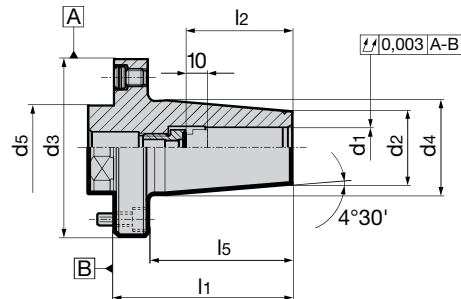


Product information

- 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 Series no. 4941
- incl. 6 angular alignment sets
Series no. 4715
- incl. 6 clamping screws
- order intermediate tube Series no. 4716
separately
- further dimensions on request



Series no.											4717
Modul-Ø d3 mm	für Schaft-Ø d1 h6 mm	d2 mm	d4 mm	d5 mm	l1 mm	l2 mm	l5 mm	incl. setting screw art. no. 4941	intermediate sleeve tube art. no. 4716	Code no.	EDP Number
60	6	21	27	30	70	36	56	6.100	14.010	6.060	9047170060600
60	8	21	27	30	70	36	56	8.100	14.010	8.060	9047170080600
60	10	24	32	30	70	40	56	10.100	14.020	10.060	9047170100600
60	12	24	32	30	70	45	56	12.100	14.030	12.060	9047170120600
70	12	24	32	35	75	45	60	12.100	14.020	12.070	9047170120700
70	14	27	34	35	75	45	60	14.100	14.020	14.070	9047170140700
70	16	27	34	35	75	48	60	16.100	14.040	16.070	9047170160700
80	18	33	42	40	80	48	65	18.100	14.050	18.080	9047170180800
80	20	33	42	40	80	50	65	20.100	14.040	20.080	9047170200800
100	25	44	52	50	80	56	61	25.100	20.010	25.100	9047170251000
100	32	44	52	50	80	60	61	32.100	20.020	32.100	9047170321000

**Holders for
fine machining**

4949

Coolant supply
set HSK-A
(conventional)



4939

MQL 1-channel
coolant supply
set HSK-A



4940

MQL 1-channel
coolant supply
set HSK-A (filler)



4723

Module
HSK-A
alignment adaptor



4725

Module
SK taper
alignment adaptor



4712

Module
taper
alignment adaptor BT



machine spindle
direct installation



Intermediate sleeve



4716

Intermediate sleeve



4363

Module
HSK adaptor
flange



4722

Module
hydraulic chuck
flange



4717

Module
shrink fit chuck
flange



4714

Module
HPC clamping chuck
flange



Holders for
fine machining

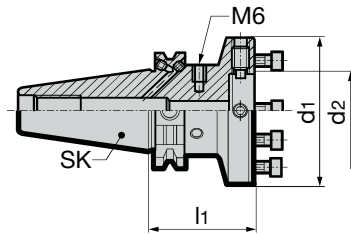
Module 6x6 SK taper alignment adaptor

Product information

- ISO taper to DIN ISO 7388-1 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
- SK40 - M16 x 2.0 retention knob
- SK50 - M24 x 3.0 retention knob

Scope of delivery

- incl. 6 screws for radial adjustment
- incl. 6 clamping screws



Series no.

4725

SK	d ₁ mm	d ₂ mm	l ₁ mm	Code no.	EDP Number
40	60	30	50	60.040	9047250600400
40	70	35	50	70.040	9047250700400
40	80	40	55	80.040	9047250800400
40	100	50	60	100.040	9047251000400
50	60	30	50	60.050	9047250600500
50	70	35	50	70.050	9047250700500
50	80	40	50	80.050	9047250800500
50	100	50	60	100.050	9047251000500
50	117	60	60	117.050	9047251170500
50	140	80	60	140.050	9047251400500

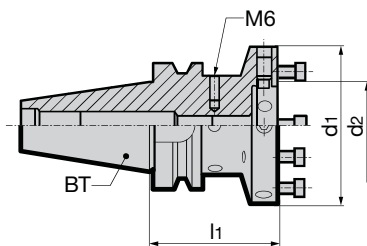
Module 6x6 taper alignment adaptor BT

Product information

- MAS/BT to DIN ISO 7388-2 form AD
- 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
- BT30 - M12 x 1.75 retention knob
- BT40 - M16 x 2.0 retention knob
- BT50 - M24 x 3.0 retention knob

Scope of delivery

- incl. 6 screws for radial adjustment
- incl. 6 clamping screws



Series no.

4712

BT	d ₁ mm	d ₂ mm	l ₁ mm	Code no.	EDP Number
30	60	30	50	60.030	9047120600300
30	70	35	50	70.030	9047120700300
40	60	30	55	60.040	9047120600400
40	70	35	55	70.040	9047120700400
40	80	40	65	80.040	9047120800400
40	100	50	70	100.040	9047121000400
50	60	30	70	60.050	9047120600500
50	70	35	70	70.050	9047120700500
50	80	40	70	80.050	9047120800500
50	100	50	70	100.050	9047121000500
50	117	60	80	117.050	9047121170500
50	140	80	80	140.050	9047121400500

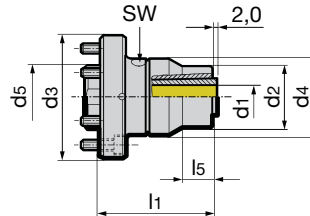
Module 6x6 HPC clamping chuck flange

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



Series no. 4714											EDP Number	
Module-Ø d3 mm	nom. size	for shank Ø d1 h6 mm	d2 mm	d4 mm	d5 mm	l1 mm	l5 mm	intermediate sleeve tube Series no. 4716	SW	Code no.		
70	20	3 - 20	40	53	35	87	20	20.030	4	20.070	9047140200700	
80	20	3 - 20	40	53	40	73	20	20.030	4	20.080	9047140200800	
100	25	16-32	53	63	50	118	-	20.030	4	25.100	9047140251000	

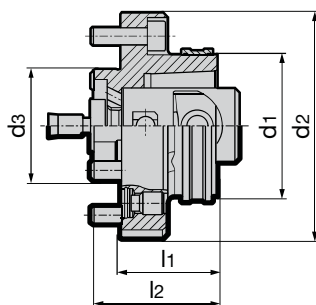
Module 6x6 HSK adaptor flange

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
- for holding HSK-A/C shanks to ISO 12164-1/DIN 69893

Scope of delivery

- incl. MQL 4-point clamping set Series no. 4930
- incl. clamping screw Series no. 4935
- incl. brass lock ring Series no. 4953
- incl. 6 angular alignment sets Series no. 4715
- incl. 6 clamping screws
- incl. intermediate tube Series no. 4716



Holders for
fine machining



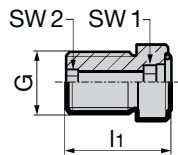
Series no. 4363								EDP Number	
HSK-C d1 mm	Module-Ø d2 mm	d3 mm	kg	l1 mm	l2 mm	intermediate sleeve tube Series no. 4716	Code no.		
32	60	30	0.4	26	36	24.060	24.060	9043630240600	
40	70	35	0.6	30	40	30.070	30.070	9043630300700	
50	80	40	1.0	35	45	238.080	38.080	9043630380800	
63	100	50	1.8	43	55	48.100	48.100	9043630481000	
80	117	60	2.9	50	62	60.117	60.110	9043630601100	
100	140	80	5.8	75	87	75.140	75.140	9043630751400	

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 no. **4941**

for HSK-A	clamping- Ø	G	d ₁ mm	l ₁ mm	SW1	SW2	Code no.	EDP Number
40	6	M5	6.0	14.9	2.5	-	6.0400	9049410060400
40	6	M7x1	5.8	15.0	2.5	-	6.0410	9049410060410
40	8	M7x1	5.8	18.0	3	-	6.0500	9049410060500
50	6	M8x1	5.8	14.0	2.5	-	6.1000	9049410061000
50	8	M8x1	6.8	18.0	3	-	8.0400	9049410080400
40 / 50	10	M8x1	9.8	17.7	4	-	8.0500	9049410080500
63/ 80/ 100	6	M10x1	5.8	17.0	2.5	-	8.1000	9049410081000
63/ 80/ 100	8	M10x1	7.8	17.0	3	-	10.0500	9049410100500
63/ 80/ 100	10	M10x1	9.8	16.2	4	-	10.1000	9049410101000
40/ 50/ 63/ 80/ 100	12	M10x1	9.8	16.0	5	-	12.1000	9049410121000
40/ 50/ 63/ 80/ 100	14	M10x1	9.8	17.2	5	-	14.1000	9049410141000
50/ 63/ 80/ 100	16	M12x1	15.8	18.2	6	-	16.1000	9049410161000
50/ 63/ 80/ 100	18	M12x1	15.8	19.2	6	-	18.1000	9049410181000
50/ 63/ 80/ 100	20	M16x1	15.8	19.2	6	8	20.1000	9049410201000
63/ 80/ 100	25	M16x1	15.8	22.7	6	8	25.1000	9049410251000
63/ 80/ 100	32	M16x1	15.8	26.7	6	8	32.1000	9049410321000

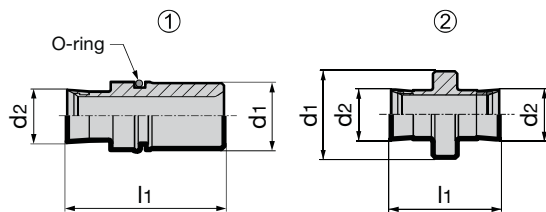
Intermediate sleeves for module flange and alignment adaptor 6x6 and 4x4

Product information

- for sealing when machining with either coolant or MQL
- Design without O-ring for HSK module adaptor flange art. no. 4363 and art. no. 4713

Scope of delivery

- with O-ring and sealing lip
- Series no. 4617 1.140



Series no. **4716**

d ₁ mm	for d ₂ mm	l ₁ mm	O-ring	type	Code no.	EDP Number
14	10.5	47.5	10x1.5	1	14.01	9047160140100
14	10.5	32.0	10x1.5	1	14.02	9047160140200
14	10.5	37.5	10x1.5	1	14.03	9047160140300
14	10.5	26.5	10x1.5	1	14.04	9047160140400
14	10.5	31.5	10x1.5	1	14.05	9047160140500
20	10.5	28.0	17x1.5	1	20.01	9047160200100
20	10.5	25.5	17x1.5	1	20.02	9047160200200
20	10.5	16.5	17x1.5	1	20.03	9047160200300
4	10.5	26.1	–	1	24.060	9047160240600
5	10.5	21.9	–	1	30.070	9047160300700
6	10.5	21.9	–	1	238.080	9047162380800
7	10.5	31.7	–	1	48.100	9047160481000
10	10.5	28.6	–	1	60.117	9047160601170
12	10.5	36.4	–	1	75.140	9047160751400
17.8	10.5	22.3	–	2	60.100	9047160601000
17.8	10.5	26.3	–	2	117.140	9047161171400

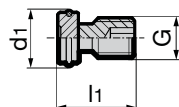
Angle alignment units for module flange and alignment adaptor 6x6 and 4x4

Product information

- for accurate angle alignment of module flanges

Scope of delivery

- pressure disc, threaded pin and snap ring



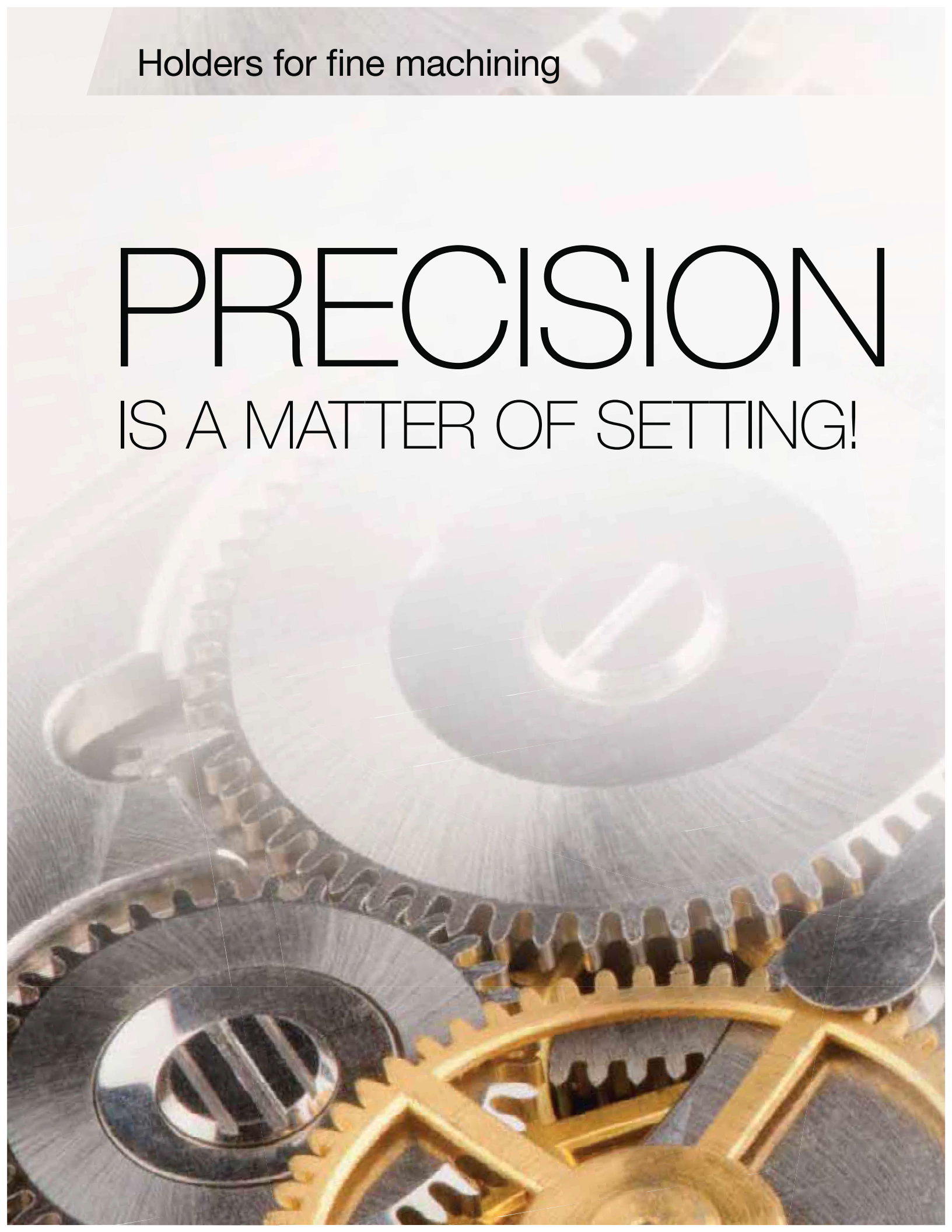
Series no. **4715**

for module	G	d ₁ mm	l ₁ mm	Code no.	EDP Number
60 / 70 / 80	M8x1	11.5	13	8.01	9047150080100
100 / 117 / 140	M10x1	13.6	19	10.01	9047150100100

Holders for
fine machining

Holdings for fine machining

PRECISION IS A MATTER OF SETTING!





**QUICK + SIMPLE
ADJUSTMENT**



**AXIAL + RADIAL
 μ -ACCURATE SETTING**



**CONCENTRICITY AND
ALIGNMENT ERROR
COMPENSATION**



MQL SUITABLE

