	9049770160140	16.050	9047640160500
50	18	33	42	80	49	9049770160140	18.050	9047640180500
50	20	33	42	80	51	9049770201140	20.050	9047640200500
50	25	44	53	100	57	9049770201140	25.050	9047640250500
50	32	44	53	100	61	9049770201140	32.050	9047640320500

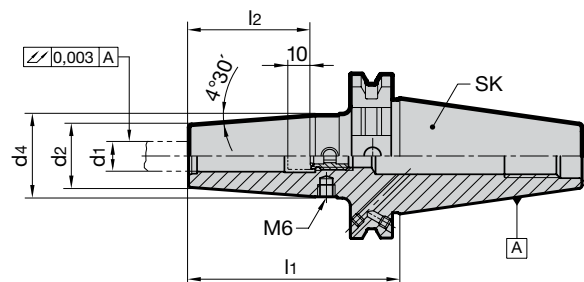
CAT GUHROJET shrink fit holder

Product information

- Optimized cooling for tools without internal coolant ducts
- Good chip evacuation and increased process reliability
- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm
- Including balancing threads 4x M6 / 6xM6
- Taper according to ANSI/ASME B 5.50
- Coolant through center and also through flange (plugged with threaded pins when supplied)
- CAT 40 - 5/8 x 11 retention knob thread
- CAT 50 - 1" x 8 retention knob thread

Scope of delivery

- Including setting screw, Guhring no. 4938 with slots for coolant supply
- Special dimensions on request



GUHROJET

Series Number

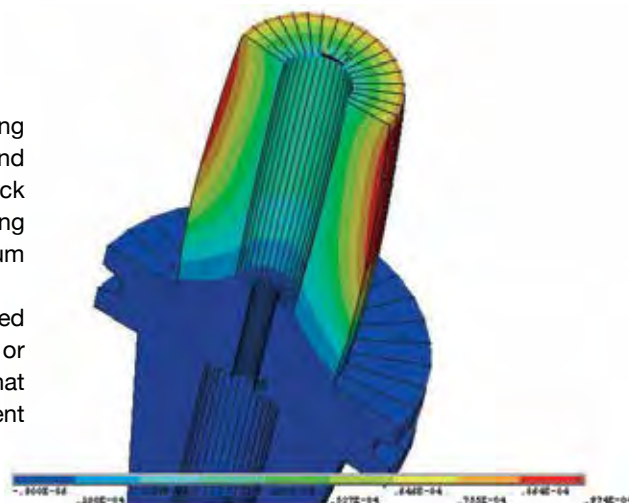
4765

CAT	clamping dia. d1 in h6 inch	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. setting screw Guh. no. Code no.	Order Code	EDP Numbers
40	1/4	21	27	80	36	9049770060140	106.040	9047651060400
40	3/8	24	32	80	41	9049770080140	109.040	9047651090400
40	1/2	24	32	80	46	9049770120140	112.040	9047651120400
40	5/8	27	34	80	49	9049770160140	115.040	9047651150400
40	3/4	33	42	80	49	9049770160140	119.040	9047651190400
50	3/8	24	32	80	41	9049770080140	109.050	9047651090500
50	1/2	24	32	80	46	9049770120140	112.050	9047651120500
50	3/4	33	42	80	49	9049770160140	119.050	9047651190500
50	1	44	53	100	57	9049770201140	125.050	9047651250500

A gripping principle

When shrink fitting tools into shrink fit chucks, the decisive factors for ensuring the safe clamping of the tool in the tool holder are solely the heating and cooling of the tool holder. The heating process expands the shrink fit chuck enabling a tool to be inserted or withdrawn respectively. During the cooling process it contracts again and clamps the inserted tool with maximum clamping force.

Because the shrink fit chucks can become extremely hot in localized areas during the heating process and the tools shrink fitted for insertion or withdrawal respectively possess very sharp cutting edges, it is important that the operator wears Kevlar® gloves during the shrink fit operation to prevent burns and cuts to the hands.



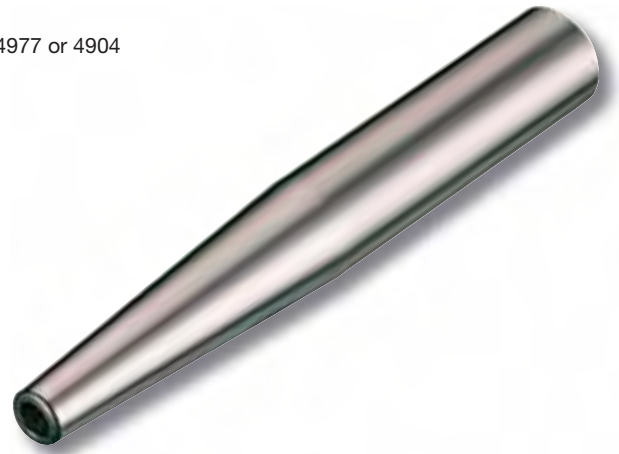
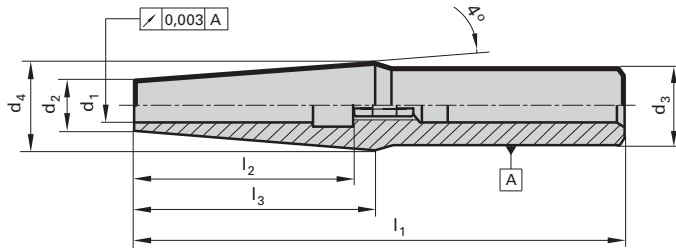
Shrink fit extensions

Product information

- for clamping in hydraulic chucks or shrink fit chucks
- internal cooling suitable
- we recommend the use of special cooling adaptors Guhring no. 4419
- for carbide tool shanks in tolerance h6 (from d1 14mm also HSS possible)

Scope of delivery

- incl. setting screw Guhring no. 4977 or 4904
- special dimensions on request



Series Number

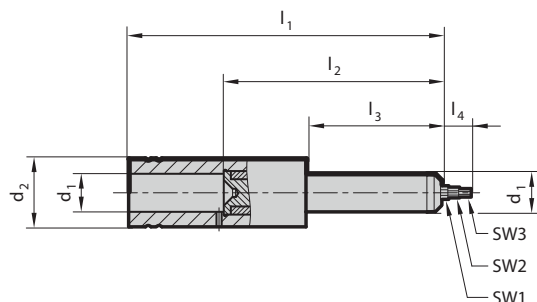
4719

for shank Ø d1 h6 mm	d2 mm	d3 h6 mm	d4 mm	l1 mm	l2 mm	incl. setting screw Guh. no. Code no.	Order Code	EDP Numbers
3	7	16	16	115	30	9049040050160	3.016	9047190030160
4	7	16	16	115	35	9049040060160	4.016	9047190040160
5	8	16	16	115	40	9049040080180	5.016	9047190050160
6	10	16	16	115	36	9049770060140	6.016	9047190060160
8	12	16	16	115	36	9049770080140	8.016	9047190080160
10	14	16	16	115	41	9049770100140	10.016	9047190100160
12	16	16	23	115	46	9049770120140	12.016	9047190120160
3	7	20	16	115	30	9049040050160	3.020	9047190030200
4	8	20	17	115	35	9049040060160	4.020	9047190040200
5	9	20	18	115	40	9049040080180	5.020	9047190050200
6	10	20	19	115	36	9049770060140	6.020	9047190060200
8	12	20	20	115	36	9049770080140	8.020	9047190080200
10	14	20	20	115	41	9049770100140	10.020	9047190100200
12	16	20	20	115	46	9049770120140	12.020	9047190120200
14	20	20	29	150	46	9049770120140	14.020	9047190140200
14	20	25	29	150	46	9049770120140	14.025	9047190140250
16	24	25	33	150	49	9049770160140	16.025	9047190160250
3	10	20	20	160	30	9049040050160	3.120	9047190031200
4	10	20	20	160	35	9049040060160	4.120	9047190041200
5	10	20	20	160	40	9049040080180	5.120	9047190051200
6	14	20	20	160	36	9049770060140	6.120	9047190061200
8	14	20	20	160	36	9049770080140	8.120	9047190081200
10	20	25	25	160	41	9049770100140	10.125	9047190101250
12	20	25	25	160	46	9049770120140	12.125	9047190121250
14	20	25	29	160	46	9049770160140	14.125	9047190141250
16	22	25	33	160	49	9049770160140	16.125	9047190161250
18	27	32	32	160	49	9049770160140	18.132	9047190181320
20	27	32	32	160	51	9049770201140	20.132	9047190201320
3	10	20	20	200	30	9049040050160	3.220	9047190032200
4	10	20	20	200	35	9049040060160	4.220	9047190042200
5	10	20	20	200	40	9049040080180	5.220	9047190052200
6	14	20	20	200	36	9049770060140	6.220	9047190062200
8	14	20	20	200	36	9049770080140	8.220	9047190082200
10	20	25	25	200	41	9049770100140	10.225	9047190102250
12	20	25	25	200	46	9049770120140	12.225	9047190122250
14	20	32	32	200	46	9049770160140	14.232	9047190142320
16	24	32	32	200	49	9049770160140	16.232	9047190162320
18	27	32	32	200	49	9049770200140	18.232	9047190182320
20	27	32	32	200	51	9049770201140	20.232	9047190202320

Universal length setting adaptor

Product information

- for shrink fit and hydraulic chucks
- for length pre-setting of the setting screw with the cutting tool (less difference dimension l_2 , see sketch)
- flexibly mounted hexagonal key SW1/SW2 (*only available as rigid design)
- with standard screws suitable for wet application Guhring no. 4900, 4941, 4977
- suitable with MQL setting screws Guhring no. 4621, 4919, 4937



Series Number

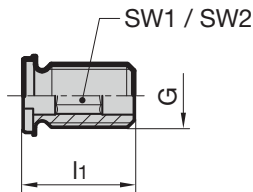
4718

									EDP Numbers
d_1 mm	d_2 mm	l_1 mm	l_2 mm	l_3 mm	l_4 mm	SW1	SW2	SW3	
6.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180060010
6.0	25.0	115.0	80.0	50.0	10.0	3.0	2.5	-	9047180060000
6*	25.0	115.0	80.0	50.0	10.0	4.0	-	-	9047180060020
8.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180080010
8.0	25.0	115.0	80.0	50.0	10.0	3.0	-	-	9047180080000
8*	25.0	115.0	80.0	50.0	10.0	4.0	-	-	9047180080020
10.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180100010
10.0	25.0	115.0	80.0	50.0	10.0	4.0	3.0	-	9047180100000
12.0	25.0	115.0	80.0	50.0	10.0	3.0	2.0	1.5	9047180120010
12.0	25.0	115.0	80.0	50.0	10.0	5.0	4.0	-	9047180120000
14.0	25.0	115.0	80.0	50.0	10.0	3.0	2.0	1.5	9047180140010
14.0	25.0	115.0	80.0	50.0	10.0	5.0	4.0	-	9047180140000
16.0	25.0	120.0	85.0	55.0	10.0	3.0	2.0	1.5	9047180160010
16.0	25.0	120.0	85.0	55.0	10.0	6.0	5.0	4.0	9047180160000
18.0	30.0	120.0	85.0	55.0	10.0	3.0	2.0	1.5	9047180180010
18.0	30.0	120.0	85.0	55.0	10.0	6.0	5.0	4.0	9047180180000
20.0	30.0	135.0	90.0	65.0	10.0	4.0	3.0	2.0	9047180200010
20.0	30.0	135.0	90.0	65.0	10.0	8.0	5.0	-	9047180200000
25.0	35.0	140.0	100.0	70.0	10.0	4.0	3.0	2.0	9047180250010
25.0	35.0	140.0	100.0	70.0	10.0	8.0	5.0	-	9047180250000
32.0	45.0	150.0	100.0	70.0	10.0	4.0	3.0	2.0	9047180320010
32.0	45.0	150.0	100.0	70.0	10.0	8.0	5.0	-	9047180320000

Setting screws for GÜHROJET shrink fit chucks

Product information

- setting screws for GÜHROJET-shrink fit chucks
Guhring no. 4755 and 4729.
- slotted for reliable coolant supply for
conventional internal cooling

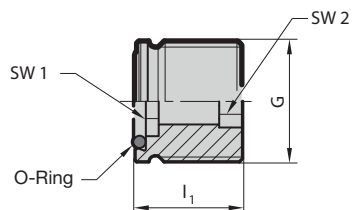


					Series Number
					4938
for clamping-Ø	l ₁ mm	G	SW1	SW2	EDP Numbers
6	14.0	M5	2.5	2.5	9049380060000
8	14.0	M6	3.0	3.0	9049380080000
10	14.0	M8 x 1	4.0	4.0	9049380100000
12/14	14.0	M10 x 1	5.0	5.0	9049380120000
16/18	14.0	M12 x 1	6.0	6.0	9049380160000
20/25/32	14.0	M16 x 1	8.0	6.0	9049380200000

Shrink fit chuck length setting screw with axial force damping

Product information

- for shrink fit chucks
- for conventional internal cooling
- with facing stop for standard shank ends
- with patented axial force damping.
O-ring reduces the concentricity error
when shrink fitting on the setting screw

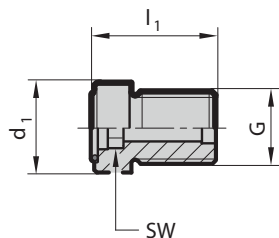


						Series Number
						4977
for clamping-Ø	l ₁ mm	G	SW1	SW2	O-Ring	EDP Numbers
6	14.0	M5	2.5	2.5	3 x 1	9049770060140
8	14.0	M6	3.0	3.0	3.5 x 1	9049770080140
10	14.0	M8 x 1	4.0	4.0	6 x 1	9049770100140
12/14	14.0	M10 x 1	5.0	5.0	6 x 1	9049770120140
16/18	14.0	M12 x 1	6.0	6.0	7.5 x 1.5	9049770160140
20/25/32	14.0	M16 x 1	8.0	6.0	12 x 1.5	9049770201140

Length setting screws for conventional cooling

Product information

- To adapt MQL tool holders to meet the requirements of conventional wet machining. For plain end shanks. The height of screw head compensates the height of MQL taper.



- for MQL HSK-A shrink fit chucks hydraulic chucks
- for use with shank according to DIN 6535 with plain shank end for conventional cooling
- The patented face orientated o-ring provides axial force clamping which eliminates concentricity errors.

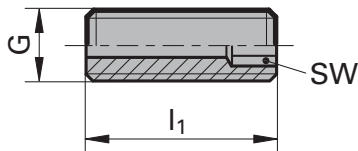


Series Number						4941
for HSK-A	clamping - Ø	G	d ₁ mm	l ₁ mm	SW	EDP Numbers
40	6	M5	6	15	2.5	9049410060410
40	6	M7x1	6	15	2.5	9049410060400
40	8	M7x1	6	18	3	9049410080400
50	6	M8x1	8	14	2.5	9049410060500
50	8	M8x1	7	18	3	9049410080500
40 / 50	10	M8x1	10	17.7	4	9049410100500
63/ 80/ 100	6	M10x1	9	22	2.5	9049410061000
63/ 80/ 100	8	M10x1	9	22	3	9049410081000
63/ 80/ 100	10	M10x1	10	16.2	4	9049410101000
40/ 50/ 63/ 80/ 100	12	M10x1	10	16.2	5	9049410121000
40/ 50/ 63/ 80/ 100	14	M10x1	10	17.2	5	9049410141000
50/ 63/ 80/ 100	16	M12x1	16	18.2	6	9049410161000
50/ 63/ 80/ 100	18	M12x1	16	19.2	6	9049410181000
50/ 63/ 80/ 100	20	M16x1	16	19.2	8	9049410201000
63/ 80/ 100	25	M16x1	16	22.7	8	9049410251000
63/ 80/ 100	32	M16x1	16	26.7	8	9049410321000

Setting screws

Product information

- for HSK-A side lock holders with bore to DIN 1835-2, form E, shrink fit chuck and shrink fit extensions



Scope of delivery

- minimum order quantity 5

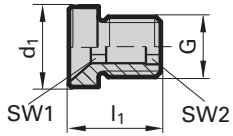


Series Number			4904
G	l ₁ mm	SW	EDP Numbers
M5	16	2.5	9049040050160
M5	20	2.5	9049040050200
M6	16	3.0	9049040060160
M6	20	3.0	9049040060200
M8	12	3.0	9049040080120
M8	18	4.0	9049040080180
M10	17	3.0	9049040100170
M10	20	5.0	9049040100200
M12	14	3.0	9049040120140
M12	20	5.0	9049040120200
M16	25	5.0	9049040160250
M20	25	6.0	9049040200250

MQL length setting screws

Product information

- for hydraulic chucks and shrink fit chucks
- with special geometry optimized for MQL
- with conical end for tapered MQL shank ends



Series Number					4919
d ₁ mm	l ₁ mm	G	SW1	SW2	EDP Numbers
6	14.8	M5	2.5	2.5	9049190060000
8	15.6	M6	3.0	3.0	9049190080000
10	16.1	M8x1	4.0	4.0	9049190100000
10	16.6	M8x1	3.0	3.0	9049190100400
10	16.6	M6	3.0	3.0	9049190100320
12	16.6	M10x1	5.0	5.0	9049190120000
12	17.6	M6	3.0	3.0	9049190120320
14	17.6	M10x1	5.0	5.0	9049190140000
14	18.6	M6	3.0	3.0	9049190140400
16	18.6	M12x1	5.0	5.0	9049190160000
16	19.6	M6	3.0	3.0	9049190160400
18	19.6	M12x1	5.0	5.0	9049190180000
20	20.6	M16x1	5.0	5.0	9049190200000
25	22.6	M16x1	8.0	6.0	9049190250000
32	26.1	M16x1	8.0	6.0	9049190320000

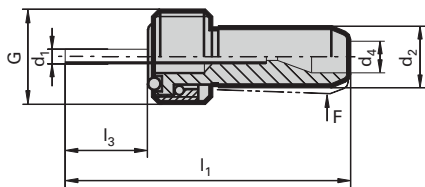
MQL coolant delivery sets HSK-A

Product information

- replace conventional coolant delivery sets, Guhring no. 4949, when applying MQL
- for shrink fit chucks to DIN 69882-8

Scope of delivery

- complete MQL coolant delivery sets



Series Number								4924
for HSK-A	clamping-Ø mm	d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₃ mm	G	EDP Numbers
32	6	2.5	6	3.5	45.1	18.9	M10x1	9049240320200
32	10	3.0	6	3.5	45.7	19.5	M10x1	9049240320600
32	8/12	3.0	6	3.5	45.2	19.0	M10x1	9049240320800
40	6	2.5	8	4.0	56.0	26.9	M12x1	9049240400200
40	8	3.0	8	4.0	56.2	27.0	M12x1	9049240400400
40	10	3.0	8	4.0	51.7	22.5	M12x1	9049240400600
40	12/14	3.0	8	4.0	57.2	28.0	M12x1	9049240401000
40	16	3.0	8	4.0	54.2	25.0	M12x1	9049240401200
50	6	2.5	10	4.0	55.4	22.7	M16x1	9049240500200
50	8	3.0	10	4.0	46.5	13.8	M16x1	9049240500400

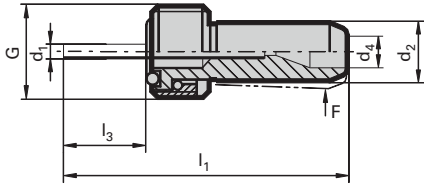
MQL coolant delivery sets HSK-A

Product information

- replace conventional coolant delivery sets, Guhring no. 4949, when applying MQL
- for shrink fit chucks to DIN 69882-8

Scope of delivery

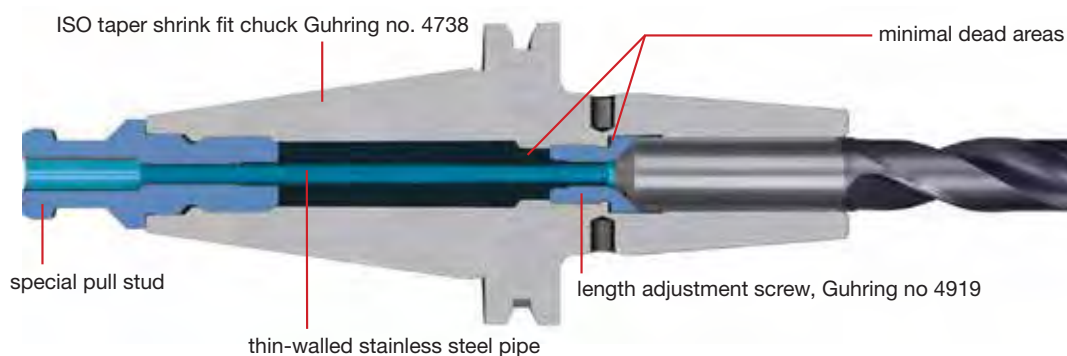
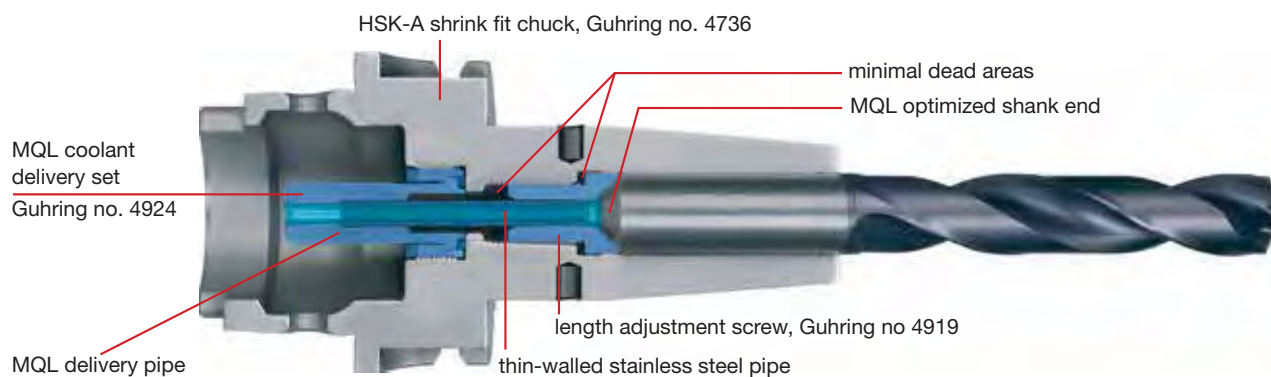
- complete MQL coolant delivery sets



Series Number								4924
for HSK-A	clamping-Ø mm	d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₃ mm	G	EDP Numbers
50	10	4.0	10	4.0	46.1	13.4	M16x1	9049240500600
50	12	5.0	10	4.0	55.7	23.0	M16x1	9049240500800
50	14	5.0	10	4.0	55.7	22.9	M16x1	9049240501000
50	16/18	5.0	10	4.0	57.7	25.0	M16x1	9049240501400
50	20	5.0	10	4.0	60.7	28.0	M16x1	9049240501600
63	6	2.5	12	4.0	56.7	20.5	M18x1	9049240630200
63	6	2.5	12	4.0	137.7	101.4	M18x1	9049240630210
63	8	3.0	12	4.0	57.0	20.8	M18x1	9049240630400
63	8	3.0	12	4.0	137.0	100.7	M18x1	9049240630410
63	10	4.0	12	4.0	55.7	19.5	M18x1	9049240630600
63	10	4.0	12	4.0	132.2	95.9	M18x1	9049240630610
63	12/14	5.0	12	4.0	55.7	19.5	M18x1	9049240630800
63	12/14	5.0	12	4.0	127.1	90.8	M18x1	9049240630810
63	16/18	5.0	12	4.0	57.5	21.3	M18x1	9049240631000
63	16/18	5.0	12	4.0	124.3	88.0	M18x1	9049240631410
63	20	5.0	12	4.0	60.7	24.5	M18x1	9049240631100
63	20	5.0	12	4.0	122.1	85.8	M18x1	9049240631610
63	25	6.0	12	4.0	69.0	32.8	M18x1	9049240631300
63	25	6.0	12	4.0	116.2	79.9	M18x1	9049240631810
63	32	6.0	12	4.0	70.7	34.5	M18x1	9049240631400
63	32	6.0	12	4.0	112.2	75.9	M18x1	9049240632010
80	6	2.5	14	4.0	61.2	21.9	M20x1.5	9049240800200
80	8	3.0	14	4.0	61.3	22.0	M20x1.5	9049240800400
80	10	4.0	14	4.0	61.3	22.0	M20x1.5	9049240800600
80	12/14	5.0	14	4.0	61.3	22.0	M20x1.5	9049240801000
80	16/18	5.0	14	4.0	63.3	24.0	M20x1.5	9049240801400
80	20	5.0	14	4.0	66.3	27.0	M20x1.5	9049240801600
80	25	6.0	14	4.0	70.3	31.0	M20x1.5	9049240801800
80	32	6.0	14	4.0	71.3	32.0	M20x1.5	9049240802000
100	6	2.5	16	4.0	63.9	20.1	M24x1.5	9049241000200
100	8	3.0	16	4.0	64.6	20.8	M24x1.5	9049241000400
100	10	4.0	16	4.0	63.3	19.5	M24x1.5	9049241000600
100	12/14	5.0	16	4.0	63.3	19.5	M24x1.5	9049241001000
100	16/18	5.0	16	4.0	65.3	21.5	M24x1.5	9049241001400
100	20	5.0	16	4.0	68.3	24.5	M24x1.5	9049241001600
100	25	6.0	16	4.0	72.3	28.5	M24x1.5	9049241001800
100	32	6.0	16	4.0	73.3	29.5	M24x1.5	9049241002000

MQL conversion of tool holders for conventional cooling

With the assistance of Guhring's MQL length adjustment screw, Guhring no. 4919, and MQL coolant delivery set, Guhring no. 4924, tool holders such as shrink fit chucks, Guhring no. 4736, from Guhring's GM 300 program can be converted for application under MQL conditions and automatic tool clamping. This combination is suitable for 2-channel MQL systems. The insertion depth is reduced by the length of the cone on the MQL shank and does not correspond with our Guhring standard. Special solutions for SK/BT are available on request.



GSS
2000

Simple operation

The movement of the spindle and its heating is a single handed operation.

Tool clamping cannot be simpler and quicker!

Quick cooling

The water-cooled cooling elements cool down the shrink fit chuck quickly and safely. The shrink fit chuck remains clean and dry, **so that it can be applied again without drying and without rusting.** Hot spots remain safely screened during the cooling process in order to prevent burns.

Safe shrink fitting

The minimal heating of the shrink fit chuck ensures **maximum operating safety** on the one hand, on the other the controlled heating ensures the **long life** of the shrink fit chuck.



The control panel

The clear control panel with display makes the operation of the GSS 2000 **very user-friendly.**

Benefit from the advantages of GSS 2000

GSS
2000

Efficient operation

The turntable allows simultaneous preparation, heating and cooling of the shrink fit chucks.

Subsequently, there is no waiting time, tool clamping is seamless and with maximum efficiency.



All under control

Practical locations and compartments provide room for accessories such as stop discs or gloves in close proximity to the equipment.

Thus all the necessary components are always at hand.

- > **High-performance spindle**, hence quick change time
- > **Overheating protection** for holder
- > **Automatic mode** possible (equipment automatically selects the correct heating program)
- > **Error detection** choosing wrong chuck/program
- > **Heating programs** for standard/reinforced and very small holder/shrink fit extensions
- > **Maximum rigidity**
- > **Highest cutting rates**

GSS 2000 Comfort version

Product information

- 3-station system with turntable

Scope of delivery

- incl. base system with turntable
- incl. induction coil Guhring no. 4743 / version 2008
- incl. 1 limit stop collar set Guhring no. 4769 / version 2008
- incl. SpeedCooler Guhring no. 4747
- incl. 1 pair of gloves Guhring no. 4750
- with integrated SpeedCooler-Manager
- order HSK-/ISO-holders Guhring nos. 4745, 4744 separately



Series Number	4742
	EDP Numbers
US version 50/60 Hz / 400-480 V, SpeedCooler 115 V	9047420020000

GSS 2000 HSK holders

Product information

- for GSS 2000 Comfort Plus Guhring no. 4742
- holder (spider) for turn-table to hold max. 3 shrink fit chucks.



GSS 2000 ISO taper holders

Product information

- for GSS 2000 Comfort Plus Guhring no. 4742
- also suitable for MAS-BT
- holder (spider) for turn-table to hold max. 3 shrink fit chucks.



Series Number	4745
for HSK-A/C/E	EDP Numbers
32	9047450320000
40	9047450400000
50	9047450500000
63	9047450630000
80	9047450800000
100	9047451000000

Series Number	4744
for ISO taper and BT	EDP Numbers
30	9047440300000
40	9047440400000
50	9047440500000

System cart

Product information

- for GSS 2000
- for mobile and stationary application
- systematic storage of cooler and accessories



	Series Number	4748
	EDP Numbers	
System cart		9047480010000

Swivel compartments for GSS 2000

Product information

- for the clean storage of GSS shrink fit system accessories, i.e. limit stop washers, gloves, measuring instruments etc.
- suitable for GSS 2000 Comfort Plus and ECO Plus Guhring no. 4742 and 4752

Scope of delivery

- swivel compartment does not include accessories shown



	Series Number	4763
	EDP Numbers	
Swivel compartments for GSS 2000 accessories		9047630010000

Tongs

Product information

- for the safe handling of hot tools



	Series Number	4749
	EDP Numbers	
Tongs		9047490010000

Cooling adaptor set, complete

Product information

- cooling adaptor set for shrink fit system GSS 2000 Comfort Plus and ECO Plus Guhring no. 4742 and 4752
- for inserting in the cooling adaptor Ø14-16, in order to effectively and safely cool the small shrink fit holders with clamping diameter Ø 3-5



Series Number **4419**

		EDP Numbers
for cooling adaptor	for shank Ø	
Ø14-16	Ø 3-5	9044190050000

Protective gloves

Product information

- Kevlar gloves providing protection against sharp cutting edges and high temperatures
- as specified for all shrink fit applications



Series Number **4750**

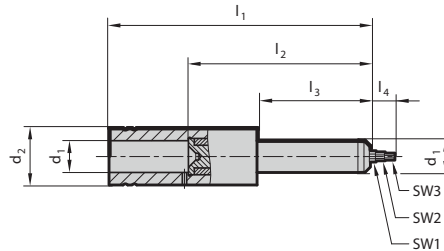
		EDP Numbers
Protective gloves		9047500010000

Universal length setting adaptor

Product information

- for shrink fit chuck to DIN 69 882-8
- for length pre-setting of the setting screw Guhring no. 4977 with the cutting tool (less difference dimension l₂, see sketch)
- flexibly mounted hexagonal key SW1/SW2 (*only available as rigid design)

- with standard screws suitable for wet application Guhring no. 4900, 4941, 4977
- suitable with MQL setting screws Guhring no. 4621, 4919, 4937



Series Number **4718**

d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	l ₄ mm	SW1	SW2	SW3	EDP Numbers
6.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180060000
6.0	25.0	115.0	80.0	50.0	10.0	3.0	2.5	-	9047180080000
6.0*	25.0	115.0	80.0	50.0	10.0	4.0	-	-	9047180100000
8.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180120000
8.0	25.0	115.0	80.0	50.0	10.0	3.0	-	-	9047180140000
8.0*	25.0	115.0	80.0	50.0	10.0	4.0	-	-	9047180160000
10.0	25.0	115.0	80.0	50.0	10.0	2.0	1.5	-	9047180180000
10.0	25.0	115.0	80.0	50.0	10.0	4.0	3.0	-	9047180200000
12.0	25.0	115.0	80.0	50.0	10.0	3.0	2.0	1.5	9047180250000
12.0	25.0	115.0	80.0	50.0	10.0	5.0	4.0	-	9047180320000
14.0	25.0	115.0	80.0	50.0	10.0	3.0	2.0	1.5	9047180060010
14.0	25.0	115.0	80.0	50.0	10.0	5.0	4.0	-	9047180060020
16.0	25.0	120.0	85.0	55.0	10.0	3.0	2.0	1.5	9047180080010
16.0	25.0	120.0	85.0	55.0	10.0	6.0	5.0	4.0	9047180080020
18.0	30.0	120.0	85.0	55.0	10.0	3.0	2.0	1.5	9047180100010
18.0	30.0	120.0	85.0	55.0	10.0	6.0	5.0	4.0	9047180120010
20.0	30.0	135.0	90.0	65.0	10.0	4.0	3.0	2.0	9047180140010
20.0	30.0	135.0	90.0	65.0	10.0	8.0	5.0	-	9047180160010
25.0	35.0	140.0	100.0	70.0	10.0	4.0	3.0	2.0	9047180180010
25.0	35.0	140.0	100.0	70.0	10.0	8.0	5.0	-	9047180200010
32.0	45.0	150.0	100.0	70.0	10.0	4.0	3.0	2.0	9047180250010
32.0	45.0	150.0	100.0	70.0	10.0	8.0	5.0	-	9047180320010

GSS 2000 Eco-Plus

Product information

- 1-place system

Scope of delivery

- incl. base system
- incl. induction coil Guhring no. 4743 / version 2008
- incl. 1 limit stop collar set Guhring no. 4769 / version 2008
- incl. SpeedCooler Guhring no. 4747
- incl. 1 pair of gloves Guhring no. 4750
- with integrated SpeedCooler-Manager
- order HSK-/ISO-holders Guhring nos. 4761, 4762 separately!



Series Number	4752
	EDP Numbers
50/60 Hz / 400-480 V, SpeedCooler 115 V	9047520200000

GSS 2000 Basic

Product information

- 1-place system

Scope of delivery

- incl. base system
- incl. 1 limit stop collar set Guhring no. 4769 / version 2008
- incl. 1 pair of gloves Guhring no. 4750
- order HSK-/ISO-holders Guhring nos. 4761, 4762 separately!



Series Number	4730
	EDP Numbers
Version 50/60 Hz / 400-480 V	9047300100000

HSK holder carriers GSS 2000

Product information

- for GSS 2000 Basic and ECO Plus Guhring no. 4730 and 4752
- holder carriers for HSK shrink fit chucks



Series Number	4761
for HSK- A/C/E	EDP Numbers
32	9047610320000
40	9047610400000
50	9047610500000
63	9047610630000
80	9047610800000
100	9047611000000

ISO taper holder carriers GSS 2000

Product information

- for GSS 2000 Basic and ECO Plus Guhring no. 4730 and 4752
- also suitable for MAS-BT
- holder carriers for SK or MAS/BT shrink fit chucks



Series Number	4762
for ISO taper and BT	EDP Numbers
30	9047620300000
40	9047620400000
50	9047620500000

SpeedCooler Cooling system

Product information

- for GSS 2000 Comfort Version and Eco-Plus



Series Number	4747
EDP Numbers	
50/60 Hz, 115 V	9047470020000

SpeedCooler Manager

Product information

- for automatic switch on and off of the SpeedCooler
- preserves the cooling system and reduce the service intervals



Series Number	4759
EDP Numbers	
50/60 Hz, 115 V	9047590020000

Induction coil

Product information

- for GSS 2000 / version 2008
- HSS for Ø 6...32 mm, carbide for Ø 3...32 mm



Series Number	4743
EDP Numbers	
Ø range mm	
3...32	9047430320000

Limit stop collars

Product information

- for induction coil
- suitable for all GSS systems
- for extra short standard shrink fit chucks with Code no.,100



Series Number	4769
EDP Numbers	
for tool shank diameter	
3 - 5 mm	9047690050000
6 - 12 mm	9047690120000
14 - 16 mm	9047690160000
18 - 20 mm	9047690200000
25 - 32 mm	9047690320000
6 - 12 mm	9047690121000
14 - 20 mm	9047690201000
25 - 32 mm	9047690321000

RF 100 *diver*



ONE END MILL ALL THE PROCESSES

SLOTTING • ROUGHING • FINISHING • DRILLING • RAMPING

Shank HA/HB

Solid carbide

4-fluted

36°/38° helix

Face geometry for
drilling and ramping

nano-SiP®-coating

Cutting edge preparation

Optimal chip space



HPC



HPC CLAMPING CHUCKS

AT FULL SPEED

A FIRM GRASP
ON EVERYTHING!



4500208017

SK40 / Ø3-20
GM300



HIGH CLAMPING FORCE



*IDEAL CLAMPING
FORCE TRANSFER
TO THE TOOL*



IMMENSE SPEEDS



MAXIMUM RIGIDITY



PRECISION CLAMPING CHUCKS

TECHNOLOGY AND ADVANTAGES

Guhring's precision clamping chucks offer highest clamping force particularly for milling operations but also for drilling and reaming as well as under HSC and HPC conditions. The special clamping sleeve is clamped via a worm gear and optimally transfers the enormous clamping force onto the clamped tool. This enables clamping forces of, for example, > 200 Nm for 12 mm shank diameters or > 300 Nm for 16 mm shank diameters.



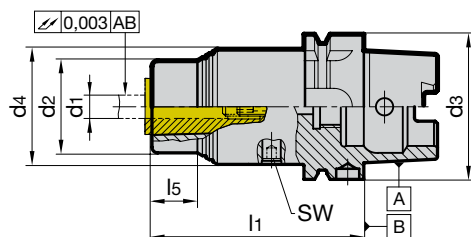
This system offers the following advantages:

- Increased cutting depths in comparison to conventional tool holders
- Increased radial engagement and subsequently higher material removal rate
- Maintenance-free technology
- Suitable for straight shanks to DIN 1835 A and B as well as to 6535 HA, HB and HE
- Concentricity 3 μm with 2.5 x D

HSK-A precision clamping chucks

Product information

- for heavy-duty and high-speed machining
- HSK-A to ISO 12164-1/DIN 69893-1
- balancing quality: G2.5 / 20,000 rev./min or $U < 1.2\text{gmm}$
- for tool shank tolerance h6
- highest clamping force and stability thanks to mech. tension gearing
- actuation torque for clamping initiation 12Nm
- suitable for internal cooling up to 80 bar



Scope of delivery

- hexagon clamping key Guhring no. 4912 4,600 included
- order clamping sleeves Guhring no. 4302, 4235, 4236, 4237 separately
- order coolant delivery set Guhring no. 4949 separately
- for optimal operation order torque wrench 12 Nm Guhring no. 4915 12,000 and sockets Guhring no. 4916 4,000 separately



Series Number **4300**

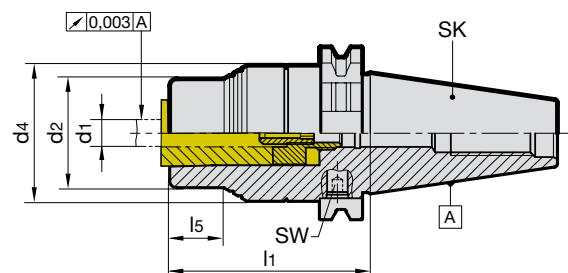
HSK-A d_3	**Nominal Size	for clamping-Ø d_1 h6 mm	d_2 mm	d_4 mm	l_1 mm	l_5 mm	SW	Order Code	EDP Numbers
63	20	3-20	40	53	92	20	4	20.063	9043000200630
100	20	3-20	40	70	100	18	4	20.100	9043000201000
100	25	16-32	70	70	139	-	4	25.100	9043000251000

***HPC chuck bore nominal size must match clamping sleeve nominal size*

ISO taper precision clamping chucks

Product information

- for heavy-duty and high-speed machining
- SK taper to DIN ISO 7388-1 form AD
- balancing quality: G2.5 / 20,000 rev./min or $U < 1.2\text{gmm}$
- for tool shank tolerance h6
- highest clamping force and stability thanks to mech. tension gearing
- actuation torque for clamping initiation 12Nm
- suitable for internal cooling up to 80 bar central coolant supply form AD



Scope of delivery

- hexagon clamping key Guhring no. 4912 4,600 included
- order clamping sleeves Guhring no. 4302, 4235, 4236, 4237 separately
- order pull studs Guhring no. 4925 or 4926 separately
- for optimal operation order torque wrench 12 Nm Guhring no. 4915 12,000 and sockets Guhring no. 4916 4,000 separately
- form AD/B on request



Series Number **4301**

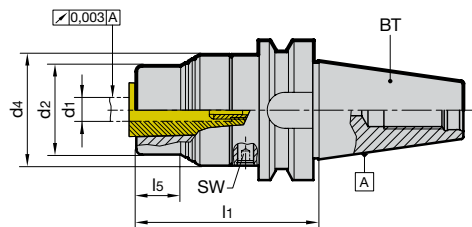
SK taper	**Nominal Size	for clamping-Ø d_1 h6 mm	d_2 mm	d_4 mm	l_1 mm	l_5 mm	SW	Order Code	EDP Numbers
40	20	3-20	40	50	63	20	4	20.040	9043010200400
50	20	3-20	40	63	62	18	4	20.050	9043010200500
50	25	16-32	70	70	102	-	4	25.050	9043010250500

***HPC chuck bore nominal size must match clamping sleeve nominal size*

MAS/BT precision clamping chucks

Product information

- for heavy-duty and high-speed machining
- MAS/BT to DIN ISO7388-2 form JD
- balancing quality: G2.5 / 20,000 rev./min or U < 1.2mm
- for tool shank tolerance h6
- highest clamping force and stability thanks to mech. tension gearing
- actuation torque for clamping initiation 12Nm
- suitable for internal cooling up to 80 bar



Scope of delivery

- hexagon clamping key Guhring no. 4912 4,600 included
- order clamping sleeves Guhring no. 4302, 4235, 4236, 4237 separately
- order pull studs Guhring no. 4927 or 4928 separately
- for optimal operation order torque wrench 12 Nm Guhring no. 4915 12,000 and sockets Guhring no. 4916 4,000 separately
- form AD/B on request



Series Number **4244**

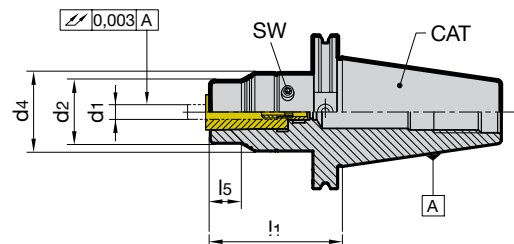
MAS-BT	**Nominal Size	for clamping-Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₅ mm	SW	Order Code	EDP Numbers
30	20	3-20	40	53	82	20	4	20.030	9042440200300
40	20	3-20	40	63	70	18	4	20.040	9042440200400
40	20	3-20	40	63	120	48	4	120.040	9042441200400
50	20	3-20	40	63	81	18	4	20.050	9042440200500
50	20	3-20	40	63	167	84	4	120.050	9042441200500
40	25	16-32	63	63	110	-	4	25.040	9042440250400
50	25	16-32	70	70	121	-	4	25.050	9042440320500

***HPC chuck bore nominal size must match clamping sleeve nominal size*

CAT precision clamping chucks

Product information

- for heavy-duty and high-speed machining
- CAT to ASME B5.50
- balancing quality: G2.5 / 20,000 rev./min or U < 1.2mm
- for tool shank tolerance h6
- highest clamping force and stability thanks to mech. tension gearing
- actuation torque for clamping initiation 12Nm
- suitable for internal cooling up to 80 bar
- central coolant supply form AD
- CAT40 d4: does not correspond to ASME B5.50



Scope of delivery

- hexagon clamping key Guhring no. 4912 4,600 included
- order clamping sleeves Guhring no. 4302, 4235, 4236, 4237 separately
- order pull studs with imperial thread separately
- for optimal operation order torque wrench 12 Nm Guhring no. 4915 12,000 and sockets Guhring no. 4916 4,000 separately



Series Number **4243**

CAT	**Nominal Size	for clamping-Ø d _{1 h6} mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₅ mm	SW	Order Code	EDP Numbers
40	20	3-20	40	50	62,5	20	4	20.040	9042430200400
50	20	3-20	40	63	62	18	4	20.050	9042430200500
50	25	16-32	70	70	102	-	4	25.050	9042430250500

***HPC chuck bore nominal size must match clamping sleeve nominal size*

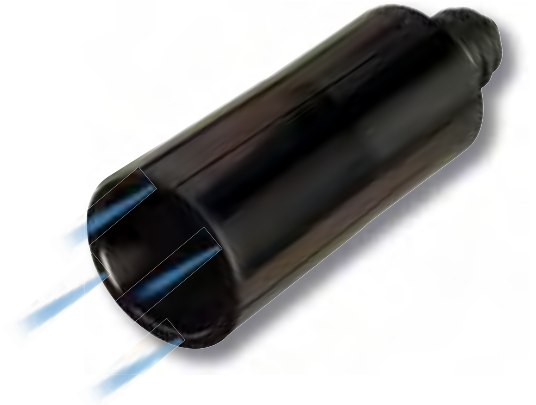
GÜHROJET clamping sleeves with peripheral cooling for precision clamping chucks

Product information

- for clamping tools with straight shank
- for maximum holding torque
- design with peripheral cooling
- for tool shank tolerance h6

Scope of delivery

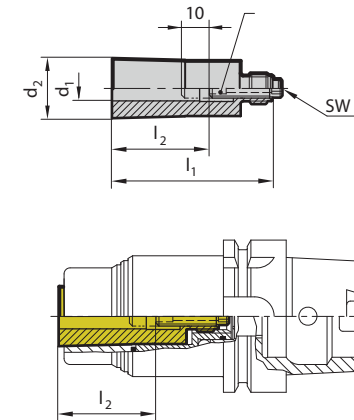
- incl. length setting screw



GÜHROJET

Series Number

4302



							EDP Numbers
Nominal size	for shank Ø d ₁ h6 mm	d ₂ mm	l ₁ mm	l ₂ mm	SW	Order Code	
20	3	24.6	66	28	4	3.020	9043020030200
20	4	24.6	66	28	4	4.020	9043020040200
20	5	24.6	66	28	4	5.020	9043020050200
20	6	24.6	66	36	4	6.020	9043020060200
20	8	24.6	66	36	4	8.020	9043020080200
20	10	24.6	66	40	4	10.020	9043020100200
20	12	24.6	66	45	4	12.020	9043020120200
20	14	24.6	66	45	4	14.020	9043020140200
20	16	24.6	66	48	4	16.020	9043020160200
20	18	24.6	66	48	4	18.020	9043020180200
20	20	24.6	66	50	4	20.020	9043020200200
32	20	45.5	90	50	4	20.032	9043020200320
32	22	45.5	90	50	4	22.032	9043020220320
32	25	45.5	90	56	4	25.032	9043020250320
32	32	45.5	90	59	4	32.032	9043020320320

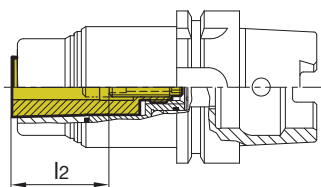
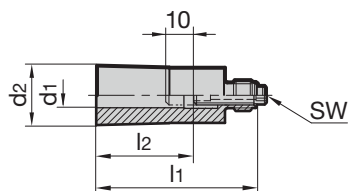
Clamping sleeves for precision clamping chucks, sealed version

Product information

- for clamping tools with straight shank
- for maximum holding torque
- sealed version
- for tool shank tolerance h6

Scope of delivery

- incl. length setting screw



Series Number 4235

							EDP Numbers
Nominal size	for shank Ø d ₁ h6 mm	d ₂ mm	l ₁ mm	l ₂ mm	SW	Order Code	
20	3	24.6	66	28	4	3.020	9042350030200
20	4	24.6	66	28	4	4.020	9042350040200
20	5	24.6	66	28	4	5.020	9042350050200
20	6	24.6	66	36	4	6.020	9042350060200
20	8	24.6	66	36	4	8.020	9042350080200
20	10	24.6	66	40	4	10.020	9042350100200
20	12	24.6	66	45	4	12.020	9042350120200
20	14	24.6	66	45	4	14.020	9042350140200
20	16	24.6	66	48	4	16.020	9042350160200
20	18	24.6	66	48	4	18.020	9042350180200
20	20	24.6	66	50	4	20.020	9042350200200
32	20	45.5	90	50	4	20.032	9042350200320
32	22	45.5	90	50	4	22.032	9042350220320
32	25	45.5	90	56	4	25.032	9042350250320
32	32	45.5	90	59	4	32.032	9042350320320

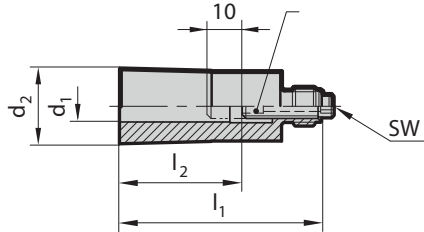
GÜHROJET clamping sleeves with peripheral cooling, imperial, for precision clamping chucks

Product information

- for clamping imperial tool shanks
- for maximum holding torque
- design with peripheral cooling
- for tool shank tolerance h6

Scope of delivery

- incl. length setting screw



GÜHROJET

Series Number

4236

Nominal size	for shank Ø d ₁ h6 inch	d ₂ mm	l ₁ mm	l ₂ mm	SW	Order Code	EDP Numbers
20	1/8	24.6	66	28	4	1.020	9042360010200
20	3/16	24.6	66	28	4	2.020	9042360020200
20	1/4	24.6	66	28	4	3.020	9042360030200
20	5/16	24.6	66	36	4	4.020	9042360040200
20	3/8	24.6	66	36	4	5.020	9042360050200
20	7/16	24.6	66	40	4	6.020	9042360060200
20	1/2	24.6	66	45	4	7.020	9042360070200
20	9/16	24.6	66	45	4	8.020	9042360080200
20	5/8	24.6	66	48	4	9.020	9042360090200
20	11/16	24.6	66	48	4	10.020	9042360100200
20	3/4	24.6	66	50	4	11.020	9042360110200
32	3/4	45.5	90	50	4	1.032	9042360010320
32	1	45.5	90	56	4	2.032	9042360020320
32	1-1/4	45.5	90	59	4	3.032	9042360030320

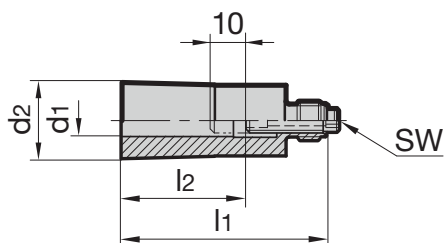
Clamping sleeves, imperial, for precision clamping chucks, sealed version

Product information

- for clamping imperial tool shanks
- for maximum holding torque
- sealed version
- for tool shank tolerance h6

Scope of delivery

- incl. length setting screw



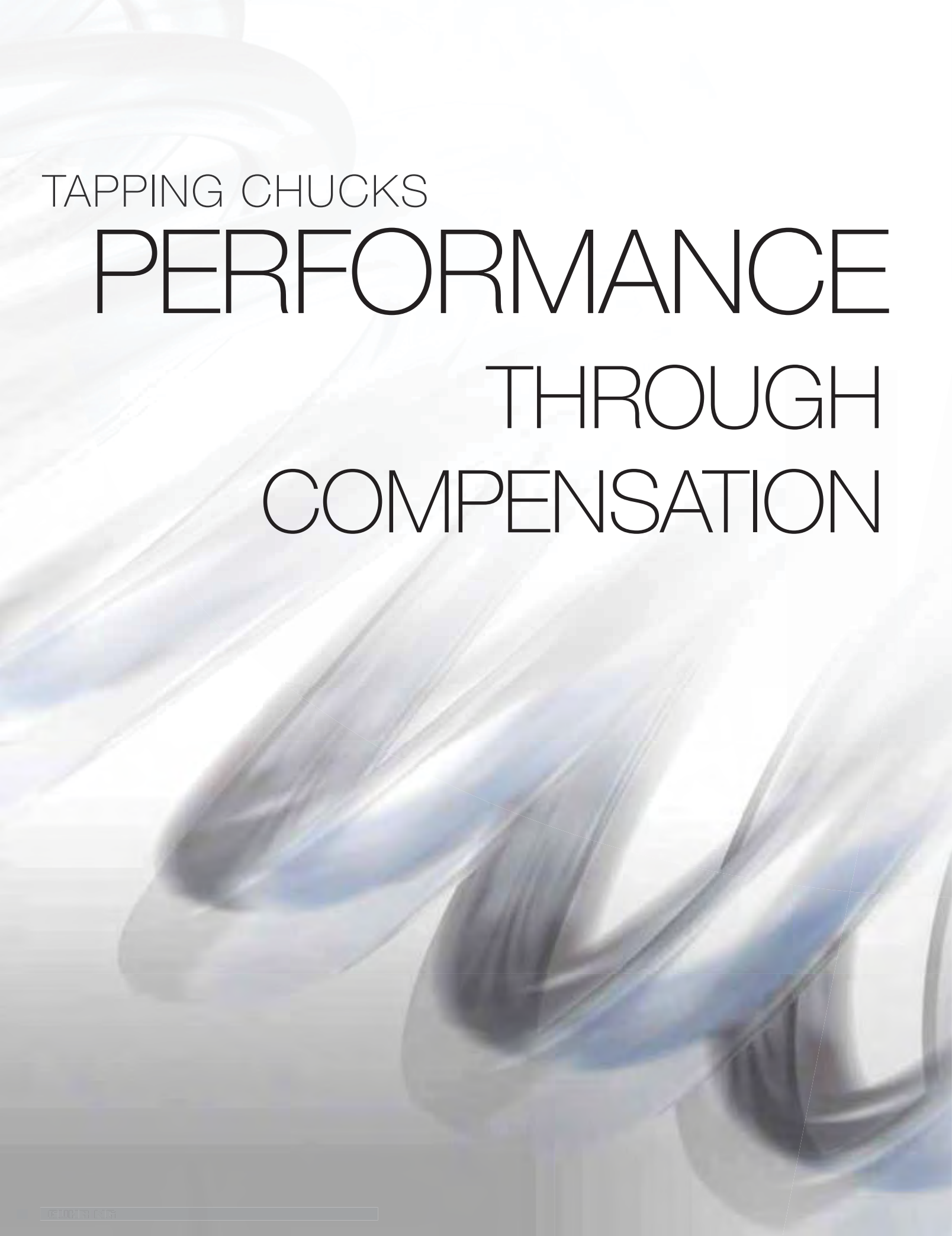
Series Number

4237

Nominal size	for shank Ø d _{1 h6} inch	d ₂ mm	l ₁ mm	l ₂ mm	SW	Order Code	EDP Numbers
20	1/8	24.6	66	28	4	1.020	9042370010200
20	3/16	24.6	66	28	4	2.020	9042370020200
20	1/4	24.6	66	36	4	3.020	9042370030200
20	5/16	24.6	66	36	4	4.020	9042370040200
20	3/8	24.6	66	40	4	5.020	9042370050200
20	7/16	24.6	66	45	4	6.020	9042370060200
20	1/2	24.6	66	45	4	7.020	9042370070200
20	9/16	24.6	66	45	4	8.020	9042370080200
20	5/8	24.6	66	48	4	9.020	9042370090200
20	11/16	24.6	66	48	4	10.020	9042370100200
20	3/4	24.6	66	50	4	11.020	9042370110200
32	3/4	45.5	90	50	4	1.032	9042370010320
32	1	45.5	90	56	4	2.032	9042370020320
32	1-1/4	45.5	90	59	4	3.032	9042370030320

TAPPING CHUCKS



The background of the entire page is a blurred, high-speed photograph of a tapping chuck. The chuck is a cylindrical metal tool with a central hole, used for creating threads in metal. It is shown in motion, with the background streaked to convey speed. The text is overlaid on this image.

TAPPING CHUCKS

PERFORMANCE

THROUGH
COMPENSATION



**COMPENSATES
SYNCHRONIZATION
ERRORS**



**SHORTER
CYCLE TIMES**

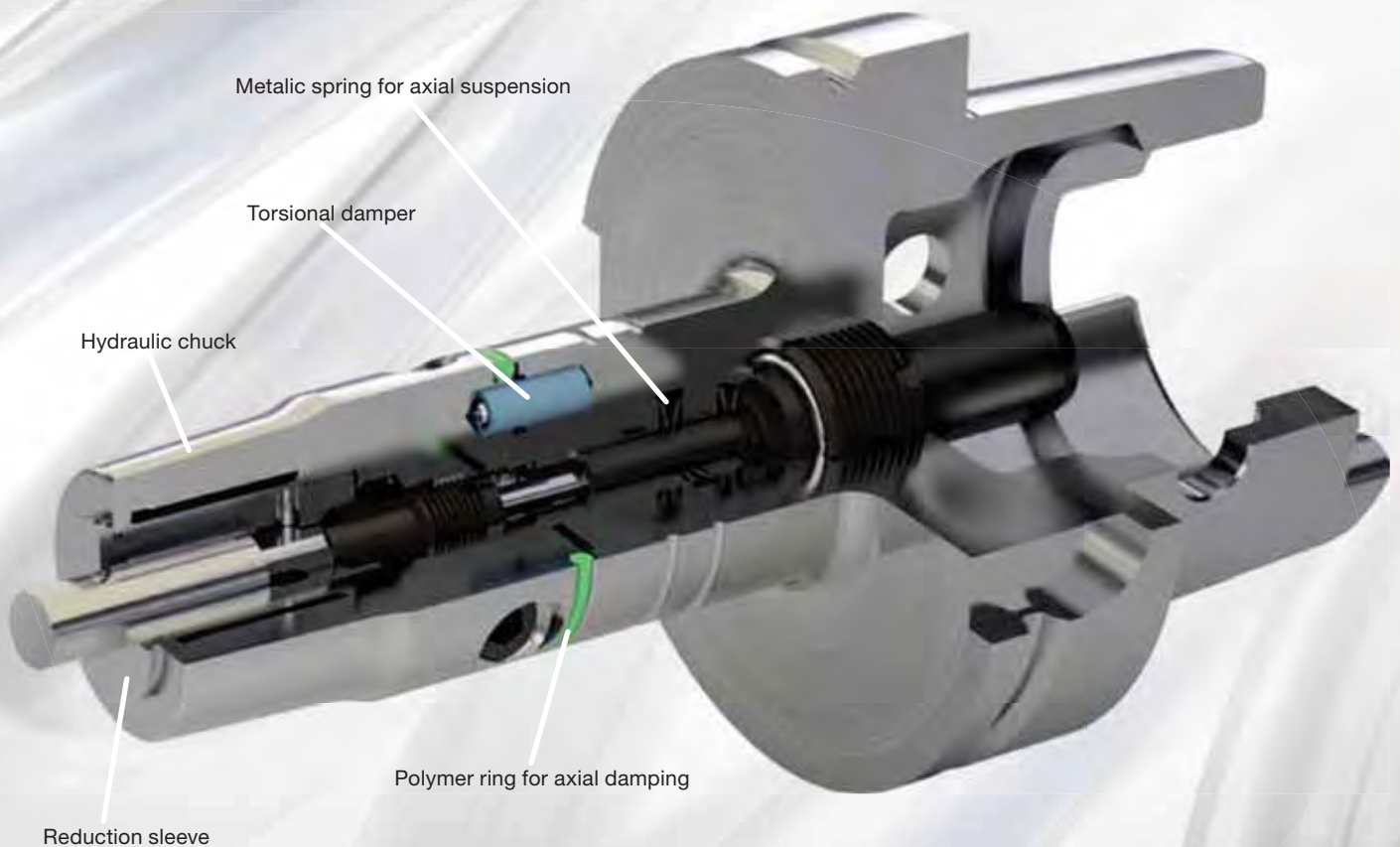


**HIGHER
CUTTING RATES**



GUHROSUNC

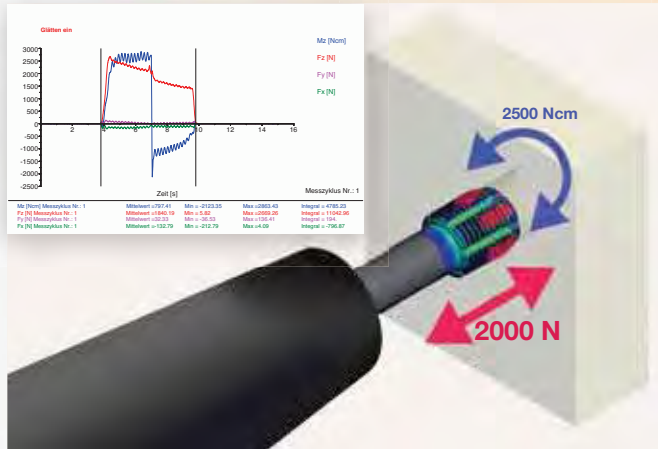
THE EASY WAY
TO THE PERFECT THREAD



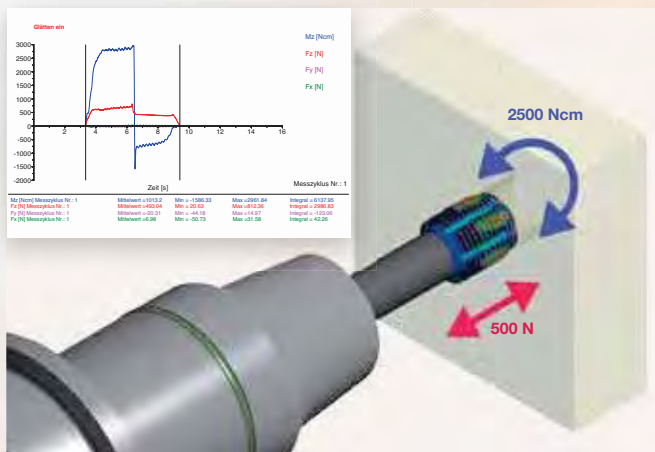
Intelligent design:

As well as the suspension and damping elements in the slender GUHROSunc chucks (for the reduction of axial and radial forces during the tapping process) there is also room for the delivery set for MQL or conventional cooling lubrication and the length setting screw.

The optimal combination of long-life metal spring and polymer damping elements considerably reduces axial and radial forces



Rigid chuck



GUHROSyc



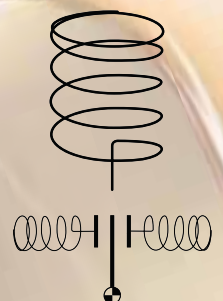
**IMPROVED
TOOL LIFE**



**IMPROVED THREAD
QUALITY**



**GREATER PROCESS
RELIABILITY**



Made visible:
The spring symbol on the GUHROSyc displays the effect of axial and radial force.



*REDUCTION OF AXIAL
AND RADIAL FORCES*



*COMPENSATES
SYNCHRONIZATION ERRORS*



*QUICK AND ACCURATE
LENGTH SETTING OF TOOLS*



*MODULAR DESIGN
FOR DIFFERENT STANDARD
AND SPECIAL VERSIONS*



*LONGER
TOOL LIFE*



*REDUCED
CYCLE TIMES*



*IMPROVED
THREAD QUALITY*



*GREATER PROCESS
RELIABILITY*

Configuration of GUHROSynch synchro tapping chucks with straight shank for internal cooling

Side lock holders

4343 HSK-A

4322 ISO taper

4233 BT taper

4087 CAT taper

Shrink fit chucks

4736 HSK-A

4758 HSK-C

4764 CAT taper

Hydraulic synchro tapping chucks with increased clamping force

4221 MAS-BT

4299 HSK-A

4267 HSK-C

4213 ISO taper

4216 CAT taper

Hydraulic synchro tapping chucks

4601 HSK-A

Hydraulic synchro tapping chucks

4576 ISO taper

Hydraulic synchro tapping chucks

4577 MAS-BT

4525 Type B

Hydraulic synchro tapping chucks with cylindrical shank Ø 25, DIN 1835-B+E, internal cooling

4525 Type A

Hydraulic synchro tapping chucks with cylindrical shank Ø 20, DIN 1835-A, internal cooling

4364

Setting screws for synchro tapping chucks, with conventional int. cooling

4605 Sealed reduction sleeve

4606 GUHROJET reduction sleeve

Threading tool:
shank diameter x square

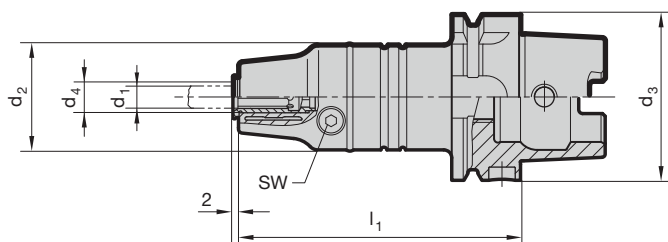
HSK-A hydraulic synchro tapping chucks with internal cooling

Product information

- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black colored ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"
Guhring no. 4364 separately
- order reduction sleeves
Guhring no. 4605 or 4606 separately
- for conventional cooling order coolant delivery set Guhring no. 4949 separately



GÜHROSync

Series Number

4601

HSK-A d ₃	d ₄ mm	for shank Ø d ₁ x VKT	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
63	12	2.8 to 10	M3 to M12	40	106.5	0.3	4	1.5	12.063	9046010120630
63	20	6 to 16	M8 to M20	40	120.5	0.3	5	1.6	20.063	9046010200630
100	12	2.8 to 10	M3 to M12	40	113	0.3	4	2.8	12.100	9046010121000
100	20	6 to 16	M8 to M20	40	127	0.3	5	2.9	20.100	9046010201000

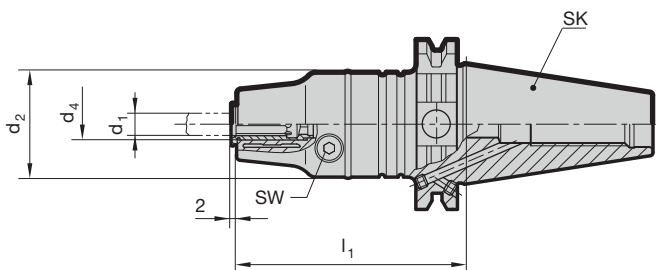
ISO taper hydraulic synchro tapping chucks with internal cooling

Product information

- SK30 to DIN 69871 form AD without coolant supply over collar
- SK40 to DIN 69871 form AD/B
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- suitable for internal cooling identifiable by black colored ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"
Guhring no. 4364 separately
- order reduction sleeves
Guhring no. 4605 or 4606 separately
- order pull studs, Guhring no. 4925 or 4926 separately



GÜHROSync

Series Number

4576

										EDP Numbers
SK	d ₄ mm	for shank Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	
30	12	2.8 to 10	M3 to M12	40	81	0.3	4	0.8	12.030	9045760120300
30	20	6 to 16	M8 to M20	40	95	0.3	5	0.9	20.030	9045760200300
40	12	2.8 to 10	M3 to M12	40	85	0.3	4	1.3	12.040	9045760120400
40	20	6 to 16	M8 to M20	40	99	0.3	5	1.4	20.040	9045760200400

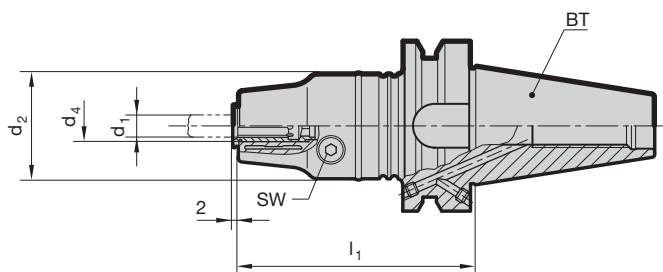
MAS/BT hydraulic synchro tapping chucks with internal cooling

Product information

- MAS/BT30 to JIS B 6339-2 form JD without coolant supply over collar
- MAS/BT40 to JIS B 6339-2 form JD/JF (form AD/B)
- form B supplied with threaded pins in bores
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm re-adjustment
- suitable for internal cooling identifiable by black colored ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"
Guhring no. 4364 separately
- order reduction sleeves
Guhring no. 4605 or 4606 separately
- order pull studs, Guhring no. 4927 or 4928 separately



GÜHROSync

Series Number

4577

BT	d ₄ mm	for shank Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
30	12	2.8 to 10	M3 to M12	40	81	0.3	4	0.8	12.030	9045770120300
30	20	6 to 16	M8 to M20	40	95	0.3	5	0.9	20.030	9045770200300
40	12	2.8 to 10	M3 to M12	40	85	0.3	4	1.3	12.040	9045770120400
40	20	6 to 16	M8 to M20	40	99	0.3	5	1.4	20.040	9045770200400

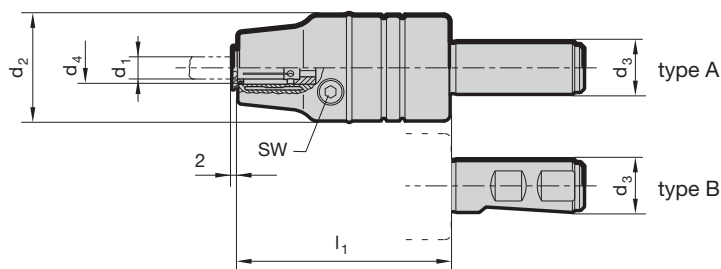
Straight shank hydraulic synchro tapping chucks for internal cooling

Product information

- compensates synchronisation errors
- guarantees best thread quality and optimal life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- holder shank to DIN 1835-A or holding in precision chucks (hydraulic, shrink fit or power clamping chucks)
- suitable for internal cooling identifiable by black colored ring
- coolant pressure up to max. 80 bar

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. adjustment key for adjustment screws
- order setting screw "face"
Guhring no. 4364 separately
- order reduction sleeves
Guhring no. 4605 or 4606 separately



GÜHROSync

Series Number 4525

											EDP Numbers
d_3 h6 mm	d_4 mm	Type	for shank Ø d_1	for thread	d_2 mm	l_1 mm	tension/ compr. ± mm	SW	kg	Order Code	
20	12	A	2.8 to 10	M3 to M12	40	80	0.3	4	0.7	12.020	9045250120200
20	20	A	6 to 16	M8 to M20	40	94	0.3	5	0.8	20.020	9045250200200
25	12	B	2.8 to 10	M3 to M12	40	80	0.3	4	0.7	12.025	9045250120250
25	20	B	6 to 16	M8 to M20	40	94	0.3	5	0.8	20.025	9045250200250

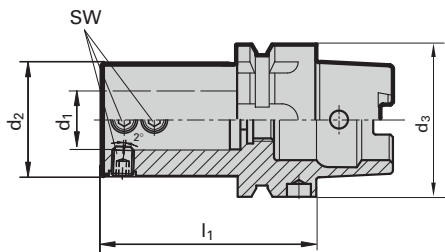
HSK-A adaptors for tapping chucks

Product information

- for quick change chucks and Synchro tapping chucks with straight shank

Scope of delivery

- incl. clamping screws Guhring no. 4903, code no. 12,001
- order coolant delivery set Guhring no. 4949 separately



Series Number **4343**

HSK-A d ₃	d ₁ mm	d ₂ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
50	25	50	80	6	0.89	25.050	9043430250500
63	25	50	82	6	1.26	25.063	9043430250630
80	25	50	87	6	3.1	25.080	9043430250800
100	25	50	89	6	4.08	25.100	9043430251000

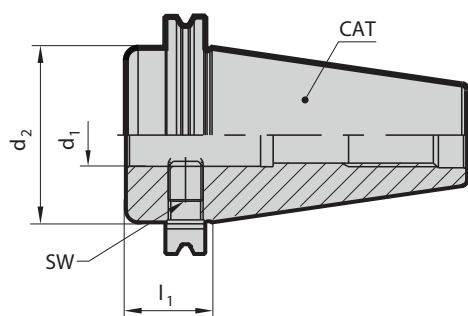
CAT side lock holder extra short

Product information

- balancing quality G6.3 / 15.000 rev./min.
- taper according to ANSI/ASME B5.50
- Coolant through center
- CAT 40 - 5/8 x 11 retention knob thread
- CAT 50 - 1" x 8 retention knob thread

Scope of delivery

- incl. clamping screw Guhring no. 4903



EXCLUSIVELY for
GÜHR Sync

Series Number **4087**

CAT	clamping-Ø d ₁ mm	d ₂ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
40	25	44.5	35	6.0	0.8	25.040	9040870250400
50	25	70.0	35	6.0	2.8	25.050	9040870250500

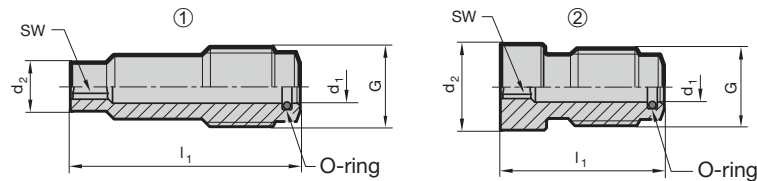
Setting screws for synchro tapping chucks with conventional internal cooling

Product information

- for GuhroSync synchro tapping chucks
Guhring no. 4601, 4576, 4577, 4525
- for conventional internal cooling
- for standard shank ends
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- with O-ring for secure seal



Series Number

4364

for nominal size	for tap shank-Ø x □	G	d ₁ mm	d ₂ mm	l ₁ mm	SW	O-ring	image	Order Code	EDP Numbers
ER20 / Hydro12	< Ø6	M8x1	3.6	3.3	28.0	2.0	3.5x1	1	5.020	9043640050200
ER20 / Hydro12	6x4.9	M8x1	3.6	4.8	26.0	2.5	3.5x1	1	6.020	9043640060200
ER20 / Hydro12	7x5.5	M8x1	3.6	5.4	25.8	2.5	3.5x1	1	7.020	9043640070200
ER20 / Hydro12	8x6.2	M8x1	3.6	6.1	20.9	2.5	3.5x1	1	8.020	9043640080200
ER20 / Hydro12	9x7	M8x1	3.6	6.9	20.3	2.5	3.5x1	1	9.020	9043640090200
ER20 / Hydro12	10x8	M8x1	3.6	7.8	15.8	2.5	3.5x1	2	10.020	9043640100200
ER20 / Hydro12	11x9	M8x1	3.6	8.8	14.8	2.5	3.5x1	2	11.020	9043640110200
ER32 / Hydro20	< Ø6	M10x1	4.1	3.3	33.0	2.0	4x1	1	5.032	9043640050320
ER32 / Hydro20	6x4.9	M10x1	4.1	4.8	34.0	3.0	4x1	1	6.032	9043640060320
ER32 / Hydro20	7x5.5	M10x1	4.1	5.4	33.8	3.0	4x1	1	7.032	9043640070320
ER32 / Hydro20	8x6.2	M10x1	4.1	6.1	28.8	3.0	4x1	1	8.032	9043640080320
ER32 / Hydro20	9x7	M10x1	4.1	6.9	28.3	3.0	4x1	1	9.032	9043640090320
ER32 / Hydro20	10x8	M10x1	4.1	7.8	23.8	3.0	4x1	1	10.032	9043640100320
ER32 / Hydro20	11x9 & 12x9	M10x1	4.1	8.8	22.9	3.0	4x1	1	11.032	9043640110320
ER32 / Hydro20	14x11	M10x1	4.1	10.8	20.7	3.0	4x1	2	14.032	9043640140320
ER32 / Hydro20	16x12	M10x1	4.1	11.8	19.7	3.0	4x1	2	16.032	9043640160320
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.1	14.3	18.0	3.0	4x1	2	18.032	9043640180320

Configuration of GUHROSynch tapping chucks for internal cooling with MQL

MQL shrink fit chucks
HSK-A
auto. tool change

4741 

4614 

man. tool change

4735 

4613 

MQL hydraulic tapping chucks
HSK-A
auto. tool change

4210 

4612 

man. tool change

4209 

4611 

4508

 **1 MQL**

MQL coolant delivery set
for single channel
HSK-A



4511

 **2 MQL**

MQL coolant delivery set
for 2 channel systems
HSK-A



4513

 **1 MQL**

 **2 MQL**

MQL coolant delivery set
HSK-A (filler)



MQL HSK-A hydraulic
synchro tapping chucks for
single channel
auto. tool change

4602 

MQL HSK-A hydraulic
synchro tapping chucks for
2 channel systems
auto. tool change

4603 

MQL HSK-A hydraulic
synchro tapping chucks
man. tool change

 **1 MQL**

 **2 MQL**



4524

 **1 MQL**  **2 MQL**

MQL hydraulic synchro tapping chuck with internal coolant
cylindrical shank Ø20.0 mm



4305

MQL setting screws with internal cone
for MQL synchro tapping chucks



4605

Reduction sleeves, sealed



4606

GUHROJET reduction sleeves



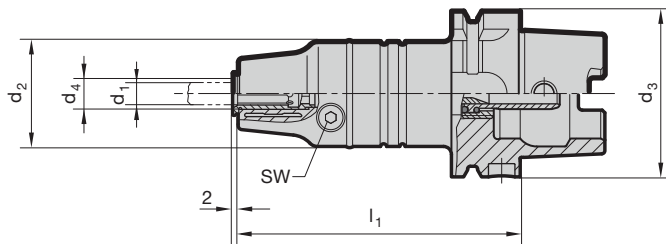
Threading tool with MQL shank:
shank diameter x square

Product information

- for MQL single channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green colored ring

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. MQL coolant delivery set for automatic tool change
Guhring no. 4508
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw
Guhring no. 4305 separately
- order reduction sleeves Guhring no. 4605 or 4606 separately



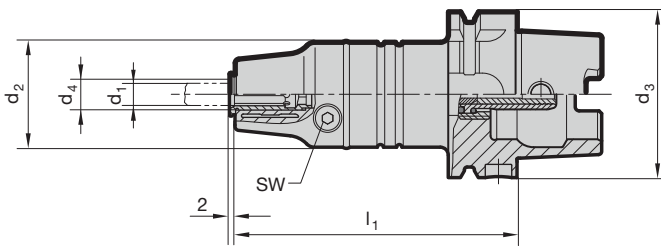
Series Number										4602
HSK-A d ₃	d ₄ mm	for shank-Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
63	12	2.8 to 10	M3 to M12	40	106.5	0.3	4	1.5	12.063	9046020120630
63	20	6 to 16	M8 to M20	40	120.5	0.3	5	1.6	20.063	9046020200630
100	12	2.8 to 10	M3 to M12	40	113	0.3	4	2.8	12.100	9046020121000
100	20	6 to 16	M8 to M20	40	127	0.3	5	2.9	20.100	9046020201000

Product information

- for MQL 2 channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green colored ring

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. MQL coolant delivery set for automatic tool change Guhring no. 4511
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw
Guhring no. 4305 separately
- order reduction sleeves Guhring no. 4605 or 4606 separately



Series Number 4603

HSK-A d ₃	d ₄ mm	for shank-Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
63	12	2.8 to 10	M3 to M12	40	106.5	0.3	4	1.5	12.063	9046030120630
63	20	6 to 16	M8 to M20	40	120.5	0.3	5	1.6	20.063	9046030200630
100	12	2.8 to 10	M3 to M12	40	113	0.3	4	2.8	12.100	9046030121000
100	20	6 to 16	M8 to M20	40	127	0.3	5	2.9	20.100	9046030201000

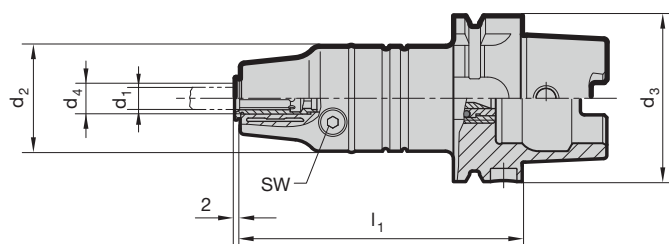
MQL HSK-A hydraulic synchro tapping chucks for manual tool change

Product information

- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- Guhring MQL identifiable by green colored ring

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. MQL coolant delivery set for manual tool change (filler)
Guhring no. 4513
- incl. adjustment key for MQL adjustment screws
- order MQL adjustment screw
Guhring no. 4305 separately
- order reduction sleeves Guhring no. 4605 or 4606 separately



Series Number

4604

HSK-A d ₃	d ₄ mm	for shank-Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
63	12	2.8 to 10	M3 to M12	40	106.5	0.3	4	1.5	12.063	9046040120630
63	20	6 to 16	M8 to M20	40	120.5	0.3	5	1.6	20.063	9046040200630
100	12	2.8 to 10	M3 to M12	40	113	0.3	4	2.8	12.100	9046040121000
100	20	6 to 16	M8 to M20	40	127	0.3	5	2.9	20.100	9046040201000

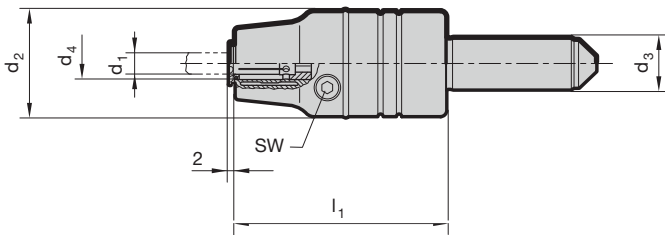
MQL hydraulic synchro tapping chucks with internal cooling

Product information

- for MQL single and double channel systems
- MQL coolant pressure up to max. 16 bar
- compensates synchronisation errors
- guarantees high thread quality and optimal tool life
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap
- reduces an increase in axial forces during the cutting cycle to a minimum
- convenient hydraulic clamping using reduction sleeves with active drive
- length-setting screw allows 3 mm readjustment
- holder shank to DIN 1835-A or holding in precision chucks (hydraulic, shrink fit or power clamping chucks)
- Guhring MQL identifiable by green colored ring

Scope of delivery

- incl. hexagon clamping key
Guhring no. 4912
- incl. adjustment key for
MQL adjustment screws
- order MQL adjustment screw
Guhring no. 4305 separately
- order reduction sleeves
Guhring no. 4605 or 4606 separately



Series Number 4524

d ₃ h6 mm	d ₄ mm	for shank-Ø d ₁	for thread	d ₂ mm	l ₁ mm	tension/ compr. ± mm	SW	kg	Order Code	EDP Numbers
20	12	2.8 to 10	M3 to M12	40	80	0.3	4	0.7	12.020	9045240120200
20	20	6 to 16	M8 to M20	40	94	0.3	5	0.8	20.020	9045240200200

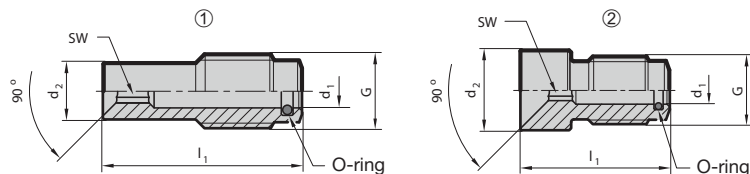
MQL setting screws with internal cone for MQL synchro tapping chucks.

Product information

- MQL setting screws with internal cone
- for MQL single and double channel systems
- for MQL taps with external cone
- for MQL synchro tapping chucks
Gühring no. 4602, 4603 and 4604
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- with O-ring for secure seal



Series Number

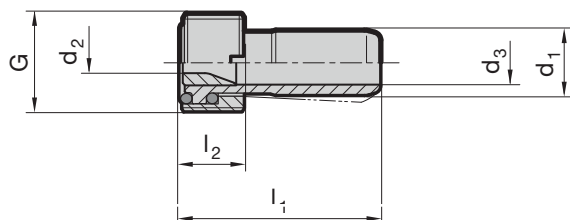
4305

for nom. size	for tap shank-Ø x □	G	d ₁ mm	d ₂ mm	l ₁ mm	SW	O-ring	image	EDP Numbers
ER20 / Hydro12	6x4.9	M8x1	3.60	4.80	26.50	2.50	3.5x1	1.00	9043050060200
ER20 / Hydro12	7x5.5	M8x1	3.60	5.40	26.50	2.50	3.5x1	1.00	9043050070200
ER20 / Hydro12	8x6.2	M8x1	3.60	6.10	21.50	2.50	3.5x1	1.00	9043050080200
ER20 / Hydro12	9x7	M8x1	3.60	6.90	21.00	2.50	3.5x1	1.00	9043050080200
ER20 / Hydro12	10x8	M8x1	3.60	7.80	17.00	2.50	3.5x1	2.00	9043050100200
ER20 / Hydro12	11x9	M8x1	3.60	8.80	16.00	2.50	3.5x1	2.00	9043050110200
ER32 / Hydro20	6x4.9	M10x1	4.10	4.80	34.50	3.00	4x1	1.00	9043050060320
ER32 / Hydro20	7x5.5	M10x1	4.10	5.40	34.50	3.00	4x1	1.00	9043050070320
ER32 / Hydro20	8x6.2	M10x1	4.10	6.10	29.50	3.00	4x1	1.00	9043050080320
ER32 / Hydro20	9x7	M10x1	4.10	6.90	29.00	3.00	4x1	1.00	9043050080320
ER32 / Hydro20	10x8	M10x1	4.10	7.80	25.00	3.00	4x1	1.00	9043050100320
ER32 / Hydro20	11x9 & 12x9	M10x1	4.10	8.80	24.00	3.00	4x1	1.00	9043050110320
ER32 / Hydro20	14x11	M10x1	4.10	10.80	22.50	3.00	4x1	2.00	9043050140320
ER32 / Hydro20	16x12	M10x1	4.10	11.80	22.00	3.00	4x1	2.00	9043050160320
ER32 / Hydro20	18x14.5 & 20x16	M10x1	4.10	14.30	20.50	3.00	4x1	2.00	9043050180320

MQL coolant delivery set for single channel HSK-A

Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 1-channel systems
- for tool holders with automatic tool clamping
- dimensions d_2 and l_1 based on installed condition



EXCLUSIVELY for
GÜHROSync

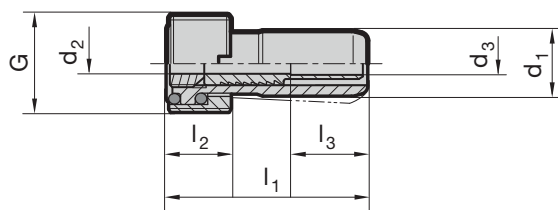
Series Number 4508

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	EDP Numbers
32	6.00	3.00	4.00	26.00	5.50	M10x1	9045080100320
40	8.00	3.80	5.40	29.50	7.50	M12x1	9045080120400
50	10.00	3.80	6.40	33.00	9.50	M16x1	9045080160500
63	12.00	3.80	8.00	36.50	11.50	M18x1	9045080180630
80	14.00	3.80	10.00	40.00	13.50	M20x1.5	9045080200800
100	16.00	3.80	12.00	44.00	15.50	M24x1.5	9045080241000

MQL coolant delivery set for 2 channel systems HSK-A

Product information

- to MQL standard
- version sim. to DIN 69895
- for MQL 2-channel systems
- for tool holders with automatic tool clamping
- "Crashsafe" version similar to DIN 69090-2 neck design
- dimensions d_2 and l_1 based on installed condition



EXCLUSIVELY for
GÜHROSync

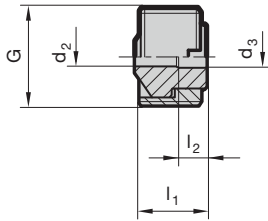
Series Number 4511

for HSK-A	d_1 mm	d_2 mm	d_3 mm	l_1 mm	l_2 mm	l_3 mm	G	EDP Numbers
32	6.00	3.00	4.00	26.00	5.50	-	M10x1	9045110100320
40	8.00	3.80	5.40	29.50	7.50	-	M12x1	9045110120400
50	10.00	3.60	4.00	33.00	9.50	21.00	M16x1	9045110160500
63	12.00	3.60	4.00	36.50	11.50	13.80	M18x1	9045110180630
80	14.00	3.60	4.00	40.00	13.50	14.00	M20x1.5	9045110200800
100	16.00	3.60	4.00	44.00	15.50	14.00	M24x1.5	9045110241000

MQL coolant delivery set HSK-A (filler)

Product information

- to MQL standard
- for internal cooling MQL 1 and 2 channel systems
- for tool holders with manual tool clamping
- optimally sealed for MQL clamping set
- dimensions d_2 and l_1 based on installed condition



EXCLUSIVELY for

GÜHROSync

Series Number

4513

for HSK-A	d_2 mm	d_3 mm	l_1 mm	l_2 mm	G	EDP Numbers
32.00	3.000	3.000	6.30	-	M10x1	9045130100320
40.00	3.600	4.000	8.30	5.00	M12x1	9045130120400
50.00	3.600	4.000	10.30	5.00	M16x1	9045130160500
50.00	5.000	5.000	10.30	-	M16x1	9045130161500
63.00	3.600	4.000	12.30	5.00	M18x1	9045130180630
63.00	6.000	6.000	12.30	-	M18x1	9045130181630
80.00	3.600	4.000	14.40	5.00	M20x1.5	9045130200800
80.00	8.000	8.000	14.40	-	M20x1.5	9045130201800
100.00	3.600	4.000	16.40	5.00	M24x1.5	9045130241000
100.00	8.000	8.000	16.40	-	M24x1.5	9045130241010

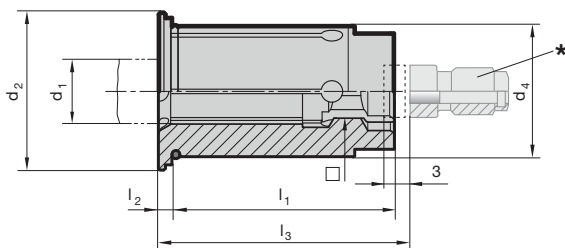
Reduction sleeves sealed for hydraulic synchro tapping chucks

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw
Guhring no. 4364 separately
- order MQL setting screws
Guhring no. 4305 separately



EXCLUSIVELY for
GUHROSync

Series Number **4605**

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* code for adjustment screw	for thread	Order Code	EDP Numbers
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2.812	9046050028120
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512	9046050035120
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4.012	9046050040120
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4 / M6	4.512	9046050045120
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	26.00	4364 5.020	10-24 & 10-32	4.912	9046050049120
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M4	5.012	9046050050120
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M5	5.512	9046050055120
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	26.00	4364 5.020	12-24 & 12-28	15.512	9046050155120
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	4364 5.020	M6	16.012	9046050160120
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	4364 6.020	M4.5/M5/M6/M8	6.012	9046050060120
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	4364 6.020	M7 / M8	6.212	9046050062120
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	4364 6.020	1/4-20 & 1/4-28	6.412	9046050064120
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	4364 7.020	M7 / M9 / M10	7.012	9046050070120
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	4364 7.020	1/16-27	7.912	9046050079120
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	4364 8.020	M8 / M11	8.012	9046050080120
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M11	18.012	9046050180120
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	4364 7.020	5/16-18 & 5/16-24	28.012	9046050280120
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	4364 7.020	7/16-14 & 7/16-20	8.212	9046050082120
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	4364 8.020	M12	8.512	9046050085120
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	4364 9.020	M9 / M12	9.012	9046050090120
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	4364 9.020	1/2-13 & 1/2-20	9.312	9046050093120
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	4364 9.020	3/8-16 & 3/8-24	9.612	9046050096120
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	4364 10.020	M10	10.012	9046050100120

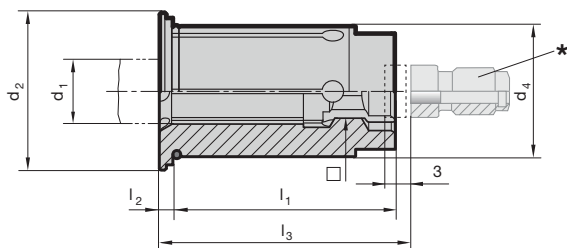
Reduction sleeves sealed for hydraulic synchro tapping chucks

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- face side closed, therefore coolant leak-proof for threading tools with IC
- positive drive
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw
Guhring no. 4364 separately
- order MQL setting screws
Guhring no. 4305 separately



EXCLUSIVELY for
GUHROSync

Series Number **4605**

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* code for adjustment screw	for thread	Order Code	EDP Numbers
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M6	26.020	9046050260200
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	4364 6.032	M4.5/M5/M6/M8	6.020	9046050060200
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	4364 6.032	M7 / M8	6.220	9046050062200
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	4364 6.032	1/4-20 & 1/4-28	6.420	9046050064200
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	4364 7.032	M7 / M9 / M10	7.020	9046050070200
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	4364 7.032	1/16-27	7.920	9046050079200
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	4364 8.032	M8 / M11	8.020	9046050080200
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M11	18.020	9046050180200
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	4364 8.032	5/16-18 & 5/16-24	28.020	9046050280200
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	4364 8.032	7/16-14 & 7/16-20	8.220	9046050082200
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	4364 8.032	M12	8.520	9046050085200
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	4364 9.032	M9 / M12	9.020	9046050090200
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	4364 8.032	1/2-13 & 1/2-20	9.320	9046050093200
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	4364 9.032	3/8-16 & 3/8-24	9.620	9046050096200
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	4364 10.032	M10	10.020	9046050100200
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	4364 10.032	M14	10.520	9046050105200
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	4364 10.032	9/16-12 & 9/16-18	10.820	9046050108200
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M14	11.020	9046050110200
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	4364 11.032	M12 / M16	12.020	9046050120200
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	4364 11.032	5/8-11 & 5/8-18	12.120	9046050121200
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M16	12.520	9046050125200
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	4364 11.032	M17	13.020	9046050130200
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	4364 11.032	M18	14.020	9046050140200
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	4364 11.032	1/4-18	14.220	9046050142200
20.00	14.986	10.719	ANSI	0.590	0.422	24.10	34.00	2.00	39.00	4364 11.032	3/4-10 & 3/4-16	14.920	9046050149200
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	4364 16.032	M20	15.020	9046050150200
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	4364 16.032	M20	16.020	9046050160200

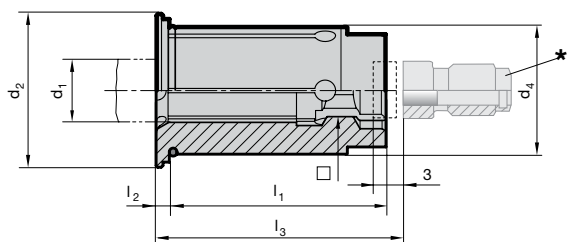
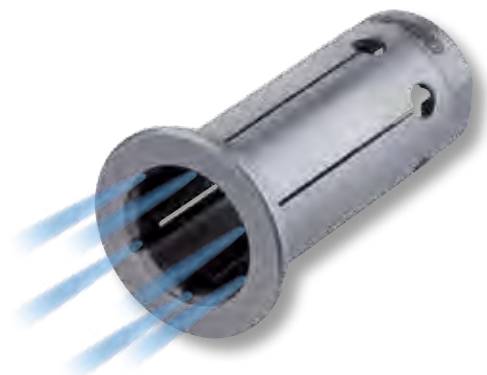
GUHROJET reduction sleeves for hydraulic synchro tapping chucks

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw
Guhring no. 4364 separately
- order MQL setting screws
Guhring no. 4305 separately



GUHROJET

EXCLUSIVELY for

GUHROSync

Series Number 4606

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* code for adjustment screw	for thread	Order Code	EDP Numbers
12.00	2.800	2.100	DIN	-	-	16.50	29.00	2.00	-	-	M2 / M4	2.812	9046060028120
12.00	3.500	2.700	DIN	-	-	16.50	29.00	2.00	-	-	M3 / M4.5 / M5	3.512	9046060035120
12.00	3.581	2.794	ANSI	0.1410	0.110	16.50	29.00	2.00	-	-	2-56 to 6-40	3.612	9046060036120
12.00	4.000	3.200	JIS	-	-	16.50	29.00	2.00	-	-	M3	4.012	9046060040120
12.00	4.268	3.327	ANSI	0.1680	0.131	16.50	29.00	2.00	-	-	8-32 & 8-36	4.312	9046060043120
12.00	4.500	3.400	DIN	-	-	16.50	29.00	2.00	-	-	M4 / M6	4.512	9046060045120
12.00	4.928	3.861	ANSI	0.194	0.152	16.50	29.00	2.00	-	-	10-24 & 10-32	4.912	9046060049120
12.00	5.000	4.000	JIS	-	-	16.50	29.00	2.00	-	-	M4	5.012	9046060050120
12.00	5.500	4.500	JIS	-	-	16.50	29.00	2.00	-	-	M5	5.512	9046060055120
12.00	5.588	4.191	ANSI	0.220	0.165	16.50	29.00	2.00	-	-	12-24 & 12-28	15.512	9046060155120
12.00	6.000	4.500	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M6	16.012	9046060160120
12.00	6.000	4.900	DIN	-	-	16.50	29.00	2.00	26.00	6.020	M4.5/M5/M6/M8	6.012	9046060060120
12.00	6.200	5.000	JIS	-	-	16.50	29.00	2.00	26.00	6.020	M7 / M8	6.212	9046060062120
12.00	6.477	4.851	ANSI	0.255	0.191	16.50	29.00	2.00	26.00	6.020	1/4-20 & 1/4-28	6.412	9046060064120
12.00	7.000	5.500	DIN / JIS	-	-	16.50	29.00	2.00	26.00	7.020	M7 / M9 / M10	7.012	9046060070120
12.00	7.938	5.944	ANSI	0.3125	0.234	16.50	29.00	2.00	31.00	7.020	1/16-27	7.912	9046060079120
12.00	8.000	6.200	DIN	-	-	16.50	29.00	2.00	31.00	8.020	M8 / M11	8.012	9046060080120
12.00	8.000	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M11	18.012	9046060180120
12.00	8.077	6.045	ANSI	0.318	0.238	16.50	29.00	2.00	31.00	7.020	5/16-18 & 5/16-24	28.012	9046060280120
12.00	8.204	6.147	ANSI	0.323	0.242	16.50	29.00	2.00	31.00	8.020	7/16-14 & 7/16-20	8.212	9046060082120
12.00	8.500	6.500	JIS	-	-	16.50	29.00	2.00	31.00	8.020	M12	8.512	9046060085120
12.00	9.000	7.000	DIN	-	-	16.50	29.00	2.00	32.00	9.020	M9 / M12	9.012	9046060090120
12.00	9.322	6.985	ANSI	0.367	0.275	16.50	29.00	2.00	32.00	9.020	1/2-13 & 1/2-20	9.312	9046060093120
12.00	9.677	7.264	ANSI	0.381	0.286	16.50	29.00	2.00	33.00	9.020	3/8-16 & 3/8-24	9.612	9046060096120
12.00	10.000	8.000	DIN	-	-	16.50	29.00	2.00	36.00	10.020	M10	10.012	9046060100120

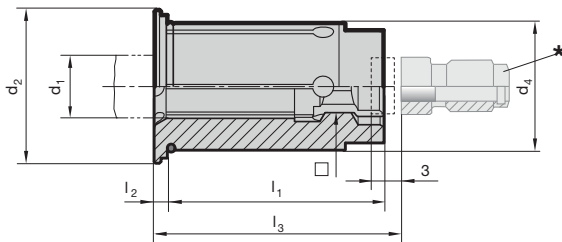
GUHROJET reduction sleeves for hydraulic synchro tapping chucks

Product information

- for clamping taps with square shank in GUHROSync synchro tapping chucks
- clamping-Ø for tool shank tolerance h6-h9
- positive drive of reduction bush in Guhrosync synchro chuck
- with coolant slots for peripheral cooling, therefore process and tool life improvement
- coiled swarf is consistently washed away
- position setting screw on tap shank
- length-setting screw allows 3 mm readjustment

Scope of delivery

- order setting screw
Guhring no. 4364 separately
- order MQL setting screws
Guhring no. 4305 separately



GUHROJET

EXCLUSIVELY for

GUHROSync

Series Number

4606

d ₄ mm	d ₁ mm	□ mm	Standard	d ₁ inch	□ inch	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	* code for adjustment screw	for thread	Order Code	EDP Numbers
20.00	6.000	4.500	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M6	26.020	9046060260200
20.00	6.000	4.900	DIN	-	-	24.10	34.00	2.00	26.00	6.032	M4.5/M5/M6/M8	6.020	9046060060200
20.00	6.200	5.000	JIS	-	-	24.10	34.00	2.00	26.00	6.032	M7 / M8	6.220	9046060062200
20.00	6.477	4.851	ANSI	0.255	0.191	24.10	34.00	2.00	26.00	6.032	1/4-20 & 1/4-28	6.420	9046060064200
20.00	7.000	5.500	DIN / JIS	-	-	24.10	34.00	2.00	26.00	7.032	M7 / M9 / M10	7.020	9046060070200
20.00	7.938	5.944	ANSI	0.3125	0.234	24.10	34.00	2.00	31.00	7.032	1/16-27	7.920	9046060079200
20.00	8.000	6.200	DIN	-	-	24.10	34.00	2.00	31.00	8.032	M8 / M11	8.020	9046060080200
20.00	8.000	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M11	18.020	9046060180200
20.00	8.077	6.045	ANSI	0.318	0.238	24.10	34.00	2.00	31.00	8.032	5/16-18 & 5/16-24	28.020	9046060280200
20.00	8.204	6.147	ANSI	0.323	0.242	24.10	34.00	2.00	31.00	8.032	7/16-14 & 7/16-20	8.220	9046060082200
20.00	8.500	6.500	JIS	-	-	24.10	34.00	2.00	31.00	8.032	M12	8.520	9046060085200
20.00	9.000	7.000	DIN	-	-	24.10	34.00	2.00	32.00	9.032	M9 / M12	9.020	9046060090200
20.00	9.322	6.985	ANSI	0.367	0.275	24.10	34.00	2.00	32.00	9.032	1/2-13 & 1/2-20	9.320	9046060093200
20.00	9.677	7.264	ANSI	0.381	0.286	24.10	34.00	2.00	33.00	9.032	3/8-16 & 3/8-24	9.620	9046060096200
20.00	10.000	8.000	DIN	-	-	24.10	34.00	2.00	36.00	10.032	M10	10.020	9046060100200
20.00	10.500	8.000	JIS	-	-	24.10	34.00	2.00	36.00	10.032	M14	10.520	9046060105200
20.00	10.897	8.179	ANSI	0.4290	0.3220	24.10	34.00	2.00	35.00	10.032	9/16-12 & 9/16-18	10.820	9046060108200
20.00	11.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M14	11.020	9046060110200
20.00	12.000	9.000	DIN	-	-	24.10	34.00	2.00	37.00	11.032	M12 / M16	12.020	9046060120200
20.00	12.192	9.144	ANSI	0.480	0.36	24.10	34.00	2.00	36.00	11.032	5/8-11 & 5/8-18	12.120	9046060121200
20.00	12.500	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M16	12.520	9046060125200
20.00	13.000	10.000	JIS	-	-	24.10	34.00	2.00	38.00	11.032	M17	13.020	9046060130200
20.00	14.000	11.000	DIN / JIS	-	-	24.10	34.00	2.00	39.00	14.032	M18	14.020	9046060140200
20.00	14.288	10.693	ANSI	0.5625	0.421	24.10	34.00	2.00	38.00	11.032	1/4-18	14.220	9046060142200
20.00	14.986	10.719	ANSI	0.590	0.422	24.10	34.00	2.00	39.00	11.032	3/4-10 & 3/4-16	14.920	9046060149200
20.00	15.000	12.000	JIS	-	-	24.10	34.00	2.00	40.00	16.032	M20	15.020	9046060150200
20.00	16.000	12.000	DIN	-	-	24.10	34.00	2.00	41.00	16.032	M20	16.020	9046060160200

Configuration of Synchro tapping chucks for conventional cooling



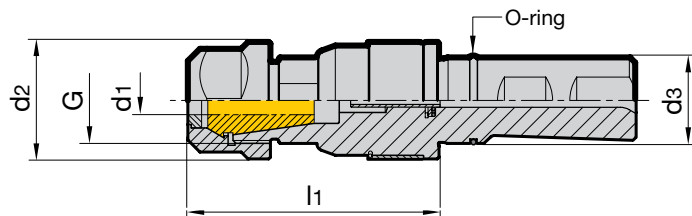
Synchro tapping chucks with straight shanks

Product information

- compensate synchronisation errors
- minimal length compensation in tension and compression direction balances very small pitch differences between synchro spindle and tap, which can cause high frictional forces on the thread flanks
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar

Scope of delivery

- incl. sealed IC/ER clamping nut Guhring no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws "plan" Guhring no. 4364, tapping collet, Guhring no. 4308, sealing washer, Guhring no. 4335 and clamping key, Guhring no. 4913 separately



Series Number **4326**

d_3 ~DIN 1835 mm	Nominal size	for thread	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	SW	EDP Numbers
25.0	ER20	M3.5-M14	4.0-11.0	34.0	73.0	0.15	40	M25x1.5	0.50	9043260200250
25.0	ER32	M3.5-M28	4.0-20.0	50.0	88.0	0.15	170	M40x1.5	1.30	9043260320250

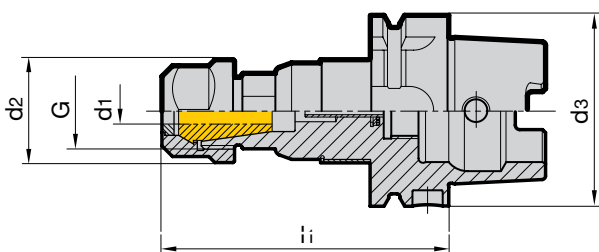
HSK-A synchro tapping chucks

Product information

- compensate synchronisation errors
- guarantee high thread quality and optimal tool life with conventional taps
- minimal length compensation in tension and compression direction between synchronous spindle and tap reduces excessive thread flank friction
- reduces a possible increase in axial forces during the cutting cycle to a minimum
- length-setting screw allows 2 to 3 mm readjustment
- suitable for internal cooling
- max. coolant pressure up to 50 bar

Scope of delivery

- incl. sealed IC/ER clamping nut Guhring no. 4306 (*see torque)
- incl. adjustment key for adjustment screws
- order adjustment screws „plan“ Guhring no. 4364, tapping collet, Guhring no. 4308, sealing washer, Guhring no. 4335 and clamping key, Guhring no. 4913 separately
- for conventional cooling order coolant supply set Guhring no. 4949 separately



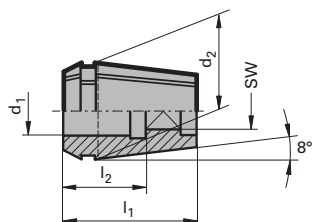
Series Number **4327**

d_3 ~DIN 1835 mm	Nominal size	for thread	d_1 mm	d_2 mm	l_1 mm	tension/ compr. mm	torque* Nm	G	SW	EDP Numbers
63.0	ER20	M3.5-M14	4.0-11.0	34.0	95.5	0.15	40	M25x1.5	1.00	9043270200630
63.0	ER20	M3.5-M14	4.0-11.0	34.0	160.0	0.15	40	M25x1.5	1.50	9043270201630
63.0	ER32	M3.5-M28	4.0-20.0	50.0	109.0	0.15	170	M40x1.5	1.70	9043270320630
100.0	ER20	M3.5-M14	4.0-11.0	34.0	102.0	0.15	40	M25x1.5	2.50	9043270201000
100.0	ER32	M3.5-M28	4.0-20.0	50.0	115.5	0.15	170	M40x1.5	2.70	9043270321000

Tapping collets

Product information

- for clamping taps with square shank in Synchro tapping chucks or collet holders
- smaller Ø4mm are clamped with collet, Guh. no. 4307 without sq. drive



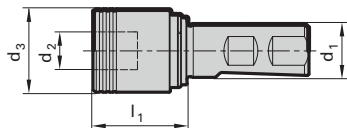
Series Number 4308

Nominal size d_2	for shank Ø d_1 mm	square SW	l_1 mm	l_2 mm	EDP Numbers
ER16	4.5	3.4	27.5	18	9043080045160
ER16	5.5	4.3	27.5	18	9043080055160
ER16	6.0	4.9	27.5	18	9043080060160
ER16	7.0	5.5	27.5	18	9043080070160
ER16	8.0	6.2	27.5	22	9043080080160
ER20	4.0	3.0	31.5	15	9043080040200
ER20	4.5	3.4	31.5	18	9043080045200
ER20	5.5	4.3	31.5	18	9043080055200
ER20	6.0	4.9	31.5	18	9043080060200
ER20	7.0	5.5	31.5	18	9043080070200
ER20	8.0	6.2	31.5	22	9043080080200
ER20	9.0	7.0	31.5	22	9043080090200
ER20	10.0	8.0	31.5	25	9043080100200
ER20	11.0	9.0	31.5	25	9043080110200
ER25	4.5	3.4	34.0	18	9043080045250
ER25	5.5	4.3	34.0	18	9043080055250
ER25	6.0	4.9	34.0	18	9043080060250
ER25	7.0	5.5	34.0	18	9043080070250
ER25	8.0	6.2	34.0	22	9043080080250
ER25	9.0	7.0	34.0	22	9043080090250
ER25	10.0	8.0	34.0	25	9043080100250
ER25	11.0	9.0	34.0	25	9043080110250
ER25	12.0	9.0	34.0	25	9043080120250
ER32	4.0	3.0	40.0	15	9043080040320
ER32	4.5	3.4	40.0	18	9043080045320
ER32	5.5	4.3	40.0	18	9043080055320
ER32	6.0	4.9	40.0	18	9043080060320
ER32	7.0	5.5	40.0	18	9043080070320
ER32	8.0	6.2	40.0	22	9043080080320
ER32	9.0	7.0	40.0	22	9043080090320
ER32	10.0	8.0	40.0	25	9043080100320
ER32	11.0	9.0	40.0	25	9043080110320
ER32	12.0	9.0	40.0	25	9043080120320
ER32	14.0	11.0	40.0	25	9043080140320
ER32	16.0	12.0	40.0	25	9043080160320
ER32	18.0	14.5	40.0	25	9043080180320
ER32	20.0	16.0	40.0	28	9043080200320
ER40	7.0	5.5	46.0	18	9043080070400
ER40	8.0	6.2	46.0	22	9043080080400
ER40	9.0	7.0	46.0	22	9043080090400
ER40	10.0	8.0	46.0	25	9043080100400
ER40	11.0	9.0	46.0	25	9043080110400
ER40	12.0	9.0	46.0	25	9043080120400
ER40	14.0	11.0	46.0	25	9043080140400
ER40	16.0	12.0	46.0	25	9043080160400
ER40	18.0	14.5	46.0	25	9043080180400
ER40	20.0	16.0	46.0	28	9043080200400
ER40	22.0	18.0	46.0	28	9043080220400

Quick change tapping chucks without internal cooling

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread



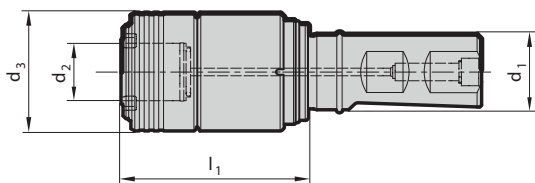
Series Number **4340**

for thread	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	tension/ compression mm	kg	EDP Numbers
M3-M12	25	19	36	39	± 7.5	0.4	9043400190250
M8-M20	25	31	53	63	±10.0	0.9	9043400310250

Quick change tapping chucks with internal cooling

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- provided with internal coolant supply feeding the coolant through the chuck and adaptor into the shank of the tap. All functional elements are sealed
- max. coolant pressure up to 50 bar



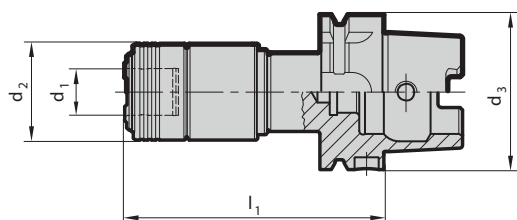
Series Number **4342**

for thread	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	tension/ compression mm	kg	EDP Numbers
M3-M12	25	19	39	62	7.5/7.5	0.6	9043420190250
M8-M20	25	31	60	88	10/10	1.0	9043420310250

HSK-A quick change tapping chucks with internal cooling

Product information

- quick change tapping chucks are provided with a ball guided length compensator that compensates any length difference between spindle feed and pitch of tap thread
- guarantee high thread quality and optimal tool life with conventional taps
- max. coolant pressure up to 50 bar.



Series Number

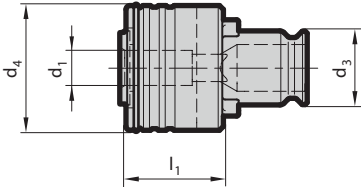
4328

							EDP Numbers
HSK-A d ₃ mm	for thread	d ₁ mm	d ₂ mm	l ₁ mm	tension/ compression mm	kg	
63	M3-M12	19	39	105	± 7.5	0.9	9043280190630
63	M8-M20	31	60	140	±10.0	1.0	9043280310630

Quick change tapping chuck adaptors

Product information

- with safety clutch
- suitable for HSS taps
- for solid carbide taps a clamping groove is required on the shank to provide additional drive.
- suitable for internal coolant supply max. 50 bar.

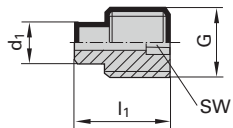


Series Number

4206

						EDP Numbers
for thread	shank $\varnothing$ x sq. d_1 mm	d_3 mm	d_4 mm	l_1 mm	Order Code	
M3-M12	2.2	19	32	25	19.022	9042060190220
M3-M12	2.5 x 2.1	19	32	25	19.025	9042060190250
M3-M12	2.8 x 2.1	19	32	25	19.028	9042060190280
M3-M12	3.5 x 2.7	19	32	25	19.035	9042060190350
M3-M12	4 x 3	19	32	25	19.040	9042060190400
M3-M12	4.5 x 3.4	19	32	25	19.045	9042060190450
M3-M12	5.5 x 4.5	19	32	25	19.055	9042060190550
M3-M12	6 x 4.9	19	32	25	19.060	9042060190600
M3-M12	7 x 5.5	19	32	25	19.070	9042060190700
M3-M12	8 x 6.2	19	32	25	19.080	9042060190800
M3-M12	9 x 7	19	32	25	19.090	9042060190900
M3-M12	10 x 8	19	32	25	19.100	9042060191000
M8-M20	6 x 4.9	31	50	34	31.060	9042060310600
M8-M20	7 x 5.5	31	50	34	31.070	9042060310700
M8-M20	8 x 6.2	31	50	34	31.080	9042060310800
M8-M20	9 x 7	31	50	34	31.090	9042060310900
M8-M20	10 x 8	31	50	34	31.100	9042060311000
M8-M20	11 x 9	31	50	34	31.110	9042060311100
M8-M20	12 x 9	31	50	34	31.120	9042060311200
M8-M20	14 x 11	31	50	34	31.140	9042060311400
M8-M20	16 x 12	31	50	34	31.160	9042060311600

Setting screws for tapping collets



Series Number						4906
for nom. size	for clamping range mm	G	d ₁ mm	l ₁ mm	SW	EDP Numbers
ER16	4.5 - 7.0	M10	4.5	22	3	9049060450220
ER20	4.5 - 7.0	M10	4.5	22	3	9049060450220
ER20	8.0 - 10.0	M10	5.5	16	3	9049060550160
ER25	4.5 - 7.0	M16	4.5	32	4	9049060450320
ER25	8.0 - 9.0	M16	5.5	24	4	9049060550240
ER25	10.0 - 12.0	M16	6.5	20	4	9049060650200
ER32	4.5 - 7.0	M16	4.5	36	4	9049060450360
ER32	8.0 - 9.0	M16	5.5	30	4	9049060550300
ER32	10.0 - 12.0	M16	5.5	24	4	9049060550240
ER32	14.0 - 16.0	M16	6.5	20	4	9049060650200
ER40	7.0 - 9.0	M16	4.5	36	4	9049060450360
ER40	10.0 - 12.0	M16	5.5	30	4	9049060550300
ER40	14.0 - 18.0	M16	9.5	26	4	9049060950260
ER40	20.0	M16	16.0	20	5	9049061600200

GÜHRJET

TOOL HOLDERS



TOOL HOLDERS WITH PERIPHERAL COOLING

|GÜHROJET|



*OPTIMAL CHIP
EVACUATION*



*HIGH PROCESS
RELIABILITY*



*IMPROVED COOLING
LUBRICATION*



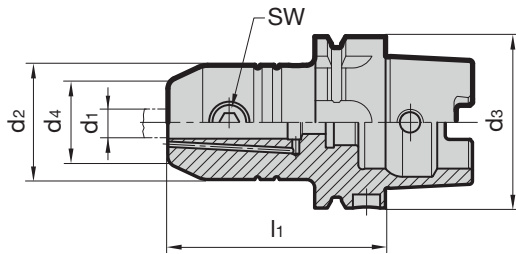
GÜHROJET HSK-A Weldon side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with bore to DIN 1835-2 form B "Weldon"
- dimensions to DIN 69882-4
- from bore d1 = 25 with two clamping screws
- with coolant ducts in the bore for peripheral cooling, improving process and tool life
- coolant ducts:
d = 6 - 14 with two coolant ducts
d = 16 - 40 with four coolant ducts

Scope of delivery

- incl. clamping screw Guhring no. 4903
- order coolant delivery set, Guhring no. 4949 separately
- HSK-A32, 40 & 80 on request



GÜHROJET

Series Number

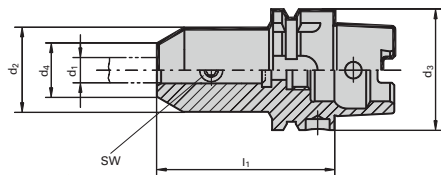
4232

HSK-A d ₃	for shank Ø d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
50	6	25	15	65	3	0.50	6.050	9042320060500
50	8	28	20	65	4	0.60	8.050	9042320080500
50	10	35	25	65	5	0.60	10.050	9042320100500
50	12	42	30	80	6	0.90	12.050	9042320120500
50	14	44	32	80	6	0.90	14.050	9042320140500
50	16	48	36	80	6	1.00	16.050	9042320160500
50	18	50	38	80	6	1.00	18.500	9042320185000
50	20	52	40	80	8	1.00	20.050	9042320200500
63	6	25	15	65	3	0.80	6.063	9042320060630
63	8	28	20	65	4	0.80	8.063	9042320080630
63	10	35	25	65	5	0.90	10.063	9042320100630
63	12	42	30	80	6	1.20	12.063	9042320120630
63	14	44	32	80	6	1.20	14.063	9042320140630
63	16	48	36	80	6	1.30	16.063	9042320160630
63	18	50	38	80	6	1.40	18.063	9042320180630
63	20	52	40	80	8	1.40	20.063	9042320200630
63	25	65	45	110	10	2.40	25.063	9042320250630
63	32	72	56	110	10	2.70	32.063	9042320320630
100	6	25	15	80	3	3.00	6.100	9042320061000
100	8	28	20	80	4	3.20	8.100	9042320081000
100	10	35	25	80	5	3.40	10.100	9042320101000
100	12	42	30	80	6	3.40	12.100	9042320121000
100	14	44	32	80	6	3.50	14.100	9042320141000
100	16	48	36	100	6	3.80	16.100	9042320161000
100	18	50	38	100	6	3.80	18.100	9042320181000
100	20	52	40	100	8	3.90	20.100	9042320201000
100	25	65	45	100	10	3.90	25.100	9042320251000
100	32	72	56	100	10	4.20	32.100	9042320321000
100	40	80	60	110	10	4.60	40.100	9042320401000

HSK-A Weldon side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- to DIN 69882-4
- with bore to DIN 1835-2 form B "Weldon"
- from bore d1 = 25 with two clamping screws



Scope of delivery

- incl. clamping screw Guhring no. 4903
- order coolant delivery set, Guhring no. 4949 separately



Series Number

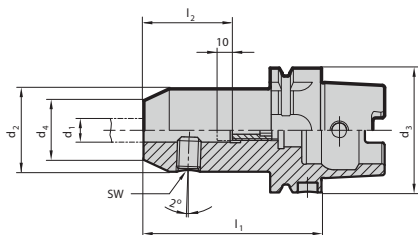
4329

HSK-A d ₃	clamping-Ø d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
32	6	25	15	60	3	0.24	6.032	9043290060320
32	8	28	20	60	4	0.27	8.032	9043290080320
32	10	35	25	65	5	0.31	10.032	9043290100320
32	12	42	30	65	6	0.41	12.032	9043290120320
40	6	25	15	60	3	0.33	6.040	9043290060400
40	8	28	20	60	4	0.35	8.040	9043290080400
40	10	35	25	60	5	0.47	10.040	9043290100400
40	12	42	30	70	6	0.58	12.040	9043290120400
40	14	44	32	75	6	0.59	14.040	9043290140400
40	16	48	36	75	6	0.64	16.040	9043290160400
50	6	25	15	65	3	0.52	6.050	9043290060500
50	8	28	20	65	4	0.55	8.050	9043290080500
50	10	35	25	65	5	0.62	10.050	9043290100500
50	12	42	30	80	6	0.87	12.050	9043290120500
50	14	44	32	80	6	0.90	14.050	9043290140500
50	16	48	36	80	6	0.94	16.050	9043290160500
50	18	50	38	80	6	0.96	18.050	9043290180500
50	20	52	40	80	8	0.97	20.050	9043290200500
63	6	25	15	65	3	0.81	6.063	9043290060630
63	8	28	20	65	4	0.83	8.063	9043290080630
63	10	35	25	65	5	0.89	10.063	9043290100630
63	12	42	30	80	6	1.20	12.063	9043290120630
63	14	44	32	80	6	1.20	14.063	9043290140630
63	16	48	36	80	6	1.30	16.063	9043290160630
63	18	50	38	80	6	1.35	18.063	9043290180630
63	20	52	40	80	8	1.40	20.063	9043290200630
63	25	65	45	110	10	2.40	25.063	9043290250630
63	32	72	56	110	10	2.70	32.063	9043290320630
80	6	25	15	80	3	1.75	6.080	9043290060800
80	8	28	20	80	4	1.90	8.080	9043290080800
80	10	35	25	80	5	2.10	10.080	9043290100800
80	12	42	30	80	6	2.10	12.080	9043290120800
80	14	44	32	80	6	2.30	14.080	9043290140800
80	16	48	36	100	6	2.50	16.080	9043290160800
80	18	50	38	100	6	2.50	18.080	9043290180800
80	20	52	40	100	8	2.70	20.080	9043290200800
80	25	65	45	100	10	2.80	25.080	9043290250800
80	32	72	56	110	10	2.85	32.080	9043290320800
80	40	80	60	120	10	2.98	40.080	9043290400800
100	6	25	15	80	3	3.00	6.100	9043290061000
100	8	28	20	80	4	3.20	8.100	9043290081000
100	10	35	25	80	5	3.40	10.100	9043290101000
100	12	42	30	80	6	3.40	12.100	9043290121000
100	14	44	32	80	6	3.50	14.100	9043290141000
100	16	48	36	100	6	3.80	16.100	9043290161000
100	18	50	38	100	6	3.80	18.100	9043290181000
100	20	52	40	100	8	3.90	20.100	9043290201000
100	25	65	45	100	10	3.90	25.100	9043290251000
100	32	72	56	100	10	4.20	32.100	9043290321000
100	40	80	60	110	10	4.60	40.100	9043290401000

Whistle Notch HSK-A side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- to DIN 69882-5
- with bore to DIN 1835-2 form E "Whistle Notch"
- from bore d1 = 25 with two clamping screws



Scope of delivery

- incl. clamping screw Guhring no. 4903 and adjustment screw Guhring no. 4904
- order coolant delivery set, Guhring no. 4949 separately



Series Number

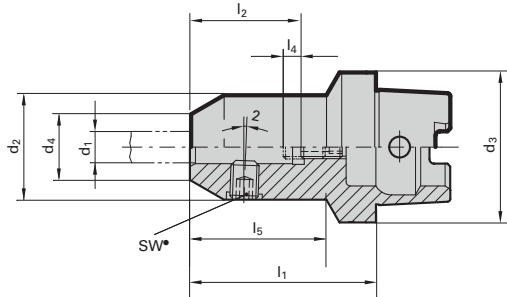
4334

HSK-A d ₃	clamping-Ø d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. adjustment screw 4904 ...	SW	kg	Order Code	EDP Numbers
32	6	25	15	80	36	9049040050160	3	0.32	6.032	9043340060320
32	8	28	20	80	36	9049040060160	4	0.36	8.032	9043340080320
32	10	35	25	80	40	9049040080120	5	0.46	10.032	9043340100320
32	12	42	30	80	45	9049040100170	6	0.57	12.032	9043340120320
40	6	25	15	80	36	9049040050160	3	0.36	6.040	9043340060400
40	8	28	20	80	36	9049040060160	4	0.40	8.040	9043340080400
40	10	35	25	80	40	9049040080120	5	0.50	10.040	9043340100400
40	12	42	30	90	45	9049040100170	6	0.68	12.040	9043340120400
40	14	44	32	90	45	9049040100170	6	0.72	14.040	9043340140400
40	16	48	36	90	48	9049040120140	6	0.77	16.040	9043340160400
50	6	25	15	80	36	9049040050200	3	0.58	6.050	9043340060500
50	8	28	20	80	36	9049040060200	4	0.62	8.050	9043340080500
50	10	35	25	80	40	9049040080180	5	0.73	10.050	9043340100500
50	12	42	30	90	45	9049040100200	6	0.97	12.050	9043340120500
50	14	44	32	90	45	9049040100200	6	1.00	14.050	9043340140500
50	16	48	36	90	48	9049040120200	6	1.09	16.050	9043340160500
50	18	50	38	90	48	9049040120200	6	1.12	18.050	9043340180500
50	20	52	40	100	50	9049040160250	8	1.30	20.050	9043340200500
63	6	25	15	80	36	9049040050200	3	0.86	6.063	9043340060630
63	8	28	20	80	36	9049040060200	4	0.90	8.063	9043340080630
63	10	35	25	80	40	9049040080180	5	1.00	10.063	9043340100630
63	12	42	30	90	45	9049040100200	6	1.24	12.063	9043340120630
63	14	44	32	90	45	9049040100200	6	1.28	14.063	9043340140630
63	16	48	36	100	48	9049040120200	6	1.53	16.063	9043340160630
63	18	50	38	100	48	9049040120200	6	1.60	18.063	9043340180630
63	20	52	40	100	50	9049040160250	8	1.65	20.063	9043340200630
63	25	65	45	110	56	9049040200250	10	2.34	25.063	9043340250630
63	32	72	56	110	60	9049040200250	10	2.54	32.063	9043340320630
80	6	25	15	90	36	9049040050200	3	2.20	6.080	9043340060800
80	8	28	20	90	36	9049040060200	4	2.25	8.080	9043340080800
80	10	35	25	90	40	9049040080180	5	2.56	10.080	9043340100800
80	12	42	30	100	45	9049040100200	6	2.60	12.080	9043340120800
80	14	44	32	100	45	9049040100200	6	2.85	14.080	9043340140800
80	16	48	36	100	48	9049040120200	6	2.88	16.080	9043340160800
80	18	50	38	100	48	9049040120200	6	2.90	18.080	9043340180800
80	20	52	40	110	50	9049040160250	8	3.05	20.080	9043340200800
80	25	65	45	110	56	9049040200250	10	3.10	25.080	9043340250800
80	32	72	56	120	60	9049040200250	10	3.20	32.080	9043340320800
100	6	25	15	90	36	9049040050200	3	2.60	6.100	9043340061000
100	8	28	20	90	36	9049040060200	4	2.60	8.100	9043340081000
100	10	35	25	90	40	9049040080180	5	2.60	10.100	9043340101000
100	12	42	30	100	45	9049040100200	6	2.80	12.100	9043340121000
100	14	44	32	100	45	9049040100200	6	2.85	14.100	9043340141000
100	16	48	36	100	48	9049040120200	6	2.97	16.100	9043340161000
100	18	50	38	100	48	9049040120200	6	3.10	18.100	9043340181000
100	20	52	40	110	50	9049040160250	8	3.23	20.100	9043340201000
100	25	65	45	120	56	9049040200250	10	4.06	25.100	9043340251000
100	32	72	56	120	60	9049040200250	10	4.40	32.100	9043340321000

Whistle Notch HSK-C side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- to DIN 69882-5
- with bore to DIN 1835-2 form E "Whistle Notch"
- from bore d1 = 25 with two clamping screws
Guhring no. 4903



Scope of delivery

- incl. clamping screw Guhring no. 4903
and adjustment screw Guhring no. 4905



Series Number

4333

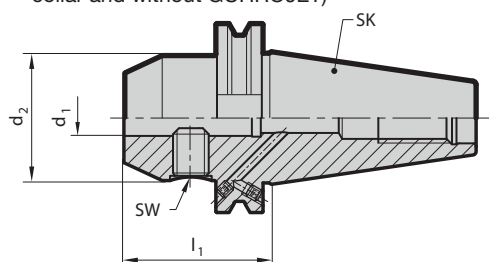
HSK-C d ₃	clamping-Ø d ₁ mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	incl. adjustment screw 4905 ...	SW	kg	Order Code	EDP Numbers
32	6	25	15	60	36	9049050050160	3	0.23	6.032	9043330060320
32	8	28	20	60	36	9049050060160	4	0.28	8.032	9043330080320
32	10	35	25	65	40	9049050080170	5	0.43	10.032	9043330100320
40	6	25	15	60	36	9049050050160	3	0.29	6.040	9043330060400
40	8	28	20	60	36	9049050060160	4	0.33	8.040	9043330080400
40	10	35	25	65	40	9049050080170	5	0.47	10.040	9043330100400
40	12	42	30	70	45	9049050100170	6	0.67	12.040	9043330120400
40	14	44	32	70	45	9049050100170	6	0.73	14.040	9043330140400
40	16	48	36	75	48	9049050120190	6	0.92	16.040	9043330160400
40	20	52	40	80	50	9049050160200	8	1.11	20.040	9043330200400
50	6	25	15	60	36	9049050050140	3	0.42	6.050	9043330060500
50	8	28	20	60	36	9049050060140	4	0.46	8.050	9043330080500
50	10	35	25	65	40	9049050080150	5	0.57	10.050	9043330100500
50	12	42	30	75	45	9049050100200	6	0.80	12.050	9043330120500
50	14	44	32	75	45	9049050100200	6	0.87	14.050	9043330140500
50	16	48	36	80	48	9049050120220	6	1.02	16.050	9043330160500
50	18	50	38	80	48	9049050120220	6	1.09	18.050	9043330180500
50	20	52	40	80	50	9049050160200	8	1.15	20.050	9043330200500
50	25	65	45	95	56	9049050200260	10	2.14	25.050	9043330250500
63	6	25	15	60	36	9049050050140	3	0.64	6.063	9043330060630
63	8	28	20	60	36	9049050060140	4	0.66	8.063	9043330080630
63	10	35	25	65	40	9049050080150	5	0.78	10.063	9043330100630
63	12	42	30	75	45	9049050100200	6	0.99	12.063	9043330120630
63	14	44	32	75	45	9049050100200	6	1.03	14.063	9043330140630
63	16	48	36	80	48	9049050120220	6	1.21	16.063	9043330160630
63	18	50	38	80	48	9049050120220	6	1.26	18.063	9043330180630
63	20	52	40	80	50	9049050160200	8	1.31	20.063	9043330200630
63	25	65	45	95	56	9049050200260	10	2.23	25.063	9043330250630
63	32	72	56	100	60	9049050200260	10	2.75	32.063	9043330320630

GÜHROJET Weldon ISO taper side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with bore to DIN 1835-2 form B "Weldon"
- ISO taper to DIN 69871 form AD/B
- form B supplied with threaded pins in bores
- with coolant ducts in the bore for peripheral cooling, improving process and tool life
- from bore $d_1 = 25$ mm with two clamping screws Guhring no. 4903
- coolant supply form AD/B

(*: version AD without coolant supply over collar and without GÜHROJET)



Scope of delivery

- incl. clamping screw Guhring no. 4903
- order pull studs, Guhring no. 4925 or 4926 separately



GÜHROJET

Series Number

4317

ISO taper	clamping-Ø d_1 mm	d_2 mm	l_1 mm	SW	Order Code	EDP Numbers
40*	16	45	35	6	916.040	9043179160400
40*	20	45	35	8	920.040	9043179200400
40*	25	50	35	10	925.040	9043179250400
40	6	25	50	3	6.040	9043170060400
40	8	28	50	4	8.040	9043170080400
40	10	35	50	5	10.040	9043170100400
40	12	42	50	6	12.040	9043170120400
40	14	44	50	6	14.040	9043170140400
40	16	48	63	6	16.040	9043170160400
40	18	50	63	6	18.040	9043170180400
40	20	52	63	8	20.040	9043170200400
40	6	25	100	3	106.040	9043171060400
40	8	28	100	4	108.040	9043171080400
40	10	35	100	5	110.040	9043171100400
40	12	42	100	6	112.040	9043171120400
40	14	44	100	6	114.040	9043171140400
40	16	48	100	6	116.040	9043171160400
40	18	50	100	6	118.040	9043171180400
40	20	52	100	8	120.040	9043171200400
40	25	63	100	10	25.040	9043170250400
40	32	72	100	10	32.040	9043170320400
50	6	25	63	3	6.050	9043170060500
50	8	28	63	4	8.050	9043170080500
50	10	35	63	5	10.050	9043170100500
50	12	42	63	6	12.050	9043170120500
50	14	44	63	6	14.050	9043170140500
50	16	48	63	6	16.050	9043170160500
50	18	50	63	6	18.050	9043170180500
50	20	52	63	8	20.050	9043170200500
50	25	65	80	10	25.050	9043170250500
50	32	72	100	10	32.050	9043170320500

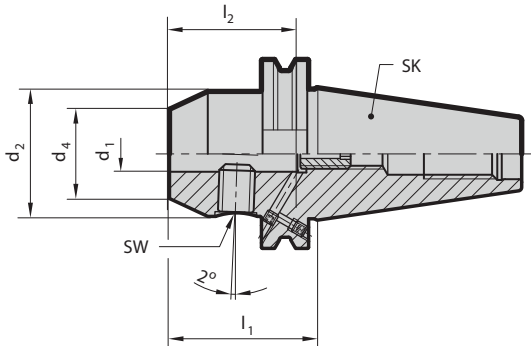
Whistle Notch ISO taper side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with bore to DIN 1835-2 form E "Whistle Notch"
- ISO taper to DIN 69871 form AD/B
- from bore $d_1 = 25$ mm with two clamping screws Guhring no. 4903

Scope of delivery

- incl. clamping screw Guhring no. 4903 and adjustment screw
- order pull studs, Guhring no. 4925 or 4926 separately



Series Number									4322
ISO taper	clamping-Ø d_1 mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	SW	kg	Order Code	EDP Numbers
40	6	25	15	50	36	3	0.90	6.040	9043220060400
40	8	28	20	50	36	4	0.90	8.040	9043220080400
40	10	35	25	50	40	5	1.00	10.040	9043220100400
40	12	42	30	50	45	6	1.20	12.040	9043220120400
40	14	44	32	50	45	6	1.20	14.040	9043220140400
40	16	48	36	63	48	6	1.20	16.040	9043220160400
40	18	50	38	63	48	6	1.40	18.040	9043220180400
40	20	52	40	63	50	8	1.50	20.040	9043220200400
40	25	65	45	100	56	10	2.30	25.040	9043220250400
40	32	72	56	100	60	10	2.50	32.040	9043220320400
50	6	25	15	63	36	3	2.70	6.050	9043220060500
50	8	28	20	63	36	4	2.70	8.050	9043220080500
50	10	35	25	63	40	5	2.90	10.050	9043220100500
50	12	42	30	63	45	6	3.00	12.050	9043220120500
50	14	44	32	63	45	6	3.00	14.050	9043220140500
50	16	48	36	63	48	6	3.00	16.050	9043220160500
50	18	50	38	63	48	6	3.00	18.050	9043220180500
50	20	52	40	63	50	8	3.10	20.050	9043220200500
50	25	65	45	80	56	10	3.70	25.050	9043220250500
50	32	72	56	100	60	10	4.50	32.050	9043220320500

GÜHROJET Weldon MAS/BT side lock holders

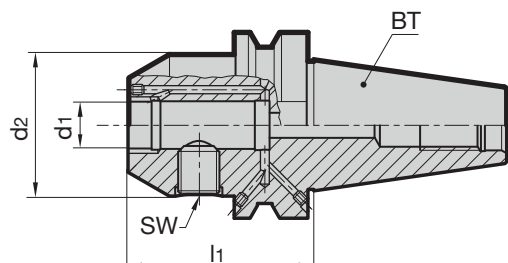
Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with bore to DIN 1835-2 form B "Weldon"
- MAS/BT to JIS B 6339 form AD/B
- from bore d1 = 25 with two clamping screws
- with coolant ducts in the bore for peripheral cooling, improving process and tool life
- coolant supply form AD/B

(*: version AD without coolant supply over collar and without GÜHROJET)

Scope of delivery

- incl. clamping screw Guhring no. 4903
- order pull studs, Guhring no. 4927 or 4928 separately
- BT-50 on request



GÜHROJET

Series Number

4234

BT	clamping-Ø d ₁ mm	d ₂ mm	l ₁ mm	SW	Order Code	EDP Numbers
30*	6	25	50	3	6.030	9042340060300
30*	8	28	50	4	8.030	9042340080300
30*	10	35	50	5	10.030	9042340100300
30*	12	42	50	6	12.030	9042340120300
30*	14	44	50	6	14.030	9042340140300
30*	16	48	63	6	16.030	9042340160300
30*	18	50	63	6	18.030	9042340180300
30*	20	52	63	8	20.030	9042340200300
40*	16	45	35	6	916.040	9042349160400
40*	20	45	35	8	920.040	9042349200400
40*	25	45	35	10	925.040	9042349250400
40	6	25	50	3	6.040	9042340060400
40	8	28	50	4	8.040	9042340080400
40	10	35	63	5	10.040	9042340100400
40	12	42	63	6	12.040	9042340120400
40	14	44	63	6	14.040	9042340140400
40	16	48	63	6	16.040	9042340160400
40	18	50	63	6	18.040	9042340180400
40	20	52	63	8	20.040	9042340200400
40	25	63	90	10	25.040	9042340250400
40	32	72	100	10	32.040	9042340320400
40	6	25	100	3	106.040	9042341060400
40	8	28	100	4	108.040	9042341080400
40	10	35	100	5	110.040	9042341100400
40	12	42	100	6	112.040	9042341120400
40	14	44	100	6	114.040	9042341140400
40	16	48	100	6	116.040	9042341160400
40	18	50	100	6	118.040	9042341180400
40	20	52	100	8	120.040	9042341200400

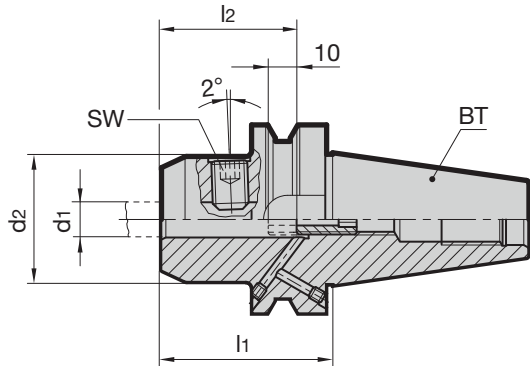
Whistle Notch MAS/BT side lock holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- MAS/BT to JIS B 6339 form AD/B
- with bore to DIN 1835-2 form E „Whistle-Notch“
- from bore d1 = 25 with two clamping screws
- coolant supply form AD/B
(*: BT50 version AD without coolant supply over collar)

Scope of delivery

- incl. clamping screw Guhring no. 4903 and adjustment screw
- order pull studs, Guhring no. 4927 or 4928 separately



Series Number

4233

							EDP Numbers
BT	clamping-Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	SW	Order Code	
40	6	25	50	36	3	6.040	9042330060400
40	8	28	50	36	4	8.040	9042330080400
40	10	35	63	40	5	10.040	9042330100400
40	12	42	63	45	6	12.040	9042330120400
40	14	44	63	45	6	14.040	9042330140400
40	16	48	63	48	6	16.040	9042330160400
40	18	50	63	48	6	18.040	9042330180400
40	20	52	63	50	8	20.040	9042330200400
40	25	63	90	56	10	25.040	9042330250400
40	32	72	100	60	10	32.040	9042330320400
50*	6	25	63	36	3	6.050	9042330060500
50*	8	28	63	36	4	8.050	9042330080500
50*	10	35	63	40	5	10.050	9042330100500
50*	12	42	80	45	6	12.050	9042330120500
50*	14	44	80	45	6	14.050	9042330140500
50*	16	48	80	48	6	16.050	9042330160500
50*	18	50	80	48	6	18.050	9042330180500
50*	20	52	80	50	8	20.050	9042330200500
50*	25	65	100	56	10	25.050	9042330250500
50*	32	72	105	60	10	32.050	9042330320500

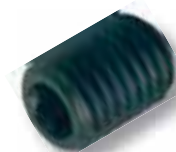
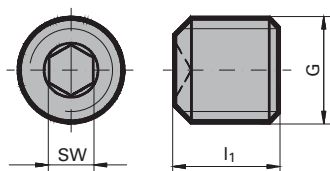
Clamping screws

Product information

- for side lock holders with bore to DIN 1835-2, B and E, and HSK-A adaptors for tapping chucks, Guhring nos. 4317/4322/4329/4333/4334/4343
- Guhring no. 4903 12,001 (M12) only for Guhring no. 4343

Scope of delivery

- Minimum order quantity 5



Series Number

4903

for holder- Ø	G	l ₁ mm	torque Nm	SW	EDP Numbers
6	M6	10	5	3	9049030060000
8	M8	10	10	4	9049030080000
10	M10	12	15	5	9049030100000
12/14	M12	16	28	6	9049030120000
25	M12	12	28	6	9049030120010
16/18	M14	16	42	6	9049030140000
20	M16	16	50	8	9049030160000
25	M18x2	20	60	10	9049030180000
32/40	M20x2	20	72	10	9049030200000
40	M20x2	25	72	10	9049030200010

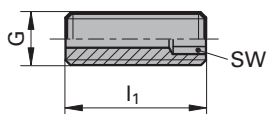
Adjustment screws

Product information

- for HSK-A Weldon side lock holders with bore to DIN 1835-2, form E, shrink fit chuck and shrink fit extensions

Scope of delivery

- Minimum order quantity 5



Series Number

4904

G	l ₁ mm	SW	EDP Numbers
M5	16	2.5	9049040050160
M5	20	2.5	9049040050200
M6	16	3.0	9049040060160
M6	20	3.0	9049040060200
M8	12	3.0	9049040080120
M8	18	4.0	9049040080180
M10	17	3.0	9049040100170
M10	20	5.0	9049040100200
M12	14	3.0	9049040120140
M12	20	5.0	9049040120200
M16	25	5.0	9049040160250
M20	25	6.0	9049040200250

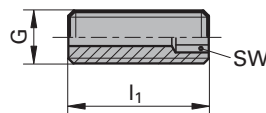
Adjustment screws

Product information

- for HSK-C side lock with bore to DIN 1835-2, form E, Guhring nos. 4333 / 4322

Scope of delivery

- Minimum order quantity 5



Series Number

4905

G	l ₁ mm	SW	EDP Numbers
M5	14	2.5	9049050050140
M5	16	2.5	9049050050160
M6	14	3.0	9049050060140
M6	16	3.0	9049050060160
M8	15	4.0	9049050080150
M8	17	4.0	9049050080170
M10	17	5.0	9049050100170
M10	20	5.0	9049050100200
M12	19	6.0	9049050120190
M12	22	6.0	9049050120220
M16	20	6.0	9049050160200
M20	26	6.0	9049050200260

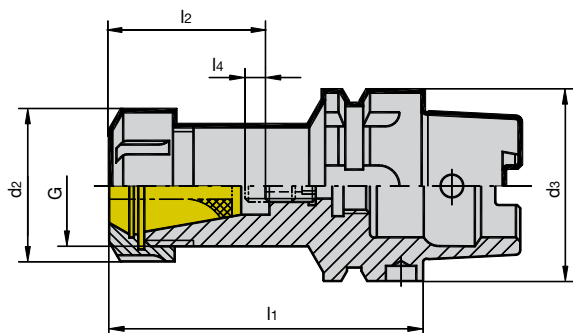
HSK-A collet holders

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm

Scope of delivery

- incl. retaining nut Guhring no. 4306 and adjustment screw Guhring no. 4902
- order collet, Guhring no. 4307, clamping key, Guhring no. 4913 and coolant delivery set, Guhring no. 4949 separately



Series Number

4304

HSK-A d ₃	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	l ₂ mm	l ₃ mm	incl. adjustment screw Guhr. no. 4902	kg	Order Code	EDP Numbers
32	ER 11	1-7	19	M14 x 0.75	55	25	6	9049020110120	0.16	11.032	9043040110320
32	ER 16	1-10	28	M22 x 1.5	80	34	6	9049020160120	0.30	16.032	9043040160320
32	ER 20	3-13	34	M25 x 1.5	70	40	6	9049020160120	0.27	20.032	9043040200320
40	ER 16	1-10	28	M22 x 1.5	80	34	6	9049020160120	0.40	16.040	9043040160400
40	ER 25	2-16	42	M32 x 1.5	80	44	6	9049020250140	0.51	25.040	9043040250400
40	ER 32	3-20	50	M40 x 1.5	100	50	10	9049020320200	0.72	32.040	9043040320400
50	ER 16	1-10	28	M22 x 1.5	100	34	6	9049020160120	0.74	16.050	9043040160500
50	ER 25	2-16	42	M32 x 1.5	80	44	6	9049020250140	0.66	25.050	9043040250500
50	ER 25	2-16	42	M32 x 1.5	100	44	6	9049020250140	0.83	25.150	9043040251500
50	ER 32	3-20	50	M40 x 1.5	100	50	10	9049020320200	0.93	32.050	9043040320500
63	ER 16	1-10	28	M22 x 1.5	100	34	6	9049020160120	0.95	16.063	9043040160630
63	ER 16	1-10	28	M22 x 1.5	160	34	6	9049020160120	1.40	16.163	9043040161630
63	ER 25	2-16	42	M32 x 1.5	80	42	6	9049020250140	0.94	25.063	9043040250630
63	ER 25	2-16	42	M32 x 1.5	100	42	6	9049020250140	1.08	25.163	9043040251630
63	ER 32	3-20	50	M40 x 1.5	100	50	10	9049020320200	1.20	32.063	9043040320630
63	ER 40	3-26	63	M50 x 1.5	120	56	10	9049020320200	1.80	40.063	9043040400630
80	ER 32	3-20	50	M40 x 1.5	100	50	10	9049020320200	2.75	32.080	9043040320800
80	ER 32	3-20	50	M40 x 1.5	160	50	10	9049020320200	3.45	32.180	9043040321800
80	ER 40	3-26	63	M50 x 1.5	120	56	10	9049020320200	2.93	40.080	9043040400800
100	ER 32	3-20	50	M40 x 1.5	100	50	10	9049020320200	2.70	32.100	9043040321000
100	ER 32	3-20	50	M40 x 1.5	160	50	10	9049020320200	4.30	32.101	9043040321010
100	ER 40	3-26	63	M50 x 1.5	120	56	10	9049020320200	3.20	40.100	9043040401000

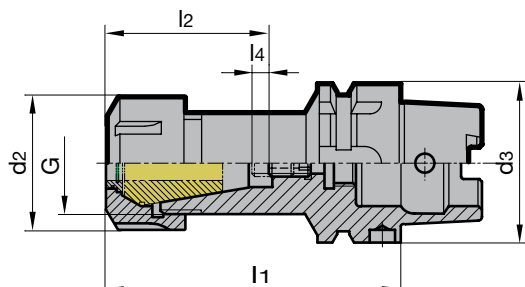
HSK-A collet holders, sealed version

Product information

- sealed, suitable for coolant pressure up to 100 bar
- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm

Scope of delivery

- incl. retaining nut Guhring no. 4306 and adjustment screw Guhring no. 4902
- order sealing washer, Guhring no. 4335, collet, Guhring no. 4307, clamping key, Guhring no. 4913 and coolant delivery set Guhring no. 4949 separately



Series Number

4324

HSK-A d ₃	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	l ₂ mm	l ₄ mm	incl. adjustment screw Guhr. no. 4902	kg	Order Code	EDP Numbers
32	ER 16	1-10	28	M22 x 1.5	85	39	6	9049020160120	0.32	16.032	9043240160320
32	ER 20	3-13	34	M25 x 1.5	75	45	6	9049020160120	0.31	20.032	9043240200320
40	ER 16	1-10	28	M22 x 1.5	85	39	6	9049020160120	0.41	16.040	9043240160400
40	ER 25	2-16	42	M32 x 1.5	85	49	6	9049020250140	0.51	25.040	9043240250400
40	ER 32	3-20	50	M40 x 1.5	105	55	10	9049020320200	0.72	32.040	9043240320400
50	ER 16	1-10	28	M22 x 1.5	105	39	6	9049020160120	0.78	16.050	9043240160500
50	ER 25	2-16	42	M32 x 1.5	85	49	6	9049020250140	0.66	25.050	9043240250500
50	ER 25	2-16	42	M32 x 1.5	105	49	10	9049020250140	0.86	25.150	9043240251500
50	ER 32	3-20	50	M40 x 1.5	105	55	10	9049020320200	0.93	32.050	9043240320500
63	ER 16	1-10	28	M22 x 1.5	105	39	6	9049020160120	1.00	16.063	9043240160630
63	ER 16	1-10	28	M22 x 1.5	165	39	6	9049020160120	1.45	16.163	9043240161630
63	ER 25	2-16	42	M32 x 1.5	85	47	6	9049020250140	0.94	25.063	9043240250630
63	ER 25	2-16	42	M32 x 1.5	105	47	6	9049020250140	1.08	25.163	9043240251630
63	ER 32	3-20	50	M40 x 1.5	105	55	10	9049020320200	1.20	32.063	9043240320630
63	ER 40	3-26	63	M50 x 1.5	125	61	10	9049020320200	1.80	40.063	9043240400630
80	ER 32	3-20	50	M40 x 1.5	105	55	10	9049020320200	2.80	32.080	9043240320800
80	ER 32	3-20	50	M40 x 1.5	165	55	10	9049020320200	3.50	32.180	9043240321800
80	ER 40	3-26	63	M50 x 1.5	125	61	10	9049020320200	2.98	40.080	9043240400800
100	ER 32	3-20	50	M40 x 1.5	105	55	10	9049020320200	2.70	32.100	9043240321000
100	ER 32	3-20	50	M40 x 1.5	165	55	10	9049020320200	4.30	32.101	9043240321010
100	ER 40	3-26	63	M50 x 1.5	125	61	10	9049020320200	3.20	40.100	9043240401000

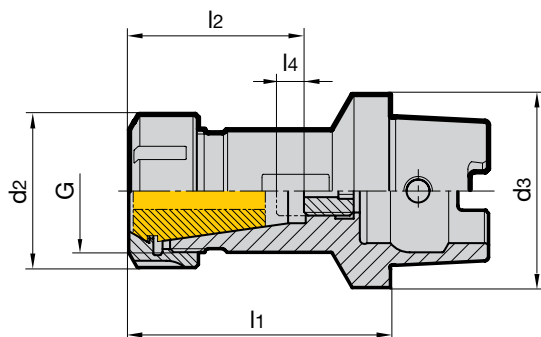
HSK-C collet holders

Product information

- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm

Scope of delivery

- incl. retaining nut Guhring no. 4306 and adjustment screw Guhring no. 4901
- order collet, Guhring no. 4307, clamping key, Guhring no. 4913 separately



											Series Number
											4303
HSK-C d ₃	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	l ₂ mm	l ₄ mm	incl. adjustment screw Guhr. no. 4901	kg	Order Code	EDP Numbers
25	ER16 mini	1-10	22	M19 x 1.0	50	30	4	9049010160120	0.10	16.025	9043030160250
32	ER 16	1-10	28	M22 x 1.5	55	32	4	9049010160120	0.19	16.032	9043030160320
32	ER 20	3-13	34	M25 x 1.5	60	38	5	9049010160120	0.23	20.032	9043030200320
32	ER 25	2-16	42	M32 x 1.5	70	44	6	9049010250140	0.36	25.032	9043030250320
40	ER 20	3-13	34	M25 x 1.5	60	38	5	9049010160120	0.28	20.040	9043030200400
40	ER 25	2-16	42	M32 x 1.5	70	44	6	9049010250140	0.41	25.040	9043030250400
40	ER 32	3-20	50	M40 x 1.5	75	49	6	9049010250140	0.59	32.040	9043030320400
50	ER 16	1-10	28	M22 x 1.5	60	34	6	9049010160120	0.45	16.050	9043030160500
50	ER 25	2-16	42	M32 x 1.5	70	44	6	9049010250140	0.54	25.050	9043030250500
50	ER 32	3-20	50	M40 x 1.5	75	49	6	9049010250140	0.68	32.050	9043030320500
50	ER 40	3-26	63	M50 x 1.5	80	54	6	9049010250140	0.98	40.050	9043030400500
63	ER 40	3-26	63	M50 x 1.5	80	54	6	9049010250140	1.17	40.063	9043030400630

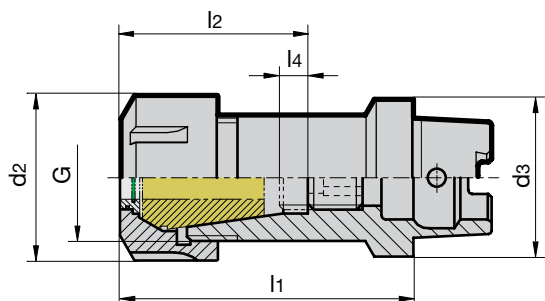
HSK-C collet holders, sealed version

Product information

- sealed, suitable for coolant pressure up to 100 bar
- balancing quality: G2.5 / 25,000 rev./min or U< 1gmm

Scope of delivery

- incl. retaining nut Guhring no. 4306 and adjustment screw Guhring no. 4901
- order sealing washer Guhring no. 4335, collet, Guhring no. 4307, clamping key, Guhring no. 4913 separately



Series Number											4323
HSK-C d ₃	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	l ₂ mm	l ₄ mm	incl. adjustment screw Guhr. no. 4901	kg	Order Code	EDP Numbers
25	ER16 mini	1-10	22	M19 x 1.0	55	37	4	9049010160120	0.10	16.025	9043230160250
32	ER 16	1-10	28	M22 x 1.5	60	37	4	9049010160120	0.20	16.032	9043230160320
32	ER 20	3-13	34	M25 x 1.5	65	43	5	9049010160120	0.26	20.032	9043230200320
32	ER 25	2-16	42	M32 x 1.5	75	49	6	9049010250140	0.42	25.032	9043230250320
40	ER 20	3-13	34	M25 x 1.5	65	43	5	9049010160120	0.30	20.040	9043230200400
40	ER 25	2-16	42	M32 x 1.5	75	49	6	9049010250140	0.47	25.040	9043230250400
40	ER 32	3-20	50	M40 x 1.5	80	54	6	9049010250140	0.64	32.040	9043230320400
50	ER 16	1-10	28	M22 x 1.5	65	39	6	9049010160120	0.46	16.050	9043230160500
50	ER 25	2-16	42	M32 x 1.5	75	49	6	9049010250140	0.59	25.050	9043230250500
50	ER 32	3-20	50	M40 x 1.5	80	54	6	9049010250140	0.74	32.050	9043230320500
50	ER 40	3-26	63	M50 x 1.5	85	61	6	9049010250140	1.12	40.050	9043230400500
63	ER 40	3-26	63	M50 x 1.5	85	61	6	9049010250140	1.30	40.063	9043230400630

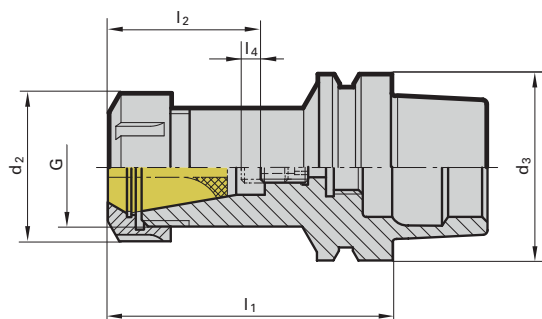
HSK-E collet holders

Product information

- balancing quality: G2.5 / 25,000 rev./min or < 1 gmm residual imbalance
- incl. spanner flat for locking during clamping
- Code no. 16,025 without length adjustment and central cooling

Scope of delivery

- incl. retaining nut Guhring no. 4306 and adjustment screw
- order collet, Guhring no. 4307, clamping key, Guhring no. 4913 and coolant supply set, Guhring no. 4949 separately

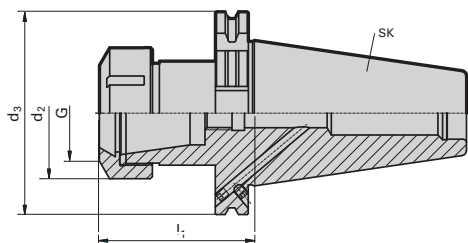


Series Number										4397
HSK-E d ₃	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	l ₂ mm	l ₄ mm	kg	Order Code	EDP Numbers
25	ER 16 mini	1-10	22	M19 x 1.0	43	-	-	0.10	16.025	9043970160250
32	ER 16 mini	1-10	22	M19 x 1.0	60	32	4	0.20	16.032	9043970160320
32	ER 20 mini	1-13	28	M24 x 1.0	60	35	4	0.25	20.032	9043970200320
40	ER 16	1-10	28	M22 x 1.5	60	38	4	0.30	16.040	9043970160400
40	ER 20 mini	1-13	28	M24 x 1.0	65	37	6	0.30	20.040	9043970200400
40	ER 25 mini	2-16	35	M30 x 1.0	80	38	6	0.40	25.040	9043970250400
50	ER 16	1-10	28	M22 x 1.5	100	33	4	0.50	16.050	9043970160500
50	ER 20	1-13	34	M25 x 1.5	70	37.5	4	0.50	20.050	9043970200500
50	ER 25	2-16	42	M32 x 1.5	80	39	6	0.70	25.050	9043970250500
50	ER 32	3-20	50	M40 x 1.5	100	50	6	1.00	32.050	9043970320500
63	ER 32	3-20	50	M40 x 1.5	90	52	6	1.00	32.063	9043970320630
63	ER 40	4-26	63	M50 x 1.5	120	65	10	1.20	40.063	9043970400630

ISO taper collet holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- ISO taper to DIN 69871 form AD/B



Scope of delivery

- incl. retaining nut
- order collet, Guhring no. 4307, separately
- order clamping key, Guhring no. 4913 separately
- order pull studs, Guhring no. 4925 or 4926 separately



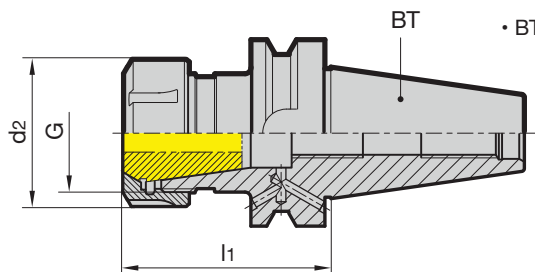
Series Number **4318**

ISO taper	Nominal size	clamping range	d ₂ mm	G	l ₁ mm	Order Code	EDP Numbers
40	ER16	1-10	32	M22 x 1.5	63	16.040	9043180160400
40	ER25	2-16	42	M32 x 1.5	60	25.040	9043180250400
40	ER32	2-20	50	M40 x 1.5	70	32.040	9043180320400
40	ER16	1-10	32	M22 x 1.5	160	16.140	9043180161400
40	ER25	2-16	42	M32 x 1.5	160	25.140	9043180251400
40	ER32	2-20	50	M40 x 1.5	160	32.140	9043180321400
50	ER25	2-16	42	M32 x 1.5	60	25.050	9043180250500
50	ER32	2-20	50	M40 x 1.5	70	32.050	9043180320500
50	ER40	3-26	63	M50 x 1.5	80	40.050	9043180400500
50	ER25	2-16	42	M32 x 1.5	160	25.150	9043180251500
50	ER40	3-26	63	M50 x 1.5	160	40.150	9043180401500

MAS/BT collet holders

Product information

- balancing quality: G6.3 / 15,000 rev./min
- MAS/BT to JIS B 6339 form AD/B
- coolant supply form AD/B (*version AD without coolant supply over collar)



Scope of delivery

- incl. retaining nut
- order collet, Guhring no. 4307, separately
- order clamping key, Guhring no. 4913 separately
- BT50 on request



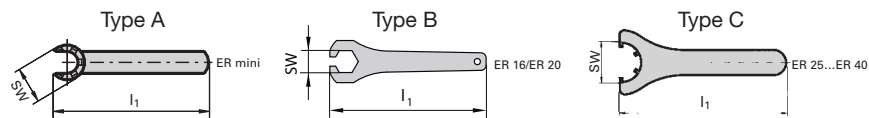
Series Number **4245**

BT	clamping range	d ₂ mm	G	l ₁ mm	Order Code	EDP Numbers
30*	ER16	32	M22x1.5	70	16.030	9042450160300
30*	ER25	42	M32x1.5	70	25.030	9042450250300
40	ER16	32	M22x1.5	63	16.040	9042450160400
40	ER25	42	M32x1.5	60	25.040	9042450250400
40	ER32	50	M40x1.5	70	32.040	9042450320400
40	ER16	32	M22x1.5	160	16.140	9042450161400
40	ER25	42	M32x1.5	160	25.140	9042450251400
40	ER32	50	M40x1.5	160	32.140	9042450321400

Clamping key

Product information

- for collet holders
- ER11 - clamping key SW17



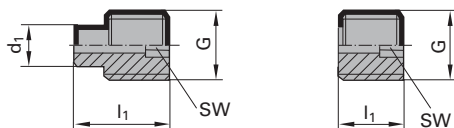
Series Number **4913**

nominal size mm	type	l_1 mm	SW	EDP Numbers
ER16 mini	A	122	22	9049130162000
ER20 mini	A	139	28	9049130202000
ER25 mini	A	143	35	9049130252000
ER11	B	141	17	9049130110000
ER16	B	178	25	9049130160000
ER16	C	163	32	9049130160320
ER20	C	183	35	9049130200000
ER25	C	210	42	9049130250000
ER32	C	250	50	9049130320000
ER40	C	290	63	9049130400000

Adjustment screws for HSK-A/HSK-E collet holders

Product information

- with code nos. 16,012, 25,014 and 32,020
- screws for the largest clamping diameter are without dog point



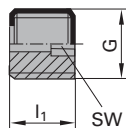
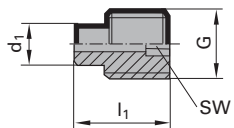
Series Number **4902**

for nominal size	for clamping range	G	d_1 mm	l_1 mm	SW	EDP Numbers
ER11	1 - 7	M6	—	12	3	9049020110120
ER16	1.2 - 6	M10	3.5	18	3	9049020160180
ER16	6 - 10	M10	—	12	3	9049020160120
ER20	3 - 6	M10	4.5	24	3	9049020200240
ER20	6-10	M10	5.5	18	3	9049020200180
ER20	10 - 13	M10	—	12	3	9049020160120
ER25	3 - 7	M16	4.5	26	4	9049020250260
ER25	7 - 10	M16	6.5	20	4	9049020250200
ER25	10 - 16	M16	—	14	4	9049020250140
ER32	3 - 10	M16	6.5	36	5	9049020320360
ER32	10 - 16	M16	9.5	28	5	9049020320280
ER32	16 - 20	M16	—	20	5	9049020320200
ER40	3 - 8	M16	6.5	44	5	9049020400440
ER40	8 - 10	M16	6.5	36	5	9049020320200
ER40	10 - 16	M16	9.5	28	5	9049020320360
ER40	16 - 26	M16	—	20	5	9049020320280

Adjustment screws for HSK-C collet holders

Product information

- with code nos.16,012 and 32,020 screws for the largest clamping diameter are without dog point



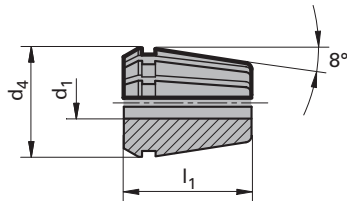
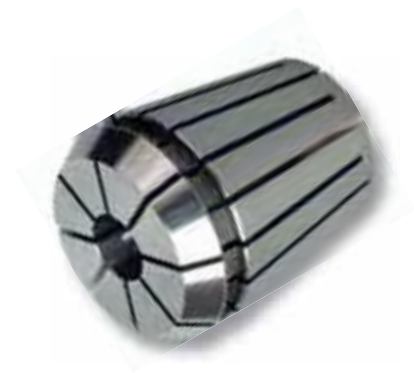
Series Number						4901
for nominal size	for clamping range	G	d ₁ mm	l ₁ mm	SW	EDP Numbers
ER16	1.2- 6	M10	3.5	16	3	9049010160160
ER16	6-10	M10	–	12	3	9049010160120
ER20	3- 6	M10	4.5	20	3	9049010200200
ER20	6-10	M10	5.5	16	3	9049010200160
ER20	10-13	M10	–	12	3	9049010160120
ER25	3- 7	M16	4.5	26	4	9049010250260
ER25	7-10	M16	6.5	20	4	9049010250200
ER25	10-16	M16	–	14	4	9049010250140
ER32	3- 7	M16	6.5	32	5	9049010320320
ER32	7-10	M16	6.5	26	5	9049010320260
ER32	10-16	M16	9.5	20	5	9049010320200
ER32	16-20	M16	–	14	4	9049010250140
ER40	3- 6	M16	6.5	38	5	9049010400380
ER40	6- 8	M16	6.5	32	5	9049010320320
ER40	8-10	M16	6.5	26	5	9049010320260
ER40	10-16	M16	9.5	20	5	9049010320200
ER40	16-26	M16	–	14	4	9049010250140

Product information

- the application range of collet, Guhring no. 4307, is from nom.-Ø d1 to the next dimension below, i.e. for Ø 6.3 mm (nom. size ER20) order collet d1 = 7.0 mm (code no. 07,020).

Ordering example:

Ø d1 = 2.5
 nom. size = ER 20
 Guhring no./Code no. = 4307 02,520

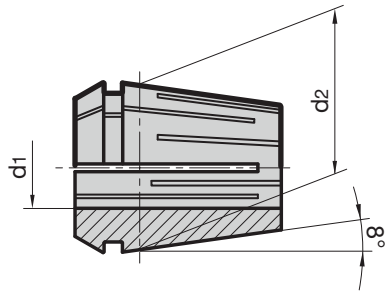


Series Number					4307
nominal size d ₂	d ₁ mm	Clamping Range	l ₁ mm	Order Code	EDP Numbers
ER11	1	1 to 0.5	18	1.011	9043070010110
ER11	1.5	1.5 to 1	18	1.511	9043070015110
ER11	2	2 to 1.5	18	2.011	9043070020110
ER11	2.5	2.5 to 2	18	2.511	9043070025110
ER11	3	3 to 2.5	18	3.011	9043070030110
ER11	4	4 to 3	18	4.011	9043070040110
ER11	5	5 to 4	18	5.011	9043070050110
ER11	6	6 to 5	18	6.011	9043070060110
ER11	7	7 to 6	18	7.011	9043070070110
ER16	1	1 to 0.5	27.5	1.016	9043070010160
ER16	1.5	1.5 to 1	27.5	1.516	9043070015160
ER16	2	2 to 1.5	27.5	2.016	9043070020160
ER16	2.5	2.5 to 2	27.5	2.516	9043070025160
ER16	3	3 to 2.5	27.5	3.016	9043070030160
ER16	4	4 to 3	27.5	4.016	9043070040160
ER16	5	5 to 4	27.5	5.016	9043070050160
ER16	6	6 to 5	27.5	6.016	9043070060160
ER16	7	7 to 6	27.5	7.016	9043070070160
ER16	8	8 to 7	27.5	8.016	9043070080160
ER16	9	9 to 8	27.5	9.016	9043070090160
ER16	10	10 to 9	27.5	10.016	9043070100160
ER20	1	1 to 0.5	31.5	1.020	9043070010200
ER20	1.5	1.5 to 1	31.5	1.520	9043070015200
ER20	2	2 to 1.5	31.5	2.020	9043070020200
ER20	2.5	2.5 to 2	31.5	2.520	9043070025200
ER20	3	3 to 2.5	31.5	3.020	9043070030200
ER20	4	4 to 3	31.5	4.020	9043070040200
ER20	5	5 to 4	31.5	5.020	9043070050200
ER20	6	6 to 5	31.5	6.020	9043070060200
ER20	7	7 to 6	31.5	7.020	9043070070200
ER20	8	8 to 7	31.5	8.020	9043070080200
ER20	9	9 to 8	31.5	9.020	9043070090200
ER20	10	10 to 9	31.5	10.020	9043070100200
ER20	11	11 to 10	31.5	11.020	9043070110200
ER20	12	12 to 11	31.5	12.020	9043070120200
ER20	13	13 to 12	31.5	13.020	9043070130200
ER25	1	1 to 0.5	34	1.025	9043070010250
ER25	1.5	1.5 to 1	34	1.525	9043070015250
ER25	2	2 to 1.5	34	2.025	9043070020250

Series Number					4307
nominal size d ₂	d ₁ mm	Clamping Range	l ₁ mm	Order Code	EDP Numbers
ER25	2.5	2.5 to 2	34	2.525	9043070025250
ER25	3	3 to 2.5	34	3.025	9043070030250
ER25	4	4 to 3	34	4.025	9043070040250
ER25	5	5 to 4	34	5.025	9043070050250
ER25	6	6 to 5	34	6.025	9043070060250
ER25	7	7 to 6	34	7.025	9043070070250
ER25	8	8 to 7	34	8.025	9043070080250
ER25	9	9 to 8	34	9.025	9043070090250
ER25	10	10 to 9	34	10.025	9043070100250
ER25	11	11 to 10	34	11.025	9043070110250
ER25	12	12 to 11	34	12.025	9043070120250
ER25	13	13 to 12	34	13.025	9043070130250
ER25	14	14 to 13	34	14.025	9043070140250
ER25	15	15 to 14	34	15.025	9043070150250
ER25	16	16 to 15	34	16.025	9043070160250
ER32	2	2 to 1.5	40	2.032	9043070020320
ER32	2.5	2.5 to 2	40	2.532	9043070025320
ER32	3	3 to 2.5	40	3.032	9043070030320
ER32	4	4 to 3	40	4.032	9043070040320
ER32	5	5 to 4	40	5.032	9043070050320
ER32	6	6 to 5	40	6.032	9043070060320
ER32	7	7 to 6	40	7.032	9043070070320
ER32	8	8 to 7	40	8.032	9043070080320
ER32	9	9 to 8	40	9.032	9043070090320
ER32	10	10 to 9	40	10.032	9043070100320
ER32	11	11 to 10	40	11.032	9043070110320
ER32	12	12 to 11	40	12.032	9043070120320
ER32	13	13 to 12	40	13.032	9043070130320
ER32	14	14 to 13	40	14.032	9043070140320
ER32	15	15 to 14	40	15.032	9043070150320
ER32	16	16 to 15	40	16.032	9043070160320
ER32	17	17 to 16	40	17.032	9043070170320
ER32	18	18 to 17	40	18.032	9043070180320
ER32	19	19 to 18	40	19.032	9043070190320
ER32	20	20 to 19	40	20.032	9043070200320
ER40	4	4 to 3	46	4.040	9043070040400
ER40	5	5 to 4	46	5.040	9043070050400
ER40	6	6 to 5	46	6.040	9043070060400
ER40	7	7 to 6	46	7.040	9043070070400
ER40	8	8 to 7	46	8.040	9043070080400
ER40	9	9 to 8	46	9.040	9043070090400
ER40	10	10 to 9	46	10.040	9043070100400
ER40	11	11 to 10	46	11.040	9043070110400
ER40	12	12 to 11	46	12.040	9043070120400
ER40	13	13 to 12	46	13.040	9043070130400
ER40	14	14 to 13	46	14.040	9043070140400
ER40	15	15 to 14	46	15.040	9043070150400
ER40	16	16 to 15	46	16.040	9043070160400
ER40	17	17 to 16	46	17.040	9043070170400
ER40	18	18 to 17	46	18.040	9043070180400
ER40	19	19 to 18	46	19.040	9043070190400
ER40	20	20 to 19	46	20.040	9043070200400
ER40	21	21 to 20	46	21.040	9043070210400
ER40	22	22 to 21	46	22.040	9043070220400
ER40	23	23 to 22	46	23.040	9043070230400
ER40	24	24 to 23	46	24.040	9043070240400
ER40	25	25 to 24	46	25.040	9043070250400
ER40	26	26 to 25	46	26.040	9043070260400

Product information

- DIN 15488
- for application without sealing washer
- concentricity error max. 6 µm
- for high-performance tools with internal cooling e.g. HR 500 reamers
- ER-DM collets with restricted clamping range



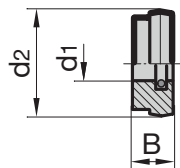
Series Number				4175
nominal size d ₂	d ₁ mm	l ₁ mm	Order Code	EDP Numbers
ER20	3.00	31.5	3.020	9041750030200
ER20	4.00	31.5	4.020	9041750040200
ER20	5.00	31.5	5.020	9041750050200
ER20	6.00	31.5	6.020	9041750060200
ER20	7 to 6.5	31.5	7.020	9041750070200
ER20	8 to 7.5	31.5	8.020	9041750080200
ER20	9 to 8.5	31.5	9.020	9041750090200
ER20	10 to 9.5	31.5	10.020	9041750100200
ER20	11 to 10.5	31.5	11.020	9041750110200
ER20	12 to 11.5	31.5	12.020	9041750120200
ER20	13 to 12.5	31.5	13.020	9041750130200
ER25	6.00	34	6.025	9041750060250
ER25	8 to 7.5	34	8.025	9041750080250
ER25	10 to 9.5	34	10.025	9041750100250
ER25	12 to 11.5	34	12.025	9041750120250
ER25	14 to 13.5	34	14.025	9041750140250
ER25	16 to 15.5	34	16.025	9041750160250
ER32	6.00	40	6.032	9041750060320
ER32	8 to 7.5	40	8.032	9041750080320
ER32	10 to 9.5	40	10.032	9041750100320
ER32	12 to 11.5	40	12.032	9041750120320
ER32	14 to 13.5	40	14.032	9041750140320
ER32	16 to 15.5	40	16.032	9041750160320
ER32	18 to 17.5	40	18.032	9041750180320
ER32	20 to 19.5	40	20.032	9041750200320

Product information

- the application range of sealing washer, Guhring no. 4325, is from nom.-Ø d1 to the next dimension below, i.e. for Ø 6.3 mm (nom. size ER20) order sealing washer d1 = 6.5 mm (code no. 06,520).

Ordering example

Ø d1 = 3.5
nom. size = ER 20
Guhring no./Code no. = 4335 03,520



Series Number						4335
nominal size	d ₁ mm	Sealing Range	d ₂ mm	B mm	Order Code	EDP Numbers
ER16	3	2.5 to 3	13	4	3.016	9043350030160
ER20	3	2.5 to 3	16	4	3.020	9043350030200
ER25	3	2.5 to 3	21	4	3.025	9043350030250
ER32	3	2.5 to 3	27	4	3.032	9043350030320
ER16	3.5	3 to 3.5	13	4	3.516	9043350035160
ER20	3.5	3 to 3.5	16	4	3.520	9043350035200
ER25	3.5	3 to 3.5	21	4	3.525	9043350035250
ER32	3.5	3 to 3.5	27	4	3.532	9043350035320
ER40	3.5	3 to 3.5	33.5	4	3.540	9043350035400
ER16	4	3.5 to 4	13	4	4.016	9043350040160
ER20	4	3.5 to 4	16	4	4.020	9043350040200
ER25	4	3.5 to 4	21	4	4.025	9043350040250
ER32	4	3.5 to 4	27	4	4.032	9043350040320
ER40	4	3.5 to 4	33.5	4	4.040	9043350040400
ER16	4.5	4 to 4.5	13	4	4.516	9043350045160
ER20	4.5	4 to 4.5	16	4	4.520	9043350045200
ER25	4.5	4 to 4.5	21	4	4.525	9043350045250
ER32	4.5	4 to 4.5	27	4	4.532	9043350045320
ER40	4.5	4 to 4.5	33.5	4	4.540	9043350045400
ER16	5	4.5 to 5	13	4	5.016	9043350050160
ER20	5	4.5 to 5	16	4	5.020	9043350050200
ER25	5	4.5 to 5	21	4	5.025	9043350050250
ER32	5	4.5 to 5	27	4	5.032	9043350050320
ER40	5	4.5 to 5	33.5	4	5.040	9043350050400
ER16	5.5	5 to 5.5	13	4	5.516	9043350055160
ER20	5.5	5 to 5.5	16	4	5.520	9043350055200
ER25	5.5	5 to 5.5	21	4	5.525	9043350055250
ER32	5.5	5 to 5.5	27	4	5.532	9043350055320
ER40	5.5	5 to 5.5	33.5	4	5.540	9043350055400
ER16	6	5.5 to 6	13	4	6.016	9043350060160
ER20	6	5.5 to 6	16	4	6.020	9043350060200
ER25	6	5.5 to 6	21	4	6.025	9043350060250
ER32	6	5.5 to 6	27	4	6.032	9043350060320
ER40	6	5.5 to 6	33.5	4	6.040	9043350060400
ER16	6.5	6 to 6.5	13	4	6.516	9043350065160
ER20	6.5	6 to 6.5	16	4	6.520	9043350065200
ER25	6.5	6 to 6.5	21	4	6.525	9043350065250
ER32	6.5	6 to 6.5	27	4	6.532	9043350065320
ER40	6.5	6 to 6.5	33.5	4	6.540	9043350065400

Sealing washers

Series Number

4335

nominal size	d ₁ mm	Sealing Range	d ₂ mm	B mm	Order Code	EDP Numbers
ER16	7	6.5 to 7	13	4	7.016	9043350070160
ER20	7	6.5 to 7	16	4	7.020	9043350070200
ER25	7	6.5 to 7	21	4	7.025	9043350070250
ER32	7	6.5 to 7	27	4	7.032	9043350070320
ER40	7	6.5 to 7	33.5	4	7.040	9043350070400
ER16	7.5	7 to 7.5	13	4	7.516	9043350075160
ER20	7.5	7 to 7.5	16	4	7.520	9043350075200
ER25	7.5	7 to 7.5	21	4	7.525	9043350075250
ER32	7.5	7 to 7.5	27	4	7.532	9043350075320
ER40	7.5	7 to 7.5	33.5	4	7.540	9043350075400
ER16	8	7.5 to 8	13	4	8.016	9043350080160
ER20	8	7.5 to 8	16	4	8.020	9043350080200
ER25	8	7.5 to 8	21	4	8.025	9043350080250
ER32	8	7.5 to 8	27	4	8.032	9043350080320
ER40	8	7.5 to 8	33.5	4	8.040	9043350080400
ER16	8.5	8 to 8.5	13	4	8.516	9043350085160
ER20	8.5	8 to 8.5	16	4	8.520	9043350085200
ER25	8.5	8 to 8.5	21	4	8.525	9043350085250
ER32	8.5	8 to 8.5	27	4	8.532	9043350085320
ER40	8.5	8 to 8.5	33.5	4	8.540	9043350085400
ER16	9	8.5 to 9	13	4	9.016	9043350090160
ER20	9	8.5 to 9	16	4	9.020	9043350090200
ER25	9	8.5 to 9	21	4	9.025	9043350090250
ER32	9	8.5 to 9	27	4	9.032	9043350090320
ER40	9	8.5 to 9	33.5	4	9.040	9043350090400
ER16	9.5	9 to 9.5	13	4	9.516	9043350095160
ER20	9.5	9 to 9.5	16	4	9.520	9043350095200
ER25	9.5	9 to 9.5	21	4	9.525	9043350095250
ER32	9.5	9 to 9.5	27	4	9.532	9043350095320
ER40	9.5	9 to 9.5	33.5	4	9.540	9043350095400
ER16	10	9.5 to 10	13	4	10.016	9043350100160
ER20	10	9.5 to 10	16	4	10.020	9043350100200
ER25	10	9.5 to 10	21	4	10.025	9043350100250
ER32	10	9.5 to 10	27	4	10.032	9043350100320
ER40	10	9.5 to 10	33.5	4	10.040	9043350100400
ER20	10.5	10 to 10.5	16	4	10.520	9043350105200
ER25	10.5	10 to 10.5	21	4	10.525	9043350105250
ER32	10.5	10 to 10.5	27	4	10.532	9043350105320
ER40	10.5	10 to 10.5	33.5	4	10.540	9043350105400
ER20	11	10.5 to 11	16	4	11.020	9043350110200
ER25	11	10.5 to 11	21	4	11.025	9043350110250
ER32	11	10.5 to 11	27	4	11.032	9043350110320
ER40	11	10.5 to 11	33.5	4	11.040	9043350110400
ER20	11.5	11 to 11.5	16	4	11.520	9043350115200
ER25	11.5	11 to 11.5	21	4	11.525	9043350115250
ER32	11.5	11 to 11.5	27	4	11.532	9043350115320
ER40	11.5	11 to 11.5	33.5	4	11.540	9043350115400
ER20	12	11.5 to 12	16	4	12.020	9043350120200
ER25	12	11.5 to 12	21	4	12.025	9043350120250
ER32	12	11.5 to 12	27	4	12.032	9043350120320
ER40	12	11.5 to 12	33.5	4	12.040	9043350120400
ER20	12.5	12 to 12.5	16	4	12.520	9043350125200
ER25	12.5	12 to 12.5	21	4	12.525	9043350125250
ER32	12.5	12 to 12.5	27	4	12.532	9043350125320
ER40	12.5	12 to 12.5	33.5	4	12.540	9043350125400

Sealing washers

Series Number						4335
nominal size	d ₁ mm	Sealing Range	d ₂ mm	B mm	Order Code	EDP Numbers
ER20	13	12.5 to 13	16	4	13.020	9043350130200
ER25	13	12.5 to 13	21	4	13.025	9043350130250
ER32	13	12.5 to 13	27	4	13.032	9043350130320
ER40	13	12.5 to 13	33.5	4	13.040	9043350130400
ER25	13.5	13 to 13.5	21	4	13.525	9043350135250
ER32	13.5	13 to 13.5	27	4	13.532	9043350135320
ER40	13.5	13 to 13.5	33.5	4	13.540	9043350135400
ER25	14	13.5 to 14	21	4	14.025	9043350140250
ER32	14	13.5 to 14	27	4	14.032	9043350140320
ER40	14	13.5 to 14	33.5	4	14.040	9043350140400
ER25	14.5	14 to 14.5	21	4	14.525	9043350145250
ER32	14.5	14 to 14.5	27	4	14.532	9043350145320
ER40	14.5	14 to 14.5	33.5	4	14.540	9043350145400
ER25	15	14.5 to 15	21	4	15.025	9043350150250
ER32	15	14.5 to 15	27	4	15.032	9043350150320
ER40	15	14.5 to 15	33.5	4	15.040	9043350150400
ER25	15.5	15 to 15.5	21	4	15.525	9043350155250
ER32	15.5	15 to 15.5	27	4	15.532	9043350155320
ER40	15.5	15 to 15.5	33.5	4	15.540	9043350155400
ER25	16	15.5 to 16	21	4	16.025	9043350160250
ER32	16	15.5 to 16	27	4	16.032	9043350160320
ER40	16	15.5 to 16	33.5	4	16.040	9043350160400
ER32	16.5	16 to 16.5	27	4	16.532	9043350165320
ER40	16.5	16 to 16.5	33.5	4	16.540	9043350165400
ER32	17	16.5 to 17	27	4	17.032	9043350170320
ER40	17	16.5 to 17	33.5	4	17.040	9043350170400
ER32	17.5	17 to 17.5	27	4	17.532	9043350175320
ER40	17.5	17 to 17.5	33.5	4	17.540	9043350175400
ER32	18	17.5 to 18	27	4	18.032	9043350180320
ER40	18	17.5 to 18	33.5	4	18.040	9043350180400
ER32	18.5	18 to 18.5	27	4	18.532	9043350185320
ER40	18.5	18 to 18.5	33.5	4	18.540	9043350185400
ER32	19	18.5 to 19	27	4	19.032	9043350190320
ER40	19	18.5 to 19	33.5	4	19.040	9043350190400
ER32	19.5	19 to 19.5	27	4	19.532	9043350195320
ER40	19.5	19 to 19.5	33.5	4	19.540	9043350195400
ER32	20	19.5 to 20	27	4	20.032	9043350200320
ER40	20	19.5 to 20	33.5	4	20.040	9043350200400
ER40	20.5	20 to 20.5	33.5	4	20.540	9043350205400
ER40	21	20.5 to 21	33.5	4	21.040	9043350210400
ER40	21.5	21 to 21.5	33.5	4	21.540	9043350215400
ER40	22	21.5 to 22	33.5	4	22.040	9043350220400
ER40	22.5	22 to 22.5	33.5	4	22.540	9043350225400
ER40	23	22.5 to 23	33.5	4	23.040	9043350230400
ER40	23.5	23 to 23.5	33.5	4	23.540	9043350235400
ER40	24	23.5 to 24	33.5	4	24.040	9043350240400
ER40	24.5	24 to 24.5	33.5	4	24.540	9043350245400
ER40	25	24.5 to 25	33.5	4	25.040	9043350250400
ER40	25.5	25 to 25.5	33.5	4	25.540	9043350255400
ER40	26	25.5 to 26	33.5	4	26.040	9043350260400

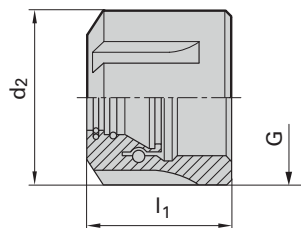
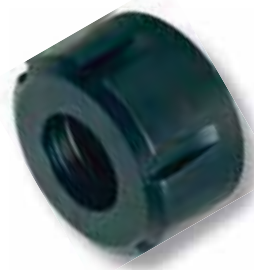
Retaining nuts, system DIN ISO 15488

Product information

- for collets DIN ISO 15488
- for increased clamping version IC/ER for glide ring
- for application with internal cooling with sealing washer Guhring no. 4335

Scope of delivery

- increased clamping force version:
incl. glide ring
- version for internal cooling IC/ER:
order sealing washer Guhring no. 4335 separately



Series Number							4306
for sealing washer no. 4335	with glide ring	nominal size	d ₂ mm	l ₁ mm	G	max. torque	EDP Numbers
–	–	ER16 mini	22	18.0	M19x1.0	55	9043060162000
–	–	ER20 mini	28	19.0	M24x1.0	75	9043060202000
–	–	ER25 mini	35	20.0	M30x1.0	100	9043060252000
–	–	ER11 (4008E)	19	11.3	M14x0.75	25	9043060110000
–	–	ER16 (426E)	28	17.5	M22x1.5	55	9043060160000
–	–	ER20 (428E)	34	19.0	M25x1.5	75	9043060200000
–	–	ER25 (430E)	42	20.0	M32x1.5	100	9043060250000
–	–	ER32 (470E)	50	22.5	M40x1.5	140	9043060320000
–	–	ER40 (472E)	63	25.5	M50x1.5	200	9043060400000
x	–	IC/ER16 mini	22	22.0	M19x1.0	55	9043060163000
x	–	IC/ER20 mini	28	24.0	M24x1.0	75	9043060203000
x	–	IC/ER25 mini	35	25.0	M30x1.0	100	9043060253000
x	–	IC/ER16	28	22.5	M22x1.5	55	9043060166000
x	–	IC/ER20	34	24.0	M25x1.5	75	9043060206000
x	–	IC/ER25	42	25.0	M32x1.5	100	9043060256000
x	–	IC/ER32	50	27.5	M40x1.5	140	9043060326000
x	–	IC/ER40	63	30.5	M50x1.5	200	9043060406000
–	x	ER16	28	20.3	M22x1.5	55	9043060164000
–	x	ER20	34	21.8	M25x1.5	75	9043060204000
–	x	ER25	42	22.4	M32x1.5	100	9043060254000
–	x	ER32	50	25.0	M40x1.5	140	9043060324000
–	x	ER40	63	28.3	M50x1.5	200	9043060404000
x	x	IC/ER16	28	22.7	M22x1.5	55	9043060165000
x	x	IC/ER20	34	24.2	M25x1.5	75	9043060205000
x	x	IC/ER25	42	25.2	M32x1.5	100	9043060255000
x	x	IC/ER32	50	27.4	M40x1.5	140	9043060325000
x	x	IC/ER40	63	30.7	M50x1.5	200	9043060405000

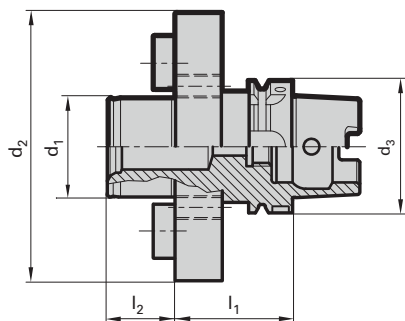
GÜHROJET HSK-A milling arbors

Product information

- to hold face milling cutters
- balancing quality: G6.3 / 15,000 rev./min
- to DIN 69882-3
- for centralised or decentralised internal cooling, therefore process and tool life improvement
- bore-Ø 40 mm has four additional holes with internal thread for milling heads with tool attachment DIN 2079 and increased tight fitting diameter D2

Scope of delivery

- incl. milling retainer screw Guhring no. 4908 and driving keys



GÜHROJET

Series Number

4362

HSK-A d ₃	arbor-Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	kg	Order Code	EDP Numbers
63	22	50	50	19	1.1	22.063	9043620220630
63	27	60	60	21	1.3	27.063	9043620270630
63	32	78	60	24	1.5	32.063	9043620320630
63	40	120	60	27	2.7	40.063	9043620400630
63	40	89	60	27	2.7	140.063	9043621400630
80	27	60	50	21	1.8	27.080	9043620270800
80	32	78	50	24	2.1	32.080	9043620320800
80	40	120	60	27	3.3	40.080	9043620400800
80	40	89	60	27	3.3	140.080	9043621400800
80	60	160	70	40	6.3	60.080	9043620600800
100	27	60	50	21	2.9	27.100	9043620271000
100	32	78	50	24	3.3	32.100	9043620321000
100	40	120	60	27	4.2	40.100	9043620401000
100	40	89	60	27	4.2	140.100	9043621401000
100	60	160	70	40	7.2	60.100	9043620601000

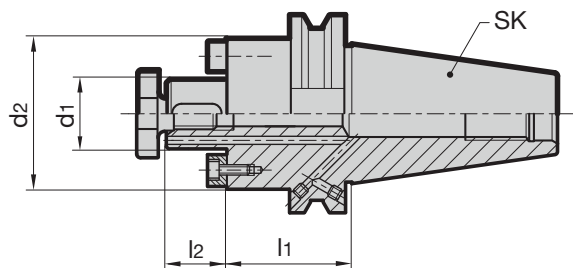
GÜHROJET ISO taper milling arbors

Product information

- to hold face milling cutters
- balancing quality: G6.3 / 15,000 rev./min
- ISO taper to DIN 69871 form AD/B
- for centralised or decentralised internal cooling, therefore process and tool life improvement
- coolant supply form AD/B
- bore-Ø 40 mm has four additional holes with internal thread for milling heads with tool attachment DIN 2079 and increased tight fitting diameter D2

Scope of delivery

- incl. milling retainer screw Guhring no. 4908 and driving keys



GÜHROJET

Series Number						4231
ISO taper	arbor-Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	Order Code	EDP Numbers
40	16	38	35	17	16.040	9042310160400
40	22	48	35	19	22.040	9042310220400
40	27	58	40	21	27.040	9042310270400
40	32	78	50	24	32.040	9042310320400
40	40	88	50	27	40.040	9042311400400
50	22	48	35	19	22.050	9042310220500
50	27	58	40	21	27.050	9042310270500
50	32	78	50	24	32.050	9042310320500
50	40	88	50	27	40.050	9042310400500

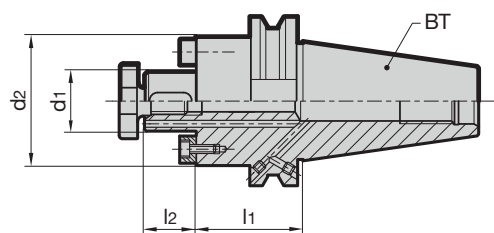
GÜHROJET MAS/BT milling arbors

Product information

- to hold face milling cutters
- balancing quality: G6.3 / 15,000 rev./min
- MAS/BT to JIS B 6339 form AD/B
- for centralised or decentralised internal cooling, therefore process and tool life improvement
- coolant supply form AD/B (*version AD without coolant supply over collar and without GÜHROJET)
- clamping-Ø 40 with 4 additional tapped holes to hold milling heads with tool attachment DIN 2079 and larger contact-Ø d2

Scope of delivery

- incl. milling retainer screw Guhring no. 4908 and driving keys
- BT-50 on request



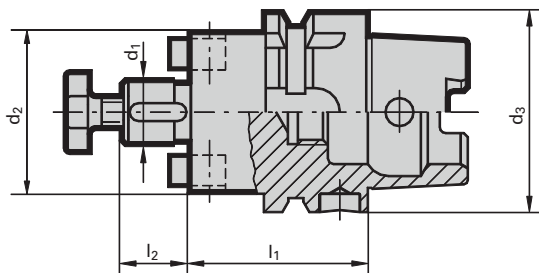
GÜHROJET

Series Number						4230
BT	arbor-Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	Order Code	EDP Numbers
30*	16	38	40	17	16.030	9042300160300
30*	22	48	40	19	22.030	9042300220300
30*	27	58	40	21	27.030	9042300270300
30*	32	78	50	24	32.030	9042300320300
40	16	38	40	17	16.040	9042300160400
40	22	48	40	19	22.040	9042300220400
40	27	58	40	21	27.040	9042300270400
40	32	78	50	24	32.040	9042300320400
40	40	88	50	27	40.040	9042300400400

HSK-A shell milling arbors

Product information

- to hold shell mills DIN 841, arbor-type single angle cutters DIN 842 with keyway, shell mills DIN 1880 with keyway an milling cutters with inserts DIN 1830
- bore-Ø 40 and 50 mm has four additional holes with internal thread for milling heads with tool attachment DIN 2079



Scope of delivery

- completely assembled with milling cutter retaining screw, Guhring no. 4908, drive dogs, Guhring no. 4922 and feather key Guhring no. 4923

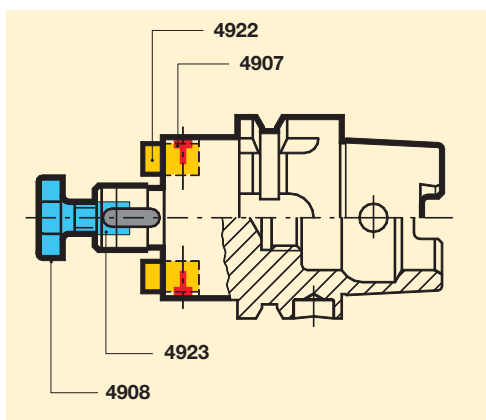


Series Number

4361

HSK-A d ₃	arbor-Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	kg	Order Code	EDP Numbers
32	16	40	45	17	0.27	16.032	9043610160320
32	22	50	50	19	0.4	22.032	9043610220320
40	16	40	45	17	0.4	16.040	9043610160400
40	22	50	50	19	0.5	22.040	9043610220400
50	16	40	45	17	0.6	16.050	9043610160500
50	22	50	50	19	0.8	22.050	9043610220500
50	27	60	55	21	1	27.050	9043610270500
63	16	40	45	17	0.9	16.063	9043610160630
63	22	50	50	19	1	22.063	9043610220630
63	27	60	55	21	1.3	27.063	9043610270630
63	32	78	55	24	1.6	32.063	9043610320630
63	40	89	60	27	2.1	40.063	9043610400630
80	16	40	45	17	2.1	16.080	9043610160800
80	22	50	50	19	2.3	22.080	9043610220800
80	27	60	55	21	2.5	27.080	9043610270800
80	32	78	55	24	2.6	32.080	9043610320800
80	40	89	60	27	3.4	40.080	9043610400800
100	22	50	50	19	2.5	22.100	9043610221000
100	27	60	55	21	2.8	27.100	9043610271000
100	32	78	55	24	3.1	32.100	9043610321000
100	40	89	60	27	3.7	40.100	9043610401000
100	50	120	70	30	5.6	50.100	9043610501000

Positioning of accessories



Feather keys DIN 6885 A

Scope of delivery

- minimum order quantity 10

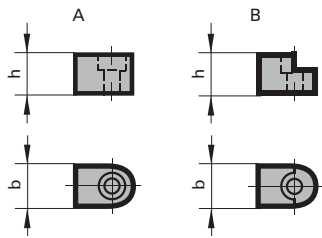


Series Number

4923

for arbor-Ø mm	l ₁ mm	b mm	EDP Numbers
16	14	4	9049230040160
22	16	6	9049230060220
27	19	7	9049230070270
32	22	8	9049230080320
40	25	10	9049230100400
50	28	12	9049230120500

Drive dog sets for shell milling arbors



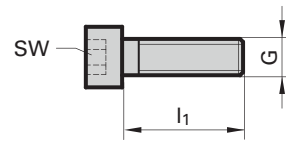
Series Number 4922

for arbor-Ø mm	Form	h mm	b mm	EDP Numbers
16	B	9.25	8	9049220160000
22	B	11.00	10	9049220220000
27	A	12.75	12	9049220270000
32	A	16.50	14	9049220320000
40	A	20.00	16	9049220400000
50	A	27.50	18	9049220500000

Screws DIN EN ISO 4762 (former DIN 912)

Scope of delivery

- minimum order quantity 10



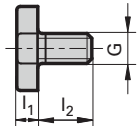
Series Number 4907

for arbor-Ø mm	G	l ₂ mm	Strength class	EDP Numbers
16	M4	10	8.8	9049070041000
22/27	M5	12	8.8	9049070051200
32	M6	16	8.8	9049070061600
40	M6	20	8.8	9049070062000
50	M8	25	8.8	9049070082500
40	M12	65	10.9	9049070126500

Milling cutter retaining screws

Product information

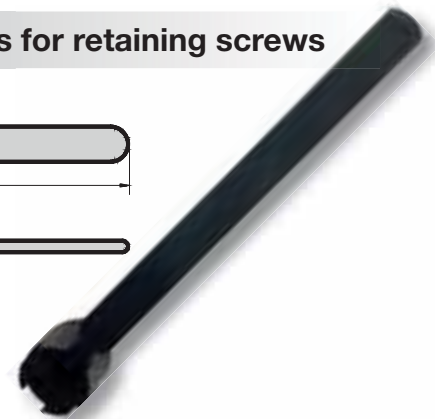
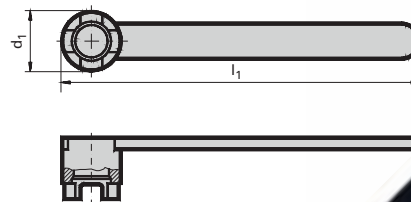
- to DIN 6367
- on request with internal cooling



Series Number 4908

for arbor-Ø mm	G	l ₁ mm	l ₂ mm	EDP Numbers
16	M8	6	16	9049080160000
22	M10	7	18	9049080220000
27	M12	8	22	9049080270000
32	M16	9	26	9049080320000
40	M20	10	30	9049080400000
50	M24	12	36	9049080500000
60	M30	14	45	9049080600000

Socket wrenches for retaining screws



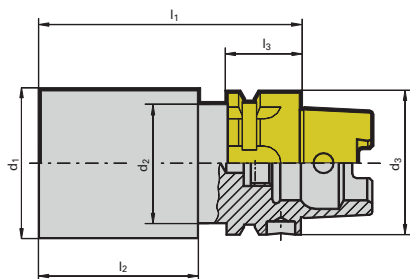
Series Number 4909

for arbor-Ø mm	d ₁ mm	l ₂ mm	EDP Numbers
16	22	180	9049090160000
22	28	200	9049090220000
27	35	225	9049090270000
32	42	250	9049090320000
40	52	280	9049090400000
50	63	315	9049090500000
60	76	355	9049090600000

HSK-A blanks

Product information

- material: nitrided steel, hardened and ground taper (yellow in scale drawing), blank unhardened for further machining



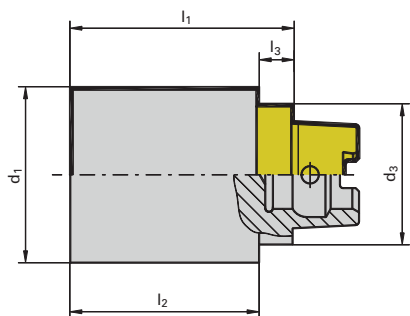
Series Number 4983

HSK-A d ₃	d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	l ₃ mm	kg	Order Code	EDP Numbers
63	63	53	150	108	26	3.55	150.063	9049831500630
32	41	26	175	140	20	1.62	175.032	9049831750320
40	51	34	205	170	20	3.02	205.040	9049832050400
50	64	42	235	193	26	5.42	235.050	9049832350500
63	81	53	235	193	26	8.71	235.063	9049832350630
80	101	67	235	193	26	13.63	235.080	9049832350800
100	126	85	250	205	29	22.71	250.100	9049832501000

HSK-C blanks

Product information

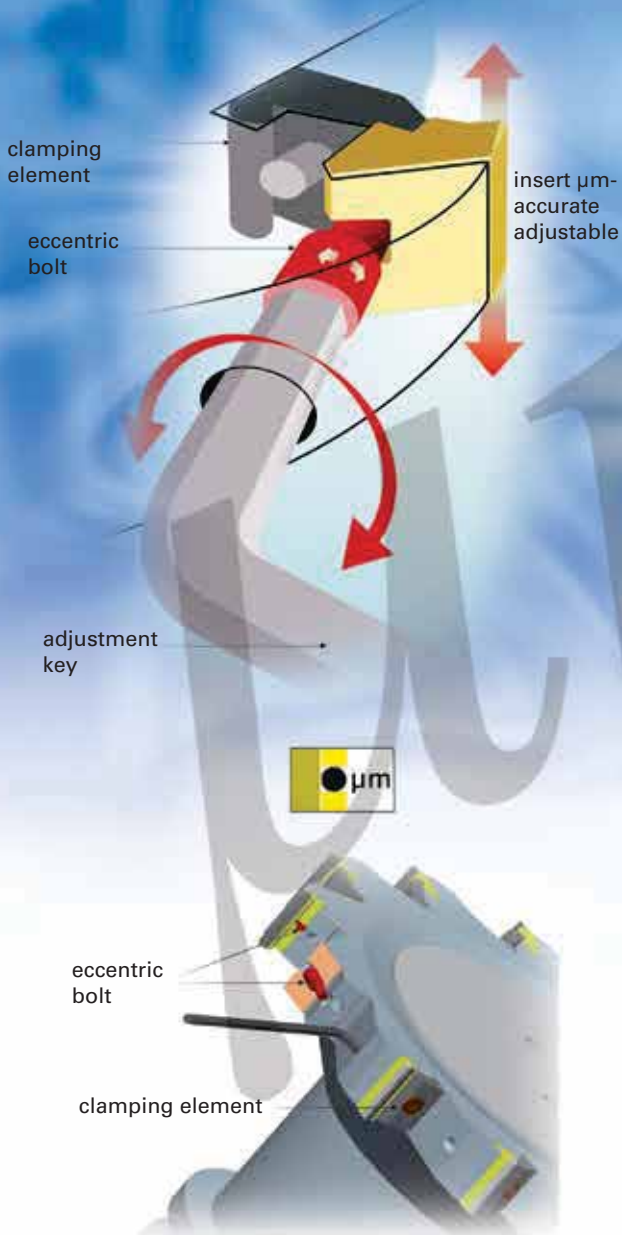
- material: nitrided steel, hardened and ground taper (yellow in scale drawing), blank unhardened for further machining
- machining not permitted in l₃ area



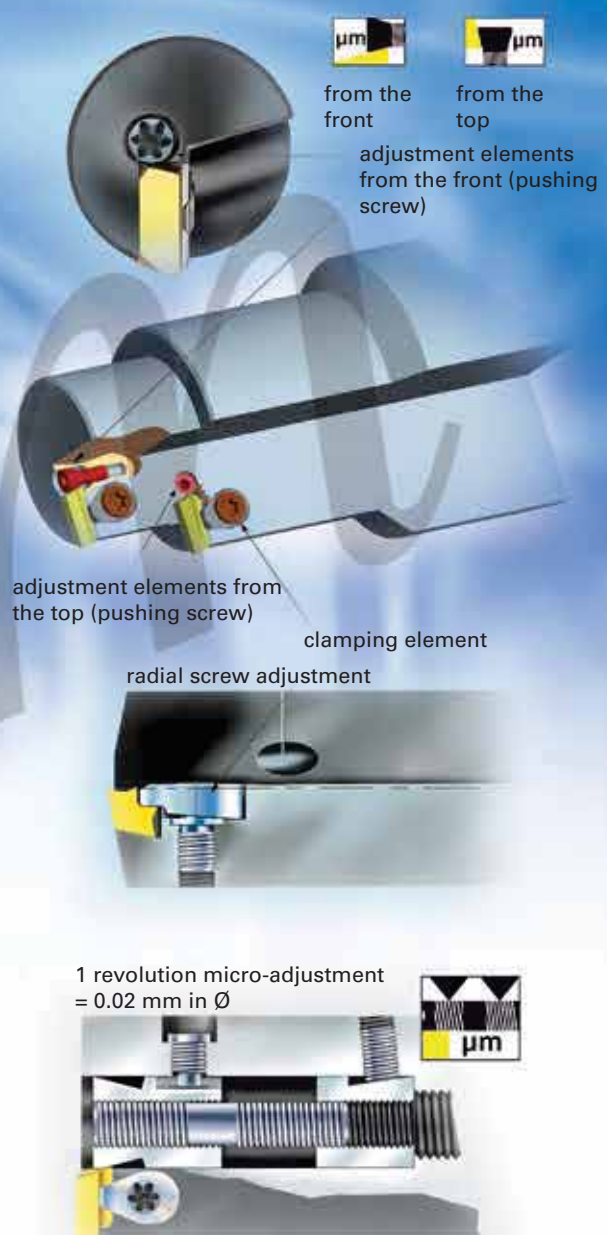
Series Number 4982

HSK-C d ₃	d ₁ mm	l ₁ mm	l ₂ mm	l ₃ mm	kg	Order Code	EDP Numbers
32	41	150	139	11	1.5	50.032	9049820500320
40	51	180	169	11	2.81	63.040	9049820630400
50	64	200	186	14	4.92	80.050	9049820800500
50	64	90	76	14	2.15	100.050	9049821000500
63	81	200	186	14	7.9	112.063	9049821120630
80	101	210	193	17	12.9	120.080	9049821200800
63	81	100	86	14	3.89	125.063	9049821250630
100	124	225	208	17	21.7	145.100	9049821451000

Eccentric bolt adjustment



Adjustment with tapered screw



ADJUSTMENT SYSTEMS

Hollfelder-Guhring Cutting Tools is your experienced partner for μm -accurate adjustable tooling for standard as well as for specific applications. The adjustment systems are the basis for innovative tooling solutions and guarantee a highly accurate process, an enormous increase in productivity as well as considerable cost savings.

HOLDERS FOR FINE MACHINING



PRECISION

IS A MATTER OF SETTING!





**QUICK + SIMPLE
ADJUSTMENT**



**AXIAL + RADIAL
 μ -ACCURATE SETTING**



**CONCENTRICITY AND
ALIGNMENT ERROR
COMPENSATION**



MQL SUITABLE



MODULE TECHNOLOGY AND ADVANTAGES

Pinpoint accurate tool setting. Thanks to closely arranged setting screws for radial and axial adjustment corrections can be made in close proximity to the measuring point. With a wide choice of chucks (hydraulic, shrink fit or HPC) and interfaces such as HSK and SK your module can be perfectly set without a problem.



Advantages:

- wobble-free tool setting
- quick μ -accurate setting
- optimal setting results for multi-flute PCD/CBN fine machining tools or Guhring's HR 500 6-fluted high-performance reamer
- reduced settlement properties provides highest accuracy over a long period
- suitable for use in combination with monolithic special tools

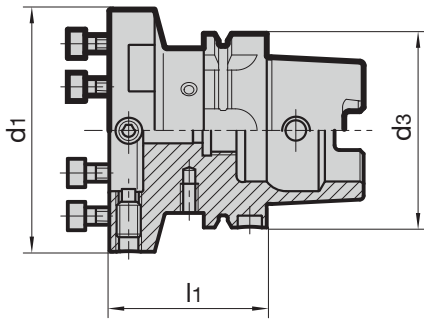
Module 6x6 HSK-A alignment adapter

Product information

- for the highly accurate alignment of all modular flanges 6x6
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- suitable for MQL and conventional cooling
- balancing quality G6.3 / 15,000 rev./min
- 6 balancing threads M6

Scope of delivery

- incl. 6 screws for radial adjustment
- incl. 6 clamping screws
- order intermediate tube Guhring no. 4716 separately
- order coolant delivery set Guhring no. 4949, MQL coolant delivery set Guhring no. 4939 oder 4940 separately
- further dimensions on request



Series Number

4723

				EDP Numbers
HSK-A d ₃ mm	d ₁ mm	l ₁ mm	Order Code	
63	60	60	60.063	9047230600630
63	70	60	70.063	9047230700630
63	80	60	80.063	9047230800630
63	100	65	100.063	9047231000630
63	117	65	117.063	9047231170630
80	70	60	70.080	9047230700800
80	80	60	80.080	9047230800800
80	100	65	100.080	9047231000800
80	117	65	117.080	9047231170800
80	140	75	140.080	9047231400800
100	70	55	70.100	9047230701000
100	80	55	80.100	9047230801000
100	100	65	100.100	9047231001000
100	117	65	117.100	9047231171000
100	140	75	140.100	9047231401000

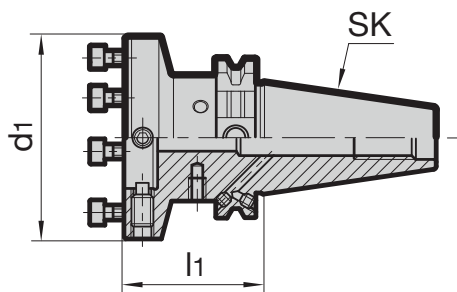
Modul 6x6 ISO taper alignment adapter

Product information

- ISO taper to DIN 69871 form AD/B
- for the highly accurate alignment of all modular flanges 6x6
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- suitable for MQL and conventional cooling
- balancing quality G6.3 / 15,000 rev./min
- 6 balancing threads M6

Scope of delivery

- incl. 6 screws for radial adjustment
- incl. 6 clamping screws
- incl. threaded pins
- order pull studs separately
- SK50/BT holder on request



Series Number				4725
ISO taper	d ₁ mm	l ₁ mm	Order Code	EDP Numbers
40	60	50	60.040	9047250600400
40	70	50	70.040	9047250700400
40	80	55	80.040	9047250800400
40	100	60	100.040	9047251000400

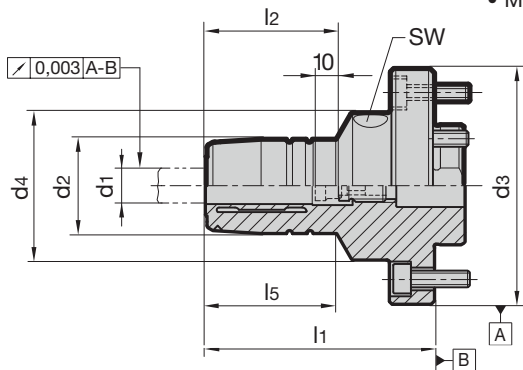
Modul 6x6 hydraulic chuck flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- balancing quality G6.3 / 15,000 rev./min
- for tool shank tolerance h6

Scope of delivery

- incl. adjustment screw Guhring no. 4941 for conventional cooling
- incl. angular alignment set Guhring no. 4715
- incl. 6 clamping screws
- incl. hexagon chuck key Guhring no. 4912
- order intermediate tube Guhring no. 4716 separately
- for other clamping Ø apply reduction bushes Guhring no. 4368 or 4369
- MQL version on request



Series Number

4722

Module- Ø d ₃ mm	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw Guh. no. 4941	intermediate sleeve tube Guhring no. 4716	SW	Order Code	EDP Numbers
70	12	32	40	75	45	45	9049410121000	9047160140200	4	12.070	9047220120700
80	12	32	50	77.5	45	44	9049410121000	9047160140500	5	12.080	9047220120800
80	20	42	50	82.5	50	51.5	9049410201000	9047160140400	5	20.080	9047220200800
100	32	64	64	103	60	84	9049410321000	9047160140200	6	32.100	9047220321000

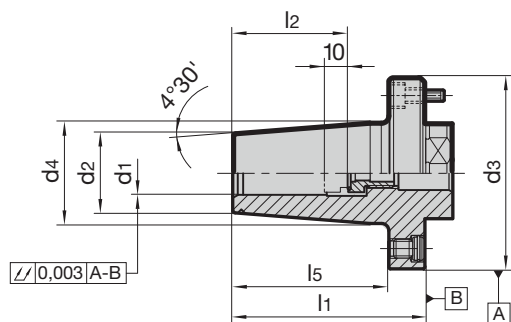
Modul 6x6 shrink fit chuck flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- balancing quality G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with axial damping screw for optimal concentricity

Scope of delivery

- incl. adjustment screw with axial force
- damping Guh. no. 4941
- incl. 6 angular alignment sets Guhring no. 4715
- incl. 6 clamping screws
- order intermediate tube Guhring no. 4716 separately
- further dimensions on request



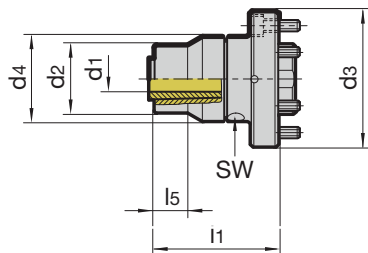
Series Number **4717**

Module- Ø d ₃ mm	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw Guh. no. 4941	intermediate sleeve tube Guhring no. 4716	Order Code	EDP Numbers
60	6	21	27	70	36	56	9049410061000	9047160140100	6.060	9047170060600
60	8	21	27	70	36	56	9049410081000	9047160140100	8.060	9047170080600
60	10	24	32	70	40	56	9049410101000	9047160140200	10.060	9047170100600
60	12	24	32	70	45	56	9049410121000	9047160140300	12.060	9047170120600
70	12	24	32	75	45	60	9049410121000	9047160140200	12.070	9047170120700
70	14	27	34	75	45	60	9049410141000	9047160140200	14.070	9047170140700
70	16	27	34	75	48	60	9049410161000	9047160140400	16.070	9047170160700
80	18	33	42	80	48	65	9049410181000	9047160140500	18.080	9047170180800
80	20	33	42	80	50	65	9049410201000	9047160140400	20.080	9047170200800
100	25	44	52	80	56	61	9049410251000	9047160200100	25.100	9047170251000
100	32	44	52	80	60	61	9049410321000	9047160200200	32.100	9047170321000

Modul 6x6 HPC clamping chuck flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- highest concentricity, clamping force and rigidity thanks to mech. tension gearing
- suitable for internal cooling up to 80 bar
- positive damping characteristics
- for tool shank tolerance h6



Scope of delivery

- incl. hexagon chuck key Guhring no. 4912
- incl. 6 angular alignment sets Guhring no. 4715
- incl. 6 clamping screws
- order intermediate tube Guhring no. 4716 separately
- order clamping sleeves Guhring nos. 4302, 4235, 4236, 4237 separately



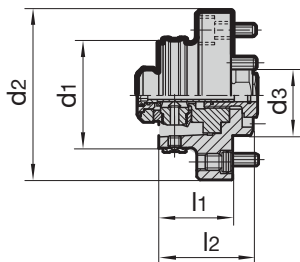
Series Number **4714**

Module-Ø d ₃ mm	Nominal Size	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₅ mm	Intermediate sleeve tube Guh. no. 4716	SW	Order Code	EDP Numbers
70	20	3 - 20	40	50	87	20	9047160200300	4	20.070	9047140200700
80	20	3 - 20	40	50	73	20	9047160200300	4	20.080	9047140200800
100	25	20 - 32	63	63	118	-	9047160200300	4	25.100	9047140251000

Modul 6x6 HSK adaptor flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- suitable for MQL and conventional cooling
- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration



Scope of delivery

- incl. MQL 4-point clamping set Guhring no. 4930
- incl. brass lock ring Guhring no. 4953
- incl. 6 angular alignment sets Guhring no. 4715
- incl. 6 clamping screws
- incl. intermediate tube



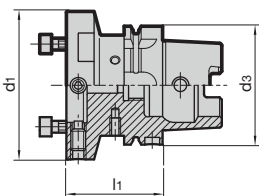
Series Number **4363**

HSK-C d ₁ mm	Module-Ø d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	Order Code	EDP Numbers
32	60	30	26	36	2.5	24.060	9043630240600
40	70	35	30	40	3	30.070	9043630300700
50	80	40	35	45	4	38.080	9043630380800
63	100	50	43	55	5	48.100	9043630481000
80	117	60	50	62	6	60.110	9043630601100
100	140	80	70	82	8	75.140	9043630751400

Modul 4x4 HSK-A alignment adaptor

Product information

- for the highly accurate alignment of all modular flanges 4x4
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- suitable for MQL and conventional cooling
- balancing quality G6.3 / 15,000 rev./min
- 6 balancing threads M6



Scope of delivery

- incl. 4 screws for radial adjustment
- incl. 4 clamping screws
- order coolant delivery set Guhring no. 4949, MQL coolant delivery set Guhring no. 4939 or 4940 separately
- order intermediate tube Guhring no. 4716 separately
- further dimensions on request

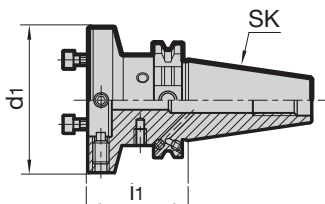


Series Number				4297
HSK-A d ₃ mm	d ₁ mm	l ₁ mm	Order Code	EDP Numbers
63	60	60	60.063	9042970600630
63	70	60	70.063	9042970700630
63	80	60	80.063	9042970800630
63	100	65	100.063	9042971000630
63	117	65	117.063	9042971170630
80	70	60	70.080	9042970700800
80	80	60	80.080	9042970800800
80	100	65	100.080	9042971000800
80	117	65	117.080	9042971170800
80	140	75	140.080	9042971400800
100	70	55	70.100	9042970701000
100	80	55	80.100	9042970801000
100	100	65	100.100	9042971001000
100	117	65	117.100	9042971171000
100	140	75	140.100	9042971401000

Modul 4x4 ISO taper alignment adaptor

Product information

- ISO taper to DIN 69871 form AD/B
- for the highly accurate alignment of all modular flanges 4x4
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- suitable for MQL and conventional cooling
- balancing quality G6.3 / 15,000 rev./min
- 6 balancing threads M6



Scope of delivery

- incl. 4 screws for radial adjustment
- incl. 4 clamping screws
- order intermediate tube Guhring no. 4716 separately
- order pull studs separately
- SK50/BT holder on request



Series Number				4724
ISO taper	d ₁ mm	l ₁ mm	Order Code	EDP Numbers
40	60	50	60.040	9047240600400
40	70	50	70.040	9047240700400
40	80	55	80.040	9047240800400
40	100	60	100.040	9047241000400

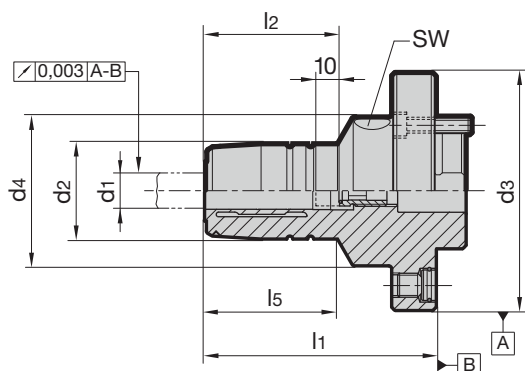
Modul 4x4 hydraulic chuck flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- balancing quality G6.3 / 15,000 rev./min
- for tool shank tolerance h6

Scope of delivery

- incl. adjustment screw Guhring no. 4941 for conventional cooling
- incl. angular alignment set Guhring no. 4715
- incl. 4 clamping screws
- incl. hexagon chuck key Guhring no. 4912
- order intermediate tube Guhring no. 4716 separately
- for other clamping $\varnothing$ apply reduction bushes Guhring no. 4368 or 4369
- MQL version on request



Series Number 4360

Module- $\varnothing d_3$ mm	for shank $\varnothing d_1$ h6 mm	d_2 mm	d_4 mm	l_1 mm	l_2 mm	l_5 mm	incl. setting screw Guh. no. 4941	intermediate sleeve tube Guhring no. 4716	SW	Order Code	EDP Numbers
70	12	32	40	75	45	45	9049410121000	9047160140200	4	12.070	9043600120700
80	12	32	50	77.5	45	44	9049410121000	9047160140500	5	12.080	9043600120800
80	20	42	50	82.5	50	51.5	9049410201000	9047160140400	5	20.080	9043600200800
100	32	64	64	103	60	84	9049410321000	9047160140200	6	32.100	9043600321000

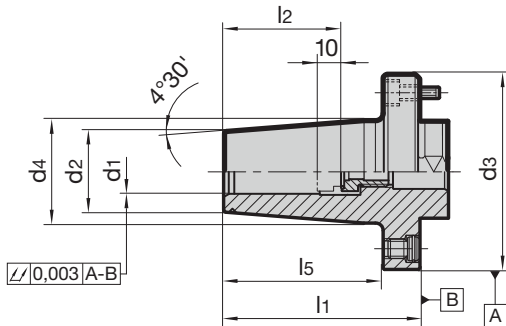
Modul 4x4 shrink fit chuck flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- cooling lubricant without loss and flow-disruption thanks to the use of an intermediate tube
- balancing quality G6.3 / 15,000 rev./min
- for tool shank tolerance h6
- with axial damping screw for optimal concentricity

Scope of delivery

- incl. adjustment screw with axial force
- damping Guh. no. 4941
- incl. angular alignment seten Guhring no. 4715
- incl. 4 clamping screws
- order intermediate tube Guhring no. 4716 separately
- further dimensions on request



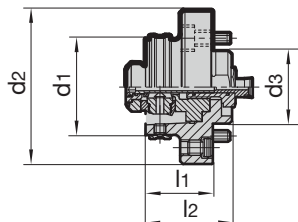
Series Number **4760**

Module-Ø d ₃ mm	for shank Ø d ₁ h6 mm	d ₂ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₅ mm	incl. setting screw Guh. no. 4941	intermediate sleeve tube Guhring no. 4716	Order Code	EDP Numbers
60	6	21	27	70	36	56	9049410061000	9047160140100	6.060	9047600060600
60	8	21	27	70	36	56	9049410081000	9047160140100	8.060	9047600080600
60	10	24	32	70	40	56	9049410101000	9047160140200	10.060	9047600100600
60	12	24	32	70	45	56	9049410121000	9047160140300	12.060	9047600120600
70	12	24	32	75	45	60	9049410121000	9047160140200	12.070	9047600120700
70	14	27	34	75	45	60	9049410141000	9047160140200	14.070	9047600140700
70	16	27	34	75	48	60	9049410161000	9047160140400	16.070	9047600160700
80	18	33	42	80	48	65	9049410181000	9047160140500	18.080	9047600180800
80	20	33	42	80	50	65	9049410201000	9047160140400	20.080	9047600200800
100	25	44	52	80	56	61	9049410251000	9047160200100	25.100	9047600251000
100	32	44	52	80	60	61	9049410321000	9047160200200	32.100	9047600321000

Modul 4x4 HSK adaptor flange

Product information

- for the highly accurate radial and axial alignment on alignment adaptors or machine spindles
- suitable for MQL and conventional cooling
- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration



Scope of delivery

- incl. MQL 4-point clamping set Guhring no. 4930
- incl. brass lock ring Guhring no. 4953
- incl. 4 angular alignment sets Guhring no. 4715
- incl. 4 clamping screws
- incl. intermediate tube



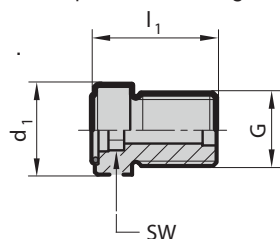
Series Number 4713

HSK-C d ₁ mm	Module-Ø d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	Order Code	EDP Numbers
32	60	30	26	36	2.5	24.060	9047130240600
40	70	35	30	40	3	30.070	9047130300700
50	80	40	35	45	4	38.080	9047130380800
63	100	50	43	55	5	48.100	9047130481000
80	117	60	50	62	6	60.117	9047130601170
100	140	80	70	82	8	75.140	9047130751400

Length adjustment screw for conventional cooling

Product information

- To adapt MQL tool holders to meet the requirements of conventional wet machining. For plain end shanks. The height of screw head compensates the height of MQL taper



- for MQL HSK-A shrink fit and hydraulic chucks
- for use with shank according to DIN 6535 with plain shank end for conventional cooling
- with the patented face orientated O ring axial force damping is provided which prevents concentricity errors.



Series Number 4941

for HSK-A	clamping- Ø	G	d ₁ mm	l ₁ mm	SW	Order Code	EDP Numbers
40	6	M5	6	15	2.5	2.500	9049410025000
40	6	M7x1	6	15	2.5	2.500	9049410025000
40	8	M7x1	6	18	3	3.000	9049410030000
50	6	M8x1	8	14	2.5	2.500	9049410025000
50	8	M8x1	7	18	3	3.000	9049410030000
40 / 50	10	M8x1	10	17.7	4	4.000	9049410040000
63/ 80/ 100	6	M10x1	9	22	2.5	2.500	9049410025000
63/ 80/ 100	8	M10x1	9	22	3	3.000	9049410030000
63/ 80/ 100	10	M10x1	10	16.2	4	4.000	9049410040000
40/ 50/ 63/ 80/ 100	12	M10x1	10	16.2	5	5.000	9049410050000
40/ 50/ 63/ 80/ 100	14	M10x1	10	17.2	5	5.000	9049410050000
50/ 63/ 80/ 100	16	M12x1	16	18.2	6	6.000	9049410060000
50/ 63/ 80/ 100	18	M12x1	16	19.2	6	6.000	9049410060000
50/ 63/ 80/ 100	20	M16x1	16	19.2	8	8.000	9049410080000
63/ 80/ 100	25	M16x1	16	22.7	8	8.000	9049410080000
63/ 80/ 100	32	M16x1	16	26.7	8	8.000	9049410080000

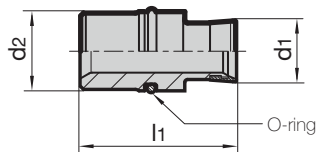
Intermediate sleeves for module flange and alignment adapter 6x6 and 4x4

Product information

- for sealing when machining with either coolant or MQL

Scope of delivery

- with O-ring and sealing lip



Series Number **4716**

d ₁ mm	d ₂ mm	l ₁ mm	O-ring	Order Code	EDP Numbers
10.7	14	47.5	10x1.5	14.01	9047160140100
10.7	14	32.0	10x1.5	14.02	9047160140200
10.7	14	37.5	10x1.5	14.03	9047160140300
10.7	14	27.4	10x1.5	14.04	9047160140400
10.7	14	32.4	10x1.5	14.05	9047160140500
10.7	20	28.0	17x1.5	20.01	9047160200100
10.7	20	25.5	17x1.5	20.02	9047160200200
10.7	20	16.5	17x1.5	20.03	9047160200300

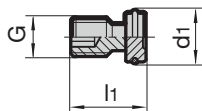
Angle alignment units for module flange and alignment adapter 6x6 and 4x4

Product information

- consisting of pressure disc and threaded pin for accurate angle alignment of module flanges

Scope of delivery

- pressure disc, threaded pin and snap ring



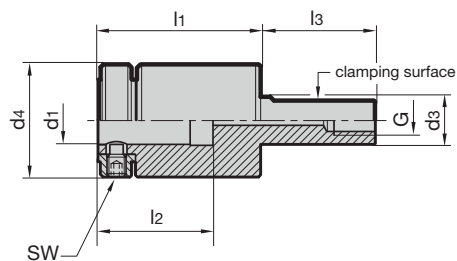
Series Number **4715**

for module	G	d ₁ mm	l ₁ mm	Order Code	EDP Numbers
60 / 70 / 80	M8x1	11.5	13	8.01	9047150080100
100 / 117 / 140	M10x1	13.6	19	10.01	9047150100100

Floating holders with side lock holder

Product information

- straight shank d3 with whistle notch flat
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- central coolant supply max. 80 bar
- drive flat on tool shank necessary
- for tool shank tolerance h6



Scope of delivery

- for other shank Ø order reduction sleeves Guhring no. 4095 separately
- order hexagon chuck key Guhring no. 4912 separately
- further sizes with differing radial play are available on request



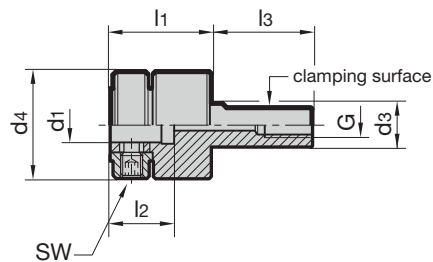
Series Number **4167**

d ₃ g6 mm	for holder d _{1 h6} mm	recommended tool-Ø	d ₄ mm	l ₁ mm	l ₂ mm	l ₃ mm	G	SW	radial play	Order Code	EDP Numbers
20	20	up to Ø 28	49	75	50	50	1/8	4	0.12	20.020	9041670200200
25	25	Ø 10 - Ø 36	59	85	60	60	1/4	5	0.12	25.025	9041670250250
32	32	Ø 16 - Ø 60	80	92	63	80	3/8	6	0.12	32.032	9041670320320

Short floating holders with side lock holder

Product information

- straight shank d3 with whistle notch flat
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- central coolant supply max. 80 bar
- drive flat on tool shank necessary
- for tool shank tolerance h6



Scope of delivery

- for other shank Ø order reduction sleeves Guhring no. 4095 separately
- order hexagon chuck key Guhring no. 4912 separately
- further sizes with differing radial play are available on request



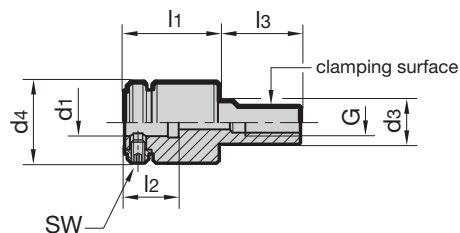
Series Number **4169**

d ₃ g6 mm	for holder d _{1 h6} mm	recommended tool-Ø	d ₄ mm	l ₁ mm	l ₂ mm	l ₃ mm	G	SW	radial play	Order Code	EDP Numbers
20	10	up to Ø 14	38.5	46	25	40	1/8	3	0.08	10.020	9041690100200
20	16	up to Ø 22	49	46	29	46	1/8	4	0.10	16.020	9041690160200
20	20	up to Ø 28	49	46	29	46	1/8	4	0.12	20.020	9041690200200

Mini floating holders with side lock holder

Product information

- holder shank with lateral clamping surface
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- very compact design for restricted space
- central coolant supply max. 80 bar
- drive flat on tool shank necessary
- for tool shank tolerance h6



Scope of delivery

- for other shank Ø order reduction sleeves Guhring no. 4097 separately
- order hexagon chuck key Guhring no. 4912 separately
- further sizes with differing radial play are available on request



Series Number 4174

d ₃ g6 mm	for holder d _{1h6} mm	recommended tool-Ø	d ₄ mm	l ₁ mm	l ₂ mm	l ₃ mm	G	SW	radial play	Order Code	EDP Numbers
16	10	to Ø 14	30	35	20	30	1/8	2.5	0.12	10.016	9041740100160

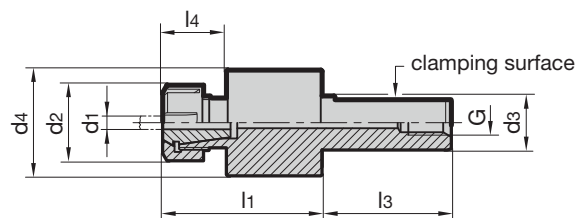
Floating holder with ER collet holder

Product information

- straight shank d3 with whistle notch flat
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- for the application of internally cooled reamers use metallic sealed collets type DM Guhring no. 4175
- central coolant supply max. 80 bar

Scope of delivery

- incl. retaining nut
- order collet Guhring no. 4175 or 4307 as well as clamping key Guhring no. 4913 separately
- further sizes with differing radial play are available on request



Series Number 4098

d ₃ g6 mm	recommended tool-Ø d1 mm	clamping range	d ₂ mm	d ₄ mm	l ₁ mm	l ₃ mm	l ₄ mm	G	radial play	Order Code	EDP Numbers
16	bis Ø 16	ER20 Ø 1-13	34	49.5	74	40	29.5	1/8	0.06	20.016	9040980200160
20	Ø 4- Ø 24	ER25 Ø 2-16	42	59	84	50	35	1/8	0.06	25.020	9040980250200
25	bis Ø 16	ER20 Ø 1-13	34	49.5	74	60	29.5	1/4	0.08	20.025	9040980200250
25	Ø 4- Ø 24	ER25 Ø 2-16	42	59	84	60	35	1/4	0.08	25.025	9040980250250
32	Ø 6 - Ø 30	ER32 Ø 3-20	50	64	91	80	35.5	3/8	0.10	32.032	9040980320320
40	Ø 6 - Ø 30	ER32 Ø 3-20	50	64	91	80	35.5	1/2	0.12	32.040	9040980320400

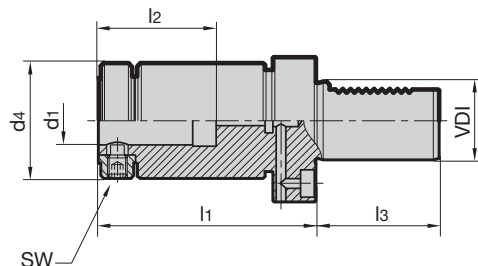
Floating side lock holder VDI DIN 69880-1

Product information

- VDI holder shank with teeth
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- central coolant supply max. 80 bar
- tool shank with special whistle notch flat necessary
- drive flat on tool shank necessary
- for tool shank tolerance h6

Scope of delivery

- for other shank $\varnothing$ order reduction sleeves Guhring no. 4095 separately
- order hexagon chuck key Guhring no. 4912 separately
- further dimensions available on request



Series Number **4117**

VDI	holder d_1 h6 mm	clamping range	d_4 mm	l_1 mm	l_2 mm	l_3 mm	SW	radial play	Order Code	EDP Numbers
30	25	$\varnothing$ 16-25	59	111	59	55	5	0.12	25.030	9041170250300
40	25	$\varnothing$ 16-25	59	111	59	63	5	0.12	25.040	9041170250400
40	32	$\varnothing$ 20-32	80	117	63	63	6	0.12	32.040	9041170320400
50	25	$\varnothing$ 16-25	59	111	59	78	5	0.12	25.050	9041170250500
50	32	$\varnothing$ 20-32	80	117	63	78	6	0.12	32.050	9041170320500

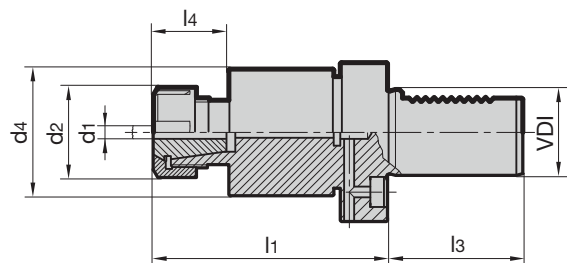
Floating ER Collet holder VDI DIN 69880-1

Product information

- VDI holder shank with teeth
- suitable for conventional and high performance multi-fluted reamers, because of no angle compensation
- for the application of internally cooled reamers use metallic sealed collets type DM Guhring no. 4175
- with coolant supply max. 80 bar

Scope of delivery

- incl. retaining nut
- order collet Guhring no. 4175 or 4307 as well as clamping key Guhring no. 4913 separately
- further sizes with differing radial play are available on request



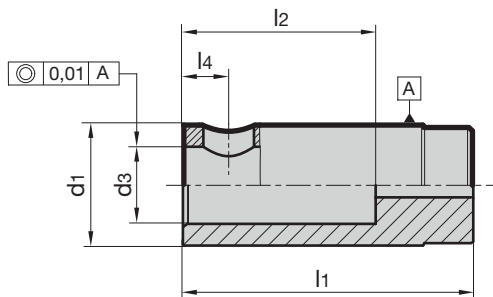
Series Number **4116**

VDI	recommended tool- $\varnothing$	clamping range	d_2 mm	d_4 mm	l_1 mm	l_3 mm	l_4 mm	radial play	Order Code	EDP Numbers
30	from $\varnothing$ 20	ER25 $\varnothing$ 2-16	42	59	109	55	35	0.08	25.030	9041160250300
40	from $\varnothing$ 20	ER25 $\varnothing$ 2-16	42	59	109	63	35	0.10	25.040	9041160250400
40	$\varnothing$ 6- $\varnothing$ 32	ER32 $\varnothing$ 3-20	50	64	116	63	35.5	0.10	32.040	9041160320400
50	from $\varnothing$ 20	ER25 $\varnothing$ 2-16	42	59	109	78	35	0.12	25.050	9041160250500
50	$\varnothing$ 6- $\varnothing$ 32	ER32 $\varnothing$ 3-20	50	64	116	78	35.5	0.12	32.050	9041160320500

Reduction sleeves for floating holder

Product information

- for reducing the clamping diameter in floating holders
- central coolant supply
- drive flat on tool shank necessary
- applicable in floating holders Guhring no. 4167 and 4117



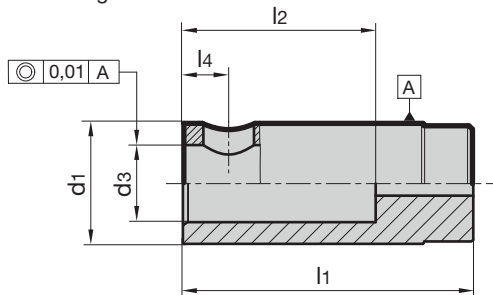
Series Number 4095

d ₁ mm	for shank Ø d ₃ h6 mm	l ₁ mm	l ₂ mm	l ₄ mm	Order Code	EDP Numbers
20	14	50	40	9.5	14.020	9040950140200
20	16	50	40	9.5	16.020	9040950160200
25	16	60	40	9.5	16.025	9040950160250
25	18	60	40	9.5	18.025	9040950180250
25	20	60	50	9.5	20.025	9040950200250
32	20	63	50	12.5	20.032	9040950200320
32	25	63	60	12.5	25.032	9040950250320

Reduction sleeves for short floating holder

Product information

- for reducing the clamping diameter in floating holders
- central coolant supply
- drive flat on tool shank necessary
- applicable in short floating holders Guhring no. 4169



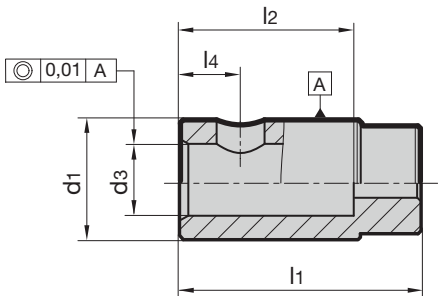
Series Number 4096

d ₁ mm	for shank Ø d ₃ h6 mm	l ₁ mm	l ₂ mm	l ₄ mm	Order Code	EDP Numbers
10	4	25	20	6	4.010	9040960040100
10	6	25	20	6	6.010	9040960060100
10	8	25	20	6	8.010	9040960080100
16	10	29	25	7	10.016	9040960100160
16	12	29	25	7	12.016	9040960120160
20	12	29	25	7	12.020	9040960120200
20	14	29	25	7	14.020	9040960140200
20	16	29	25	7	16.020	9040960160200

Reduction sleeves for mini floating holder

Product information

- for reducing the clamping diameter in floating holders
- central coolant supply
- drive flat on tool shank necessary
- applicable in mini floating holders Guhring no. 4174



Series Number 4097

d ₁ mm	for shank Ø d ₃ h6 mm	l ₁ mm	l ₂ mm	l ₄ mm	Order Code	EDP Numbers
10	4	20	20	5	4.010	9040970040100
10	6	20	20	5	6.010	9040970060100
10	8	20	20	5	8.010	9040970080100



SPECIAL DRILLS

Although we probably offer the most comprehensive standard tool range, there are still applications that require special solutions.

Customer specific special solutions are therefore also part of the Guhring program. Put us to the test with your special requirements – thanks to our know-how regarding geometries, tool materials and coatings we will surely convince you!

HSK



HSK CLAMPING TECHNOLOGY

ONE CLAMPING SET
MANY NEW
POSSIBILITIES!



*SUITABLE FOR DIFFERENT
SPINDLE CONTOURS*



*MAXIMUM
CLAMPING FORCE*



*OPTIMAL COOLING
SUPPLY – MQL &
CONVENTIONAL*



*STRAIGHT-
LINE COOLANT
THROUGHFLOW*



4-POINT CLAMPING TECHNOLOGY FOR MQL

TECHNICAL INFORMATION AND ADVANTAGES

GÜHRCLAMP



Our 4-point clamping system is suitable for radial manual clamping. Primarily designed for installation in spindles (short drilling spindles, multiple-spindle drilling heads).

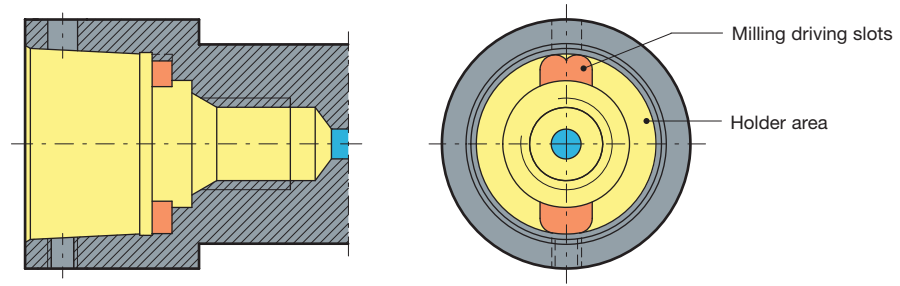


Advantages:

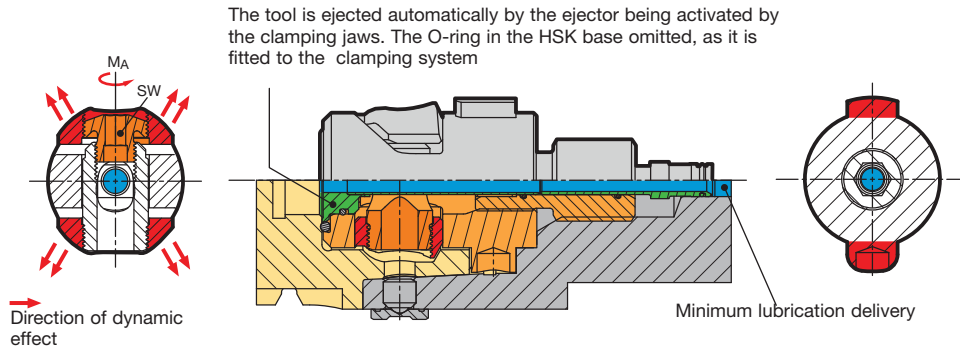
- short, small diameter spindles with constricted spindle bearing spacing
- suitable for pressure up to 160 bar (for conventional internal cooling)
- fast response time thanks to uninterrupted MQL delivery
- compatible installation contour and application of our 4-point clamping set for conventional cooling

4-point clamping technology for MQL

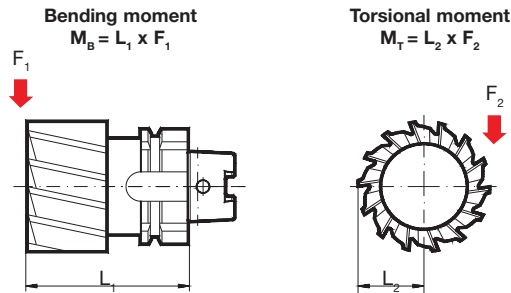
Internal contour of spindle



Installation and principle of operation



Bending, torsional and tightening moment for 4-point clamping sets for MQL



- ① We recommend M_A max. for rough machining and milling operations. For drilling and reaming operations a lower deviation of M_A max. up to 30% is permissible. Please check the torque with a torque wrench.
- ② Depending on temperature and lubricating conditions these values can be up to 15% lower.
- ③ Due to the screwed connection, M_T max. can be lower with adaptors.

HSK-C	max. torque M_A [Nm] ①	Key size	max. drawing force [kN] ②	max. linear bending moment M_B [Nm] ②	max. transferrable torsional moment M_T [Nm] ② ③
32	3.0	2.5	8.5	72	105
40	6.0	3.0	12.5	135	180
50	12.0	4.0	24.0	330	390
63	24.0	5.0	32.0	570	680
80	40.0	6.0	45.0	1000	1570
100	60.0	8.0	53.0	1620	4200

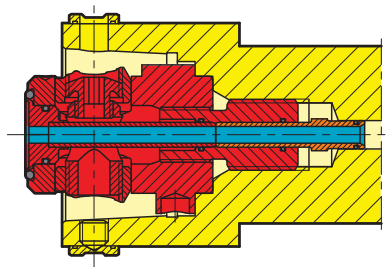
General notes: Our manual clamping sets must not be operated with motor-driven tools (impulse screwdriver or similar). The hexagonal key should not exceed the key size over its entire length, this largely prevents excessive torque being transferred. We recommend the T-handle hexagonal key, Guhring no. 4912.

For accurate setting of the maximum torque and achieving the maximum interface rigidity, we recommend the application of a torque wrench, Guhring no. 4915 with hexagonal sockets, Guhring no. 4916. Production drawings of the spindle contour to suit direct installation are available on request, including .dxf.

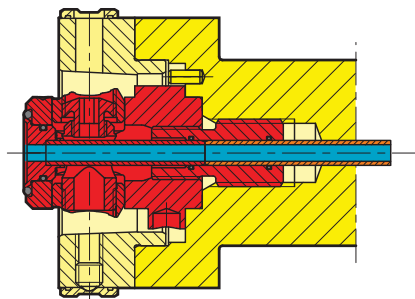


MQL 4-point clamping set connection dimensions for new designs

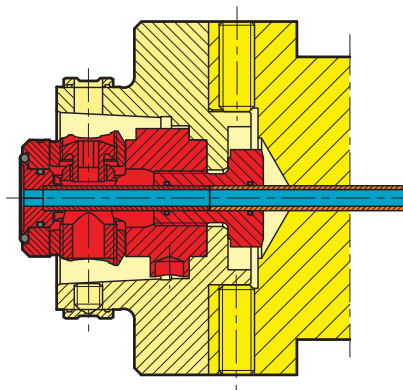
Direct installation in
spindle with MQL adaptor



Short spindle adaptor
with MQL delivery pipe



Adaptor (in front)
with MQL delivery pipe



GÜHROCLAMP MQL 4-point clamping sets for MQL and IC

Product information

- for radial manual HSK tool clamping
- universal application for MQL and high-pressure IC
- the central and coaxial MQL supply with constant internal diameter prevents coolant from consolidating to DIN 69090-2
- For a coolant pressure up to 160 bar

Scope of delivery

- complete as shown in illustration
- Installation and operating instructions



GÜHROCLAMP

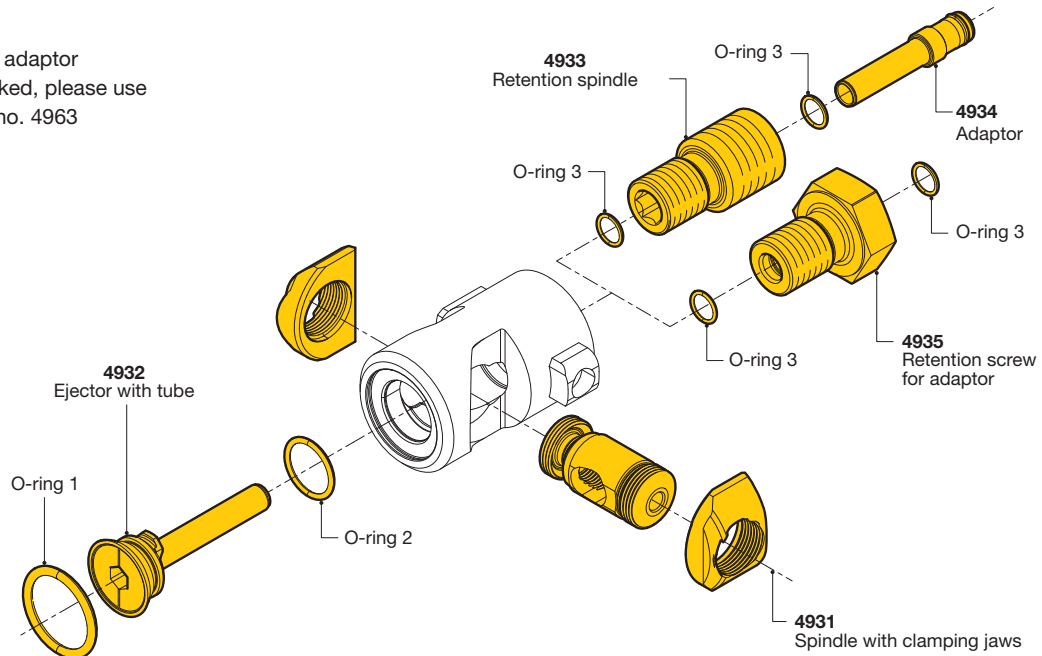
Series Number **4930**

for HSK-C	d ₁ mm	d ₂ mm	l ₁ mm	G	SW1	SW _A	kg	Order Code	EDP Numbers
32	16.7	3	39.5	M10	2.5	3	0.05	24.100	9049300241000
40	20.6	4	49.5	M12	3	4	0.09	30.100	9049300301000
50	25.5	5	59	M16	4	5	0.18	38.100	9049300381000
63	33	6	76	M20	5	6	0.37	48.100	9049300481000
80	41	8	98	M24	6	8	0.7	60.100	9049300601000
100	52	10	117.5	M24	8	10	1.3	75.100	9049300751000

GÜHROCLAMP component parts for MQL 4-point clamping sets Guhring no. 4930

- retention screw only for adaptor
- If spindle cannot be locked, please use torque socket Guhring no. 4963

GÜHROCLAMP



Series Number **4931**

4932

for HSK-C	O-ring 1 NBR 70	O-ring 2 NBR 70	O-ring 3 NBR 70	Spindle with clamping jaws	EDP Numbers	Ejector with tube	EDP Numbers
32	10.82x1.78	6.0x1.5	-	24.000	9049310240000	24,100	9049320241000
40	13.0x2.0	7.0x1.5	4.5x1.0/5.0x1.0	30.000	9049310300000	30,100	9049320301000
50	16.0x2.0	10.0x1.5	5.5x1.0/7x1.0	38.000	9049310380000	38,100	9049320381000
63	20.3x2.4	14.0x1.5	7.0x1.0	48.000	9049310480000	48,100	9049320481000
80	24.0x3.0	16.0x2.0	10.0x1.5	60.000	9049310600000	60,100	9049320601000
100	31.34x3.53	22.0x2.0	12.0x1.70	75.000	9049310750000	75,100	9049320751000

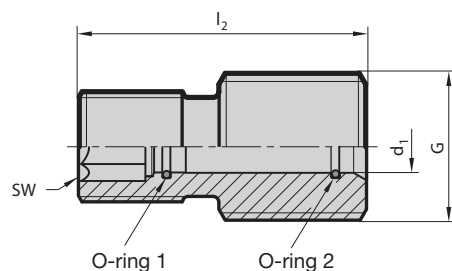
Retention spindles for GÜHROCLAMP MQL 4-point clamping sets

Product information

- retention spindle for direct installation in spindle

Scope of delivery

- complete as shown in illustration



Series Number **4933**

for HSK-C	d ₁ mm	l ₁ mm	G	SW	O-ring 1	O-ring 2	EDP Numbers
32	M7x0.5	17.0	M10	4	-	-	9049330241000
40	5.1	23.0	M 12	5	4.5x1.0	5x1	9049330301000
50	7.1	27.0	M 16	6	5.5x1.0	7x1.0	9049330381000
63	7.1	39.0	M 20	8	7.0x1.0	7.0x1.0	9049330481000
80	10.1	50.0	M 24	10	10.0x1.5	10.0x1.5	9049330601000
100	12.1	60.0	M 24	12	12.0x1.70	12.0x1.70	9049330751000

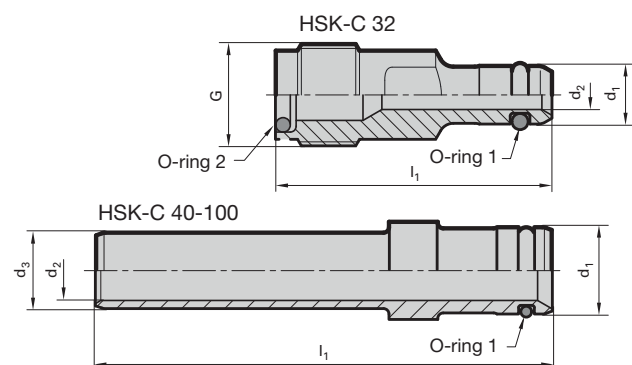
Adaptor for GÜHROCLAMP MQL 4-point clamping sets

Product information

- Adaptor for direct installation in spindle and spindle adaptor (integrated) for coolant delivery and sealing

Scope of delivery

- complete as shown in illustration



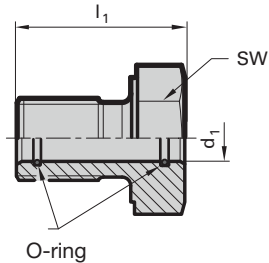
Series Number **4934**

for HSK-C	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	O-ring 12xNBR70	O-ring 2NBR70	Order Code	EDP Numbers
32	4	2	6.1	19	2.0 x 1.0	3.5 x 1.0	24.100	9049340241000
40	5	3	5	28	3.0 x 1.0	-	30.100	9049340301000
50	6	4	7	28	4.0 x 1.0	-	38.100	9049340381000
63	8	5.5	7	42	6.0 x 1.0	-	48.100	9049340481000
80	10.2	7.5	10	56	8.0 x 1.0	-	60.100	9049340601000
100	12	9.5	11.8	60	10.0 x 1.0	-	75.100	9049340751000

Retention screw for GÜHROCLAMP MQL 4-point clamping sets

Product information

- necessary for installation of MQL 4-point clamping set in spindle adaptors Guhring no. 4386 and 4387
- change against standard retention bolt



Scope of delivery

- complete as shown in illustration



Series Number						4935
for HSK-C	d ₁ mm	l ₁ mm	SW	O-ring 2 x NBR70	EDP Numbers	
32	4.0	21.5	13	-	9049350240000	
40	5.0	21	16	5x1.0	9049350300000	
50	6.0	25	18	6x1.0	9049350380000	
63	8.0	31	24	8x1.0	9049350480000	
80	10.0	36	24	10x1.5	9049350600000	
100	12.0	40	32	12x1.7	9049350750000	

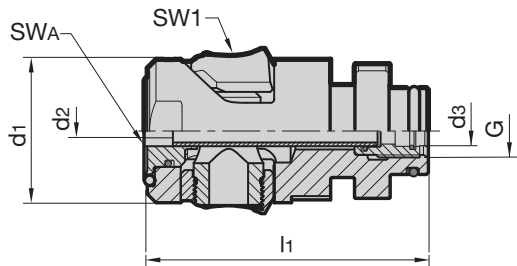
M contour clamping sets for MQL and IC

Product information

- HSK clamping sets compatible with M contour spindles and adaptors
- universal application for MQL and high-pressure IC
- the central, coaxial MQL supply with constant internal diameter ensures a uninterrupted coolant delivery to DIN 69090-2
- for a coolant pressure up to 160 bar
- for radial manual HSK tool clamping

Scope of delivery

- incl. adaptor with through hole for uninterrupted coolant delivery
- including installation and operating instructions
- order adaptor with spigot connection Guhring no. 4616 separately
- spindle connection dimensions on request

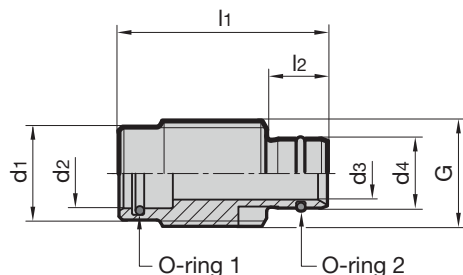


Series Number									4615
for HSK-C	d ₁ mm	d ₂ mm	d ₃ mm	l ₁ mm	G	SW1	SW _A	Order Code	EDP Numbers
32	16.7	3	4.1	43.4	M8x1	2.5	3	24.000	9046150240000
40	20.6	4	5.1	48.3	M10x1	3	4	30.000	9046150300000
50	22.5	5	7.1	55.3	M12x1	4	5	38.000	9046150380000
63	33	6	7.1	64.7	M12x1	5	6	48.000	9046150480000
80	41	8	10.1	75.3	M16x1	6	8	60.000	9046150600000
100	52	10	12.1	94.5	M18x1	8	10	75.000	9046150750000

Adaptor with spigot transition for M contour clamping set

Product information

- application on M contour clamping sets
Guhring no. 4615 instead of adaptor with coolant transfer hole
- universal application for MQL and high-pressure IC
- for a coolant pressure up to 160 bar
- adaptor for spindles without coolant tube for uninterrupted coolant delivery
- spindle connection dimensions on request



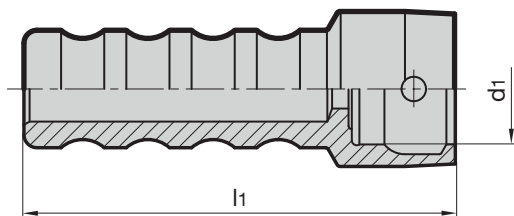
Series Number **4616**

for HSK-C	d ₁ mm	d ₂ mm	d ₃ mm	d ₄ mm	l ₁ mm	l ₂ mm	O-ring 1 NBR 70	O-ring 2 NBR 70	G	Order Code	EDP Numbers
32	-	4	3	5	14.4	5.4	4x1	3x1	M8x1	24.000	9046160240000
40	7.7	5	4	6	22	6.5	5x1	4x1	M10x1	30.000	9046160300000
50	8.5	6	5	8	23	7.5	5x1	6x1	M12x1	38.000	9046160380000
63	10.7	8	6	8	24	7	8x1	6x1	M12x1	48.000	9046160480000
80	-	10	8	11.3	23.3	8.3	10x1.5	8x1.5	M12x1	60.000	9046160600000
100	-	12	10	13.8	30.6	9.6	12x1.5	12x1.5	M18x1	75.000	9046160750000

Tool for the assembly / disassembly of M contour clamping sets

Product information

- for the assembly and disassembly of
M contour clamping sets Guhring no.
4615



Series Number **4624**

for HSK-C	d ₁ mm	l ₁ mm	EDP Numbers
32	17	119	9046240320000
40	21	121.5	9046240400000
50	26	127.5	9046240500000
63	34	132	9046240630000
80	42	143	9046240800000
100	53	152	9046241000000

THE 4-POINT CLAMPING TECHNOLOGY FOR CONVENTIONAL COOLING

TECHNICAL INFORMATION AND ADVANTAGES

Conventional 4-point clamping sets offer enormous clamping force and optimal cooling lubricant delivery. They are suitable for radial manual HSK tool clamping.



Advantages:

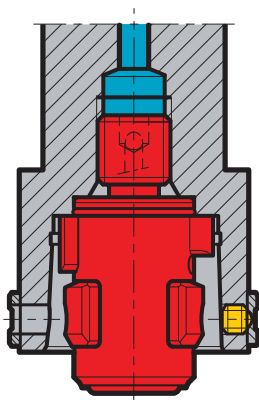
- short, small diameter spindles with constricted spindle bearing spacing
- suitable for pressure up to 80 bar

General notes: Our manual clamping sets must not be operated with motor-driven tools (impulse screwdriver or similar). The hexagonal key should not exceed the key size over its entire length, this largely prevents excessive torque being transferred. We recommend the T-handle hexagonal key, Guhring no. 4912. For accurate setting of the maximum torque and achieving the maximum interface rigidity, we recommend the application of a torque wrench, Guhring no. 4915 with hexagonal sockets, Guhring no. 4916. Removal of the locking ring is made by releasing the pressure ball screw. This is achieved with the use of an Allen key inserted through the opposite access hole and through the hollow threaded spindle and turned counter-clockwise. Once released, the locking ring will slide axially off. Production drawings of the spindle contour to suit direct installation are available on request, including .dxf.

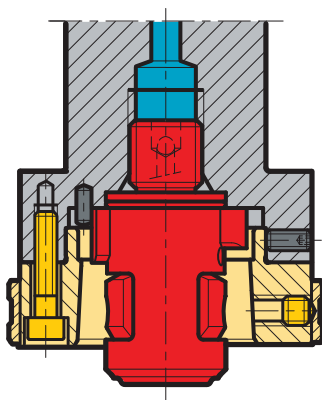
Application examples

Spindle interface

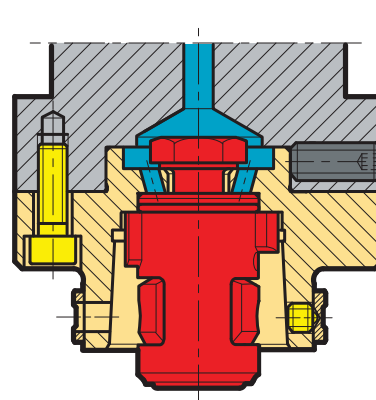
Direct installation in spindle



Spindle adaptor (integrated)

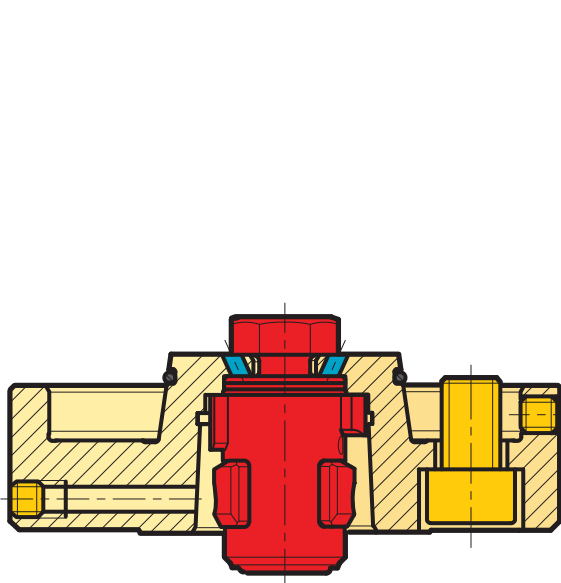


Spindle adaptor (in front)

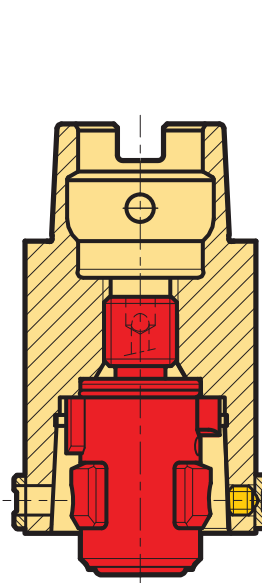


Adaptor

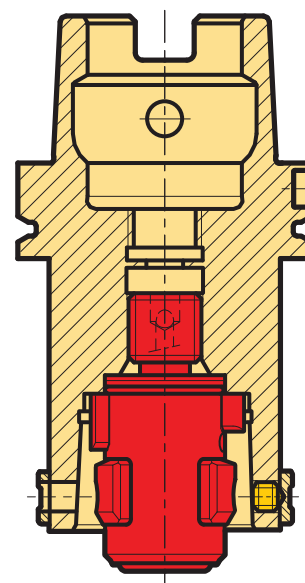
Basic adaptor for ISO taper spindles



HSK-C extension

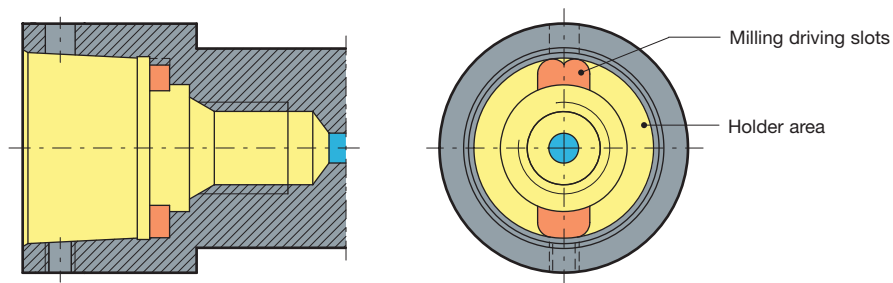


HSK-A reduction

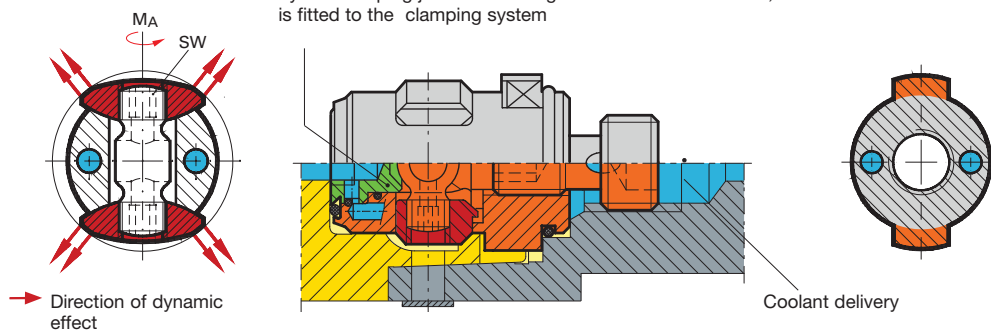


The 4-point clamping technology for conventional cooling

Internal contour of spindle

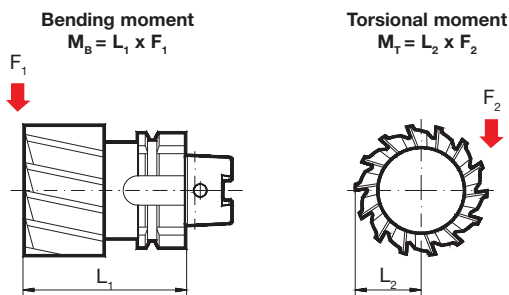


Installation and principle of operation



The tool is ejected automatically by the ejector being activated by the clamping jaws. The O-ring in the HSK base omitted, as it is fitted to the clamping system

Bending, torsional and tightening moment for 4-point clamping sets for conventional cooling



① We recommend M_A max. for rough machining and milling operations. For drilling and reaming operations a lower deviation of M_A max. up to 30% is permissible. Please check the torque with a torque wrench.

② Depending on temperature and lubricating conditions these values can be up to 15% lower.

③ Due to the screwed connection, M_T max. can be lower with adaptors.

HSK-C	max. torque M_A [Nm] ①	Key size	max. drawing force [kN] ②	max. linear bending moment M_B [Nm] ②	max. transferable torsional moment M_T [Nm] ② ③
25	1.5	2.5	4.5	30	30
32	3.0	2.5	7.0	60	100
40	6.0	3.0	12.0	130	170
50	14.0	4.0	20.0	280	350
63	27.0	5.0	28.0	500	640
80	54.0	6.0	40.0	900	1330

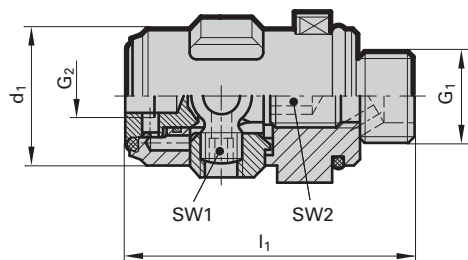
4-point clamping sets for conventional cooling

Product information

- for a coolant pressure up to 80 bar
- for radial manual HSK tool clamping

Scope of delivery

- including installation and operating instructions

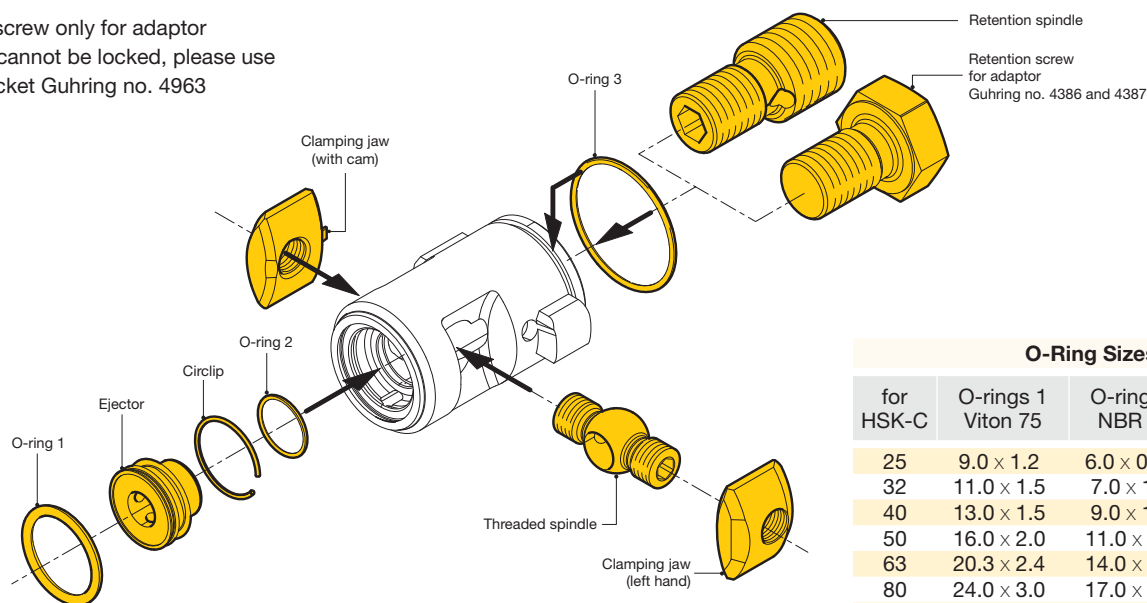


Series Number **4958**

for HSK-C	d ₁ mm	l ₁ mm	G1	G2	SW1	SW2	kg	Order Code	EDP Numbers
25	13.8	34	M 8	M 4	2.5	3	0.025	19.000	9049580190000
32	16.7	40	M10	M 5	2.5	4	0.05	24.000	9049580240000
40	20.6	49	M12	M 6	3	5	0.08	30.000	9049580300000
50	25.5	59	M16	M 8	4	6	0.15	38.000	9049580380000
63	33	72	M20	M10	5	8	0.31	48.000	9049580480000
80	41	97	M24	M12	6	10	0.64	60.000	9049580600000

Component parts for 4-point clamping set Guhring no. 4958, separate or set

- retention screw only for adaptor
- If spindle cannot be locked, please use torque socket Guhring no. 4963



O-Ring Sizes

for HSK-C	O-rings 1 Viton 75	O-rings 2 NBR 70	O-rings 3 NBR 70
25	9.0 × 1.2	6.0 × 0.75	11.0 × 1.0
32	11.0 × 1.5	7.0 × 1.0	14.0 × 1.0
40	13.0 × 1.5	9.0 × 1.0	17.0 × 1.0
50	16.0 × 2.0	11.0 × 1.0	22.0 × 1.5
63	20.3 × 2.4	14.0 × 1.0	28.0 × 1.5
80	24.0 × 3.0	17.0 × 1.0	35.0 × 1.5

EDP Numbers for Series 4957

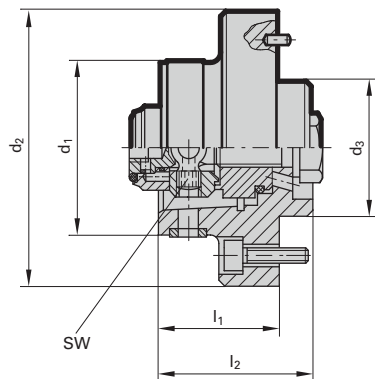
Set no. 4959

for HSK-C	Clamping jaw set	Threaded spindle	Retention spindle	Ejector	Circlip	Retention screw	EDP Numbers
25	9049570010190	9049570020190	9049570030190	9049570040190	9049570050190	9049570070190	9049590190000
32	9049570010240	9049570020240	9049570030240	9049570040240	9049570050240	9049570070240	9049590240000
40	9049570010300	9049570020300	9049570030300	9049570040300	9049570050300	9049570070300	9049590300000
50	9049570010380	9049570020380	9049570030380	9049570040380	9049570050380	9049570070380	9049590380000
63	9049570010480	9049570020480	9049570030480	9049570040480	9049570050480	9049570070480	9049590480000
80	9049570010600	9049570020600	9049570030600	9049570040600	9049570050600	9049570070600	9049590600000

HSK spindle adaptors (in front)

Product information

- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.



Scope of delivery

- incl. clamping set Guhring no. 4958 for conventional cooling
- incl. brass lock ring Guhring no. 4953
- incl. indexing pin and retention screws
- for MQL application, order as special adaptor with MQL clamping set Guhring no. 4930 and MQL retention nut, Guhring no. 4935



Series Number

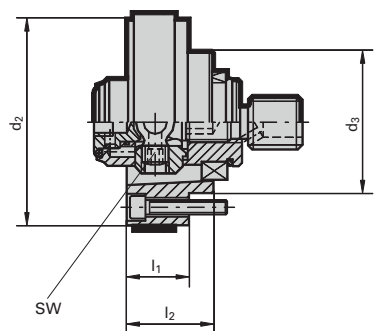
4386

HSK-C d ₁	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	kg	Order Code	EDP Numbers
25	45	23	20	28	2.5	0.22	19.000	9043860190000
32	60	30	26	36	2.5	0.38	24.000	9043860240000
40	70	35	30	40	3	0.6	30.000	9043860300000
50	80	40	35	45	4	0.92	38.000	9043860380000
63	100	50	43	55	5	1.75	48.000	9043860480000
80	117	60	50	62	6	2.79	60.000	9043860600000

Short HSK spindle adaptors (integrated)

Product information

- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.



Scope of delivery

- incl. clamping set Guhring no. 4958 for conventional cooling
- incl. brass lock ring Guhring no. 4953
- incl. indexing pin and retention screws
- for MQL application, order as special adaptor with MQL clamping set Guhring no. 4930



Series Number

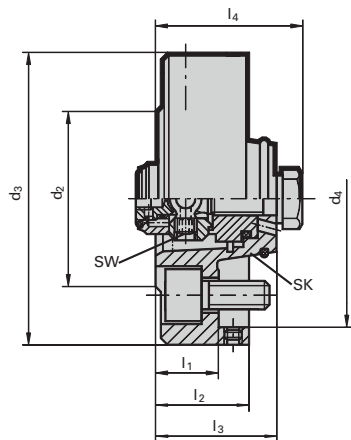
4385

for HSK-C	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	kg	Order Code	EDP Numbers
32	40	27	12.5	16	2.5	0.14	24.000	9043850240000
40	50	33.5	15	20	3	0.26	30.000	9043850300000
50	63	42	17.5	25	4	0.48	38.000	9043850380000
63	80	55	22.5	32	5	0.99	48.000	9043850480000
80	100	68	27.5	40	6	1.88	60.000	9043850600000

ISO taper/HSK-C basic adaptor for spindles to DIN 2079

Product information

- for the conversion of SK to HSK interfaces



Scope of delivery

- incl. clamping set Guhring no. 4958 for conventional cooling
- incl. retention screws



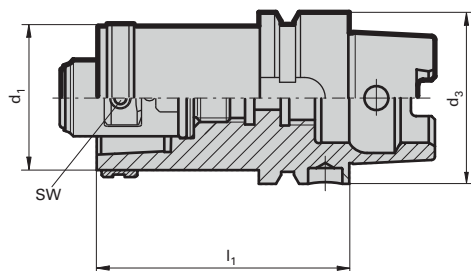
Series Number 4387

for ISO taper	for HSK-C	d ₂ mm	d ₃ mm	d ₄ mm	l ₁ mm	l ₂ mm	l ₃ mm	l ₄ mm	SW	kg	Order Code	EDP Numbers
30	40	50	85	69.83	25	35	37	39	3	1.08	30.030	9043870300300
40	50	63	100	88.88	20	30	39.5	46.5	4	1.4	40.038	9043870400380
50	63	80	150	128.57	25	40	48.5	58.5	5	1.96	50.048	9043870500480
50	80	100	150	128.57	40	55	61.1	71.1	6	2.2	50.060	9043870500600

HSK-A/HSK-C reductions

Scope of delivery

- incl. clamping set Guhring no. 4958 for conventional cooling
- incl. retention screws



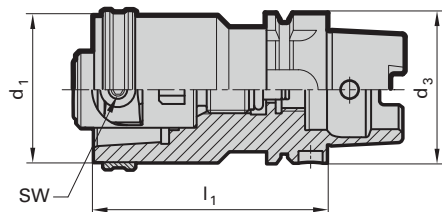
Series Number 4355

HSK-A d ₃	HSK-C d ₁	l ₁ mm	SW	kg	Order Code	EDP Numbers
40	32	60	2.5	0.42	32.040	9043550320400
50	32	60	2.5	0.54	32.050	9043550320500
50	40	70	3.0	0.69	40.050	9043550400500
63	32	60	2.5	1.08	32.063	9043550320630
63	40	70	3.0	1.15	40.063	9043550400630
63	50	80	4.0	1.23	50.063	9043550500630
80	50	90	4.0	2	50.080	9043550500800
80	63	100	5.0	2.69	63.080	9043550630800
100	50	90	4.0	2.8	50.100	9043550501000
100	63	100	5.0	3.31	63.100	9043550631000
100	80	120	6.0	5.2	80.100	9043550801000

HSK-A/HSK-C extensions with MQL 4-point clamping sets

Product information

- suitable for MQL
- for single channel systems



Scope of delivery

- incl. MQL 4-point clamping set Guhring no. 4930 and adaptor for extensions
- incl. brass lock ring Guhring no. 4953
- order coolant supply set separately:
 - for automatic tool change
Guhring no. 4939
 - for manual tool change
Guhring no. 4940



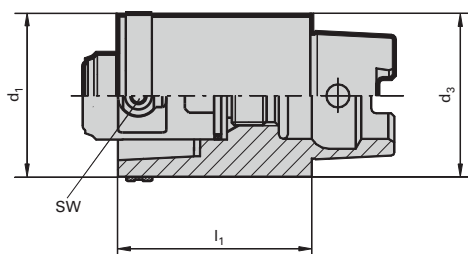
Series Number 4350

HSK-A/HSK-C d ₁ / d ₃	l ₁ mm	SW	kg	Order Code	EDP Numbers
32	60	2.5	0.3	60.032	9043500600320
40	80	3.0	0.7	80.040	9043500800400
50	80	4.0	0.9	80.050	9043500800500
50	100	4.0	1.1	100.050	9043501000500
63	100	5.0	1.8	100.063	9043501000630
63	140	5.0	2.3	140.063	9043501400630
80	120	6.0	4.2	120.080	9043501200800
100	140	8.0	8	140.100	9043501401000

HSK-C extensions

Product information

- incl. clamping set Guhring no. 4958 for conventional cooling
- incl. brass lock ring Guhring no. 4953

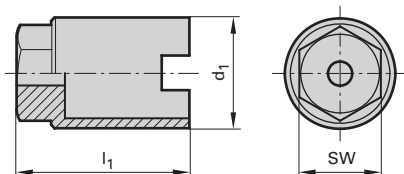


Series Number 4351

HSK-C d ₁ / d ₃	l ₁ mm	SW	kg	Order Code	EDP Numbers
25	40	2.5	0.14	40.025	9043510400250
32	40	2.5	0.22	40.032	9043510400320
40	50	3.0	0.44	50.040	9043510500400
50	60	4.0	0.81	60.050	9043510600500
63	80	5.0	1.74	80.063	9043510800630

Product information

- for the installation of 4-point clamping sets, if there are difficulties locking the spindle



Series Number				4963
for HSK-C	d ₁ mm	l ₁ mm	SW	EDP Numbers
25	17.5	25	15	9049630190000
32	22.5	32	17	9049630240000
40	28.0	40	19	9049630300000
50	36.0	50	24	9049630380000
63	45.0	60	30	9049630480000
80	56.0	80	36	9049630600000
100	70.0	95	36	9049630750000

PROCESS RELIABILITY RATHER THAN NERVE TINGLING

Guhring inspection and measuring instruments



- ⇒ simple, quick and accurate measuring of the clamping force of your chucks
- ⇒ direct measuring of the coolant flow pressure and volume
- ⇒ wireless determination of the MQL response times

POWERCLAMP

TECHNICAL INFORMATION AND ADVANTAGES

Guhring's PowerClamp system is designed for universal applications in transfer lines, machining centers, turning centers and setting equipment,

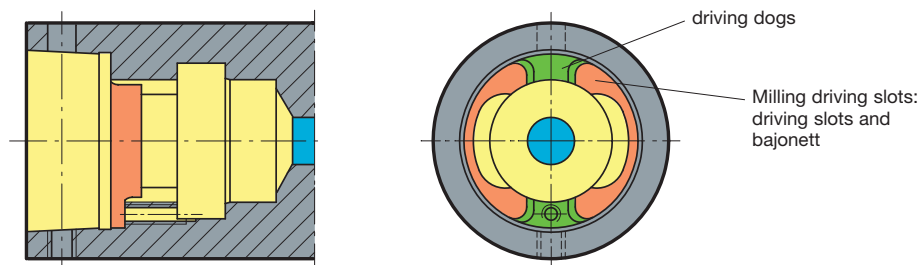
Thanks to the centrifugal forces of the clamping jaws the PowerClamp tool clamping set is suitable for high-speed applications. The high clamping force generated by the clamping jaws enables the application for heavy machining.



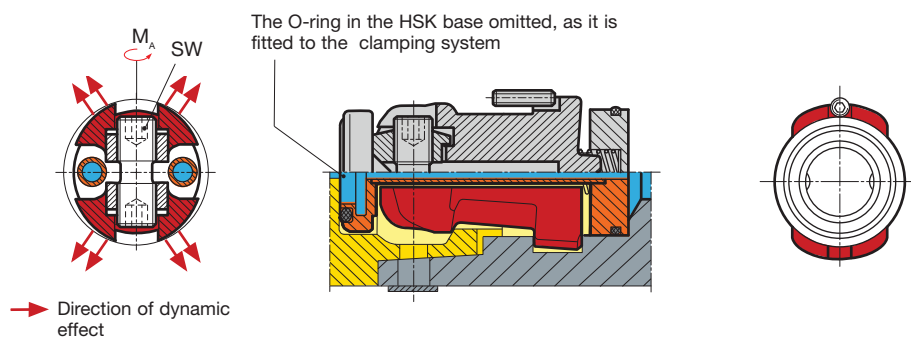
Advantages:

- simple assembly thanks to uncomplicated spindle contour
- few moving components, therefore optimal force transmission
- high clamping force, therefore excellent bending resistance
- good rotation symmetry, therefore high-speed capability
- internal coolant delivery
- secure ejector function
- coolant sealing from $p > 6$ bar to max. 80 bar

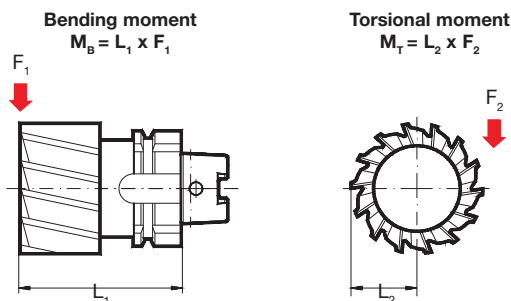
Internal contour of spindle



Installation and principle of operation



Bending, torsional and tightening moment for PowerClamp



① We recommend M_A max. for rough machining and milling operations. For drilling and reaming operations a lower deviation of M_A max. up to 30% is permissible. Please check the torque with a torque wrench.

② Depending on temperature and lubricating conditions these values can be up to 15% lower.

③ Due to the screwed connection, M_T max. can be lower with adaptors.

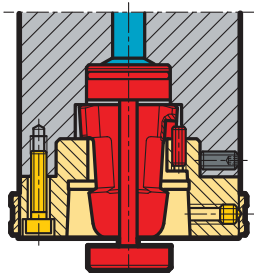
HSK-C	max. torque M_A [Nm] ①	Key size	max. drawing force [kN] ②	max. linear bending moment M_B [Nm] ②	max. transferable torsional moment M_T [Nm] ② ③
25	1.5	2.0	5	45	50
32	2.5	2.5	8	74	120
40	6.0	3.0	18	213	360
50	10.0	4.0	27	431	1000
63	15.0	5.0	35	703	1300
80	25.0	6.0	50	1100	2800
100	50.0	8.0	60	1620	4800

General notes: Our manual clamping sets must not be operated with motor-driven tools (impulse screwdriver or similar). The hexagonal key should not exceed the key size over its entire length, this largely prevents excessive torque being transferred. We recommend the T-handle hexagonal key, Guhring no. 4912. For accurate setting of the maximum torque and achieving the maximum interface rigidity, we recommend the application of a torque wrench, Guhring no. 4915 with hexagonal sockets, Guhring no. 4916. Production drawings of the spindle contour to suit direct installation are available on request, including .dxf.

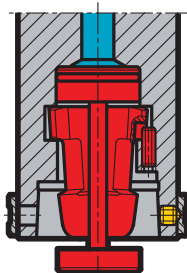
Application examples

Spindle interface

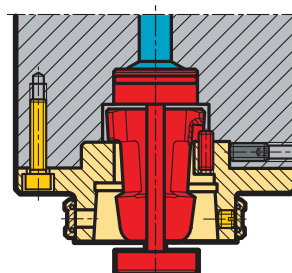
integrated spindle adaptor



Direct installation in spindle

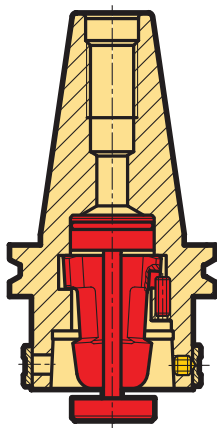


Spindle adaptor (in front)

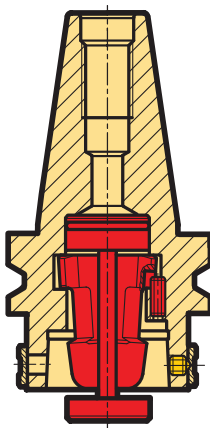


Adaptor

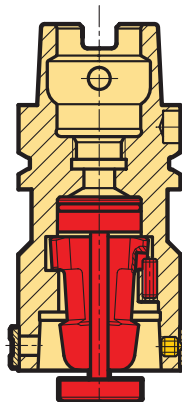
DIN 69871 AD



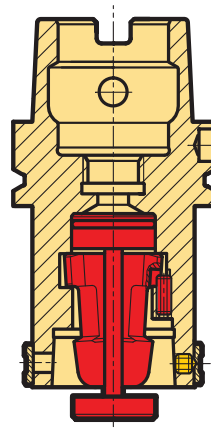
MAS/BT



HSK-A extention

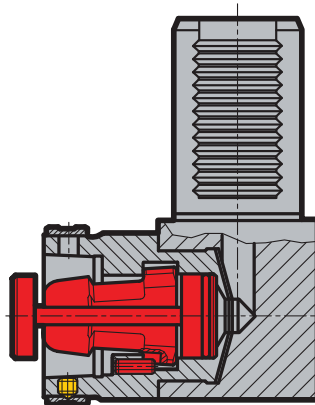


HSK-A reduction

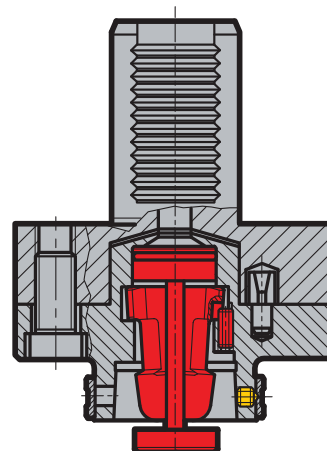


Tool holder for turning centers

adaptor (in front) on VDI angle holder



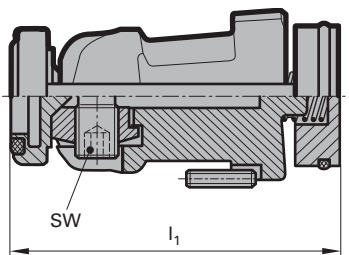
adaptor (in front) on VDI vertical holder



PowerClamp sets

Product information

- the internal coolant delivery is via the cage. It is floating mounted and ensures a coolant seal above 6 bar pressure.
- for a coolant pressure up to 80 bar
- the coolant sets are not suitable for MQL



Scope of delivery

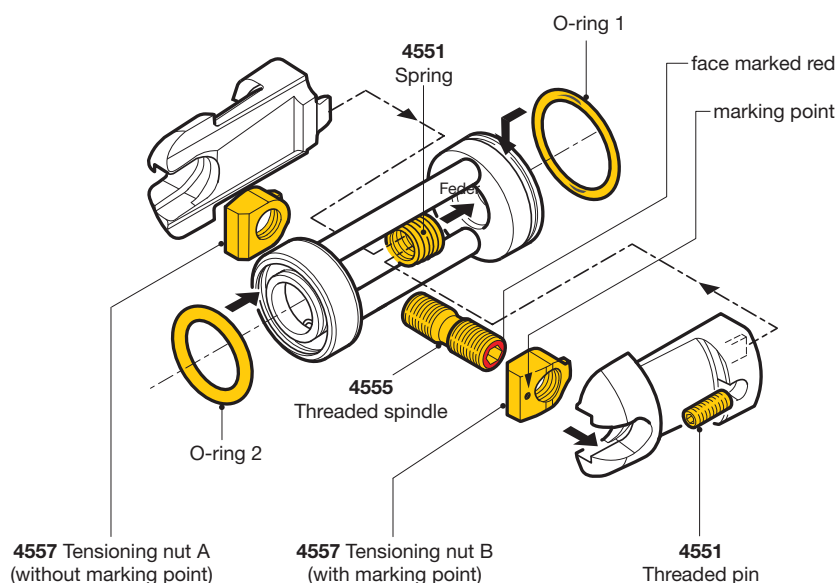
- including installation and operating instructions
- incl. threaded pin Guhring no. 4551



Series Number 4554

for HSK-C	l ₁ mm	SW	kg	Order Code	EDP Numbers
25	32.1	2	0.02	19.000	9045540190000
32	41.6	2.5	0.05	24.000	9045540240000
40	49.7	3	0.09	30.000	9045540300000
50	62.2	4	0.18	38.000	9045540380000
63	74.1	5	0.37	48.000	9045540480000
80	96.1	6	0.73	60.000	9045540600000
100	117	8	1.36	75.000	9045540750000

Component parts for PowerClamp sets Guhring no. 4554



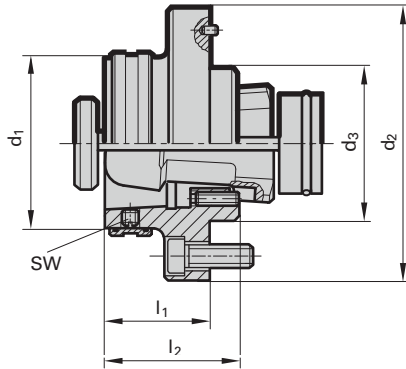
Series Number 4557 4555 4551

for HSK-C	O-rings 1 Ø/thickness	O-rings 2 Ø/thickness	EDP Numbers Tensioning nut set	EDP Numbers Threaded spindle	EDP Numbers Spring and threaded pin
25	11.5 × 1.0	7.0 × 2.0	9045570010190	9045550020190	9045510030190
32	14.0 × 1.5	10.0 × 2.5	9045570010240	9045550020240	9045510030240
40	18.0 × 1.5	12.5 × 2.5	9045570010300	9045550020300	9045510030300
50	22.0 × 1.5	16.0 × 3.0	9045570010380	9045550020380	9045510030380
63	28.0 × 2.0	21.0 × 3.0	9045570010480	9045550020480	9045510030480
80	36.0 × 3.0	25.0 × 4.0	9045570010600	9045550020600	9045510030600
100	45.0 × 3.0	32.0 × 5.0	9045570010750	9045550020750	9045510030750

HSK adaptors (in front)

Product information

- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.
- for conventional cooling from 6 to max. 80 bar



Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- incl. indexing pin and retention screws



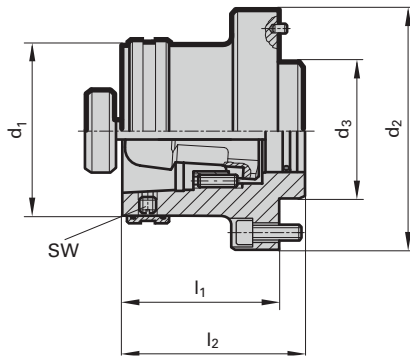
Series Number 4581

HSK-C d ₁	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	kg	Order Code	EDP Numbers
25	45	23	20	26.5	2	0.17	19.000	9045810190000
32	55	28	17.5	23	2.5	0.22	24.000	9045810240000
40	63	36	22.5	29	3	0.4	30.000	9045810300000
50	80	46	27.5	36	4	0.74	38.000	9045810380000
63	100	56	35	46	5	1.5	48.000	9045810480000
80	125	66	45	58	6	2.94	60.000	9045810600000
100	160	86	57	72	8	5.9	75.000	9045810750000

HSK spindle adaptors (in front)

Product information

- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.
- for conventional cooling from 6 to max. 80 bar



Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- incl. indexing pin and retention screws



Series Number 4586

HSK-C d ₁	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	kg	Order Code	EDP Numbers
40	70	35	32.5	42.5	3	0.55	30.000	9045860300000
50	80	40	43	53	4	1	38.000	9045860380000
63	100	50	53	65	5	1.9	48.000	9045860480000
80	117	60	73	85	6	3.6	60.000	9045860600000
100	140	80	94	106	8	7.2	75.000	9045860750000

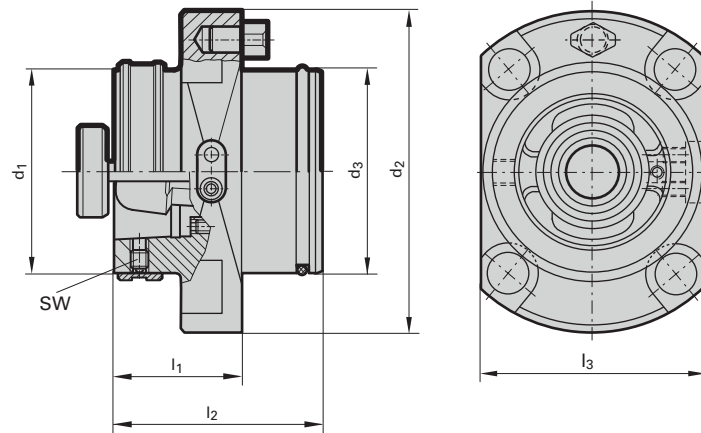
HSK adaptors for turning centres

Product information

- for fixed tools
- incl. setting element to eliminate drive play with vertical tools
- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.
- for conventional cooling from 6 to max. 80 bar

Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- incl. indexing pin and retention screws



Series Number **4582**

HSK-C d ₁	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	l ₃ mm	SW	kg	Version	Order Code	EDP Numbers
50	84	50	35	55	55	4	0.98	I-h	38.100	9045820381000
50	84	50	35	55	55	4	0.98	r-h	38.200	9045820382000
63	100	63	40	64.5	70	5	1.74	I-h	48.100	9045820481000
63	100	63	40	64.5	70	5	1.74	r-h	48.200	9045820482000

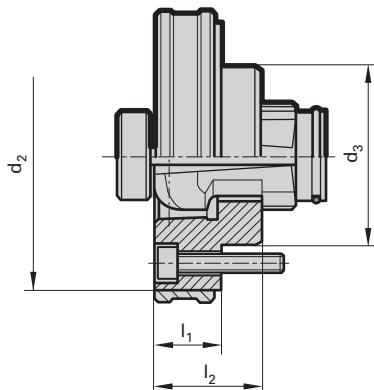
Short HSK spindle adaptors (integrated)

Product information

- with larger axial plane
- for the transferable torsional moment the interface between spindle and flange has to be taken into consideration.
- for conventional cooling from 6 to max. 80 bar

Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- incl. threaded pin Guhring no. 4551 and tensioning screws



Series Number **4584**

HSK-C	d ₂ mm	d ₃ mm	l ₁ mm	l ₂ mm	SW	kg	Order Code	EDP Numbers
32	40	27	12.5	21.1	2.5	0.16	24.000	9045840240000
40	50	33.5	15	25.7	3	0.28	30.000	9045840300000
50	63	42	17.5	32.1	4	0.55	38.000	9045840380000
63	80	55	22.5	40.05	5	1.14	48.000	9045840480000
80	100	68	27.5	51.4	6	2.2	60.000	9045840600000
100	125	88	30	64	8	4	75.000	9045840750000

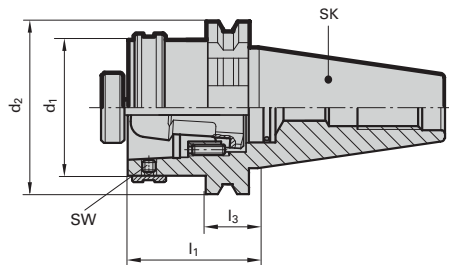
SK / HSK-C basic adaptors

Product information

- ISO taper to DIN 69871 form AD
- Form B on request
- Code no. 50,100 only applies to presetting unit
- for conventional cooling from 6 to max. 80 bar

Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- order clamping key and pull studs separately



Series Number 4512

ISO taper	HSK-C d ₁	d ₂ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
40 SK	32	63.5	40	2.5	0.89	40.032	9045120400320
40 SK	40	63.5	40	3	0.9	40.040	9045120400400
40 SK	50	63.5	40	4	0.91	40.050	9045120400500
40 SK	63	63.5	70	5	1.38	40.063	9045120400630
50 SK	32	97.5	40	2.5	2.65	50.032	9045120500320
50 SK	40	97.5	40	3	2.67	50.040	9045120500400
50 SK	50	97.5	40	4	2.71	50.050	9045120500500
50 SK	63	97.5	40	5	2.73	50.063	9045120500630
50 SK	80	97.5	70	6	3.7	50.080	9045120500800
50 SK	100	97.5	100	8	4.87	50.100	9045120501000

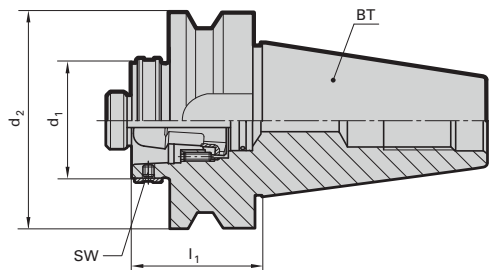
MAS/BT / HSK-C basic adaptors

Product information

- MAS/BT to JIS 3 6339, form AD
- for conventional cooling from 6 to max. 80 bar

Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- order clamping key and pull studs separately



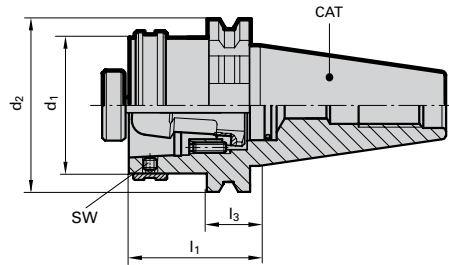
Series Number 4514

BT	HSK-C d ₁	d ₂ mm	l ₁ mm	SW	kg	Order Code	EDP Numbers
40 BT	50	63	40	4	0.95	40.050	9045140400500
50 BT	40	100	50	3	2.9	50.040	9045140500400
50 BT	50	100	60	4	3.15	50.050	9045140500500
50 BT	63	100	60	5	3.69	50.063	9045140500630

CAT / HSK-C basic adaptors

Product information

- CAT taper to DIN 69871 form AD
- Form B on request
- Code no. 50,100 only applies to presetting unit
- for conventional cooling from 6 to max. 80 bar



Scope of delivery

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- order clamping key and pull studs separately



Series Number **4003**

CAT taper	HSK-C d ₁	d ₂ mm	l ₁ mm	SW	kg	Order Code	EDP
40	63	63.5	75	5.0	1.38	40.063	9040030400630
50	63	98.5	75	5.0	2.73	50.063	9040030500630

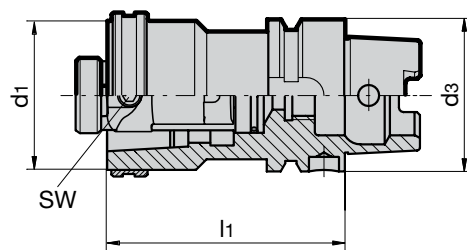
HSK-A/HSK-C extensions

Product information

- incl. clamping set, Guhring no. 4554
- incl. brass lock ring Guhring no. 4953
- for conventional cooling from 6 to max. 80 bar

Scope of delivery

- order coolant delivery set, Guhring no. 4949 separately



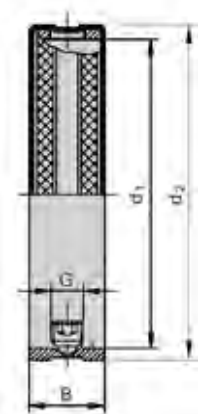
Series Number **4549**

HSK-A/ HSK-C d ₁ / d ₃	l ₁ mm	SW	kg	Order Code	EDP Numbers
32	60	2.50	0.26	60.032	9045490600320
40	80	3.00	0.65	80.040	9045490800400
50	80	4.00	0.9	80.050	9045490800500
50	100	4.00	1.13	100.050	9045491000500
63	100	5.00	1.84	100.063	9045491000630
63	140	5.00	2.3	140.063	9045491400630
80	120	6.00	3.9	120.080	9045491200800
80	160	6.00	5.4	160.080	9045491600800
100	140	8.00	7.8	140.100	9045491401000
100	200	8.00	10.54	200.100	9045492001000

Brass locking rings

Product information

- the pressure ball screw must be secured with Loctite 222



Scope of delivery

- incl. pressure ball screw, Guhring no. 4961



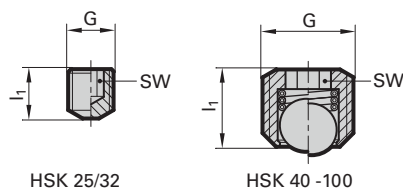
Series Number 4953

HSK-form	for HSK-size	d ₁ mm	d ₂ mm	B mm	G	EDP Numbers
C	25	25	28.0	7	M3.5	9049530250000
C	32	32	35.0	7	M4	9049530320000
C	40	40	43.5	9	M5	9049530400000
C	50	50	54.0	11	M6	9049530500000
C	63	63	68.0	14	M8	9049530630000
C	80	80	85.0	17	M10	9049530800000
C	100	100	105.0	23	M12	9049531000000
D	32	32	35.0	7	M3.5	9049530320190
D	40	40	43.5	9	M4	9049530400240
D	50	50	54.0	11	M5	9049530500300
D	63	63	68.0	14	M6	9049530630380
D	80	80	85.0	17	M8	9049530800480
D	100	100	105.0	23	M10	9049531000600
D	125	125	130.0	23	M12	9049531250750

Pressure ball screws

Product information

- Minimum order quantity 5



Series Number 4961

for HSK	l ₁ mm	G	SW	EDP Numbers
25	3.4	M3.5	2.0	9049610035000
32	4.3	M4	2.0	9049610040000
32	4.0	M4	2.0	9049610040010
40	4.6	M5	2.5	9049610050000
50	5.4	M6	3.0	9049610060000
63	7.0	M8	4.0	9049610080000
80	9.2	M10	5.0	9049610100000
100	11.4	M12	6.0	9049610120000



MEASURING INSTRUMENTS
AND GENERAL ACCESSORIES



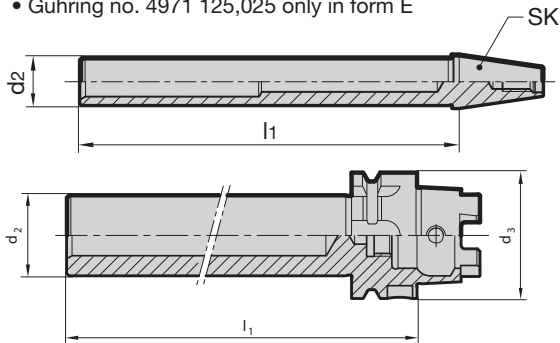
Taper proofing bars HSK/ISO

Product information

- to proof concentricity at machine spindles
- for HSK and ISO taper to DIN 69871
- calibration on request
- Guhring no. 4971 125,025 only in form E

Scope of delivery

- supplied in wooden case for vertical storage with inspection protocol



Series Number				4970	4971
HSK d ₁	ISO taper	d ₂ mm	l ₁ mm	EDP Numbers	EDP Numbers
—	40	40	320	9049703000400	—
—	50	40	320	9049703000500	—
25	—	20	140	—	9049711250250
32	—	24	180	—	9049711500320
40	—	24	180	—	9049711500400
50	—	32	236	—	9049712000500
63	—	40	346	—	9049713000630
80	—	40	346	—	9049713000800
100	—	40	349	—	9049713001000

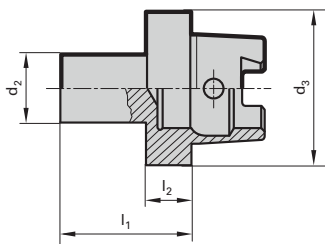
Balancing masters for HSK spindles

Product information

- for balancing HSK spindles clamping systems: holds the clamping elements in the clamped position
- balancing quality: G2.5 / 30,000 rev./min or U < 0.5 gmm
- calibration on request

Scope of delivery

- supplied in wooden case with inspection protocol



Series Number				4975
HSK-C d ₃	d ₂ mm	l ₁ mm	l ₂ mm	EDP Numbers
25	12	23	8	9049750250000
32	12	25	10	9049750320000
40	12	25	10	9049750400000
50	20	37.5	12.5	9049750500000
63	20	37.5	12.5	9049750630000
80	20	46	16	9049750800000
100	20	46	16	9049751000000

Clamping force measuring instrument for HSK / SK clamping systems

The accuracy of the HSK connection does not only depend on the geometry but also on the drawing force of the HSK clamping system which plays an important part in ensuring a powerful and dimensionally accurate connection.

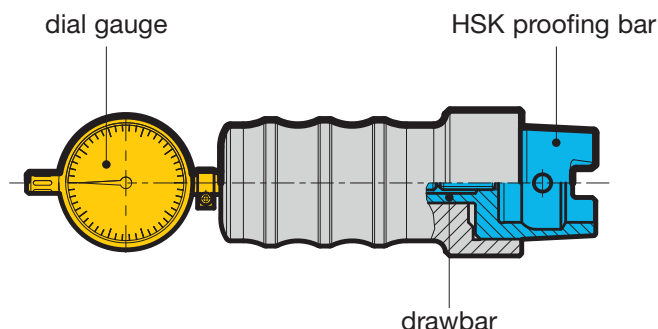
To ensure operational safety, a regular clamping force check of the HSK interface is recommended. An entirely mechanical clamping force measuring instrument is now available from Guhring. Its operation is based on components, which are linear adjustable in length and positioned proportional to the force. A force is associated with the alteration in length which is displayed via an analogue dial gauge.

Min. required pull forces for clamping systems

taper size HSK25	2.8 kN
taper size HSK32	5 kN
taper size HSK40	6.8 kN
taper size HSK50	11 kN
taper size HSK63	18 kN
taper size HSK80	28 kN
taper size HSK100	45 kN
taper size SK/BT30	6 kN
taper size SK/BT40	12 kN
taper size SK/BT50	25 kN

Specifications::

- few components, therefore cost-efficient
- robust design
- battery or mains connection not required
- patented operating principle which is also adaptable to other spindle designs



Clamping force measuring instrument

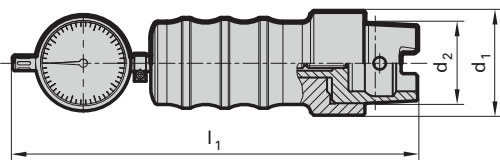
Product information

- mechanical clamping force inspection instrument for HSK / SK / BT* clamping systems in machine tool spindles

- calibration on request

Scope of delivery

- supplied in wooden case with inspection protocol, calibrated, with measuring instructions
- for SK order pull studs Guhring no. 4925, 4926 separately
- for BT* order shortened special pull studs separately



Series Number				4973	4974
HSK-A/C/E d ₁	ISO taper/BT*	d ₂ mm	l ₁ mm	EDP Numbers	EDP Numbers
—	30	32	216	9049730300000	—
—	40	44	248	9049730400000	—
—	50	69	285	9049730500000	—
25	—	19	187	—	9049740190000
32	—	24	192	—	9049740240000
40	—	30	196	—	9049740300000
50	—	38	203	—	9049740380000
63	—	48	235	—	9049740480000
80	—	60	250	—	9049740600000
100	—	75	260	—	9049740750000

Clamping force proofing instrument Senso 3000

The hydraulic clamping technology is a well-known, proven and reliable method for the clamping of tools. Thanks to its completely closed design the system is sealed and impervious, requires extremely low maintenance and guarantees longevity. Following many years of general use, however, thermal and mechanical influences can lead to a reduction in clamping force. The result can be a poor tool life and a diminished surface quality including expensive tool breakages during machining operations.

Determining the loss of clamping force was until now extremely costly and inaccurate. It involved either determining the number of clamping screw rotations or the torque with the assistance of a proofing bar and a torque key or the expansion rate applying an accurate internal measuring instrument.

The new Guhring SENSO 3000 measuring instrument offers a precise, quick and simple as well as consistent method of measuring the clamping force. An added advantage is the mobility of the system, i.e. for measuring within machines and fixtures.

SENSO 3000 determines the clamping force of the hydraulic chuck via a pressure sensitive plug gauge. The entire length of the plug gauge is clamped in the hydraulic chuck so that when tightening the clamping screw the clamping pressure of the chuck is optimally applied. The clamping force measuring instrument displays the clamping force as an absolute measurement value on the one hand and as a percentage

clamping force in relation to a reference value that can be set individually on the other. This way, SENSO 3000 can be adapted to customer specific application conditions and requirements.

The clamping force measuring instrument is supplied with a plug gauge for the respective clamping diameter as well as a carbide proofing bar for calibration purposes and a CR 2430 type battery – all in a sturdy and handy case.



Senso 3000

Scope of delivery

- supplied respectively with measuring arbor, carbide proofing arbor, battery and case



Series Number

4038

clamping diameter
mm

EDP Numbers

6.0
8.0
10.0
12.0
14.0
16.0
18.0
20.0
25.0
32.0

9040380060000
9040380080000
9040380100000
9040380120000
9040380140000
9040380160000
9040380180000
9040380200000
9040380250000
9040380320000

Flow rate measuring instrument PQ 3000

Guhring's PQ 3000 enables quick and simple measuring of pressure and volume of coolant flow directly in the machine using the actual tool applied.

Guhring has developed the PQ 3000 instrument for quick, simple and direct measuring of the existing coolant pressure and rate of flow for tools with internal cooling.

PQ 3000 enables the measuring of pressure and rate of



flow of coolant when the actual tool is clamped directly in the stationary tool spindle. This way, it is possible to establish the real conditions of the relevant machine and tool configuration and measure the resulting actual rate of flow.

PQ 3000 provides the following information:

- pressure and volume flow of the coolant pump, the so-called P/Q characteristic curve
- possible pump or seal wear as well as rotary transmission losses
- possible narrowed cross sections in the line through machine, spindle and tool holder
- possible blocked filters
- possible narrowed cross sections resulting from deposits on the surface of the coolant ducts in the tool
- the coolant duct layout in the tool.

to identify and rectify possible weak points in the overall system, this way, the tool life of the applied tool can be optimized preventing tool breakage as well as chip congestion and jamming!

PQ 3000 provides data of sensors and indicates the measuring results on the display fixture. A data interface enables an evaluation via software on your PC (interface and software are available on request).

PQ 3000

Product information

- pressure checking range: 1 to 120 bar
- rate of flow checking range: 2 to 40 l/min
- diameter holder shank: 16 mm
- diameter range tool holder: ER 32 / 6 to 20 mm
- display for existing pressure P in bar also rate of flow volume Q in l/min

Scope of delivery

- clamping fixture and checking instrument
- display fixture with grip and connection socket
- checking data cable with connector plug, length 3 m
- ER 32 collet holder and sealing washer set for standard shanks with collets from 6 to 20 mm diameter
- clamping key for tensioning nut



Series Number	4068
clamping diameter mm	EDP Numbers
case complete interface and PC-Software	9040680100000

Coolant supply measuring instrument CC 3000

With Guhring's CC 3000 you can quickly and simply check the filtering efficiency of the coolant system.

Guhring has developed the inspection instrument CC 3000 for quick, simple and direct check of the coolant filtering efficiency.

Thanks to replaceable stainless steel filters, the user can adapt the instrument specifically to the filtering of the coolant system.

CC 3000 establishes the present condition of the individual system and displays the actual filter efficiency.

In order to analyze and rectify possible weak points of the filter system, the following information is provided:

- perfect operation of the coolant filtering system
- defective filters
- insufficient filtering for the applied tool

In addition, it is possible to determine the oil concentration of the applied soluble oil with the included refractometer.

Thus, it is possible to optimize the tool life of the applied tool, to prevent tool breakage and subsequent production stoppage!



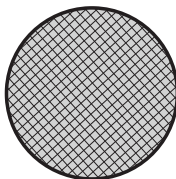
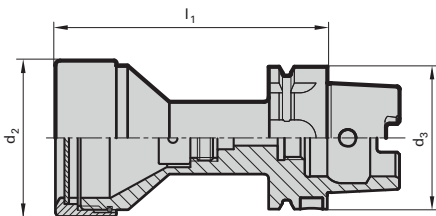
CC 3000

Product information

- range of application 50 - 500 min-1
- suitable for coolant pressure up to 80 bar

Scope of delivery

- inspection instrument with HSK 63-A interface
- high-grade steel filter sizes 100, 200 and 300 µm
- refractometer including accessories
- magnifying glass, 8-fold magnification
- coolant delivery set guhring no. 4949 code 18,063
- order high-grade steel filter size 60 µm separately



Series Number

4076

4077

EDP Numbers

EDP Numbers

case complete

9040760100630

high-grade steel filter size 60, Guhring no. 4077
high-grade steel filter size 100, Guhring no. 4077
high-grade steel filter size 200, Guhring no. 4077
high-grade steel filter size 300, Guhring no. 4077

9040770600000
9040771000000
9040772000000
9040773000000

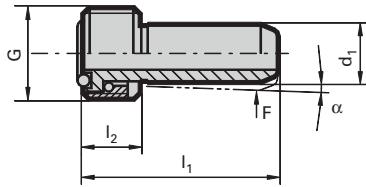
HSK-A coolant delivery sets for conventional cooling

Product information

- leak-proof screwed connection tested to 80 bar
- to DIN 69895

Scope of delivery

- incl. union nut and O-rings



Series Number

4949

for HSK-A	d ₁ mm	α °	F	G	l ₁ mm	l ₂ mm	EDP Numbers
32	6	1.2	5N	M10x1	26.0	5.5	9049490100320
40	8	1.4	5N	M12x1	29.5	7.5	9049490120400
50	10	1.3	6N	M16x1	33.0	9.5	9049490160500
63	12	1.3	6N	M18x1	36.5	11.5	9049490180630
80	14	1.4	7N	M20x1.5	40.0	13.5	9049490200800
100	16	1.4	7N	M24x1.5	44.0	15.5	9049490241000

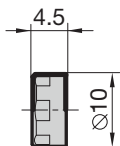
Data coding chip

Product information

- Identification systems BIS C
- for installation space to DIN 69 873
- data carrier read/write
- 511 bytes
- operating temperature 0...+70
- protection class to IEC
- product data exchange acc. to DIN 4000
- glued in bore Ø10 H11

Scope of delivery

- data coding chip
- installation in chuck and additional balancing can be ordered separately



Series Number

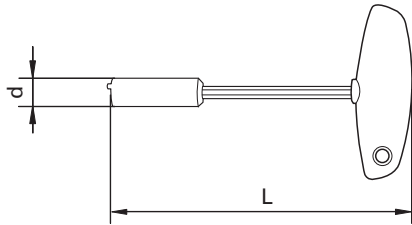
4955

coding chip BIS C	EDP Numbers
10 x 4.5	9049550100000

Sockets

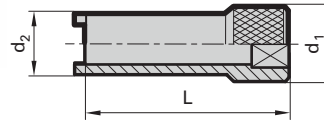
Product information

- with T-handle
- for coolant delivery sets for conventional cooling and MQL coolant delivery unit



Product information

- suitable for torque wrench Guhring no. 4915, drive 3/8"
- for coolant delivery sets



Series Number 4911

for HSK	d mm	L mm	EDP Numbers
32	11.0	115	9049110240000
40	13.0	163	9049110300000
50	15.0	163	9049110380000
63	17.0	175	9049110480000
80	20.0	179	9049110600000
100	22.5	179	9049110750000

Series Number 4910

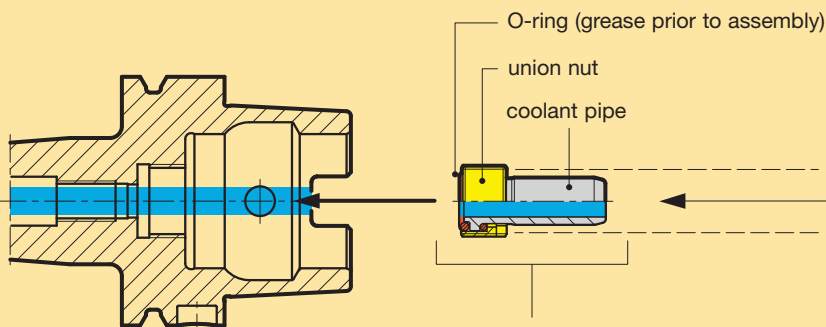
for HSK	MA Nm	d ₁ mm	d ₂ mm	L mm	EDP Numbers
32	7	20	14	60	9049100240000
40	11	20	16	60	9049100300000
50	15	20	18	60	9049100380000
63	20	20	18	60	9049100480000
80	25	20	20	75	9049100600000
100	30	22	22	80	9049100750000

Installation of coolant delivery set 4949

1. The HSK holder must be clean, free of swarf and undamaged.
2. Grease the O-rings prior to assembly.
3. Centrally insert the complete coolant delivery set (coolant pipe, union nut and 2 O-rings) in the HSK with the assistance of the socket spanner.
4. Screw in the coolant delivery set/coolant delivery unit and tighten (see table for torque figures)
5. Check coolant pipe for radial mobility.

Torque figures

for HSK	MA Nm
32	7
40	11
50	15
63	20
80	25
100	30



coolant delivery set

T-handle socket spanner
Guhring no. 4911

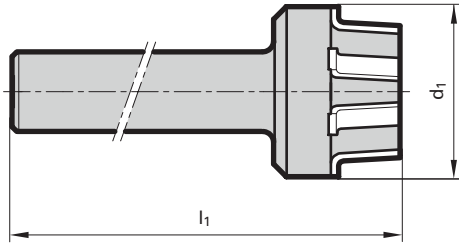


3/8" square drive socket
Guhring no. 4910

HSK cleaning mandrels

Product information

- for cleaning internal tapers and the end faces on HSK
- by cleaning the contact surfaces accuracy, clamping torque and tool life of interfaces are improved
- the taper wipers are available in 3 designs, suitable for HSK and SK spindles and HPC precision chucks



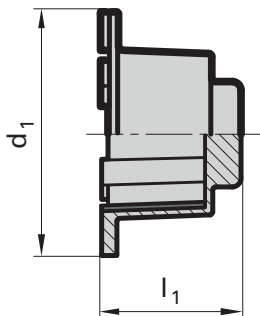
Series Number 4914

taper type	d ₁ mm	l ₁ mm	EDP Numbers
HSK-25	32	125	9049140190000
HSK-32	46	140	9049140240000
HSK-40	46	145	9049140300000
HSK-50	55	155	9049140380000
HSK-63	67	170	9049140480000
HSK-80	85	180	9049140600000
HSK-100	105	200	9049140750000
HPC 14 mm	24	160	9049140140000
HPC 20 mm	24	156	9049140200000
HPC 32 mm	42	170	9049140320000
ISO taper/BT30	35	168	9049140300300
ISO taper/BT40	48	188	9049140400000
ISO taper/BT50	75	240	9049140500000

HSK cleaning cap

Product information

- for cleaning the external taper and face



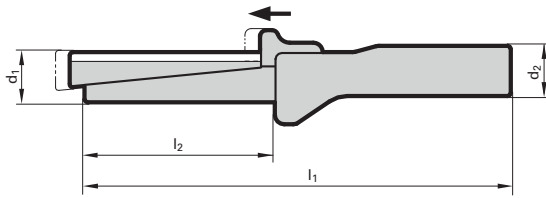
Series Number 4947

for HSK-A/C/E	d ₁ mm	l ₁ mm	EDP Numbers
40	53	36	9049470010400
50	66	42	9049470010500
63	83	53	9049470010630
80	103	58	9049470010800
100	125	77	9049470011000

Cylindrical cleaning mandrels

Product information

- for cleaning the bore of the tool holder
- e.g. hydraulic chucks and shrink fit chucks



Series Number

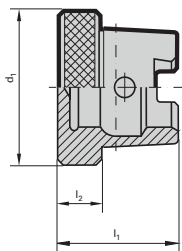
4918

d ₁ mm	d ₂ mm	l ₂ mm	l ₁ mm	EDP Numbers
6	24	37	158	9049180060000
8	24	37	158	9049180080000
10	24	47	168	9049180100000
12	24	47	168	9049180120000
14	24	47	168	9049180140000
16	24	70	176	9049180160000
18	24	70	176	9049180180000
20	24	70	176	9049180200000
25	24	80	186	9049180250000
32	30	100	221	9049180320000
40	30	105	226	9049180400000

HSK-C sealing plugs

Product information

- with high coolant pressure applications, it is imperative to seal the spindle with the sealing plug for safety reasons when the machine spindle is not fitted with a tool. The sealing plug protects the spindle from contamination.



Series Number

4985

HSK-C	d ₁ mm	l ₁ mm	l ₂ mm	kg	EDP Numbers
32	34	26.0	10.0	0.07	9049850320000
40	42	30.0	10.0	0.11	9049850400000
50	52	37.5	12.5	0.23	9049850500000
63	65	44.5	12.5	0.39	9049850630000
80	82	56.0	16.0	0.81	9049850800000
100	102	66.0	16.0	1.36	9049851000000

Tool setting fixture

Product information

- for HSK shanks HSK 32, 40, 50 and 63, form A, C, E and F
- the HSK shanks are clamped vertically and horizontally at the collar. Therefore, all tapers with the same diameter of the collar can be clamped with one fixture.

Scope of delivery

- incl. holder adaptors



Series Number 4946

for HSK-A/C	length mm	width mm	height mm	kg	EDP Numbers
32	260	130	160	9	9049464500320
40	260	130	160	9	9049464500400
50	260	130	160	9	9049464500500
63	260	130	160	9	9049464500630

Tool setting fixture

Scope of delivery

- incl. interchangeable discs Guhring no. 4991



Interchangeable discs

Product information

- for tool setting fixture, Guhring no. 4990

Scope of delivery

- 1 pair



Series Number 4990

for HSK-A/C	for ISO taper	length mm	width mm	height mm	kg	EDP Numbers
–	40	260	130	160	9	9049904000400
–	50	260	130	160	9	9049904000500
63	–	260	130	160	9	9049904500630
80	–	260	130	160	9	9049904500800
100	–	260	130	160	9	9049904501000

Series Number 4991

for HSK-A/C	for ISO taper	kg	EDP Numbers
–	40	1.50	9049914001000
–	50	1.50	9049914002000
32	–	0.82	9049914501000
40	–	0.85	9049914502000
50	–	0.09	9049914503000
63	–	0.12	9049914504000
80	–	0.27	9049914505000
100	–	0.46	9049914506000

Torque wrenches

Product information

- with ratchet
- torque range 1...200 Nm; with automatic short distance release; can be heard, seen and felt when the set value is reached. Release accuracy $\pm 4\%$ of the scale value.
- type "D" is pre-set to 12 Nm suitable for our HPC chucks Guhring no. 4300, 4301, 4243, 4244



Series Number

4915

type	drive	L mm	torque Nm	EDP Numbers
A	1/4"	160	1-5	9049150050010
B	3/8"	390	5-50	9049150500000
C	1/2"	480	20-200	9049152000000
D	1/4"	100	12	9049150120000

Socket/attachments

Product information

- for hexagon socket screws

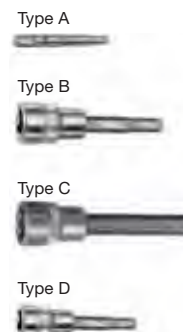


Type A: 1/4"-hexagon drive

Type B: 3/8"-square drive

Type C: 1/2"-square drive

Type D: 1/4"-square drive



Series Number

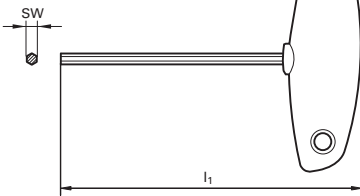
4916

SW	drive	L mm	torque wrenches type	EDP Numbers
2	1/4"	50	A	9049160020190
2.5	1/4"	50	A	9049160025240
3	1/4"	50	A	9049160030300
3	3/8"	50	B	9049160030380
4	1/4"	55	D	9049160040000
4	3/8"	100	B	9049160040380
5	3/8"	100	B	9049160050480
6	3/8"	100	B	9049160060600
8	3/8"	100	B	9049160080750
6	1/2"	120	C	9049160060380
8	1/2"	120	C	9049160080480
10	1/2"	140	C	9049160100600

Hexagon clamping keys

Product information

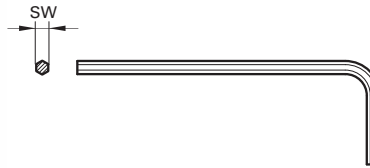
- with ergonomic handle for the safe handling of our clamping devices
- * special key for HPC chucks



Hexagon-socket offset screw keys

Product information

- for hexagon socket screws



Series Number

4912

SW	l ₁ mm	EDP Numbers
2.0	100	9049120020000
2.5	100	9049120025000
3.0	100	9049120030000
3/4/5/6	100	9049120034560
4.0	100	9049120040000
5.0	100	9049120050000
6.0	100	9049120060000
8.0	100	9049120080000
10.0	100	9049120100000
12.0	100	9049120120000
2.5	200	9049120025010
3.0	200	9049120030010
4.0	200	9049120040010
5.0	200	9049120050010
6.0	200	9049120060010
7.0	200	9049120070010
8.0	200	9049120080010
* 4.0	125	9049120040100

Series Number

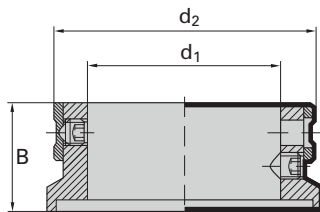
4921

for threaded pin Guhring no. 4551	SW	EDP Numbers
HSK 25	0.9	9049210009000
HSK 32	1.3	9049210013000
HSK 40	1.5	9049210015000

Centrifugal rings for short spindles to DIN 69002-3

Product information

- for short spindles to DIN 69002-3



Scope of delivery

- incl. clamping screws and brass locking ring



Series Number

4976

nom. size	d ₁ mm	d ₂ mm	B	EDP Numbers
25x20	25	35.0	15.7	9049760200150
32x25	32	42.5	19.7	9049760250190
32x30	32	43.5	19.7	9049760300190
40x35	40	54.0	21.7	9049760350210
50x45	50	68.0	24.7	9049760450240
63x55	63	82.0	31.7	9049760550310

LET GUHRING REPAIR YOUR CHUCKS

Hydraulic Chuck Repair Service

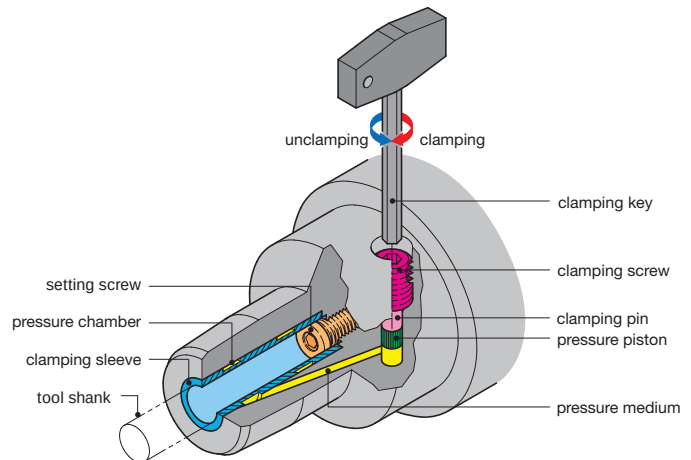
Losing Your Grip?

If your hydraulic chuck is leaking fluid or allowing the cutting tool to turn even slightly within the chuck, it's time to have it repaired. Guhring repairs hydraulic chucks - both our competitors' chucks and our own - at our facility in Brookfield, Wisconsin. Guhring can repair or replace the hydraulic components within most hydraulic chucks, restoring them to like-new functionality.

A worn out toolholder can result in excessive runout, premature tool wear and even broken tools or damaged work pieces. Don't wait until damage has occurred - check your hydraulic clamping pressure with a gauge such as the Guhring Senso 3000 (or other gauge).

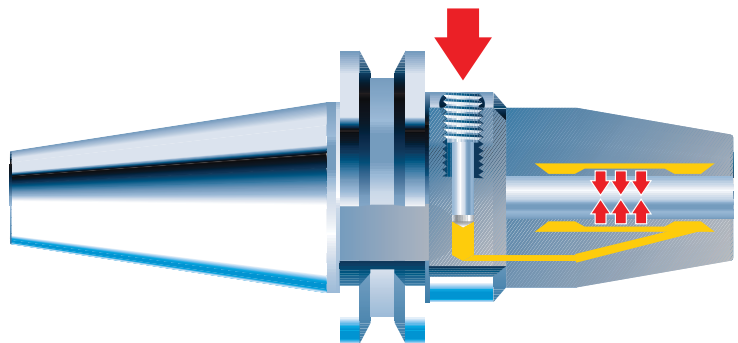


Guhring's Senso 3000 offers a quick and precise measurement of the clamping force of hydraulic chucks.



Hydraulic chucks create clamping pressure by increasing the hydraulic force around the sleeve (in blue), which causes the sleeve to tighten around the shank of the cutting tool. This forms a secure and even grip on the cutting tool in the chuck.

Consistent operation: Hydraulic oil is compressed via a screw and pressure piston ensuring accurate and consistent clamping of the tool.



Guhring Hydraulic Chuck Repairs
1505 Commerce Avenue - Brookfield, WI 53045
(800) 776-6170 standards@guhring.com



TECHNICAL INFORMATION

COMPARISON OF TOOL HOLDER CHARACTERISTICS

Clamping chucks / tool holders for straight tool shanks	Shrink fit chucks / shrink fit extensions	Hydraulic chucks / HMC 3000 / reduction sleeves
		
Characteristics	maximum concentricity; very slender non-interference; good rigidity; high clamping force; modular lengthening; patented dampening screw ensures concentricity	high dampening with maximum concentricity; simple handling; flexible application thanks to reduction sleeves also with GÜHROJET
Main application	drilling, countersinking, milling, reaming, universal and HSC application	reaming, drilling, countersinking, HSC application, light milling
Main feature	accurate and universal; slender; high clamping force	simple handling
Concentricity	< 3µm	< 3µm
with 5xD	< 5µm	< 5µm
Clamping force	very high	very high
Rigidity	very high	high
Dampening	low	very high
Interference contour	small / minimal	medium
Handling	good	very good / very flexible
Actuation	shrink fit device	hexagon key

HPC precision power chucks / clamping sleeves	Straight shank holders “Weldon” / “Whistle-Notch”	Collet chucks ER
		
maximum clamping force and rigidity thanks to mechanical clamping transmission; high accuracy and balancing quality; flexible application thanks to clamping sleeves also with GÜHROJET	robust, cost-efficient clamping chuck for heavy machining in the lower speed and accuracy range	very flexible clamping chuck for various shank dimensions and tolerances; for lower level machining tasks
heavy HPC and fast accurate HSC milling, drilling, universal application	roughing, milling, drilling	light machining, centering, chamfering, drilling, threading; intermediate shank dimensions
highest clamping force and rigidity	simple operation; secure clamping	highly flexible
< 3µm	< 10µm	< 10µm
< 8µm	< 25µm	< 20µm
extremely high	very safe	medium
extremely high	very high	low
high	low	high
medium	large	large (mini = small)
very good / flexible	good	good
hexagon key / torque wrench	hexagon key	hook spanner

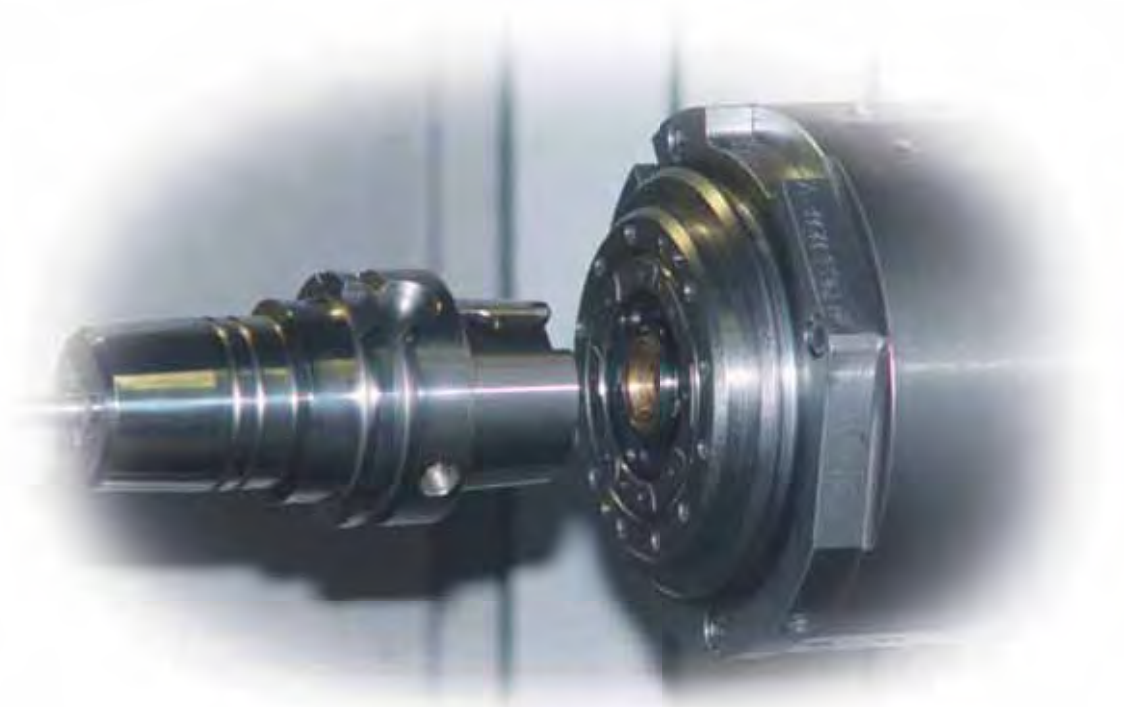


Fig. 1:
HSK-A 63 interface,
automatic tool change

Our modular tooling system GM 300 has been developed for the application of rotating and stationary tools. 1987 we developed the GM 300 coupling. Standardization for this interface (DIN 69893) was obtained in 1991. Since 12/2001 the HSK interface is also standard to ISO 12164-1/-2. The unique design of the clamping method offers not only an ideal interface for manual clamping within the tooling system, but also an ideal interface for automatic clamping directly to the machine spindle (fig. 1) or tool holder.

Characteristic feature:

Tapered hollow shank (HSK) with axial plane clamping mechanism according to DIN 69893. The most important advantages are as follows:

• High static and dynamic rigidity

The radial and axial forces generated in the tool shank provide the clamping force necessary for extreme rigidity (fig. 2). Recommended values for the GM-300 module for manual clamping.

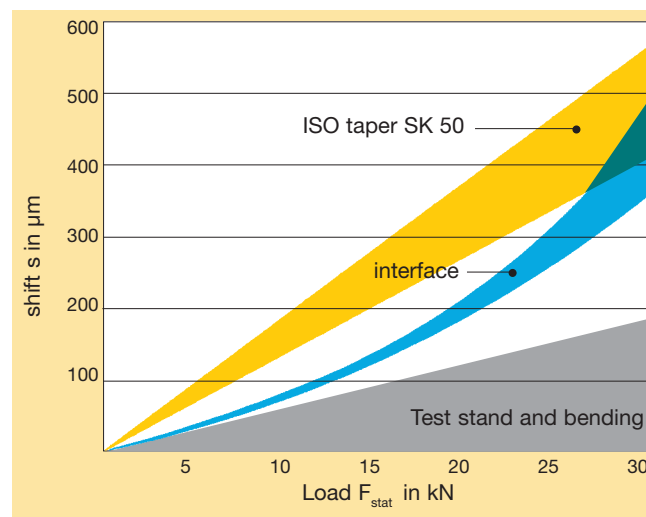
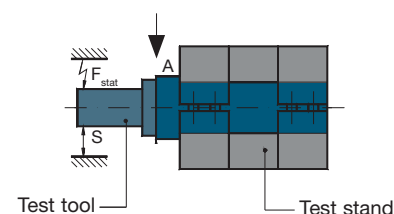


Fig. 2
Static deflection: Comparison between ISO taper 50
and automatic interface HSK-A 100 (A)

ISO taper DIN 2080 DIN 69871	HSK form A/C/(E) DIN 69893 part 1	HSK form B/D/(F) DIN 69893 part 2
—	HSK 40	HSK 50
SK30	HSK 50	HSK 63
SK40	HSK 63	HSK 80
SK45	HSK 80	HSK 100
SK50	HSK 100	HSK 125

Association between ISO taper - hollow taper shank

TECHNICAL INFORMATION AND ADVANTAGES

• High torque transmission and defined radial positioning

The wedging effect between the hollow taper shank and the holder or spindle causes a friction contact over the full taper surface and the plane supporting face (fig. 3). Two keys engage with the shank end of the tool holder and provide form-closed, radial positioning, thereby excluding any possible setting errors.

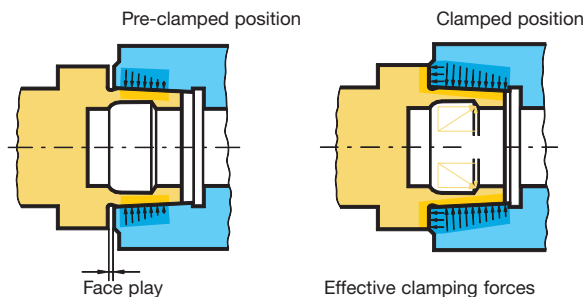
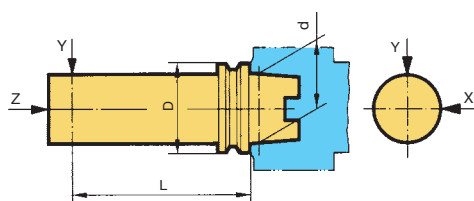


Fig. 3
Prestressing and frictional forces of hollow taper shank at the interface.

• High tool change accuracy and repeatability

The circular form engagement of the clamping claws within the hollow tool shank provides a totally tight connection between the shank and spindle or holder respectively (fig. 3 and 4).



HSK-size D	d mm	L mm	X mm	Y mm	Z mm
32	24	50	0.002	0.002	0.002
40	30	60	0.002	0.002	0.002
50	38	75	0.002	0.002	0.002
63	48	100	0.002	0.002	0.002
100	75	150	0.002	0.002	0.002

Fig. 4
Radial and axial repeatability of interface for manual and automatic clamping

• High speed machining performance

The higher the number of revolutions the better, as this increases both the power and effectiveness of the locking of the clamping mechanism. The direct initial stress between the hollow taper shank and the spindle holder compensates for the spindle expansion generated by the centrifugal force so that there is absolutely no radial play (fig. 3). The plane clamping position prevents any slipping in the axial direction.

• Short tool changing time

Efficient tool change due to a short shank length (approx. 1/3 of the conventional ISO taper) and light weight (approx. 50% of the ISO taper).

• Simple, cost-efficient shank design

No moving components at the tool shank means no wearing parts.

• Insensitive to foreign matter

The uninterrupted design of the ring-shaped axial plane clamping simplifies the cleaning of the coupling. During automatic tool change compressed air provides ideal cleaning in the interface.

• Coding and identification

To allow for the attachment of common identification systems, a hole of 10 mm dia. and 4.5 mm depth is provided for the data media (coding chips) in the vicinity of the collar.

• Standardizing of interface

GM 300 corresponds to ISO 12164-1/DIN 69893 (fig. 5).

• Coolant feed

The tools for automatic clamping, HSK-A and E, are designed for a central coolant feed by means of a duct. Tools with manual change behind the GM 300 interface also operate with a central coolant feed. The clamping elements are entirely sealed against the entry of coolant so that fouling is prevented.

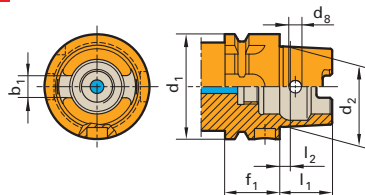
• Installation of the coolant supply set

Coolant supply sets are to be ordered separately for all GM 300 modules. The installation of the coolant duct must be carried out by the user.

GENERAL OVERVIEW OF HSK SHANKS ISO 12164-1/DIN 69893

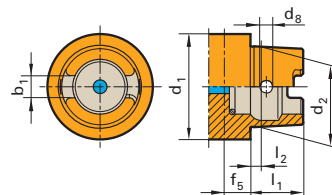
Form A DIN 69893 part 1

HSK-sizes 32...160



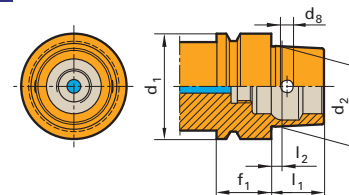
Form C DIN 69893 part 1

HSK-sizes 32...160



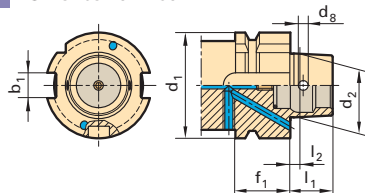
Form E DIN 69893 part 5

HSK-sizes 25...63



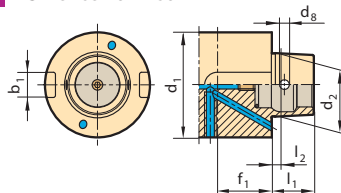
Form B DIN 69893 part 2

HSK-sizes 40...160



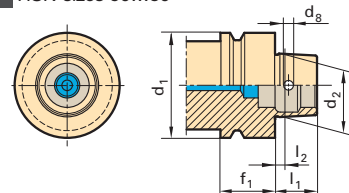
Form D DIN 69893 part 2

HSK-sizes 40...160



Form F DIN 69893 part 6

HSK-sizes 50...80



HSK for automatic tool change with gripper groove and index notch. Manual operation is via access hole in taper. Form B relies on driving dogs on the joint face as shank isn't slotted. Torque is transmitted through highly accurate connection.

HSK for manual tool change. Operation is via access hole in taper. Form D relies on driving dogs on the joint face as shank isn't slotted. Torque is transmitted through highly accurate connection.

HSK for automatic tool change. Torque is transmitted through highly accurate connection. Version with access hole acc. to DIN 69893-1 by arrangement.

HSK form A C E							
Nominal Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	f ₁ mm	f ₅ mm	d ₈ mm	b ₁ mm
25	19.000	13	2.5	10	-	-	-
32	24.007	16	3.2	20	10.0	4.0	7.05
40	30.007	20	4.0	20	10.0	4.6	8.05
50	38.009	25	5.0	26	12.5	6.0	10.54
63	48.010	32	6.3	26	12.5	7.5	12.54
80	60.012	40	8.0	26	16.0	8.5	16.04
100	75.013	50	10.0	29	16.0	12.0	20.02
125	95.016	63	12.5	29	-	-	25.02
160	120.016	90	16.0	31	-	-	30.02

HSK form B D F						
Nominal Ø d ₁ mm	d ₂ mm	l ₁ mm	l ₂ mm	f ₁ mm	d ₈ mm	b ₁ mm
25	-	-	-	-	-	-
32	-	-	-	-	-	-
40	24.007	16	3.2	20	4.0	10
50	30.007	20	4.0	26	4.6	12
63	38.009	25	5.0	26	6.0	16
80	48.010	32	6.3	26	7.5	18
100	60.012	40	8.0	29	8.5	20
125	75.013	50	10.0	29	12.0	25
160	95.016	63	12.5	31	12.0	32

Because the rotational speed is the largest influencing factor together with the limits regarding the spindle or spindle bearing interface, the following r.p.m. limits for HSK interfaces have been recommended as guidelines within the HSK standards:

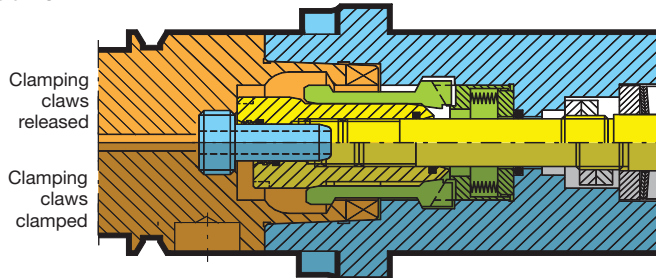
HSK-A/C 25	to 60.000 rev./min
HSK-A/C 32	to 50.000 rev./min
HSK-A/C 40	to 42.000 rev./min
HSK-A/C 50	to 30.000 rev./min
HSK-A/C 63	to 25.000 rev./min
HSK-A/C 80	to 20.000 rev./min
HSK-A/C 100	to 16.000 rev./min

AUTOMATIC TOOL CLAMPING

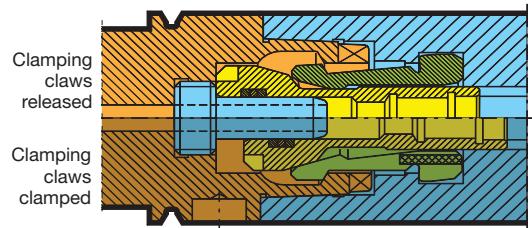
For the automatic interface the forces are introduced axially via a draw bar. A clamping taper simultaneously causes a radial movement of the clamping segments which, in turn, engage with the clamping shoulder of the tool shank and lock the coupling absolutely play-free. The clamping mechanism increases the draw-in force on the plane face by a factor of 3.5. General application in machining centers and turning centres using an automatic tool changing method. Such clamping systems are currently being offered by Messrs. Ott, Ortlieb, Berg and RöhM (fig. 6).

Fig. 6
Spindle interfaces with clamping devices

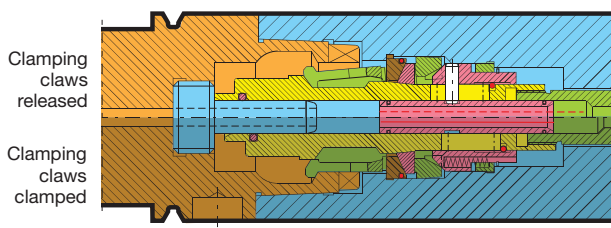
System OTT



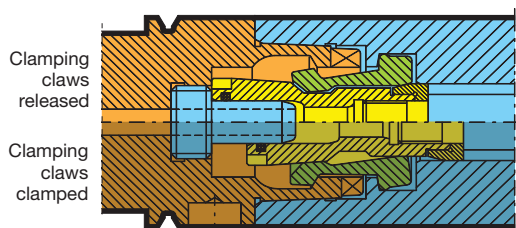
System ORTLIEB (licence Fa. Guhring)



System BERG (licence Fa. Guhring)

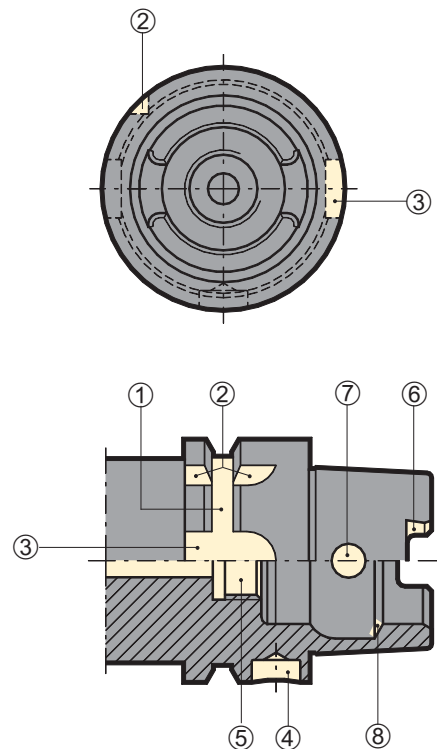


System RÖHM (licence Fa. Guhring)



Term definitions of HSK-A interface for automatic tooling systems

- ① Gripper groove: circular groove
- ② Index notch: sickle-shaped notch across gripper groove
- ③ Keyway on collar: index notch or for attachment in tool magazine or grippers. With HSK-B/D also provides form closed torque transmission to spindle.
- ④ Coding/identification: bore in collar for attachment of identification system (coding chip)
- ⑤ Thread for coolant: for attachment of coolant supply set
- ⑥ Keyway on taper shank: form closed torque transmission to spindle
- ⑦ Radial bore in taper shank: necessary for manual clamping systems
- ⑧ Clamping shoulder: circular chamfer for drawing in the tool



Note:

We like to point out, that HSK-A can be used alternatively to HSK-C with manual clamping systems e.g. 4-point clamping set or PowerClamp. The only difference is the overall length, which is slightly longer. That is why we have decided to have certain tool holders only as form C as standard.

MANUAL TOOL CLAMPING

Operating instructions for manual tool clamping

- Do not exceed the maximum torque figures for the clamping screw of the 4-point clamping set and the PowerClamp system.
- The thread of the clamping screw of the manual clamping set is supplied pre-greased. Following pro-longed operating periods it may be necessary grease otherwise the require clamping force cannot be obtained.
- At tool changing the plane surface and spindle has to be cleaned. Dirt will restrain the perfect function of the tool system. The inner taper of the spindle can be cleaned with cleaning unit, Guhring no. 4914.
- The spindle should be sealed with a plug, Guhring no. 4985, when running without tool to prevent the ingress of foreign matter into the clamping sets and HSK tool systems.

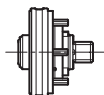
Exemplary interface design



Spindle connection dimensions see page 208/209

Detailed drawings of the spindle connection contours are available on request for the following:

Guhring no. 4385
Short HSK adaptor



Guhring no. 4554
PowerClamp clamping set



Guhring no. 4386
HSK adaptor (in front)



Guhring no. 4958
4-point clamping set



Guhring no. 4582
HSK adaptor (in front)
for turning centres



Guhring no. 4930
MQL 4-point clamping set



Guhring no. 4584
HSK adaptors
(integrated axial plane)



Guhring no. 4553
AI collar for adjustment



Guhring no. 4586
HSK adaptor (in front)h



Guhring no. 4953
Brass collar



TECHNICAL INFORMATION AND ADVANTAGES

Guhring has considerably expanded its ISO taper and MAS-BT tool holder program. Naturally, the tool holders are of the usual high Guhring quality. This means: ISO taper and MAS-BT tool holders are produced in a special, alloyed case hardened steel with a minimum tensile strength at the core of 900 N/mm², hardened in a low distortion hardening process to HRC 58 at a case hardening depth of 0.8 to 1.0 mm. For reasons of longevity, the surface of the tool holder is subjected to an abrasive blasting process and protected against corrosion..

Quality through precision

Guhring's demand for highest precision also applies to tool holders. Therefore, ISO taper and MAS-BT chucks are precision ground: in the vicinity of the ISO taper to $Ra \leq 0.2$, at the holder face to $Ra \leq 0.4$. The taper tolerance is better than AT 3 with a measuring accuracy of $\leq 1 \mu\text{m}$.

Detailed information regarding the form and positional tolerances can be found for the individual tool holders on the respective pages in the catalogue. The tolerances of the holder bore and the spigot are approximately 2/3 of the DIN tolerance.

Balancing

Tool holders suitable for increased speeds are generally pre-balanced. For this purpose, we have determined the imbalance and entered the balancing areas as well as balancing bores on the drawings. This levels out the imbalance to a large extent and up to approximately 8000 rev./min precision balancing is unnecessary. For higher revolutions, the pre-balanced tool holders must be precision balanced to G 6.3 or G 2.5 respectively.

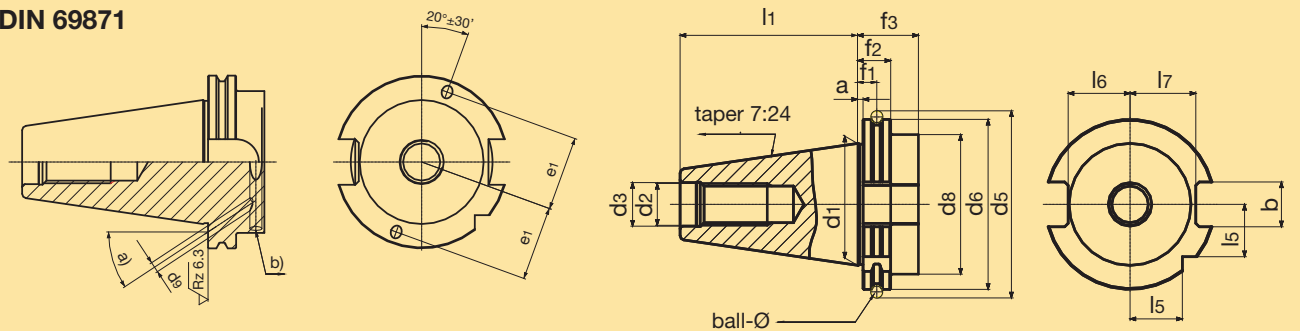
Type AD/B

ISO taper tool holders generally produced are type AD/B. Supplied is type AD, the coolant bores at the collar are sealed with screws.

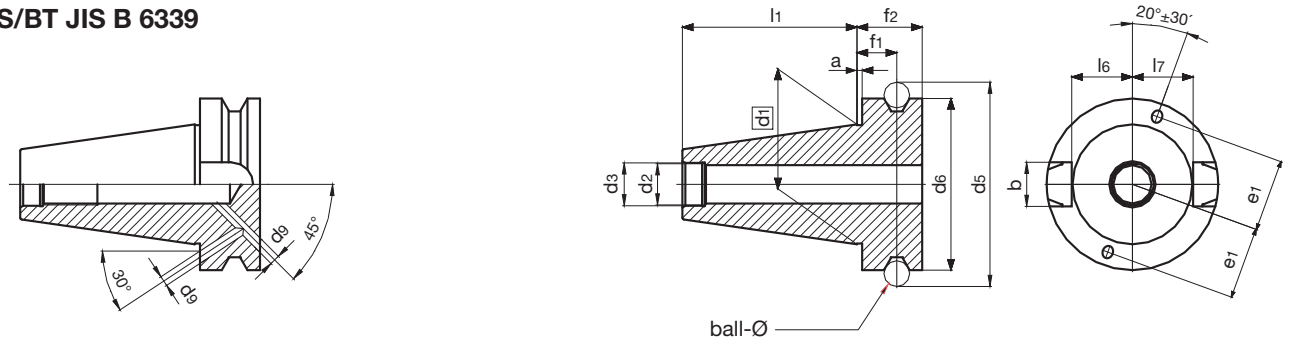
General dimensions and tolerances

The following dimensions apply to our ISO taper and MAS-BT tool holders:

SK DIN 69871



MAS/BT JIS B 6339



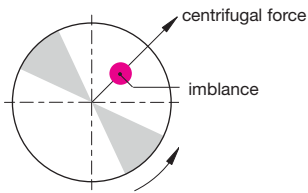
ISO taper	a mm	ball-Ø mm	b mm	d ₁ mm	d ₂ mm	d ₃ mm	d ₅ mm	d ₆ mm	d ₈ mm	d ₉ mm	e ₁ mm	f ₁ mm	f ₂ mm	f ₃ mm	l ₁ mm	l ₅ mm	l ₆ mm	l ₇ mm
SK30	3.2	7	16.1	31.75	M12	13	59.3	50.00	45	4	21	11.1	19.1	35	47.80	15.00	16.4	19.0
SK40	3.2	7	16.1	44.45	M16	17	72.3	63.55	50	4	27	11.1	19.1	35	68.40	18.5	22.8	25.0
SK50	3.2	7	25.7	69.85	M24	25	107.25	97.50	80	6	42	11.1	19.1	35	101.75	30.0	35.5	37.7
BT30	2.0	8	16.1	31.75	M12	12.5	56.144	46.00	–	–	–	13.6	22.0	–	48.40	–	16.3	16.3
BT40	2.0	10	16.1	44.45	M16	17	75.679	63.00	–	4	27	16.6	27.0	–	65.35	–	22.6	22.6
BT50	3.0	15	25.7	69.85	M24	25	119.019	100.00	–	5.4	42	23.2	38.0	–	101.75	–	35.4	35.4

Imbalance

An imbalance produces a centrifugal force during the rotation of the spindle impeding the smooth running of the tool. This imbalance influences the working process and the life span of the spindle bearings.

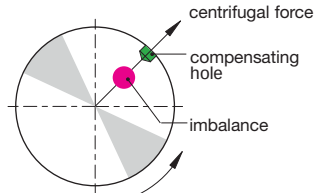
The centrifugal force F increases linear with the imbalance U and squared with the number of revolutions according to the formula below.

$$F = U \cdot \omega$$



Counter balancing

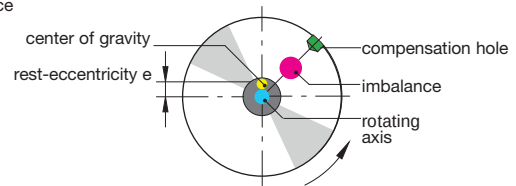
To compensate for unwanted centrifugal forces, the symmetrical distribution of mass must be restored with the aim of eliminating any centrifugal forces influencing the spindle bearing. Tool holders generally have compensation holes or areas which assist in directing the total amount of all centrifugal forces influencing the axis towards zero (see DIN ISO 1940).



Eccentricity of center of gravity

The imbalance of a spindle causes its center of gravity to deviate a certain distance from the rotating axis in direction of the imbalance. This distance is called rest-eccentricity e or eccentricity of center of gravity. The heavier the weight of the balance body mass m , the greater the rest-imbalance U permissible.

$$e = \frac{U}{m}$$



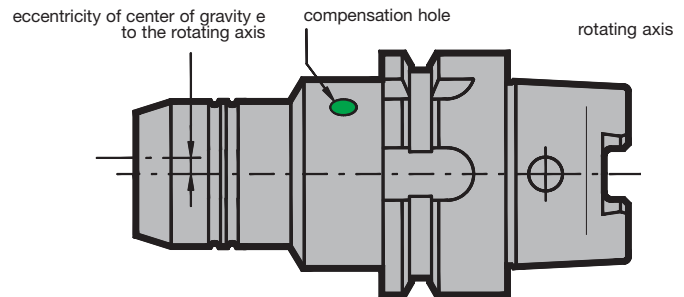
Calculation imbalance

Imbalance is a measure, specifying how much unsymmetrical distributed as deviates radially from the rotating axis.

Imbalance is measured in gmm. The measure of distance e determines the distance of the center of gravity of an element to the rotating axis. Imbalance is calculated as follows:

$$U = m \cdot e$$

U = imbalance in gmm
 e = eccentricity of center of gravity in μm
 m = mass in kg



Balancing limits

In accordance with DIN ISO 1940 the balance grade is denoted with G as well as the units gmm/kg or μm respectively and is relative to the number of revolutions. At a speed of 15.000 rev./min and a weight of 1 kg, G6.3 corresponds with a permissible center deviation between rotational axis and center of gravity axis of the spindle of 4 μm .

At twice the speed of 30,000 rev./min it would be 2 μm . If the tool holder was only half the weight, i.e. 0.5 kg, the permissible counter balancing tolerance is also halved. Aim of counter balancing is to find a compromise between the technically feasible and the economically efficient. Because the radial interchange accuracy for a brand-new HSK holder can be 2 to 3 μm and for an ISO taper shank holder

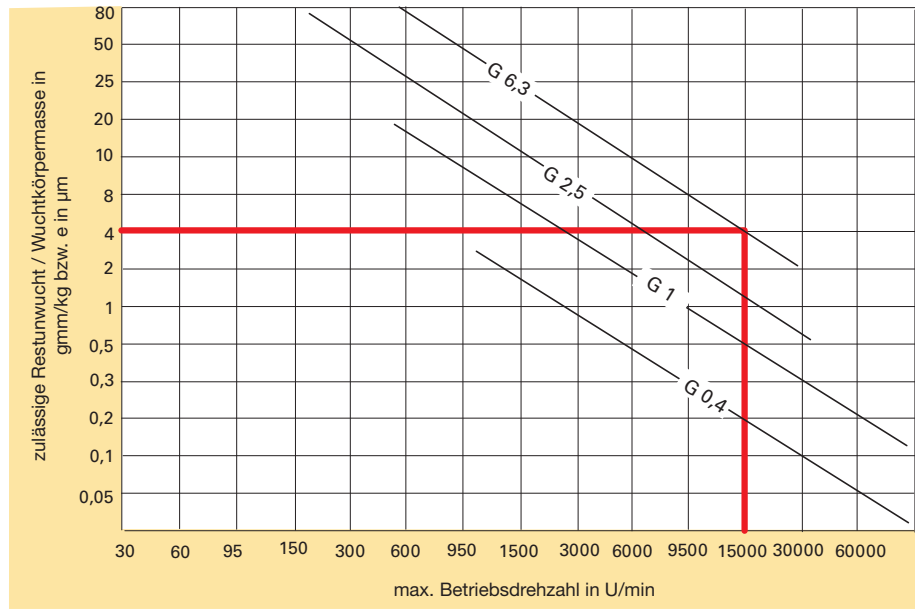
can be 5 to 10 μm , it means an initial quality limit of G2.5 or G6.3 respectively at 10,000 rev./min.

The following diagram shows the quality grades to DIN ISO 1940-1, i.e. the permissible rest imbalance in relation to the balance body mass for different counter balance qualities G relative to the maximum operating speed.

EFFECTS of IMBALANCE on MACHINE SPINDLES, TOOL HOLDERS and TOOLS



Balancing machine



Guhring tool holders are balanced to G6.3/15,000 rev./min. As an option, i.e. when specified by the machine tool manufacturer, it is possible to precision balance including balancing protocol to a rest imbalance of 0.3 gmm.

Calculation the balancing grade total of the assembled system:

Spindle - tool holder - tool

Illustration of balancing grade total

$$IB_{total} = IB_{spindle} + IB_{tool\ holder} + IB_{tool}$$

Example:

$$IB_{total} = IB_{spindle\ (G\ 0.4)} + IB_{tool\ holder\ (G2.5)} + IB_{tool\ (G6.3)}$$

Calculation of rest imbalance

$$U = \frac{G \cdot 60}{2 \cdot \pi \cdot n} \cdot m$$

m in g U in gmm

$$IB_{spindle} = \frac{0.4 \cdot 60}{2 \cdot \pi \cdot 30.000} \cdot 15.000 = 1.910$$

$$IB_{tool\ holder} = \frac{2.5 \cdot 60}{2 \cdot \pi \cdot 30.000} \cdot 1125 = 0.895$$

$$IB_{tool} = \frac{6.3 \cdot 60}{2 \cdot \pi \cdot 30.000} \cdot 215 = 0.431$$

$$m_{total} \text{ in g: } 16.340$$

$$IB_{total} \text{ in gmm: } 3.236$$

Balancing grade conversion of the total system

$$G = IB_{total} \cdot 2 \cdot \pi \cdot \frac{n}{60 \cdot m_{ges}}$$

Example:

$$G = 3.236 \text{ gmm} \cdot 2 \cdot \pi \cdot \frac{30.000 \frac{U}{min}}{60 \text{ s} \cdot 16340 \text{ g}} = 0,62$$

Spindle with 4-point clamping set
Guhring no. 4958,
code no. 48,000

2.25 gmm
2 µm

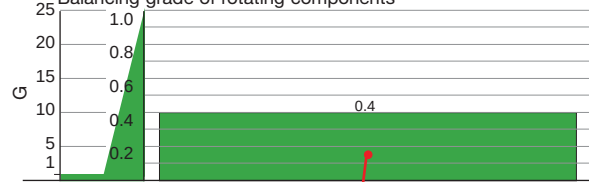
Hydraulic chuck
Guhring no. 4699
code no. 12,063

0.65 gmm
3 µm

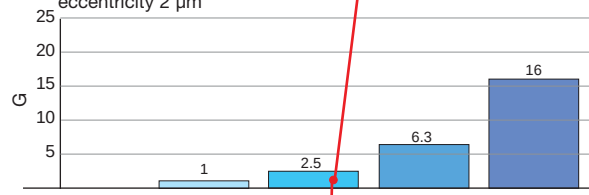
Die sinking cutter
Guhring no. 1942
code no. 12,000

Sum of
total system

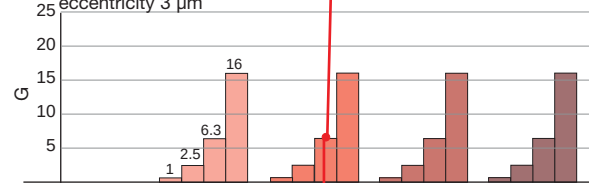
Spindle Balancing grade of rotating components



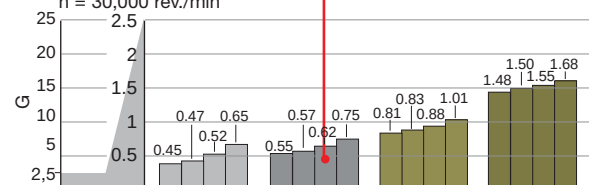
Tool holder eccentricity 2 µm



Tool eccentricity 3 µm



Balancing grade total n = 30,000 rev./min



TECHNICAL INFORMATION AND ADVANTAGES

Guhring's shrink fit chucks ensure an optimal connection between shrink fit chuck and shank tool.

While some manufacturers use conventional case hardened steel, Guhring applies a special, application orientated tool steel. The result is an increased expansion rate as well as improved temperature adaptability. There is no limit to the number of shrink fit insertion or withdrawal operations.

Advantages:

- short shrink fit times
- maximum clamping force
- shrink fit chucks available for tool shank diameters from 3 mm to 32 mm
- longevity

These advantages are of particular interest in the field of HSC milling, difficult and rough cutting operations, drilling, reaming and internal grinding operations as well as for woodworking.

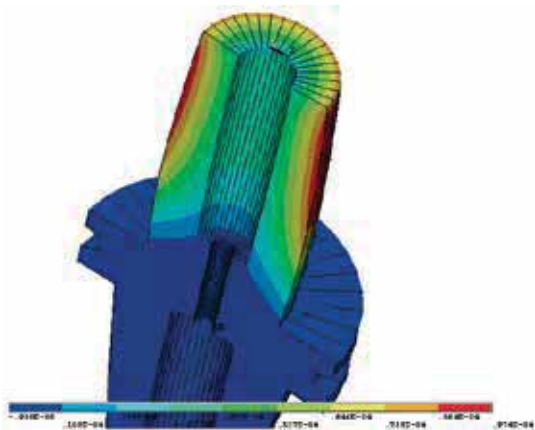
Convincing characteristics:

- excellent concentricity
- extreme clamping force and rigidity
- improved tool life
- insignificant imbalance through rotation symmetry
- economic efficiency

A gripping principle

When shrink fitting tools in shrink fit chucks, the decisive factors for ensuring the safe clamping of the tool in the tool holder are solely the heating and cooling of the tool holder. The heating process expands the shrink fit chuck enabling a tool to be inserted or withdrawn respectively. During the cooling process it contracts again and clamps the inserted tool with maximum clamping force.

Because the shrink fit chucks can become extremely hot in localized areas during the heating process and the tools shrink fitted for insertion or withdrawal respectively possess very sharp cutting edges, it is paramount that the operator wears Kevlar gloves during the shrink fit operation to prevent burns and cuts to the hands.



Shrink fit extensions: Increase performance

Shrink fit extensions increase the scope of a tool's performance and reduce tool surface imperfections. As with shrink fit chucks, the tool is clamped in the shrink fit extension and ideally in an hydraulic chuck. Naturally, shrink fit extensions can also be clamped in shrink fit chucks.

Perfect team: Guhring shrink fit chucks and shrink fit systems

For the shrink fitting for withdrawal and insertion of tools in our shrink fit chucks we offer various shrink fit systems to satisfy individual customer requirements: From high-tech solutions with integrated, highly accurate length pre-setting and special shrink fit systems for extra long tools to the multifaceted GSS 2000 with various equipment options:

- GSS 3001
- GSS 2000



1. The HSK holder must be clean, free of swarf and undamaged.
2. Grease the O-rings prior to assembly.
3. Centrally insert the complete coolant delivery set (coolant pipe, union nut and 2 O-rings) in the HSK with the assistance of the socket spanner.

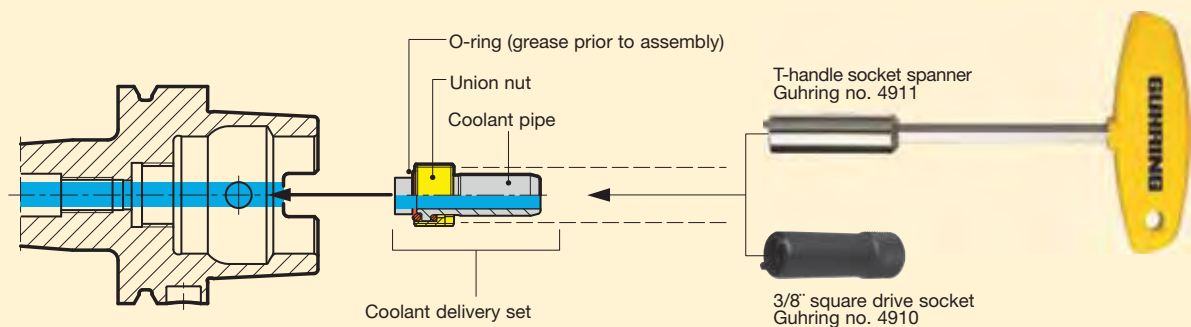
When inserting the MQL coolant delivery unit, it is paramount to ensure that the MQL pipe is inserted centrally and undamaged into the MQL length setting screw (do not kink).

4. Screw in the coolant delivery set/coolant delivery unit and tighten (see table for torque figures)
5. Check coolant pipe for radial mobility.

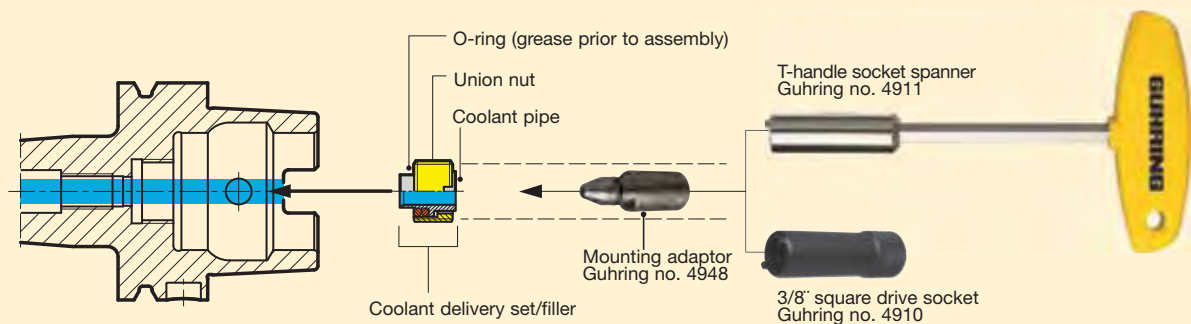
Torque figures

for HSK	MA Nm
32	7
40	11
50	15
63	20
80	25
100	30

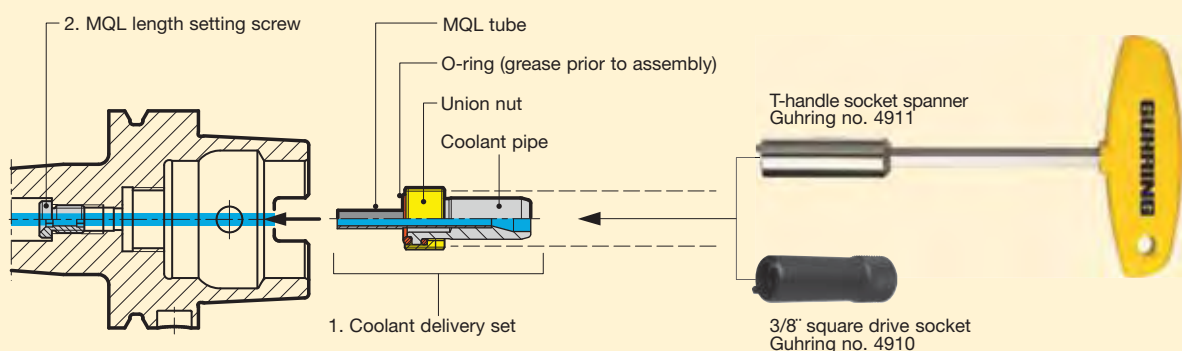
Installation of MQL coolant delivery set 4939



Installation of MQL coolant delivery set filler 4940



Installation of MQL coolant delivery unit 4623/4924



TECHNICAL INFORMATION AND ADVANTAGES

Clamping standard tool shanks to DIN 6535 in hydraulic chucks

Direct clamping
of tool preferred
run-out ≤ 0.003 mm

Form HA $\varnothing 6 \dots 20$ mm



Form HA $\varnothing 25 \dots 32$ mm

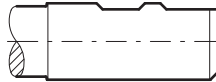


Form HB $\varnothing 6 \dots 20$ mm



Clamping of tool shank
only with reduction sleeves
run-out ≤ 0.005 mm

Form HB $\varnothing 25 \dots 32$ mm



Form HE $\varnothing 6 \dots 20$ mm



Form HE $\varnothing 25 \dots 32$ mm



General notes:

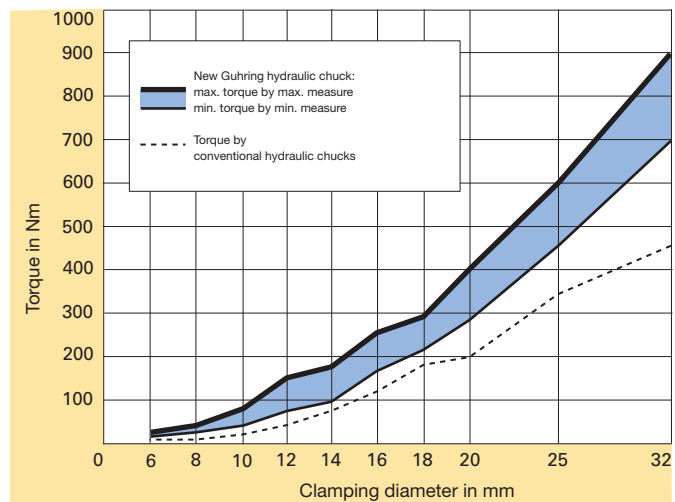
Our hydraulic chucks must not be operated with motor-driven tools (impulse screwdrivers or similar). The hexagonal key should not exceed the key size over its entire length, this largely prevents excessive torque being transferred. We recommend the hexagon clamping key, Guhring no. Art. 4912. A tightening moment of 10 Nm must not be exceeded.

Guhring Hydraulic chucks with increased clamping force

Hydraulic chucks are suitable for clamping rotary symmetrical tools or work pieces. Straight shank tools without drive flats may be clamped up to $\varnothing 32$ mm, but also shanks according to DIN 6535 form HA and HB up to $\varnothing 20$ mm without reduction sleeves. The given values in the table below are not to be exceeded. If the inserted length is less than the given minimum insertion depth or other tool shanks than specified above are applied, lower accuracy and breakage may occur.

Above all it is the high revolutions with High-Speed-Cutting operations that puts special demands on the tool holder. The clamping of the tool in a hydraulic chuck is, therefore, especially significant. Guhring has developed a hydraulic chuck that offers reliable and powerful clamping with higher torque figures, guaranteeing excellent tool clamping in the tool holder.

Combined with precise concentricity (max. 3 μ m deviation from concentricity), a very fast and simple tool change as well as the vibration cushioning effect of the pressure chamber, the new hydraulic chuck can tackle the most demanding of machining tasks. The result is optimal tool life and excellent surface qualities or dimensional accuracy of the work piece respectively.



Considerably higher:
The clamping force of Guhring's new HSK-A hydraulic chuck in comparison to conventional chucks.

TECHNICAL INFORMATION AND ADVANTAGES

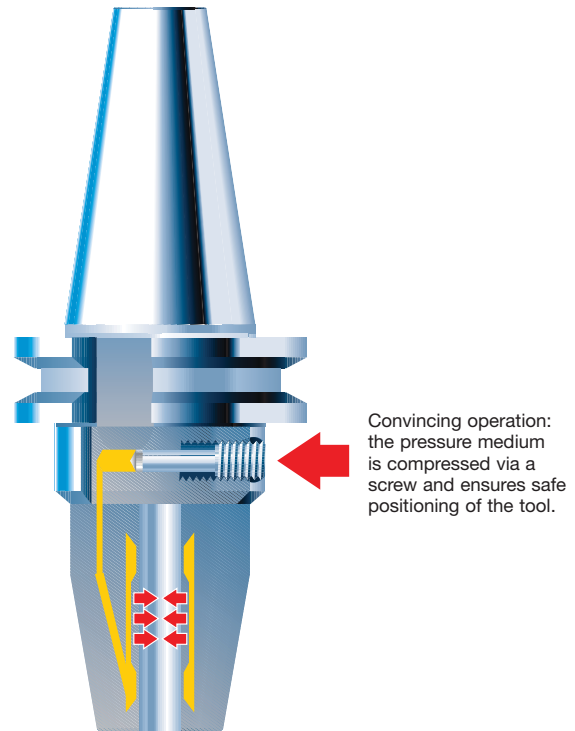
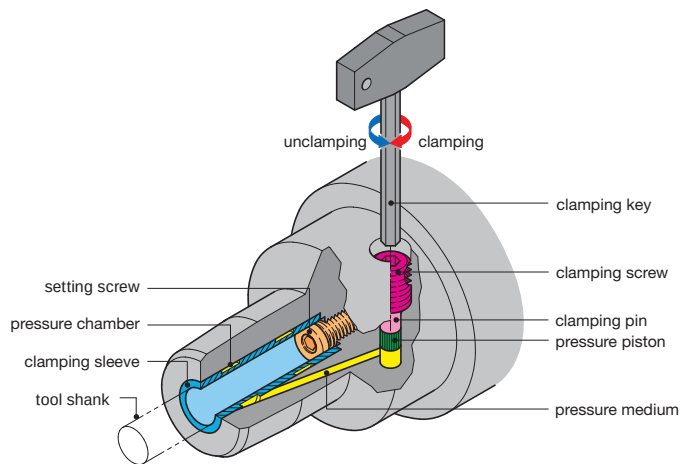
Modern machining processes place heavy demands on tool holding. Hydraulic chucks provide excellent clamping characteristics combined with precise concentricity.

Furthermore, they enable a simple and fast tool change, with the assistance of a special extraction key.

Turning the pressure screw generates sufficient pressure in the pressure chamber resulting in an elastic deformation of the clamping sleeve, providing powerful tool clamping and precise concentricity. A safe and powerful fit is guaranteed. If reduction sleeves are applied that are able to hold varying tool diameters, the tool application may be extended without problem. If such sleeves are not applied, it is essential to observe the minimum clamping length.

A summary of the advantages:

- Precise tool clamping with a maximum 3 µm deviation from concentricity
- Transmission of high torque through (excellent clamping) optimized bush clamping system
- High-speed compatibility (no centrifugal forces from clamping segments)
- Precise concentricity, therefore excellent surface qualities and dimensional accuracy of the work piece
- Rapid tool change thanks to simple operation of the clamping screw
- Optimal tool life
- Hydraulic cushioning has vibration absorbing effect

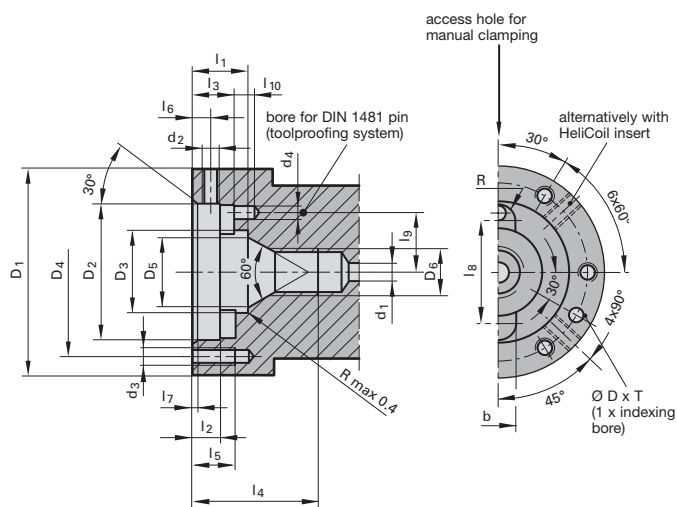


for shank-Ø in mm	max. r.p.m. in 1/min	max. transferable torque in Nm	min. insertion depth in mm	max. adjustment l ₃ mm	max. rad. force F on chuck with 50 mm from the nose in N	operating temperature in °F	max. coolant pressure in bar
6 h ₆	50 000	16	27	10	225	68 - 122	80
8 h ₆	50 000	26	27	10	370	68 - 122	80
10 h ₆	50 000	50	31	10	540	68 - 122	80
12 h ₆	50 000	82	36	10	650	68 - 122	80
14 h ₆	50 000	125	36	10	900	68 - 122	80
16 h ₆	50 000	190	39	10	1410	68 - 122	80
18 h ₆	50 000	275	39	10	1580	68 - 122	80
20 h ₆	50 000	310	41	10	1860	68 - 122	80
25 h ₆	25 000	520	47	10	4400	68 - 122	80
32 h ₆	25 000	770	51	10	6500	68 - 122	80

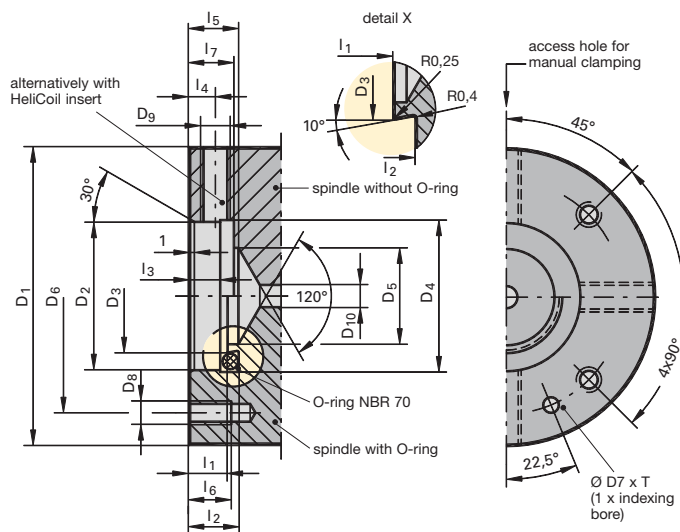
INSTALLATION DIMENSIONS FOR HSK ADAPTOR

Detailed production drawing on request

Short spindle adaptor (integr.) Guh. no. 4385



HSK adaptor (in front) Guh. no. 4386/4586



Short spindle adaptor (integr.) Guh. no. 4385

for HSK/Code no.	D1	D2	D3	D4	D5	D6	d ₁	d ₂	d ₃	d ₄
32 24,000	40	27.0	16.7	32.0	12.5	M 10	4.0	M 3	M 3	2
40 30,000	50	33.5	20.6	40.5	16.0	M 12	5.0	M 4	M 4	3
50 38,000	63	42.0	25.5	52.0	20.0	M 16	6.0	M 5	M 5	4
63 48,000	80	55.0	33.0	66.0	25.0	M 20	8.0	M 6	M 6	4
80 60,000	100	68.0	41.0	82.0	32.0	M 24	10.2	M 8	M 8	5

Short spindle adaptor (integr.) Guh. no. 4385 continuation

for HSK/Code no.	clamping depth l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	l ₈	l ₉	l ₁₀	b	R	D	T	locating pin DIN 1481
32 24,000	9.0	4.0	6.5	22	10	2.5	0.6	20.5	11.5	3.5	7.0	3.0	3.5	3.0	2 x 6
40 30,000	12.0	5.5	8.7	30	11	3.5	0.6	25.0	14.5	5.0	8.0	4.0	4.0	3.5	3 x 8
50 38,000	16.0	8.0	12.0	36	12	5.0	0.8	31.5	18.3	6.0	10.5	5.0	4.0	3.5	4 x 10
63 48,000	20.0	10.0	15.0	48	15	6.0	1.0	41.0	22.5	5.0	12.5	6.0	4.0	3.5	4 x 10
80 60,000	25.6	13.0	19.3	60	14	7.5	1.0	50.0	28.0	6.0	16.0	7.5	5.0	4.5	5 x 12

HSK adaptor (in front) Guh. no. 4386

for HSK/Code no.	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	T	O- ring
25 19,000	45	23	16.5	24	–	35	–	M5	M5	3.2	8.2	9.5	6.2	4.5	–	14	9	–	16x2
32 24,000	60	30	23.5	31	–	44	5	M5	M8x1	4.0	10.3	12.4	8.3	7.0	–	11	12	3.5	23x3
40 30,000	70	35	28.5	36	22	53	5	M6	M8x1	5.0	10.3	12.4	8.3	7.0	12	14	12	3.5	28x3
50 38,000	80	40	30.5	41	26	63	5	M6	M8x1	6.0	10.3	13.3	8.3	7.0	12	14	12	3.5	30x4
63 48,000	100	50	38.5	51	34	79	5	M8	M10x1	8.0	12.3	16.1	10.3	8.0	15	15	14	3.5	38x5
80 60,000	117	60	47.5	61	38	96	6	M8	M10x1	10.2	12.3	16.1	10.3	8.0	20	15	14	4.5	47x5
100 75,000	140	80	65	81	53	119	6	M10	M10x1	12.0	12.3	16.1	10.3	8.0	20	20	14	4.5	45x5

HSK adaptor (in front) Guh. no. 4586

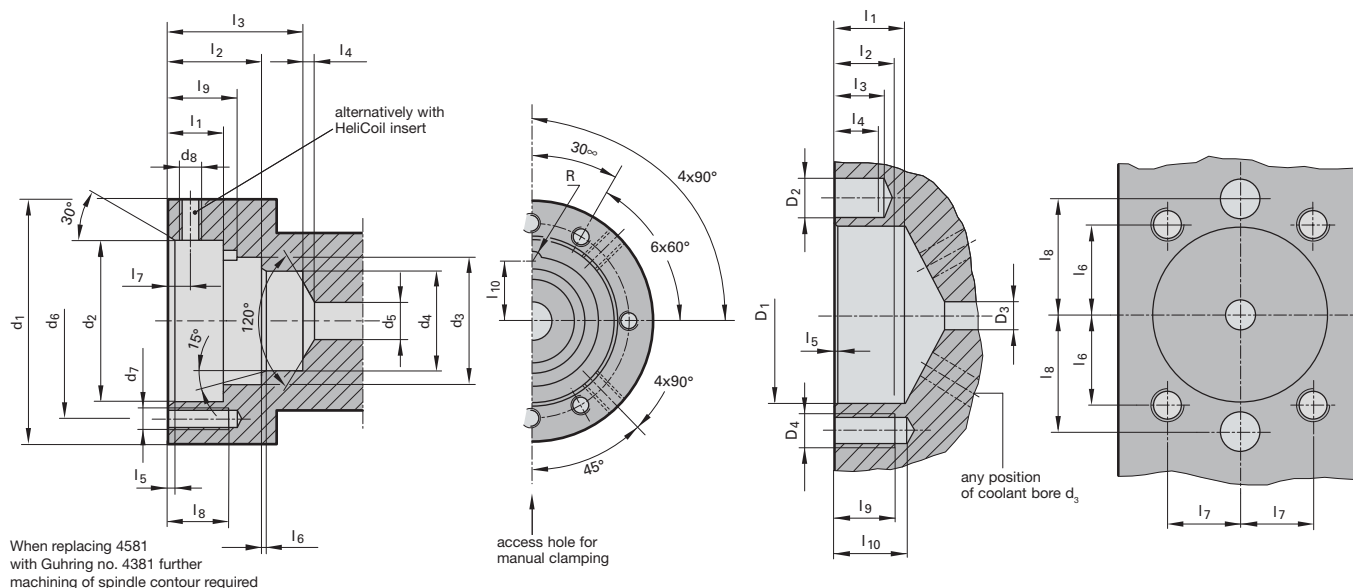
for HSK/Code no.	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	l ₁	l ₂	l ₃	l ₄	l ₅	l ₆	l ₇	T	O- ring
40 30,000	70	35	28.5	36	22	53	5	M6	M8x1	5.0	10.3	12.4	8.3	7.0	12	14	12	3.5	28x3
50 38,000	80	40	30.5	41	26	63	5	M6	M8x1	6.0	10.3	13.3	8.3	7.0	12	14	12	3.5	30x4
63 48,000	100	50	38.5	51	34	79	5	M8	M10x1	8.0	12.3	16.1	10.3	8.0	15	15	14	3.5	38x5
80 60,000	117	60	47.5	61	38	96	6	M8	M10x1	10.2	12.3	16.1	10.3	8.0	20	15	14	4.5	47x5
100 75,000	140	80	65.0	81	53	119	6	M10	M10x1	12.0	12.3	16.1	10.3	8.0	20	18	14	4.5	45x5

INSTALLATION DIMENSIONS FOR HSK ADAPTOR

Detailed production drawing on request

HSK adaptor (in front) Guh. no. 4581/4584

HSK adaptor (in front) Guh. no. 4582



HSK adaptor (in front) Guh. no. 4581

for HSK/Code no.	d_1	d_2	d_3	d_4	d_5	d_6	d_7	d_8	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8
25 19,000	45	23	-	-	5	35	M5	M4	6.8	-	-	1.5	1	-	3.5	min.8
32 24,000	55	28	21.12	17	6.4	43.5	M6	M4	6	9.75	16.75	2	1	0.6	3.5	11
40 30,000	63	36	26.4	21	8	51.5	M6	M4	7	11.3	19.9	2.5	1	1	4	12
50 38,000	80	46	33	26	10	65	M8	M5	9	14.7	25.5	3	1.5	1	5	12
63 48,000	100	56	42.5	34	16	81.5	M10	M6	12	17.8	30	3.5	1.5	1	6	16
80 60,000	125	66	52.8	42	16	103	M12	M8	14	22.7	39.8	4	2	1.5	8	16
100 75,000	160	86	66	53	20	130	M16	M10	16	27.4	49	4.5	2	2	10	16

HSK adaptor (in front) Guh. no. 4584

for HSK/Code no.	d_1	d_2	d_3	d_4	d_5	d_6	d_7	d_8	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	l_{10}	R
32 24,000	40	27.0	21.12	17	6.4	32.0	M 3	M 4	8.8	14.80	21.75	2.0	1.0	0.6	3.5	10.0	11.9	10.10	2.0
40 30,000	50	33.5	26.40	21	8.0	40.5	M 4	M 4	11.0	18.85	27.40	2.5	1.0	1.0	4.0	12.0	13.9	12.40	2.0
50 38,000	63	42.0	33.00	26	10.0	52.0	M 5	M 5	15.0	24.75	35.50	3.0	1.5	1.0	5.0	12.0	18.4	15.50	2.5
63 48,000	80	55.0	42.50	34	16.0	66.0	M 6	M 6	17.9	30.35	42.50	3.5	1.5	1.0	6.0	16.0	23.9	20.00	3.0
80 60,000	100	68.0	52.80	42	16.0	82.0	M 8	M 8	24.3	40.25	57.30	4.0	2.0	1.5	8.0	16.0	32.9	24.80	3.5
100 75,000	125	88.0	66.00	53	20.0	106.0	M10	M10	34.4	54.45	76.00	4.5	1.5	2.0	10.0	16.0	42.4	31.40	4.5

HSK adaptor (in front) Guh. no. 4582

for HSK/Code no.	d_1	d_2	d_3	d_4	l_1	l_2	l_3	l_4	l_5	l_6	l_7	l_8	l_9	l_{10}
50 38,000	50	7.95	10	M10	20.55	20	15	11	1	27.44	19.22	33.5	20	25
63 48,000	63	14.00	10	M12	25.00	21	18	16	1	31.70	26.00	41.0	22	26

INTELLIGENT SOLUTIONS OPTIMIZE TM TOOL MANAGEMENT

The Guhring software can be linked to all enterprise resource planning and IT systems.

External systems such as vertical or lift systems can be controlled and managed directly via an interface.

Guhring's tool dispensing systems send reports to the materials management, the purchasing department, controlling and management and to the tool management.

By integrating the software into the existing infrastructure, the GTMS can further serve as a research tool for work planning, design and purchasing.



Thanks to a coordinated delivery and re-grind service all production relevant working materials and tools can be optimally and punctually made available.



If required, the GTMS triggers ordering suggestions and coordinates delivery and re-grind services.

With the assistance of Guhring's TM software (GTMS) it is also possible to completely automate the procurement process for tools.

GUN DRILLS

For deep holes from $\varnothing$ 0.9 to 40.00 mm
up to max. 3000 mm overall length



EB 800

EB 80

ZB 80

EB 100





Bloomfield, CT



Huntington Beach, CA



Brookfield, WI



New Hudson, MI

Coating and Reconditioning Services

Guhring opened its fourth reconditioning center, in Bloomfield, CT. The new facility provides reconditioned carbide tools and PVD coatings.

The other reconditioning facilities are in Brookfield, WI., New Hudson, MI., and Huntington Beach, CA.





PCD/CBN TOOLS



Visit www.guhring.com
for more information



Complete Program

Tapping, fluteless tapping
and thread milling



Download the **GUHRING, INC.** iPad Application.

DETAILED PRODUCT INFORMATION

With the Guhring iPad application, everything you need to know about a cutting tool's series/size is a tap away.

FIND A SERIES

Not sure about which is the right Guhring product for the application? The Guhring iPad App can help.

LOCATE THE RIGHT SIZE

The Guhring iPad app allows you to easily view the sizes in the standard offering.

REAL TIME STOCK

(Registered Distributors)

Select your desired size, and check availability.

FIND A GUHRING DISTRIBUTOR

Need to locate a Guhring distributor nearby? It has never been easier.

GUHRING CATALOGS

Take the entire family of Guhring products with you anywhere.

E-LEARNING

Whether you are new to the industry, or need a refresher, our App allows you to give a quick tutorial or brush up on your cutting tool knowledge. Our library consists of tutorials, product videos, and additional content.



Download on the
App Store

Series	Tool	Page	Series	Tool	Page
4003	CAT / HSK-C basic adaptors	185	4327	HSK-A synchro tapping chucks	99
4038	Senso 3000	190	4328	HSK-A Quick change tapping chucks with internal cooling	102
4068	PQ 3000	191	4329	HSK-A Weldon side lock holders	109
4076	CC 3000	192	4333	Whistle Notch HSK-C side lock holders	111
4077	CC 3000	192	4334	Whistle Notch HSK-A Weldon side lock holders	110
4087	CAT side lock holder extra short	84	4335	Sealing washers	128
4095	Reduction sleeves for floating holders	156	4340	Quick change tapping chucks without internal cooling	101
4096	Reduction sleeves for short floating holders	156	4342	Quick change tapping chucks with internal cooling	101
4097	Reduction sleeves for mini floating holders	157	4343	HSK-A adaptors for tapping chucks	84
4098	Floating holder with ER collet holder	154	4350	HSK-A/HSK-C extensions with MQL 4-point clamping sets	175
4099	Extraction key for reduction sleeves	28	4351	HSK-C extensions	175
4116	Floating ER Collet holder VDI DIN 69880-1	155	4355	HSK-A/HSK-C reductions	174
4117	Floating side lock holder VDI DIN 69880-1	155	4360	Modul 4x4 hydraulic chuck flange	149
4167	Floating side lock holder	153	4361	HSK-A shell milling arbors	135
4169	Floating, short side lock holder	153	4362	GÜHROJET HSK-A milling arbors	132
4174	Floating, mini side lock holder	154	4363	Modul 6x6 HSK adaptor flange	147
4175	Collet holder ER metallic sealed	127	4364	Setting screws "face" synchro tapping chucks, int. cooling	85
4206	Quick change tapping chuck adaptors	103	4368	Reduction sleeves, sealed, for hydraulic chucks	24
4213	ISO taper hydraulic chucks with increased clamping force	20	4369	GÜHROJET Reduction sleeves for hydraulic chucks	26
4216	CAT hydraulic holder	23	4385	Short HSK spindle adaptors (integrated)	173
4221	MAS/BT hydraulic chucks with increased clamping force	22	4386	HSK spindle adaptors (in front)	173
4230	GÜHROJET MAS/BT milling arbors	134	4387	ISO taper/HSK-C basic adaptor for spindles to DIN 2079	174
4231	GÜHROJET ISO taper milling arbors	133	4397	HSK-E collet holders	121
4232	GÜHROJET HSK-A Weldon side lock holders	108	4419	Cooling adaptor set, complete	58
4233	Whistle Notch MAS/BT side lock holders	115	4508	MQL 1-channel coolant delivery set HSK-A	92
4234	GÜHROJET MAS/BT Weldon side lock holders	114	4511	MQL 2-channel coolant delivery set HSK-A	92
4235	Clamping sleeves for precision clamping chucks	70	4512	SK / HSK-C basic adaptors	184
4236	GÜHROJET Clamping sleeves, imp., f. precision clamp. chucks	71	4513	MQL coolant delivery set HSK-A (filler)	93
4237	Clamping sleeves, imp., f. prec. clamp. chucks, sealed version	72	4514	MAS/BT / HSK-C basic adaptors	184
4243	CAT precision clamping chucks	68	4524	MQL hydraulic synchro tapping chucks with internal cooling	90
4244	MAS/BT precision clamping chucks	68	4525	Straight shank hydraulic synchro tapping chucks	83
4245	MAS/BT collet holders	122	4549	HSK-A/HSK-C extensions	185
4267	HSK-C hydraulic chucks with increased clamping force	17	4551	Spring and threaded pin	181
4295	HSK-C hydraulic chucks with radial length adjustment	18	4554	PowerClamp sets	181
4296	HSK-A hydraulic chucks with radial length setting	16	4555	Threaded spindle	181
4297	Modul 4x4 HSK-A alignment adaptor	148	4557	Tensioning nut set	181
4299	HSK-A hydraulic chucks with increased clamping force	14	4576	ISO taper hydraulic synchro tapping chucks	81
4300	HSK-A precision clamping chucks	67	4577	MAS/BT hydraulic synchro tapping chucks	82
4301	ISO taper precision clamping chucks	67	4581	HSK adaptors (in front)	182
4302	GÜHROJET Clamping sleeves, for precision clamping chucks	69	4582	HSK adaptors for turning centers	183
4303	HSK-C collet holders	119	4584	Short HSK spindle adaptors (integrated)	183
4304	HSK-A collet holders	117	4586	HSK spindle adaptors (in front)	182
4305	MQL setting screws with internal taper for synchro chucks	91	4601	HSK-A hydraulic synchro tapping chucks	80
4306	Retaining nuts, system DIN ISO 15488	131	4602	MQL HSK-A 1-channel hydraulic synchro tapping chucks	87
4307	Collets DIN ISO 15488	125	4603	MQL HSK-A 2-channel hydraulic synchro tapping chucks	88
4308	Tapping collets	100	4604	MQL HSK-A hydraulic synchro tapping chucks	89
4317	GÜHROJET Weldon ISO taper side lock holders	112	4605	Sealed reduction sleeves for hydraulic synchro tapping chucks	94
4318	ISO taper collet holders	122	4606	GÜHROJET reduction sleeves for hydraulic synchro chucks	96
4322	Whistle Notch ISO taper side lock holders	113	4615	M contour clamping sets for MQL and IC	167
4323	HSK-C collet holders, sealed version	120	4616	Assembly / disassembly tool for M contour clamping sets	168
4324	HSK-A collet holders, sealed version	118	4618	HSK-A hydraulic chucks HMC 3000 for small clamping dia.	13
4326	Synchro tapping chucks with straight shank	99	4619	ISO taper hydraulic chucks HMC 3000 for small clamping dia.	19

Series	Tool	Page	Series	Tool	Page
4620	MAS/BT hydraulic chucks HMC 3000 for small clamping dia.	21	4914	HSK cleaning mandrels	195
4624	Assembly / disassembly tool for M contour clamping sets	168	4915	Torque wrenches	198
4713	Modul 4x4 HSK adaptor flange	151	4916	Socket/attachments	198
4714	Modul 6x6 HPC clamping chuck flange	147	4918	Cylindrical cleaning mandrels	196
4715	Angle alignment units f. mod. flange/alignment adapter 6x6/4x4	152	4919	MQL length pre-setting screws for conversion	29
4716	Intermediate sleeves f. mod. flange/alignment adapter 6x6/4x4	152	4921	Hexagon-socket offset screw keys	199
4717	Modul 6x6 shrink fit chuck flange	146	4922	Drive dog sets for shell milling arbors	136
4718	Universal length setting adaptor	48	4923	Feather keys DIN 6885 A	135
4719	Shrink fit extensions	47	4924	MQL coolant delivery sets HSK-A for conversion	30
4722	Modul 6x6 hydraulic chuck flange	145	4930	GÜHROCLAMP MQL 4-point clamping sets for MQL and IC	165
4723	Module 6x6 HSK-A alignment adapter	143	4931	Spindle with clamping jaws	165
4724	Modul 4x4 ISO taper alignment adaptor	148	4932	Ejector with tube	165
4725	Modul 6x6 ISO taper alignment adapter	144	4933	Retention spindles f. GÜHROCLAMP MQL 4-point clamp. sets	166
4729	ISO taper shrink fit chucks GÜHROJET	42	4934	Adaptor for GÜHROCLAMP MQL 4-point clamping sets	166
4730	GSS 2000 Basic	59	4935	Retention screw for GÜHROCLAMP MQL 4-point clamping sets	167
4736	HSK-A shrink fit chucks	34	4938	Adjustment screws for Gührojet shrink fit chucks	49
4737	HSK-E shrink fit chucks	39	4941	Length adjustment screw for conventional cooling	50
4738	ISO taper shrink fit chucks	40	4946	Tool setting fixture	197
4739	MAS/BT shrink fit chucks	43	4947	HSK cleaning cap	195
4742	GSS 2000 Comfort version	56	4949	HSK-A coolant delivery sets for conventional cooling	193
4743	Induction coil	61	4953	Brass locking rings	186
4744	GSS 2000 ISO taper holders	56	4955	Data coding chip	193
4745	GSS 2000 HSK holders	56	4957	Component parts f. 4-point clamp. set Guh. no. 4958, separate	172
4747	SpeedCooler Cooling system	61	4958	4-point clamping sets for conventional cooling	172
4748	System cart	57	4959	Component parts f. 4-point clamp. set Guh. no. 4958, set	172
4749	Tongs	57	4961	Pressure ball screws	186
4750	Protective gloves	58	4963	Torque supports	176
4752	GSS 2000 Eco-Plus	59	4970	Taper proofing bars ISO	188
4755	HSK-A shrink fit chucks GÜHROJET with peripheral cooling	37	4971	Taper proofing bars HSK	188
4758	HSK-C shrink fit chucks	38	4973	Clamping force measuring instrument	189
4759	SpeedCooler Manager	61	4974	Clamping force measuring instrument	189
4760	Modul 4x4 shrink fit chuck flange	150	4975	Balancing masters for HSK spindles	188
4761	HSK holder carriers GSS 2000	60	4976	Centrifugal rings for short spindles to DIN 69002-3	199
4762	ISO taper holder carriers GSS 2000	60	4977	Shrink fit chuck length setting screw with axial force damping	49
4763	Swivel compartments for GSS 2000	57	4982	HSK-C blanks	137
4764	CAT shrink fit holder	45	4983	HSK-A blanks	137
4765	CAT GÜHROJET shrink fit holder	46	4985	HSK-C sealing plugs	196
4769	Limit stop collars	61	4990	Tool setting fixture	197
4900	Adjustment screws	29	4991	Interchangeable discs	197
4901	Adjustment screws for HSK-C collet holders	124			
4902	Adjustment screws for HSK-A/HSK-E collet holders	123			
4903	Clamping screws	116			
4904	Adjustment screws	116			
4905	Adjustment screws	116			
4906	Setting screws for tapping collets	104			
4907	Screws DIN EN ISO 4762 (former DIN 912)	136			
4908	Milling cutter retaining screws	136			
4909	Socket wrenches for retaining screws	136			
4910	Sockets	194			
4911	Sockets	194			
4912	Hexagon clamping keys	199			
4913	Clamping key	123			

GUHRING

The Tool Company

DRILLING



TAPPING/THREADMILLING/FLUTELESS TAPPING



MILLING



REAMING



PCD/PCBN



SPECIAL TOOLING SOLUTIONS



COUNTERSINKING/DE-BURRING



MODULAR TOOLING SYSTEMS



TOOL RECONDITIONING SERVICE



Guhring, Inc. Main Office

P.O. Box 643, Brookfield, WI 53008-0643

Shipping Address

1445 Commerce Avenue

Brookfield, WI 53045

Tel (262) 784-6730 (800) 776-6170

Fax (262) 784-9096

West Coast Distribution Center and Reconditioning Facility

15581 Computer Ln
Huntington Beach, CA 92649

Reconditioning Facility

121 W Dudley Town Rd.
Bloomfield, CT 06002

Manufacturing and Reconditioning Facility

29550 W.K. Smith Rd. Suite B
New Hudson, MI 48165

Guhring Corporation

20 Steckle Place, Unit #14
Kitchener, ON N2E 2C3

Tel (519) 748-9664 (800) 463-5555

Fax (519) 748-2954