

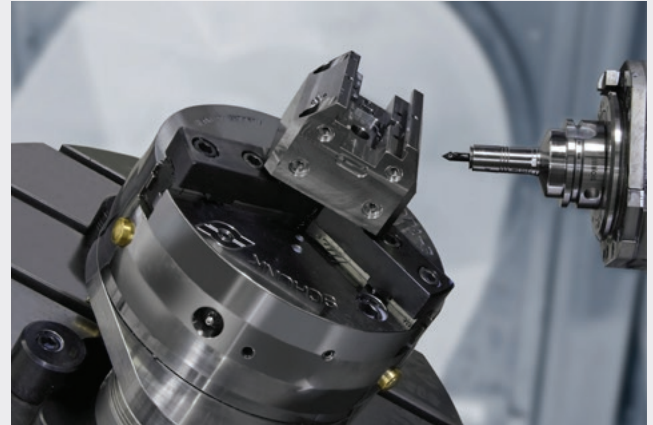


T|R|B|O|S®-S
Slim. Precise. Fast.

Hand in hand for tomorrow

Extremely slim design! Precise in the tightest machining conditions. If workpiece areas are hard to reach and conventional clamping systems have reached their limits, TRIBOS-S polygonal toolholders with their extremely slim design are the best choice. The highest permanent run-out and repeat accuracy of ≤ 0.003 mm ensures a more even cutting action, thereby improving the tool service life by four times over.

Ideally suited for machining workpieces that are difficult to access due to minimal interfering contour, especially at high rotation speeds



Advantages – Your benefits

- + Rotationally symmetrical design**
The rotationally symmetrical design minimizes the interfering contour and ensures high speed of rotation.
- + Extremely slim design**
Precise metal cutting applications, even in hard-to-reach workpiece areas
- + Lightweight design**
High feed rate and a speed range of up to 85,000 RPM (HSC machining)
- + Axial length adjustment**
Length adjustment in the range of 0.01 mm accuracy, with adjustment travel of 10 mm
- + High level of flexibility**
Clamping of different diameters due to the use of slotted or coolant-proof intermediate sleeves
- + Permanent run-out and repeat accuracy < 0.003 mm**
Optimal surface results, high precision machining and safe processes due to a uniform cutting action and highest repeatability
- + Comprehensive compatibility**
Can be ideally combined with TENDO SVL and TRIBOS SVL extensions
- + Excellent vibration damping**
Micro-blowouts are prevented, optimal workpiece surfaces, machine spindle protection, increased tool service life resulting in a reduction of costs
- + Fine-balanced by default**
Suitable for high speeds with a balancing grade of G2.5 at 25,000 RPM



1 Length-setting screw

For fast and easy tool presetting.

2 Base body

One-piece design, from the machine interface to the clamping diameter

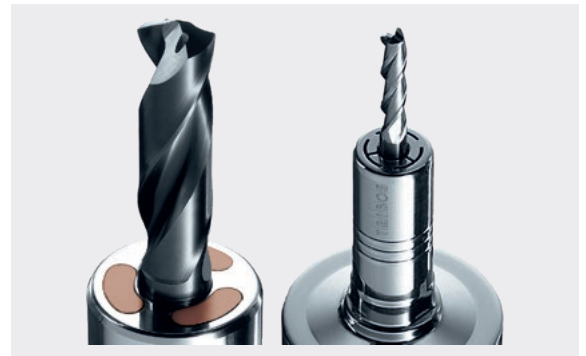
Axial length adjustment

In polygonal clamping technology, the length can be adjusted in a 0.01 mm precision range. The adjustment travel is 10 mm.



Flexibility due to a clamping range from 6 to 32 mm

All tools with commercially available shank types in the diameter range of 6 to 32 mm can be clamped. This ensures versatility in production and a significant reduction in tool acquisition costs.



Excellent vibration damping

Micro-blowouts on the cutting edge of the tool are prevented, thus achieving optimum workpiece surfaces. The spindle performance will be enhanced, the tool service life is considerably increased and costs reduced.



All commercially available tool shank types can be clamped

Form A: with smooth cylindrical shank, shank form A in accordance with DIN 1835 and DIN 6535 HA

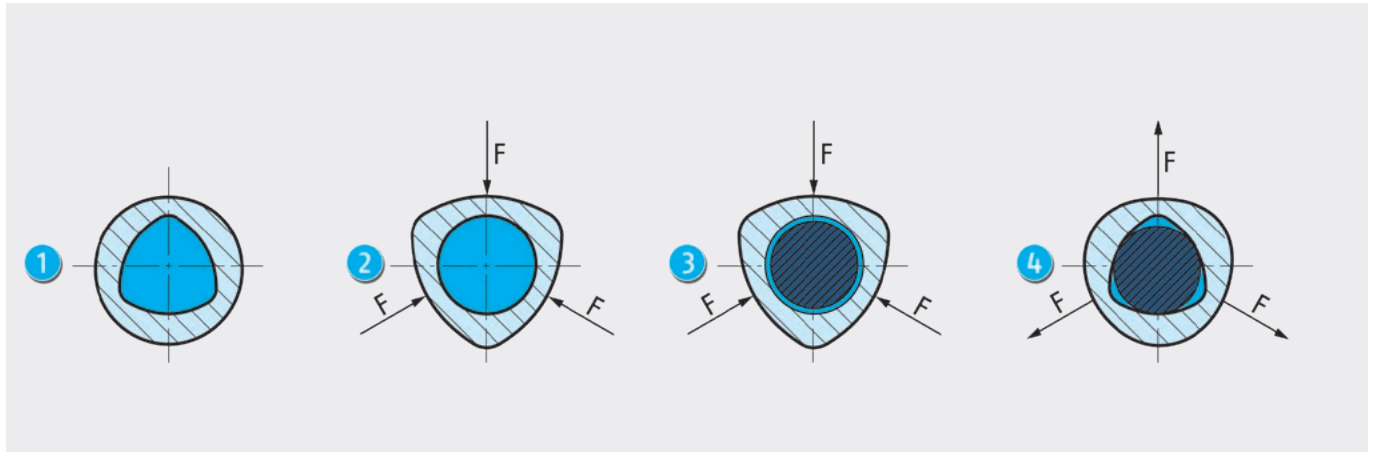
Form AB: with flat face and cylindrical shank with pulling face, shank form B in accordance with DIN 1835 and DIN 6535 HB

Form B: with lateral pulling faces, shank form B in accordance with DIN 1835

Form E: with inclined clamping face, shank form E in accordance with DIN 1835 and DIN 6535 HE



Functional principle of polygonal clamping technology



1 Clamping diameter polygonal

By using the TRIBOS SVP clamping devices and the matching pressure actuation, the polygonal clamping diameter of the toolholder becomes round.

2 Clamping diameter becomes round

The tool shank is now easy to insert.

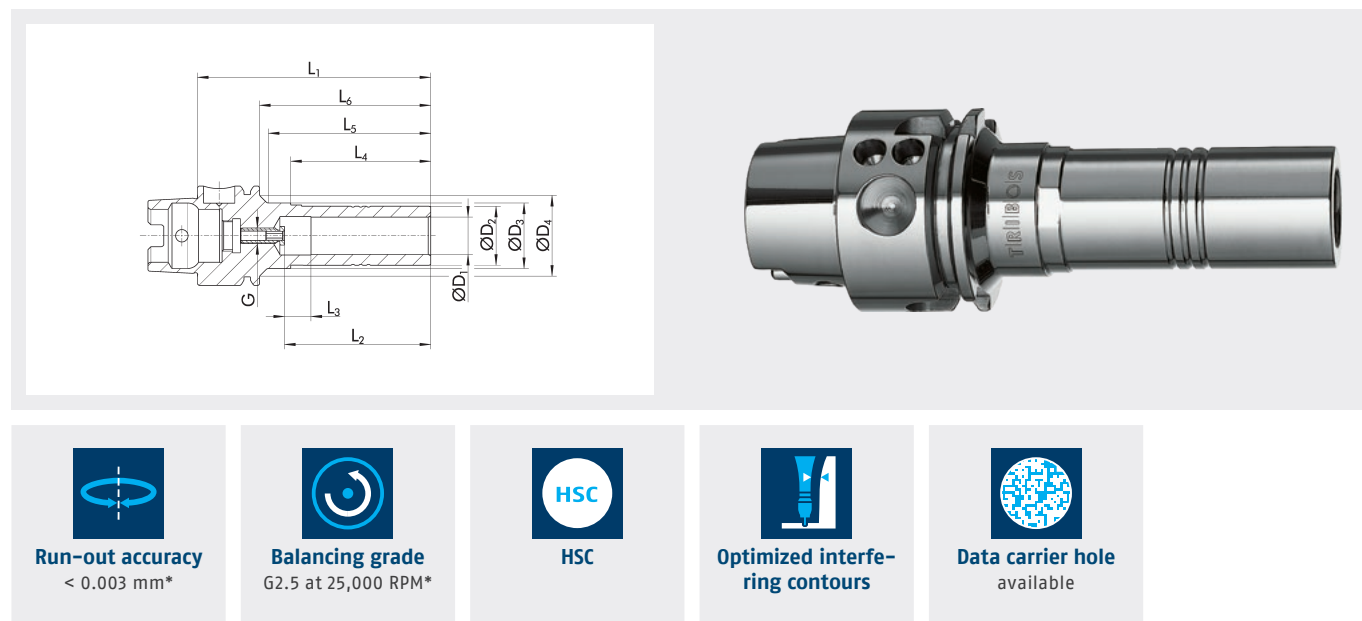
3 Inserting the tool shank

If the pressure on the clamping diameter eases off, then it will assume its polygonal shape again.

4 Tool clamped

The inserted tool shank is process-reliably clamped at a high repeat accuracy.

TRIBOS-S HSK-A 32



Technical data

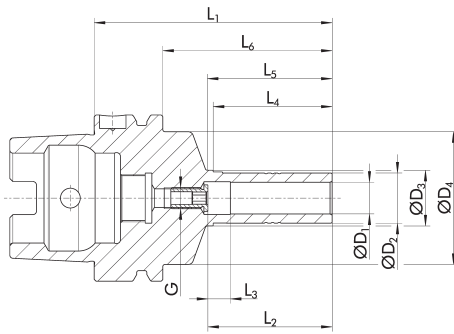
ID	D1 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205608	6	9.9	13.1	65	37	10	35	38.2	45	M5	5	0.19	0201972
0205609	8	13	15.1	65	37	10	35	39.2	45	M5	12	0.2	0201973
0205610	10	16	18.1	70	42	10	40	45.7	50	M5	20	0.22	0201974
0205611	12	19	21.1	75	47	10	45	52.2	55	M5	30	0.24	0201975

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-A 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
available

Technical data

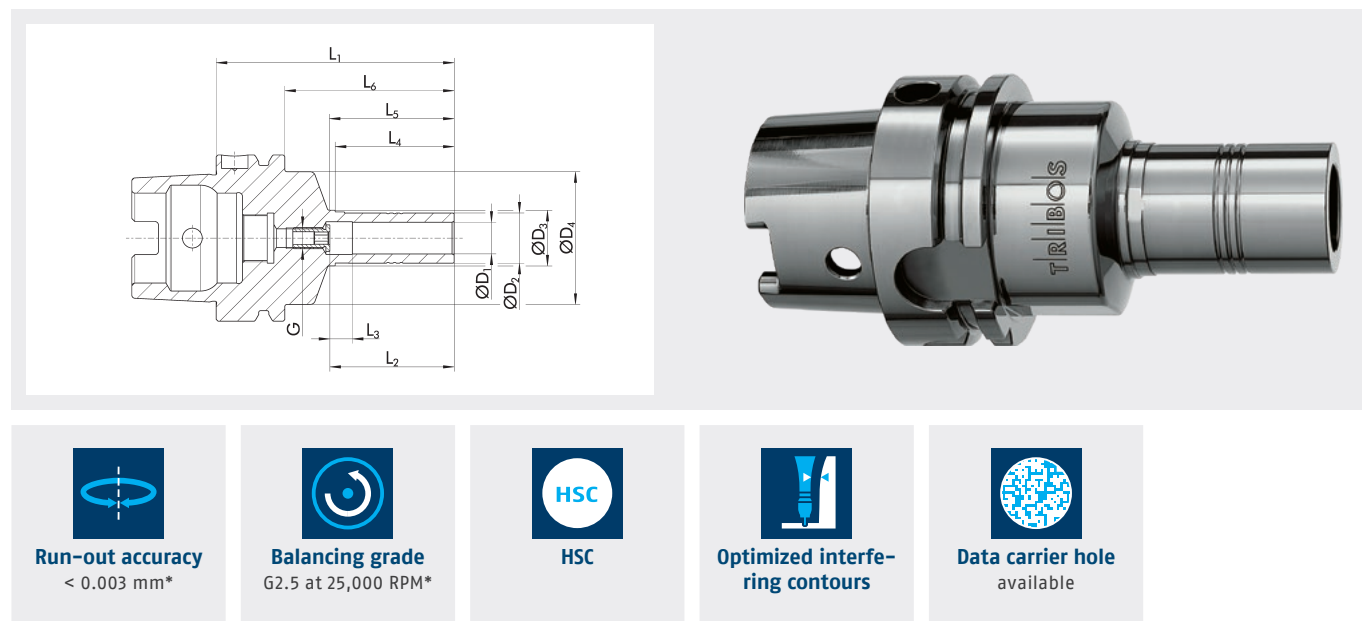
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205101	6	9.9	13.1	32	70	37	10	35	37.2	50	M5	5	0.35	0201972
0205102	8	13	15.1	32	70	37	10	35	37.2	50	M6	12	0.4	0201973
0205103	10	16	18.1	32	80	42	10	40	42.2	60	M8x1	20	0.4	0201974
0205104	12	19	21.1	32	85	47	10	45	47.2	65	M8x1	30	0.45	0201975
0205106	20	30	32.1		90	52	10	45	70		M8x1	150	0.5	0201981

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-A 50



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
available

Technical data

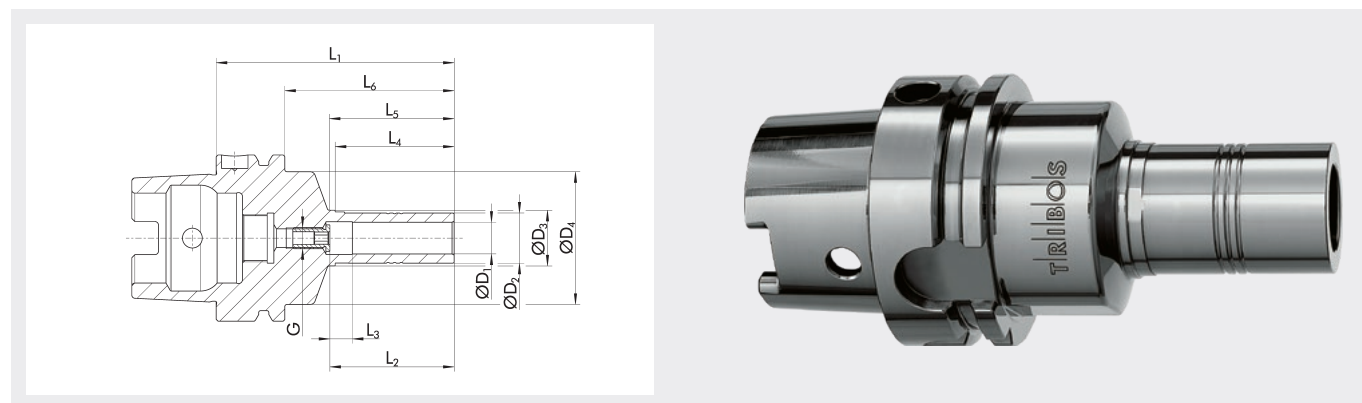
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205116	20	30	32.1	40	90	52	10	45	47.2	64	M10x1	150	0.75	0201981

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-A 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
available

Technical data

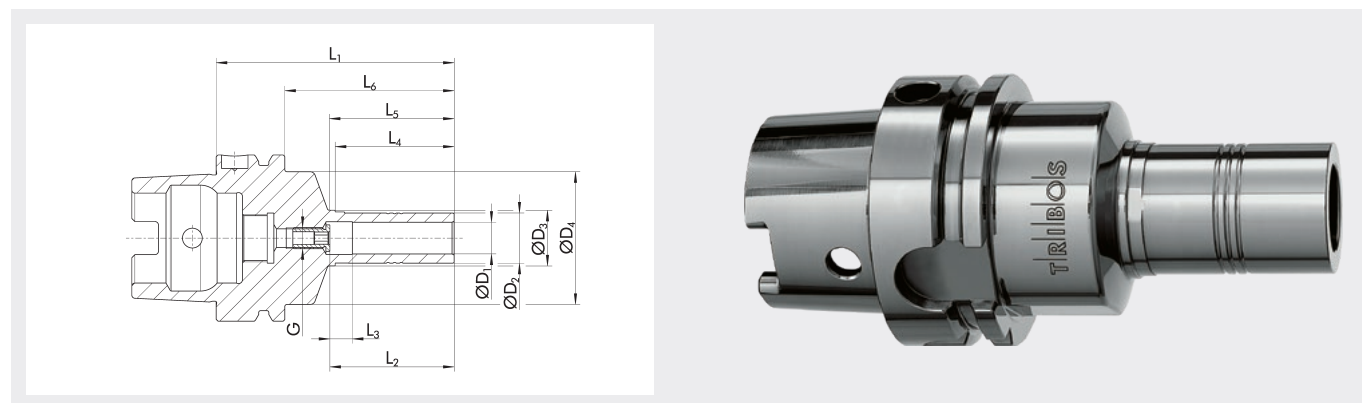
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0203351	6	9.9	13.1	50	80	37	10	35	37.2	54	M5	5	0.7	0201972
0203352	8	13	15.1	50	80	37	10	35	37.2	54	M6	12	0.7	0201973
0203353	10	16	18.1	50	85	42	10	40	42.2	59	M8x1	20	0.75	0201974
0203354	12	19	21.1	50	90	47	10	45	47.2	64	M8x1	30	0.8	0201975
0203359	14	22	24.1	50	90	47	10	45	47.2	64	M10x1	50	0.85	0201976
0203355	16	25	27.1	50	95	48	10	45	47.2	69	M10x1	70	0.85	0201977
0203350	18	28	30.1	50	95	48	10	45	47.2	69	M10x1	100	1.05	0201979
0203356	20	30	32.1	50	100	52	10	45	47.2	74	M10x1	150	1.05	0201981
0203357	25	36	38.1	50	95	57	10	45	52	69	M10x1	200	1.1	0201987
0203358	32	45	47.1	50	100	61	10	45	57	74	M10x1	280	1.15	0201998

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-A 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
available

Technical data

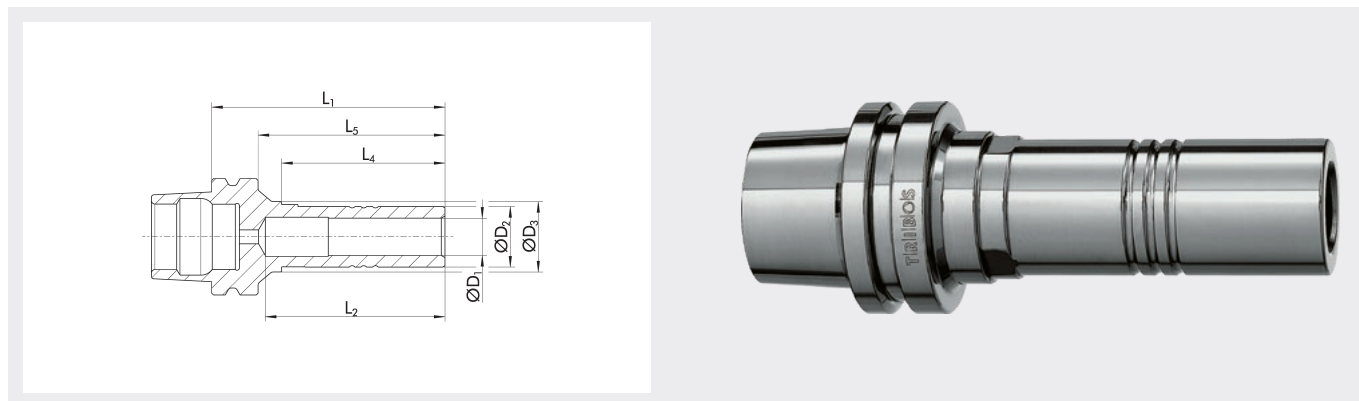
ID	D1 [Inch]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0203370	1/4"	10.3	13.1	50	80	37	10	35	37	54	M5	6	0.7	0201988
0203372	3/8"	15	17.1	50	85	42	10	40	42	59	M6	20	0.75	0201989
0203373	1/2"	20	22.1	50	90	47	10	45	47	64	M8x1	40	0.8	0201991
0203375	3/4"	29	31.1	50	95	52	10	45	47	69	M10x1	120	1.05	0201992

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-E 25



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours

Technical data

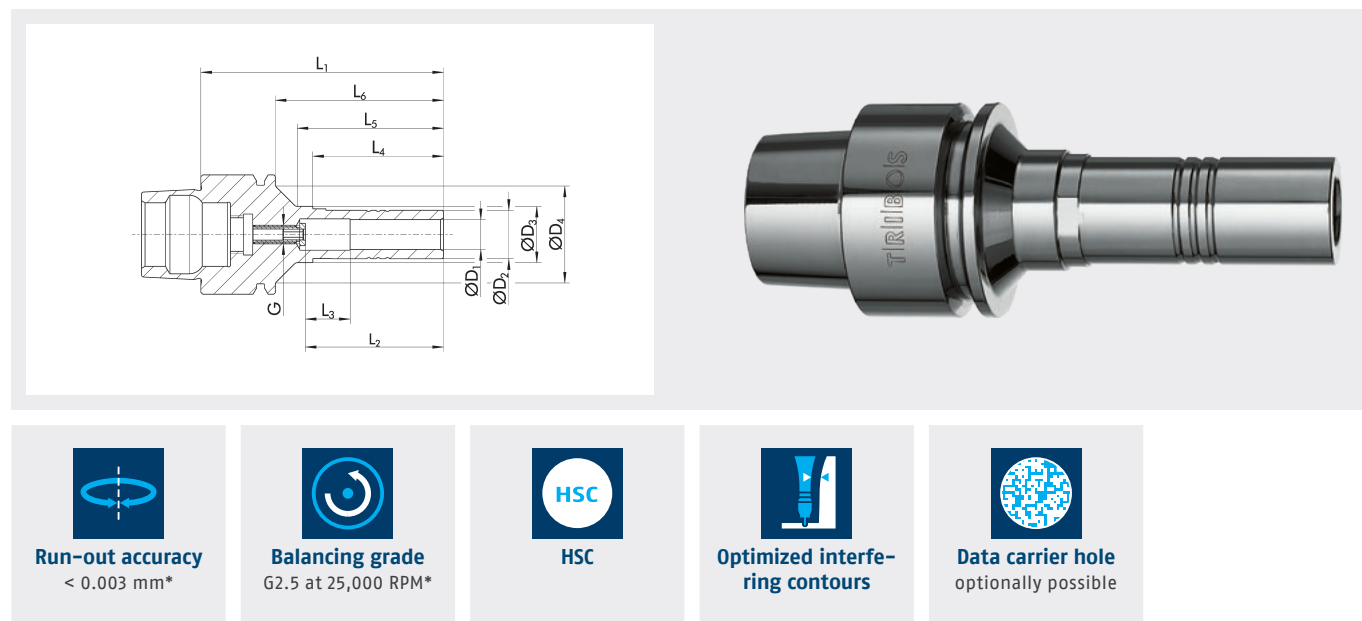
ID	D1 [mm]	D2 [mm]	D3 [mm]	L1 [mm]	L2 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	Mmin [Nm]	Weight [kg]	
0205251	6	9.9	13.1	50	38.5	35	35.6	40	5	0.15	0201972
0205252	8	13	15.1	50	38.5	35	36.8	40	12	0.15	0201973
0205253	10	16	18.1	55	43.5	40	43.6	45	20	0.16	0201974

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-E 32



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

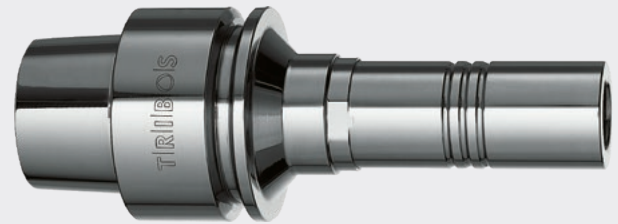
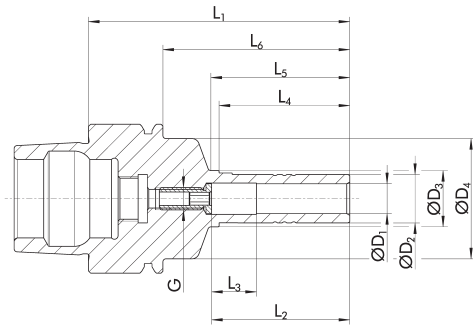
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205261	6	9.9	13.1	26	65	37	10	35	38.2	45	M5	5	0.25	0201972
0205262	8	13	15.1	26	65	37	10	35	39.2	45	M5	12	0.25	0201973
0205263	10	16	18.1	26	70	42	10	40	45.7	50	M5	20	0.25	0201974
0205264	12	19	21.1	26	75	47	10	45	52.2	55	M5	30	0.25	0201975
0205265	16	25	26.2		80	45	10	45	60		M10x1	70	0.25	0201977

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-E 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

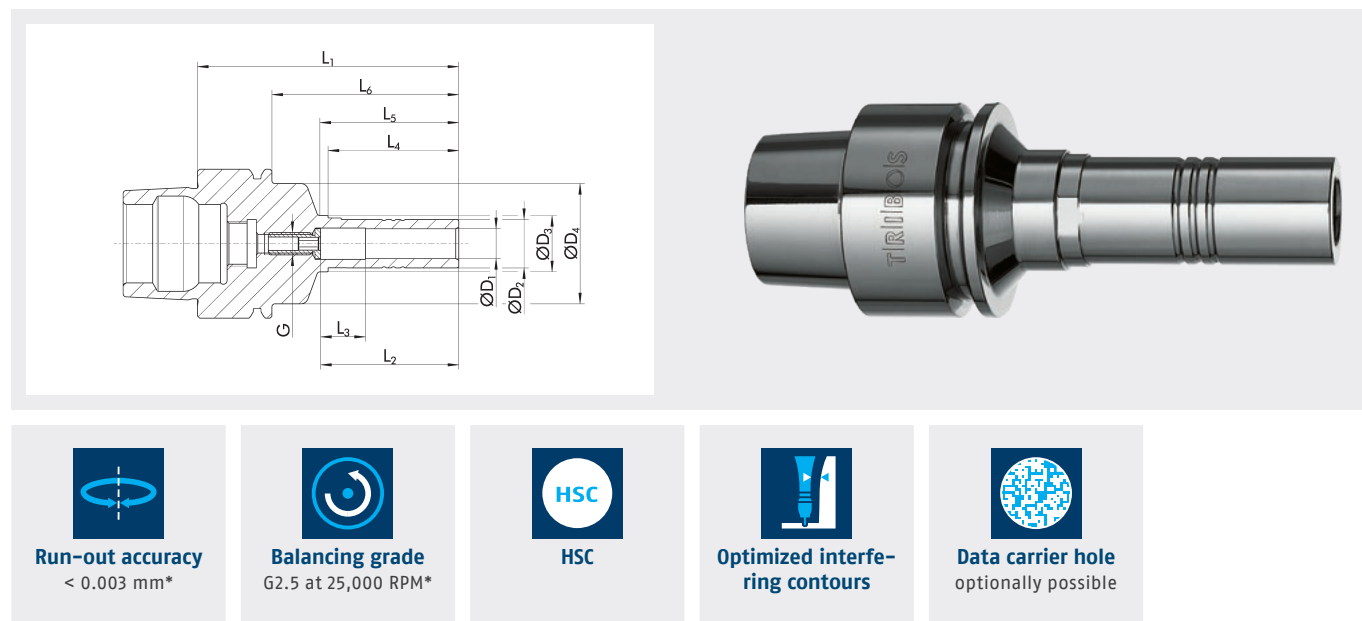
ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205151	6	9.9	13.1	32	70	37	10	35	37.2	50	M5	5	0.3	0201972
0205152	8	13	15.1	32	70	37	10	35	37.2	50	M6	12	0.3	0201973
0205153	10	16	18.1	32	80	42	10	40	42.2	60	M8x1	20	0.35	0201974
0205154	12	19	21.1	32	85	47	10	45	47.2	65	M8x1	30	0.4	0201975
0205159	14	22	24.1	32	85	47	10	45	47.2	65	M8x1	50	0.4	0201976
0205155	16	25	27.1	32	85	48	10	45	47.2	65	M8x1	70	0.45	0201977
0205156	20	30	32.1		90	52	10	45	70		M8x1	150	0.49	0201981
0205157	1/2"	20	22.1	32	85	47	10	45	47.2	65	M8x1	30	0.35	0201991

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S HSK-E 50



Technical data

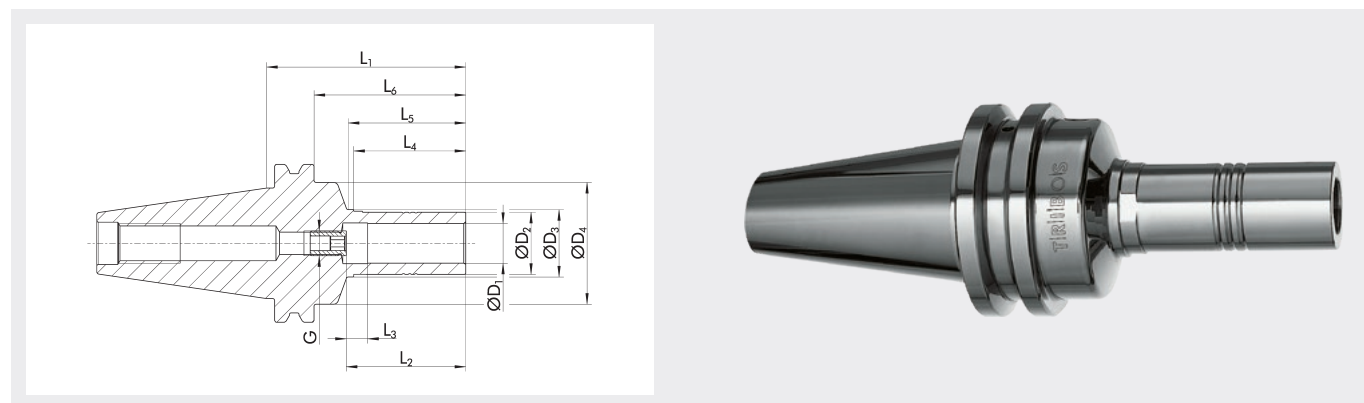
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205161	6	10	13.1	40	75	37	10	35	37.2	49	M5	5	0.5	0201972
0205162	8	13	15.1	40	75	37	10	35	37.2	49	M6	12	0.5	0201973
0205163	10	16	18.1	40	80	42	10	40	42.2	54	M8x1	20	0.5	0201974
0205164	12	19	21.1	40	85	47	10	45	47.2	59	M8x1	30	0.55	0201975
0205169	14	22	24.1	40	85	47	10	45	47.2	59	M10x1	50	0.6	0201976
0205165	16	25	27.1	40	85	48	10	45	47.2	59	M10x1	70	0.65	0201977
0205160	18	28	30.1	40	85	48	11	45	47.2	59	M10x1	100	0.65	0201979
0205166	20	30	32.1	40	90	52	10	45	47.2	64	M10x1	150	0.7	0201981
0205167	25	36	38.1	40	95	57	10	45	52	69	M10x1	200	1.2	0201987

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S SK 30



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

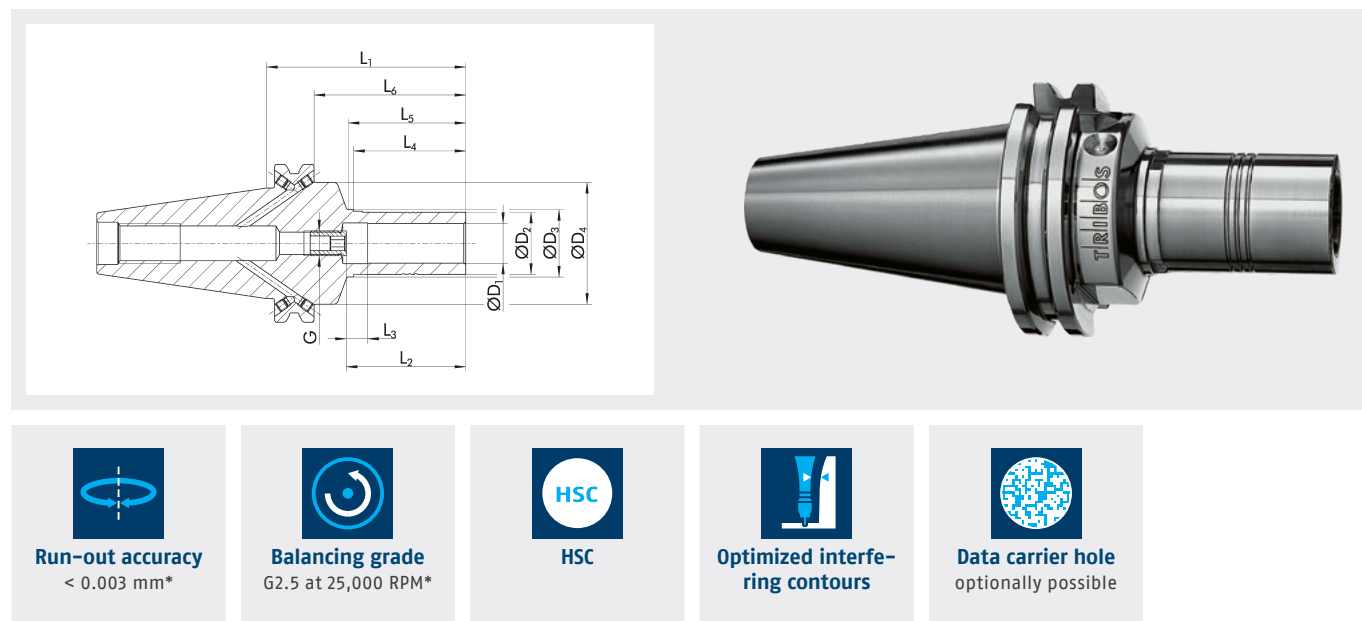
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0203766	12	19	21	42	80	47	10	45	47.2	61	M8x1	30	0.62	0201975
0203767	16	25	27	42	80	48	10	45	47.2	61	M10x1	70	0.75	0201977
0203768	20	30	32	42	80	52	10	45	47.2	61	M10x1	150	0.78	0201981
0203769	25	35	37	42	80	55	10	40	42.2	61	M10x1	200	0.78	0206089

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S SK 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

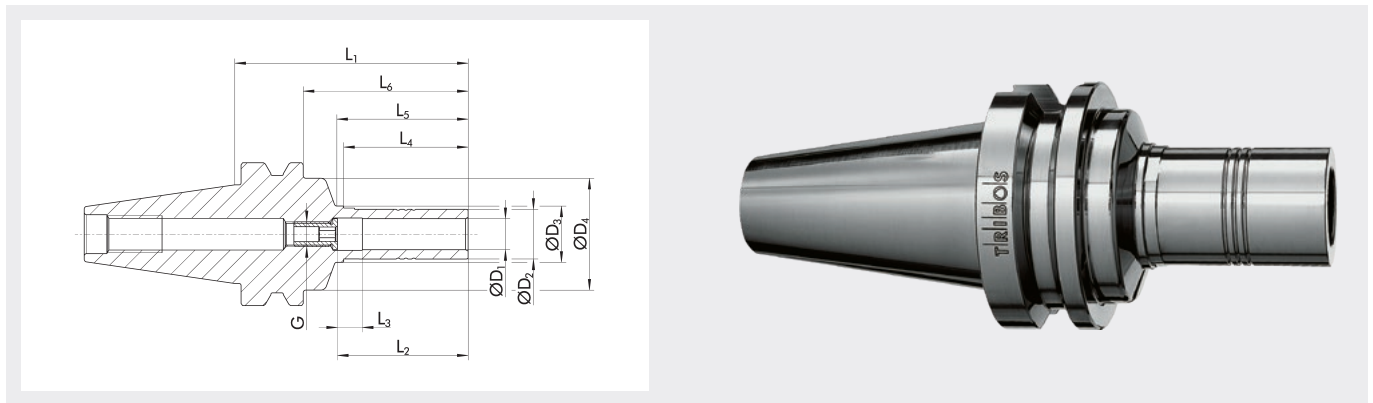
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205131	6	9.9	13.1	49	80	37	10	35	37.2	60.9	M5	5	0.9	0201972
0205132	8	13	15.1	49	80	37	10	35	37.2	60.9	M6	12	0.95	0201973
0205133	10	16	18.1	49	80	42	10	40	42.2	60.9	M8x1	20	0.95	0201974
0205134	12	19	21.1	49	80	47	10	45	47.2	60.9	M8x1	30	1	0201975
0205139	14	22	24.1	49	80	47	10	45	47.2	60.9	M10x1	50	1	0201976
0205135	16	25	27.1	49	80	48	10	45	47.2	60.9	M10x1	70	1	0201977
0205130	18	28	30.1	49	80	48	10	45	47.2	60.9	M10x1	100	1.05	0201979
0205136	20	30	32.1	49	80	52	10	45	47.2	60.9	M10x1	150	1.05	0201981
0205137	25	36	38.1	49	80	57	10	45	48	60.9	M10x1	200	1.2	0201987
0205138	32	45	47.1	49	80	61	10	45	48	60.9	M10x1	280	1.22	0201998

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S JIS-BT 30



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

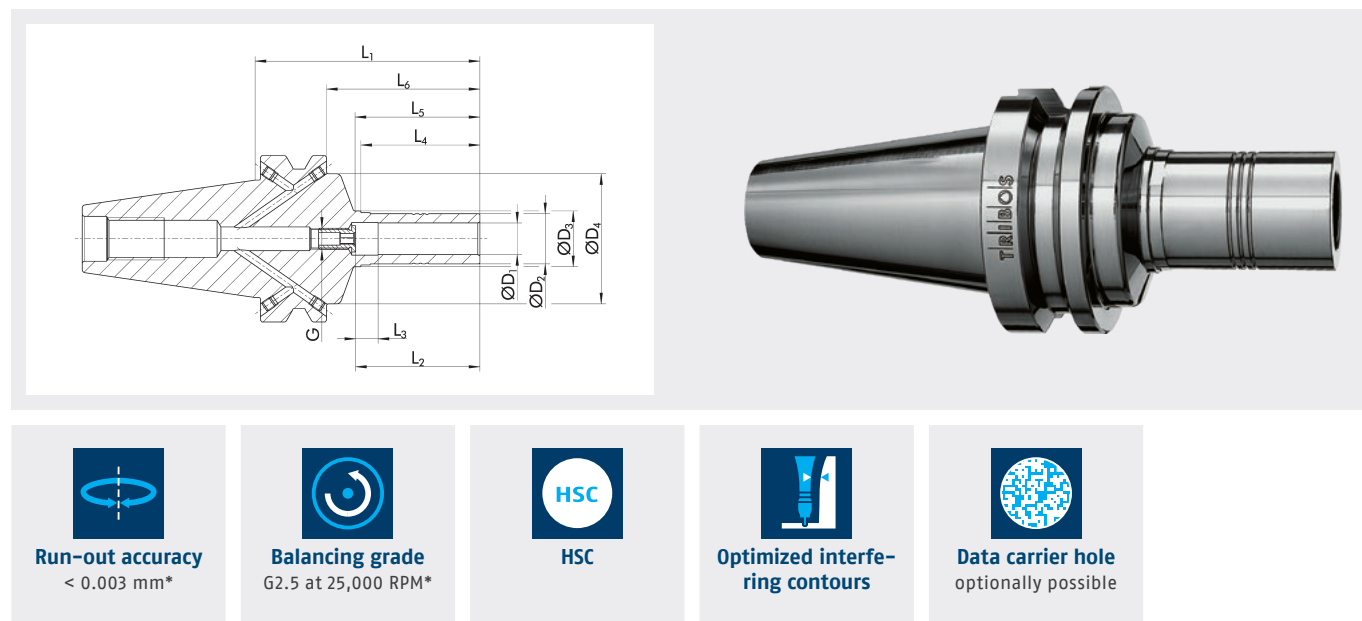
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205471	6	9.9	13.1	36	75	37	10	35	37.2	53	M5	5	0.75	0201972
0205472	8	13	15.1	36	75	37	10	35	37.2	53	M6	12	0.77	0201973
0205473	10	16	18.1	36	75	42	10	40	42.2	53	M8x1	20	0.79	0201974
0205474	12	19	21.1	36	80	47	10	45	47.2	58	M8x1	30	0.81	0201975
0205479	14	22	24.1	36	80	47	10	45	47.2	58	M8x1	30	0.83	0201976
0205475	16	25	27.1	36	80	48	10	45	47.2	58	M10x1	70	0.85	0201977
0205476	20	30	32.1	36	80	52	10	45	47.2	58	M10x1	150	0.88	0201981

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S JIS-BT 40



Technical data

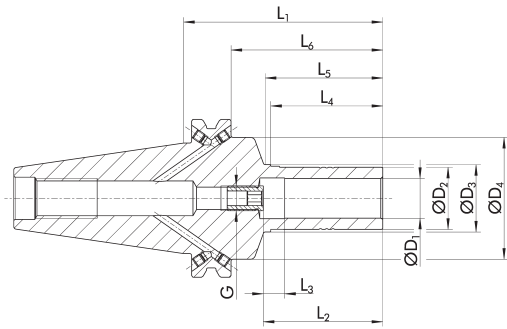
ID	D1 [mm]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0205271	6	9.9	13.1	49	80	37	10	35	37.2	53	M5	5	0.9	0201972
0205272	8	13	15.1	49	80	37	10	35	37.2	53	M6	12	1.2	0201973
0205273	10	16	18.1	49	80	42	10	40	42.2	53	M8x1	20	1.15	0201974
0205274	12	19	21.1	49	85	47	10	45	47.2	58	M8x1	30	1	0201975
0205279	14	22	24.1	49	85	47	10	45	47.2	58	M10x1	50	1	0201976
0205275	16	25	27.1	49	85	48	10	45	47.2	58	M10x1	70	1	0201977
0205270	18	28	30.1	49	85	48	10	45	47.2	58	M10x1	100	1.05	0201979
0205276	20	30	32.1	49	85	52	10	45	47.2	58	M10x1	150	1.05	0201981
0205277	25	36	38.1	49	85	57	10	45	47.2	58	M10x1	200	1.27	0201987

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

TRIBOS-S CAT 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



HSC



Optimized interfering contours



Data carrier hole
optionally possible

Technical data

ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D4 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	L6 [mm]	G	Mmin [Nm]	Weight [kg]	
0215911	6	10	13.1	44.45	90	37	10	35	37.2	70.95	M5	5	0.9	0201972
0215914	12	19	21.1	44.45	90	47	10	45	47.2	70.95	M8x1	30	1	0201975
0215916	20	30	32.1	44.45	90	52	10	45	47.2	70.95	M10x1	150	1.05	0201981
0215917	25	36	38.1	44.45	90	57	10	45	47.2	70.95	M10x1	200	1.1	0201987
0215918	32	45	47.1	44.45	90	61	10	45	55	70.95	M10x1	280	1.12	0201998
0205360	1/4"	10.3	13.1	44.45	90	37	10	35	37.2	70.95	M5	6	0.9	0201988
0205363	1/2"	20	22.1	44.45	90	47	10	45	47.2	70.95	M8x1	40	1	0201991
0205365	3/4"	29	31.1	44.45	90	52	10	45	47.2	70.95	M10x1	120	1.05	0201992

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request



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