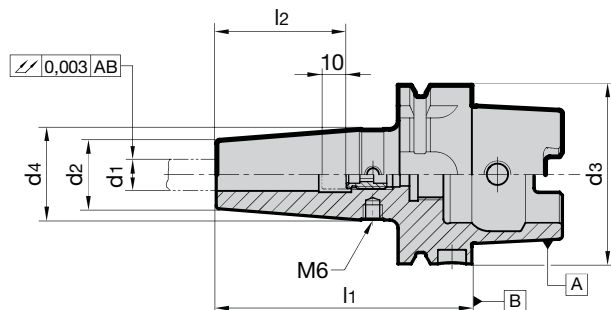


Product information

- balancing quality: G2.5 / 25,000 rev./min or U < 1 gmm
- incl. balancing thread 4xM6/6xM6
- to DIN 69882-8
- for tool shank tolerance h6
- also available in the lengths
l1 = 120 mm (concentricity 4 µm),
160 mm (concentricity 5 µm)
and 200 mm (concentricity 7 µm)
- HSK-A to ISO12164-1 / DIN 69893-1



Scope of delivery

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



Shrink fit technology

									Series no.	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 art. no. 4941 ...	kg	Code no.	EDP Number	
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	30	75	41	9049770100140	0.30	10.032	9047360100320	
32	12	24	30	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	

Series no. **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 art. no. 4941 ...	kg	Code no.	EDP Number
63	12	24	32	90	46	9049770120140	0.90	12.063	9047360120630
63	14	27	34	90	46	9049770120140	1.00	14.063	9047360140630
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	32	44	53	120	61	9049770201140	1.70	32.063	9047360320630
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	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
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

									Series no.	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 art. no. 4941 ...	kg	Code no.	EDP Number	
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	

Shrink fit technology

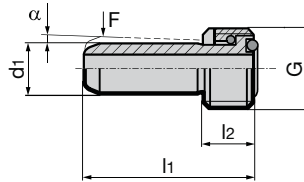
Coolant supply sets for conventional cooling

Product information

- leak-proof screwed connection tested to 80 bar
- to DIN 69895
- F = angle movability $\pm 1^\circ$
- for HSK-A and HSK-E shanks

Scope of delivery

- incl. union nut and O-rings



Series no.

4949

for HSK-A	d ₁ mm	α°	F	G	l ₁ mm	l ₂ mm	EDP Number
32	6	1.2	5N	M10x1.0	26.0	5.5	9049490100320
40	8	1.4	5N	M12x1.0	29.5	7.5	9049490120400
50	10	1.3	6N	M16x1.0	33.0	9.5	9049490160500
63	12	1.3	6N	M18x1.0	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

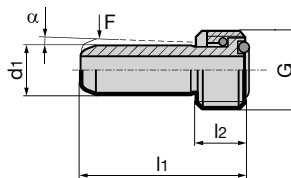
Coolant supply sets for conventional cooling with filter

Product information

- leak-proof screwed connection tested to 80 bar
- similar DIN 69895
- with filter for contamination-free cooling
- protects against tool breakage and eases error analysis
- F = angle movability $\pm 1^\circ$
- for HSK-A and HSK-E shanks

Scope of delivery

- incl. union nut and O-rings
- 100µ stainless steel fabric filter



Series no.

4979

for HSK-A	d ₁ mm	α°	F	G	l ₁ mm	l ₂ mm	EDP Number
32	6	1.2	5N	M10x1	26.0	5.5	9049790100320
40	8	1.4	5N	M12x1	29.5	7.5	9049790120400
50	10	1.3	6N	M16x1	33.0	9.5	9049790160500
63	12	1.3	6N	M18x1	36.5	11.5	9049790180630
80	14	1.4	7N	M20x1.5	40.0	13.5	9049790200800
100	16	1.4	7N	M24x1.5	44.0	15.5	9049790241000

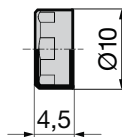
Data coding chip

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



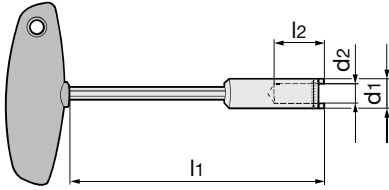
Series no.

4955

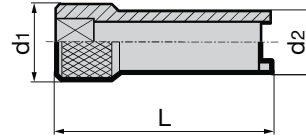
coding chip BIS C-122-04/L	EDP Number
10 x 4.5	9049550100000

Product information

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

**Product information**

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



Series no. 4911

for HSK	d1 mm	d2 mm	l1 mm	l2 mm	EDP Number
32	11,0	6,1	128	23,0	9049110240000
40	13,0	8,1	134	26,0	9049110300000
50	15,0	10,1	134	28,0	9049110380000
63	17,0	12,1	135	31,5	9049110480000
80	20,0	14,1	138	32,0	9049110600000
100	22,5	16,1	138	35,0	9049110750000

Series no. 4910

for HSK	MA Nm	d1 mm	d2 mm	L mm	EDP Number
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 supply sets 4949/4979

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 supply set (coolant pipe, union nut and 2 O-rings) in the HSK with the assistance of the socket spanner.
4. Screw in the coolant supply set/coolant supply 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

