

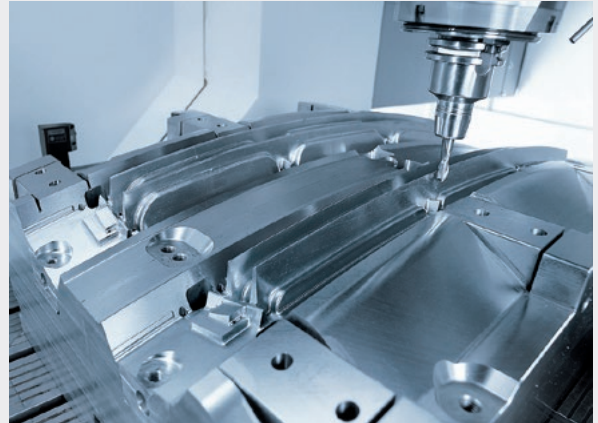


T|E|N|D|O® Platinum
Original. Fast. Economical.

Hand in hand for tomorrow

TENDO "The original" is the hydraulic expansion toolholder from SCHUNK. The extensive range of 29 interfaces makes the TENDO toolholder a precision all-rounder that is compatible with all standard machine tool spindles. With standardized outside contour according to DIN 69882-7.

Optionally suitable for HSC machining, as well as drilling, reaming, milling, and thread machining

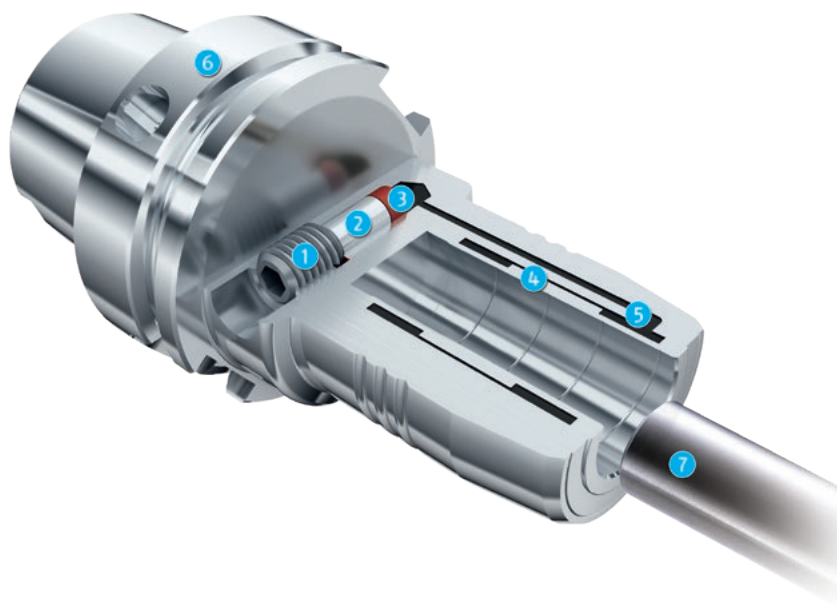


Advantages – Your benefits

- + High level of flexibility**
Clamping of different diameters, flexible by means of direct clamping $\varnothing 6 - \varnothing 32$, or the combined use of slotted or coolant-proof intermediate sleeves
- + Micron-precise tool change within seconds without peripheral equipment**
Time saving through reduction of set-up time and no investment and energy costs due to additional clamping devices
- + Excellent vibration damping**
Micro-blowouts are prevented, optimal workpiece surfaces, machine spindle protection, increased tool service life resulting in a reduction of costs
- + 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
- + Fine-balanced by default**
Suitable for high speeds with a balancing grade of G2.5 at 25,000 RPM
- + Permanent run-out and repeat accuracy < 0.003 mm**
Even cutting action, increased tool service life, and reduced costs for regrinding or buying new tools
- + Exact length preadjustment**
Length adjustment in the range of 0.01 mm accuracy, with adjustment travel of 10 mm
- + Comprehensive compatibility**
Can be ideally combined with TRIBOS SVL tool extensions
- + Dirt grooves for reliable torque transmission**
Dry clamping surfaces, by displacement of oil, grease or lubricant residues into the dirt groove

Functions

TENDO in detail



1 Clamping screw

The clamping screw is used to actuate the clamping piston. Clamp the clamping screw to dead stop using an Allen key. A torque wrench is not needed.

2 Clamping piston

The clamping piston compresses the hydraulic fluid into the oil chamber system.

3 Sealing element

Special sealing for leakage-free clamping.

4 Expansion sleeve

The expansion sleeve evenly expands against the tool shank. This clamping process first centers the tool shank before fully clamping it over the whole surface.

5 Chamber system

When the chamber system is filled with hydraulic fluid, it has a damping effect on the clamped tool.

6 Base body

The machine-side interface is located on the base body.

7 Tool

The tool is centrally clamped to the center axis
– highest run-out and repeat accuracy of < 0.003 mm.

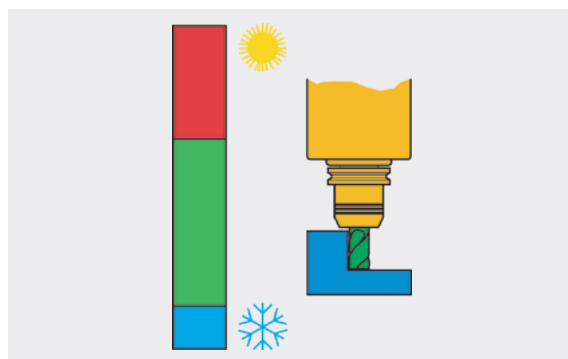
Clamping force test

The clamping force in the clamping system can be tested at any time in a matter of seconds by using a test shaft.



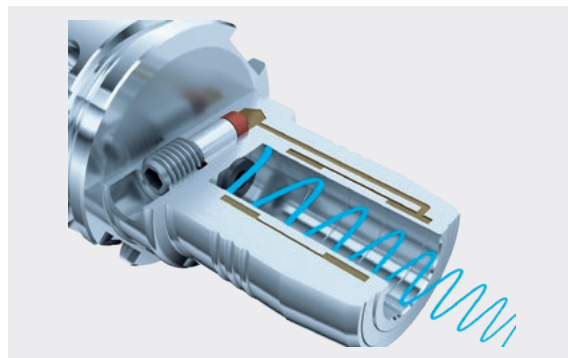
Optimum temperature range

All technical data in the catalog applies to a normal temperature range between 20 – 25°C. The optimum operating temperature range is between 20 and 50 °C. Higher temperature ranges are possible upon request.



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.



High flexibility due to the use of intermediate sleeves

The application of slotted or coolant-proof intermediate sleeves enables clamping of different tool diameters using the same toolholder. This is why a toolholder can be used flexibly within the clamping range.

The run-out accuracy of the intermediate sleeve is ≤ 0.003 mm.



Dirt grooves for reliable torque transmission

The enormous clamping pressure of the TENDO hydraulic expansion toolholder creates a displacement of oil, grease, or lubricant residues into the dirt groove. This results in the clamping face remaining dry and reliable torque transmission is guaranteed.



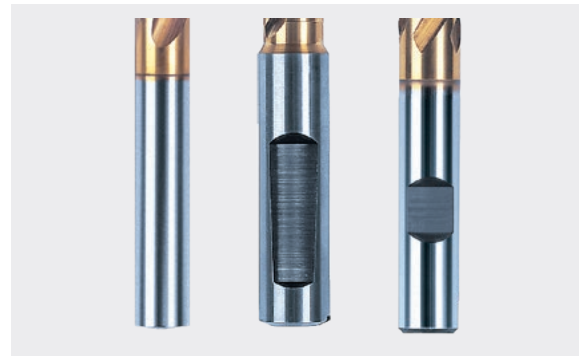
All commercially available tool shank types can be clamped

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



Dirt resistance for a long-lasting functional reliability

The completely enclosed TENDO system prevents the penetration of dirt, chips, coolants, and grease. The clamping range is not damaged, functionality and perfect tool clamping system remain fully preserved. TENDO hydraulic expansion toolholders are low-maintenance and enjoy a long service life.



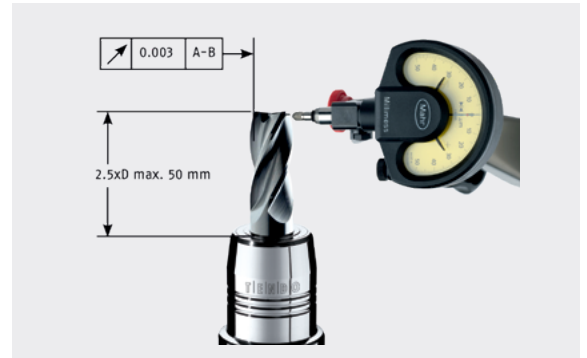
Micron-precise tool change within seconds without peripheral equipment

With a few simple actions, the tool can be changed quickly and process reliably. Time savings due to reduced set-up times and no investment costs for additional clamping devices.

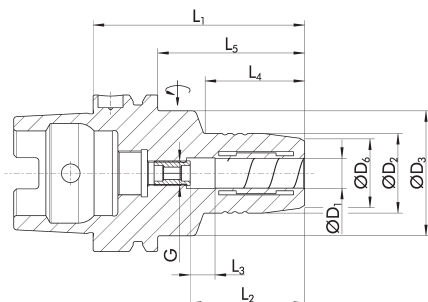


Run-out and repeat accuracy

Highest, permanent run-out and repeat accuracy of < 0.003 mm ensure an even cutting action. This minimizes wear to the cutting edges of the tool, increases tool service life considerably, and reduces the costs incurred for regrinding or buying new tools.



TENDO P HSK-A 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204241	6	26	33.5	22	70	37	10	36	50	M5	16	0.4	9205640
0204242	8	28	33.5	24	70	37	10	36	50	M6	23	0.5	9205640
0204243	10	30	33.5	26	75	41	10	42	55	M6	45	0.5	9205640
0204244	12	32	33.5	28	80	46	10	48	60	M6	90	0.5	9205640
0206205	16	38	53	33.5	90	49	10	37	70	M8x1	185	0.8	9205650
0206217	20	42	53	37.5	100	51	10	47	80	M8x1	330	1	9205650

*Run-out accuracy: at 2.5 x D

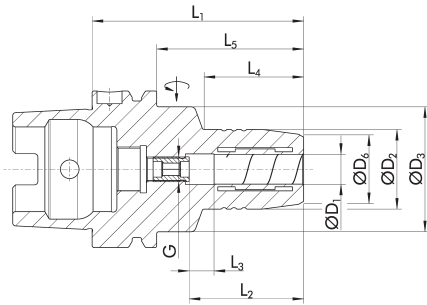
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 50



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204041	6	26	40	22	70	37	10	28	44	M5	16	0.7	9205640
0204042	8	28	40	24	70	37	10	28	44	M6	23	0.7	9205640
0204043	10	30	40	26	75	41	10	34	49	M8x1	45	0.7	9205640
0204044	12	32	40	28	85	46	10	44	59	M10x1	90	0.8	9205640
0204049	14	34	40	30	85	46	10	44	59	M10x1	110	0.8	9205640
0204045	16	38	53	34	90	49	10	30	64	M10x1	185	1.1	9205650
0204040	18	40	57	36	90	49	10	30	64	M10x1	240	1.1	9205650
0204046	20	42	60	38	90	51	10	29	64	M10x1	330	1.1	9205650

*Run-out accuracy: at 2.5 x D

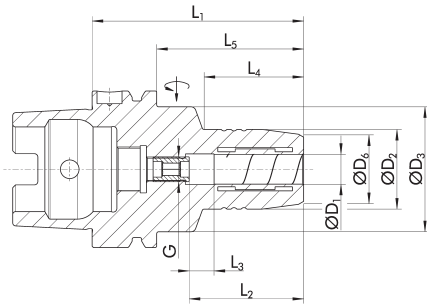
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204051	6	26	50	22	70	37	10	24	44	M5	16	1	9205650
0204052	8	28	50	24	70	37	10	25	44	M6	23	1	9205650
0204053	10	30	50	26	80	41	10	35	54	M8x1	45	1.1	9205650
0204054	12	32	50	28	85	46	10	40	59	M10x1	90	1.1	9205650
0204059	14	34	50	30	85	46	10	40	59	M10x1	110	1.1	9205650
0204055	16	38	50	34	90	49	10	46	64	M12x1	185	1.2	9205650
0204050	18	40	50	36	90	49	10	47	64	M12x1	240	1.3	9205650
0204056	20	42	50	38	90	51	10	48	64	M16x1	330	1.3	9205650
0204057	25	57		53	120	57	10	94		M16x1	400	2.16	9205660
0204058	32	62		58	125	61	10	99		M16x1	650	2.7	9205660

*Run-out accuracy: at 2.5 x D

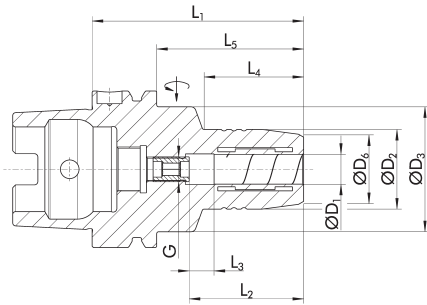
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204300	1/4"	26	50	21.5	70	37	10	24	44	M5	17	1	9205650
0204301	3/8"	30	50	25.5	80	41	10	35	54	M6	45	1	9205650
0204302	1/2"	32	50	27.5	85	46	10	40	59	M10x1	95	1	9205650
0204304	3/4"	42	50	37.5	90	51	10	48	64	M16x1	310	1.2	9205650
0204305	1"	57	63	52.6	120	57	10	59	94	M16x1	400	2.2	9205660
0204306	1 1/4"	64	75	59.6	125	61	10	63	99	M16x1	650	2.7	9205660

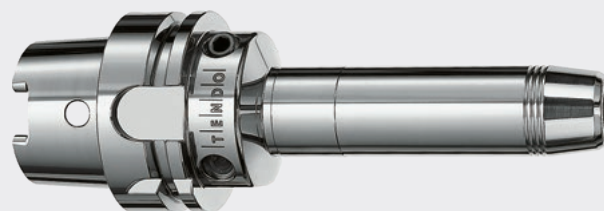
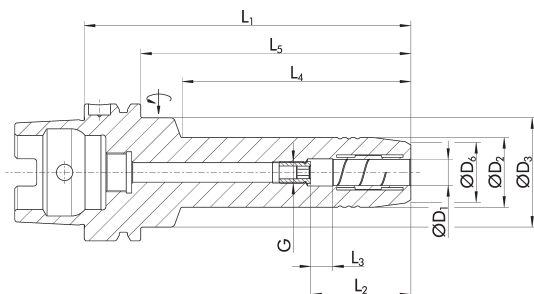
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 63 L₁ =150


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Optimized interference contours



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204771	6	26	50	22	150	37	10	103	124	M5	16	1.4	9205650
0204772	8	28	50	24	150	37	10	104	124	M6	23	1.4	9205650
0204773	10	30	50	26	150	41	10	104	124	M8x1	45	1.5	9205650
0204774	12	32	50	28	150	46	10	105	124	M10x1	90	1.5	9205650
0204779	14	34	50	30	150	46	10	105	124	M10x1	110	1.6	9205650
0204775	16	38	50	34	150	49	10	106	124	M12x1	185	1.8	9205650
0204770	18	40	50	36	150	49	10	107	124	M12x1	240	1.8	9205650
0204776	20	42	50	38	150	51	10	108	124	M16x1	330	1.9	9205650

*Run-out accuracy: at 2.5 x D

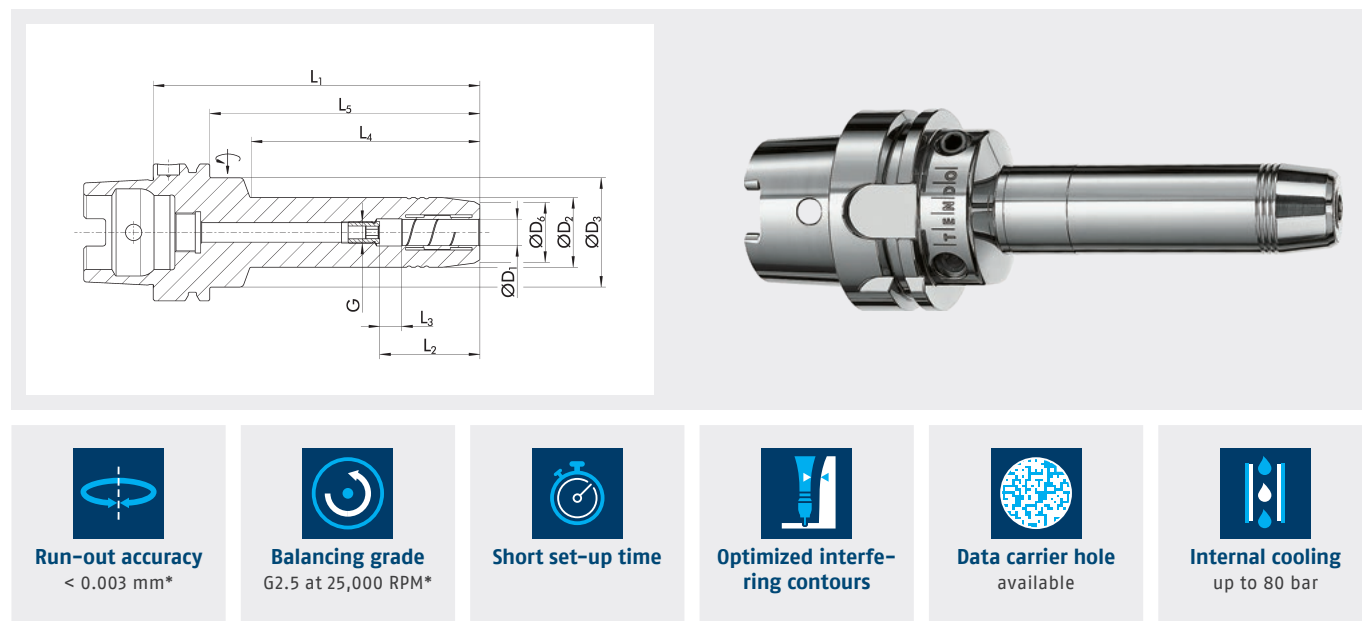
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 63 L₁ =200



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Optimized interfering contours



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204781	6	26	50	22	200	37	10	153	174	M5	16	1.6	9205650
0204782	8	28	50	24	200	37	10	154	174	M6	23	1.6	9205650
0204783	10	30	50	26	200	41	10	154	174	M8x1	45	1.7	9205650
0204784	12	32	50	28	200	46	10	155	174	M10x1	90	1.8	9205650
0204789	14	34	50	30	200	46	10	155	174	M10x1	110	1.9	9205650
0204785	16	38	50	34	200	49	10	156	174	M12x1	185	2.2	9205650
0204780	18	40	50	36	200	49	10	157	174	M12x1	240	2.3	9205650
0204786	20	42	50	38	200	51	10	158	174	M16x1	330	2.4	9205650

*Run-out accuracy: at 2.5 x D

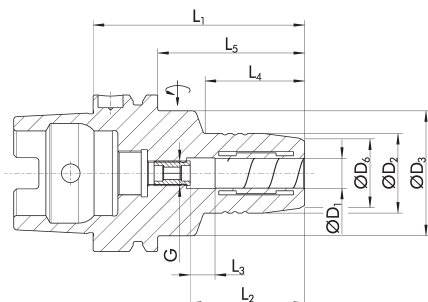
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 80



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204491	6	26	50	22	70	37	10	24	44	M5	16	1.5	9205650
0204492	8	28	50	24	70	37	10	24	44	M6	23	1.5	9205650
0204493	10	30	50	26	80	41	10	35	54	M8x1	45	1.5	9205650
0204494	12	32	50	28	85	46	10	40	59	M10x1	90	1.6	9205650
0204499	14	34	50	30	85	46	10	40	59	M10x1	110	1.6	9205650
0204495	16	38	50	34	95	49	10	51	69	M12x1	185	1.7	9205650
0204490	18	40	50	36	95	49	10	51	69	M12x1	240	1.8	9205650
0204496	20	42	50	38	95	51	10	52	69	M16x1	330	1.8	9205650
0204497	25	57	63	53	110	57	10	65	84	M16x1	400	2.6	9205660
0204498	32	64	75	60	125	61	10	63	99	M16x1	650	3.3	9205660

*Run-out accuracy: at 2.5 x D

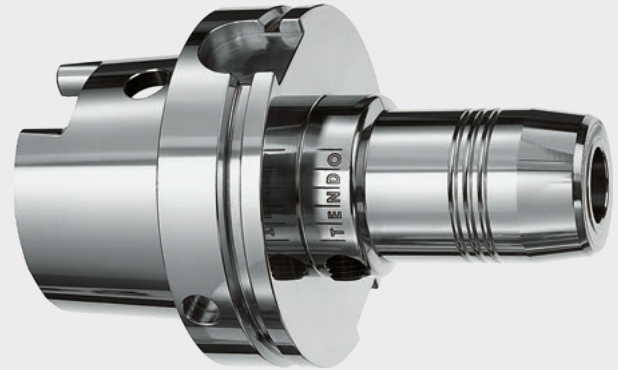
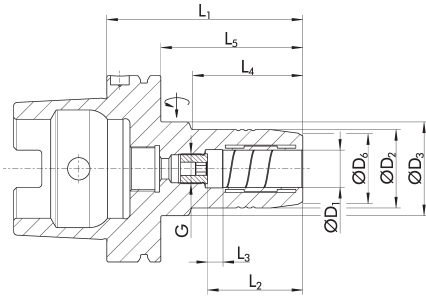
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 100



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204061	6	26	50	22	75	37	10	26	46	M5	16	2.5	9205650
0204062	8	28	50	24	75	37	10	26	46	M6	23	2.5	9205650
0204063	10	30	50	26	90	41	10	42	61	M8x1	45	2.5	9205650
0204064	12	32	50	28	95	46	10	47	66	M10x1	90	2.6	9205650
0204069	14	34	50	30	95	46	10	47	66	M10x1	110	2.6	9205650
0204065	16	38	50	34	100	49	10	53	71	M12x1	185	2.7	9205650
0204060	18	40	50	36	100	49	10	53	71	M12x1	240	2.8	9205650
0204066	20	42	50	38	105	51	10	59	76	M16x1	330	2.8	9205650
0204067	25	57	63	53	110	57	10	62	81	M16x1	400	3.7	9205660
0204068	32	64	75	60	110	61	10	62	81	M16x1	650	3.8	9205660

*Run-out accuracy: at 2.5 x D

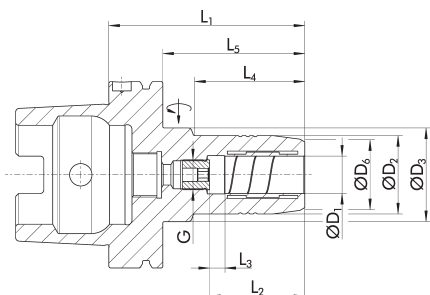
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-A 100



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204316	1 1/4"	64	75	59.6	110	61	10	62	81	M16x1	650	3.7	9205660

*Run-out accuracy: at 2.5 x D

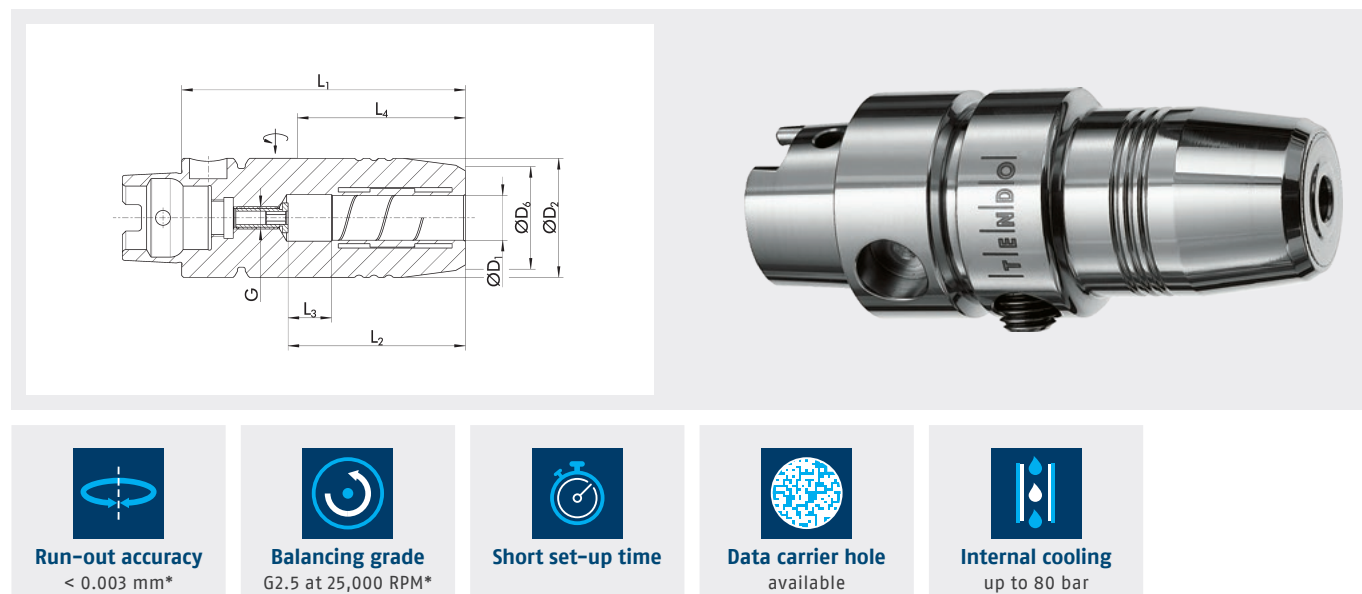
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-C 32 Chiron FZ 08



Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0204476	6	26	22	65	37.5	10	33	M5	16	0.3	9205640
0204477	8	28	24	67	37.5	10	34	M6	23	0.4	9205640
0204478	10	30	26	72.7	42.5	10	39	M6	45	0.4	9205640
0204479	12	32	28	76	47.5	10	45	M6	90	0.4	9205640

*Run-out accuracy: at 2.5 x D

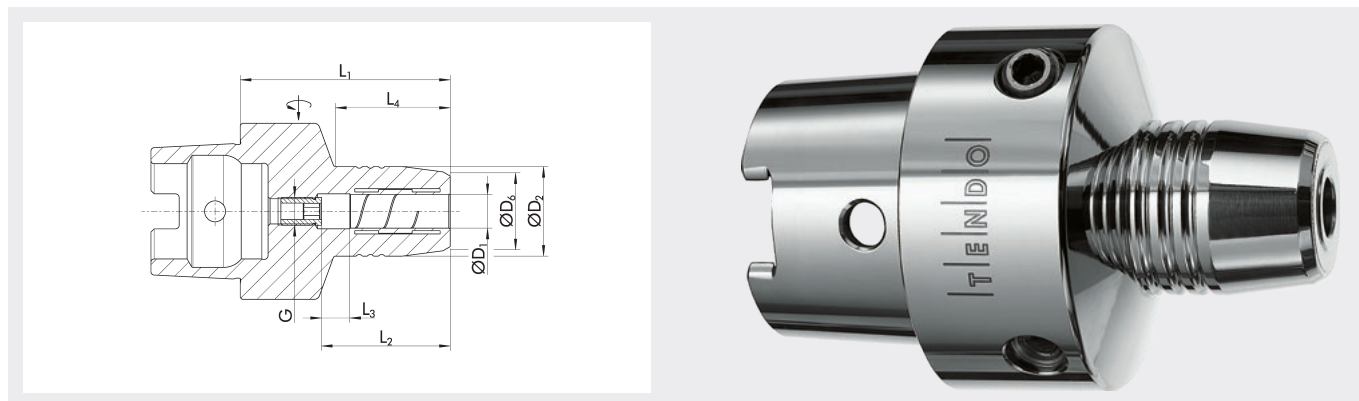
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-C 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0204001	6	26	22	60	37	10	35	M5	16	0.4	9205640
0204002	8	28	24	60	37	10	36	M6	23	0.4	9205640
0204003	10	30	26	65	41	10	41	M6	45	0.5	9205640
0204004	12	32	28	70	46	10	47	M6	90	0.5	9205640

*Run-out accuracy: at 2.5 x D

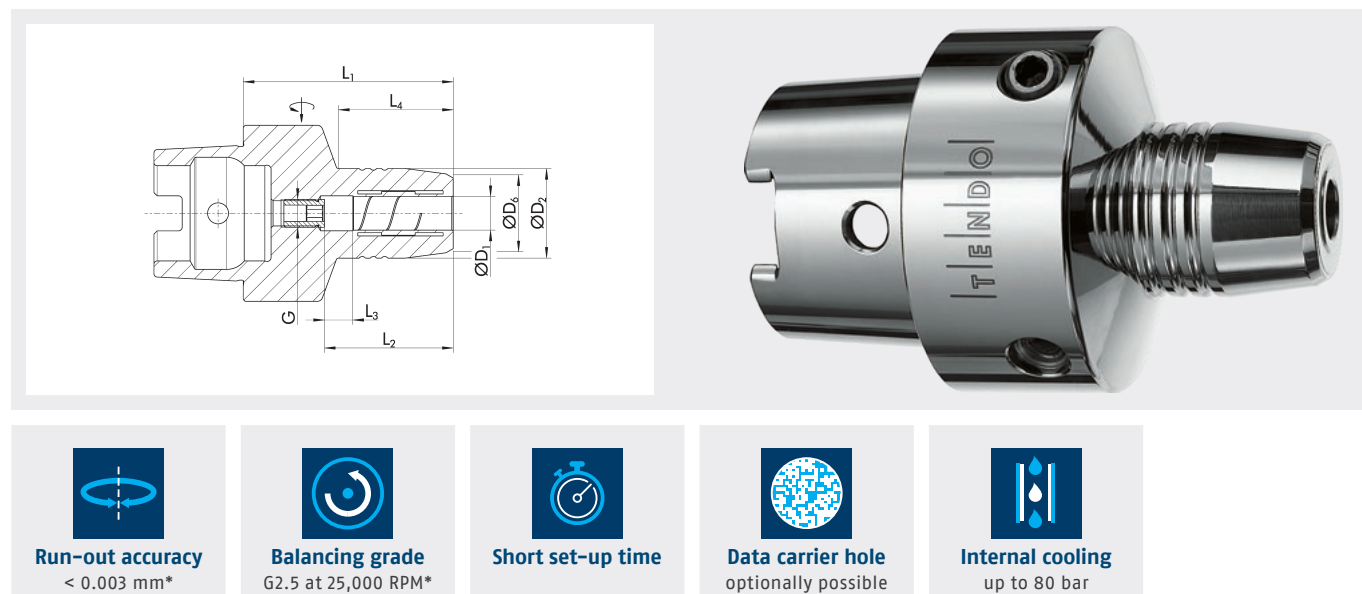
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-C 50



Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0204011	6	26	22	60	37	10	30	M5	16	0.6	9205650
0204012	8	28	24	60	37	10	30	M6	23	0.6	9205650
0204013	10	30	26	65	41	10	35	M8x1	45	0.7	9205650
0204014	12	32	28	75	46	10	44	M10x1	90	0.7	9205650
0204019	14	34	30	75	46	10	46	M10x1	110	0.7	9205650
0204015	16	38	34	80	49	10	51	M12x1	185	0.8	9205650
0204010	18	40	36	80	49	10	51	M12x1	240	0.9	9205650
0204016	20	42	38	80	51	10	52	M16x1	330	0.9	9205650

*Run-out accuracy: at 2.5 x D

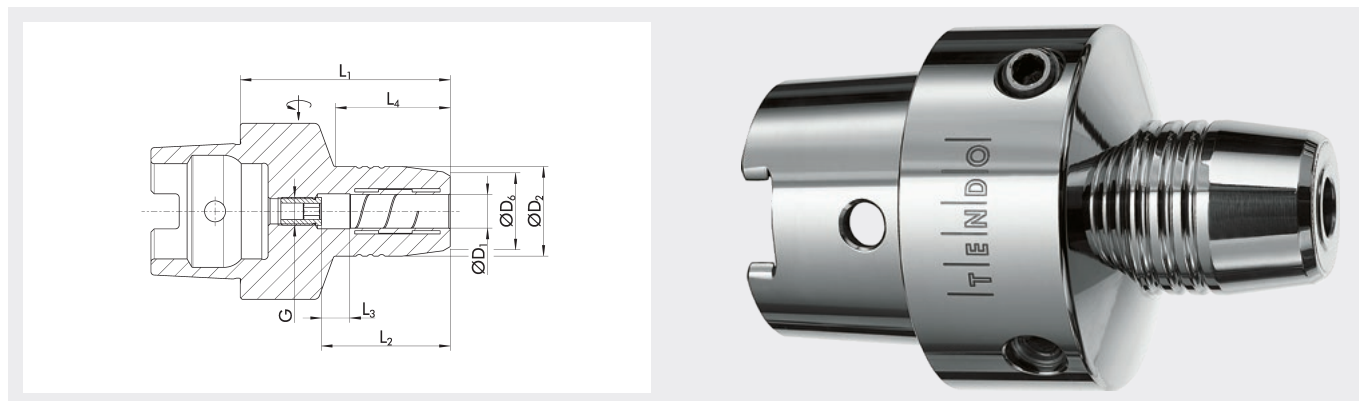
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-C 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0204021	6	26	22	60	37	10	25	M5	16	0.9	9205650
0204022	8	28	24	60	37	10	25	M6	23	0.9	9205650
0204023	10	30	26	65	41	10	31	M8x1	45	1	9205650
0204024	12	32	28	75	46	10	41	M10x1	90	1	9205650
0204025	16	38	34	80	49	10	48	M12x1	185	1.1	9205650
0204026	20	42	38	80	51	10	49	M16x1	330	1.2	9205650
0204027	25	57	53	95	57	10	63	M16x1	400	1.8	9205660
0204028	32	63	59	100	61	10	60.5	M12x1	650	2	9205660

*Run-out accuracy: at 2.5 x D

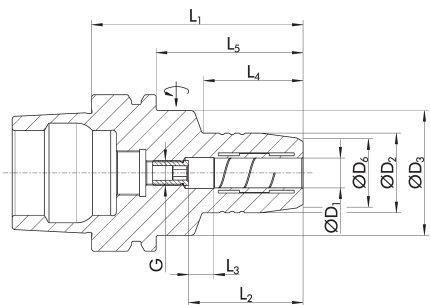
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-E 40






Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204611	6	26	33.5	22	70	37	10	36	50	M5	16	0.5	9205640
0204612	8	28	33.5	24	70	37	10	36	50	M6	23	0.5	9205640
0204613	10	30	33.5	26	75	41	10	42	55	M6	45	0.5	9205640
0204614	12	32	33.5	28	80	46	10	48	60	M6	90	0.6	9205640

*Run-out accuracy: at 2.5 x D

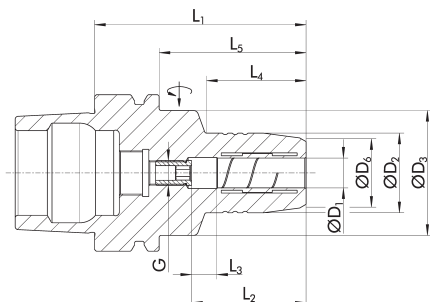
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-E 50



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204470	6	26	40	22	70	37	10	28	44	M5	16	0.7	9205640
0204471	8	28	40	24	70	37	10	28	44	M6	23	0.7	9205640
0204472	10	30	40	26	75	41	10	34	49	M8x1	45	0.7	9205640
0204473	12	32	40	28	85	46	10	44	59	M10x1	90	0.8	9205640
0204474	16	38	53	34	90	49	10	30	64	M10x1	185	1	9205650
0204475	20	42	60	38	90	51	10	29	64	M10x1	330	1.1	9205650

*Run-out accuracy: at 2.5 x D

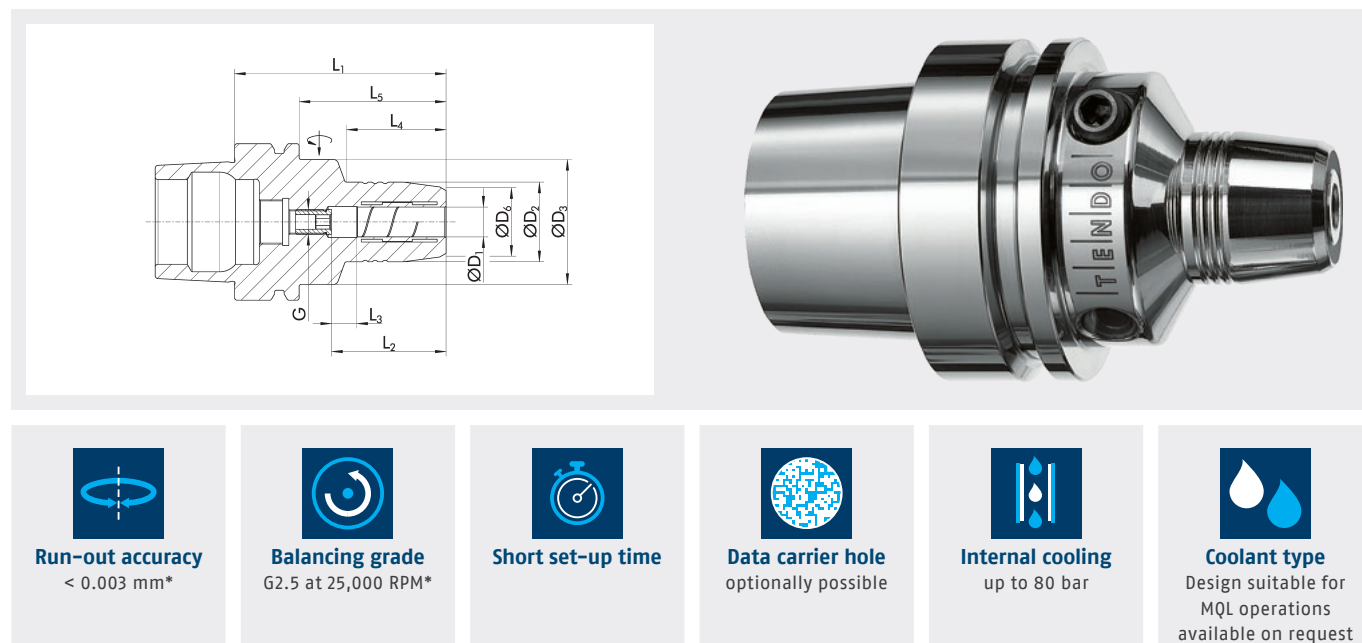
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P HSK-E 63



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar



Coolant type
Design suitable for
MQL operations
available on request

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204926	20	42	50	38	90	51	10	48	64	M16x1	330	1.3	9205650
0204928	32	64	75	60	125	61	10	63	99	M16x1	650	2.8	9205660

*Run-out accuracy: at 2.5 x D

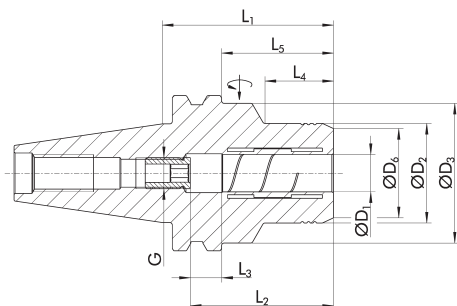
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SK 30



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204931	6	26	45	23	55	37	10	20	35.9	M5	16	0.6	9205640
0204932	8	28	45	25	55	37	10	20	35.9	M6	23	0.6	9205640
0204933	10	30	45	27	55	41	10	21	35.9	M8x1	45	0.6	9205640
0204934	12	32	45	29	55	46	10	22	35.9	M10x1	90	0.6	9205640
0204935	16	38	45	34	90	49	10	50	70.9	M6	185	0.6	9205650
0204936	20	42	45	38	90	51	10	50	70.9	M6	330	0.6	9205650

*Run-out accuracy: at 2.5 x D

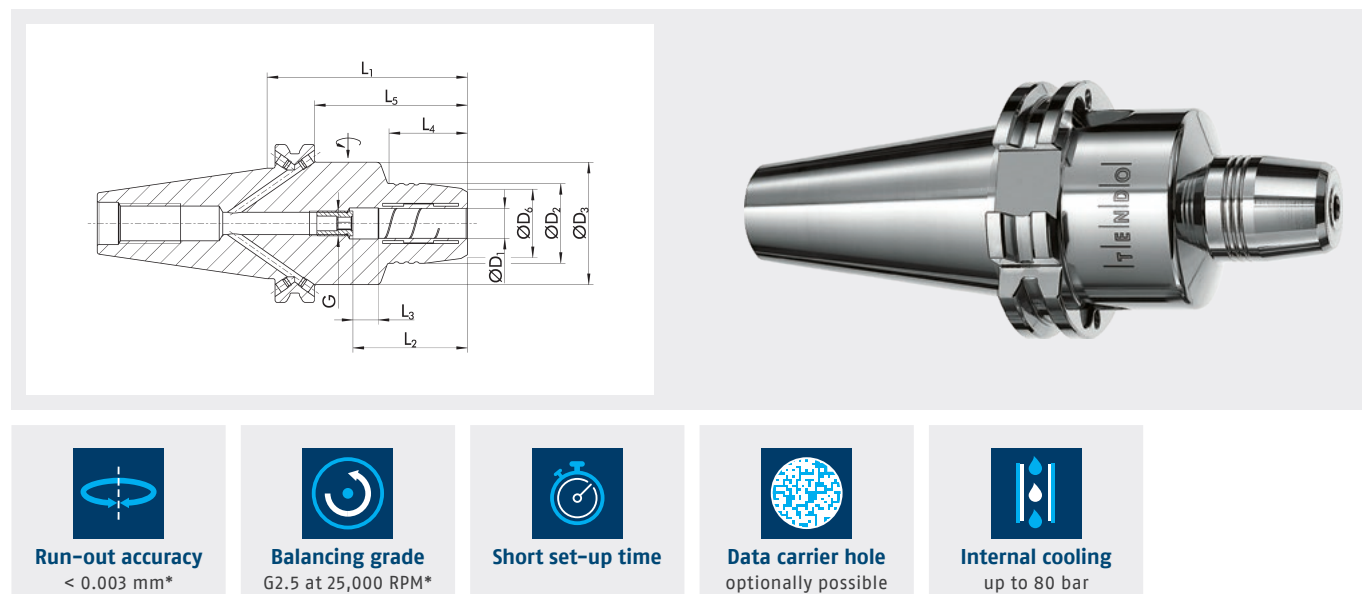
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SK 40



Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204261	6	26	49.5	22	80.5	37	10	29.5	61.4	M5	16	1.4	9205650
0204262	8	28	49.5	24	80.5	37	10	30	61.4	M6	23	1.4	9205650
0204263	10	30	49.5	26	80.5	41	10	31	61.4	M8x1	45	1.4	9205650
0204264	12	32	49.5	28	80.5	46	10	31.5	61.4	M10x1	90	1.4	9205650
0204265	16	38	49.5	34	80.5	49	10	33	61.4	M12x1	185	1.4	9205650
20023215	18	42	49.5	38.25	80.5	52.5	10	34.2	61.4	M12x1	240	1.4	9205650
0204266	20	42	49.5	38	80.5	51	10	34	61.4	M16x1	330	1.4	9205650
0201740	25	55	66	53	80.5	57	10	22	61.4	M16x1	400	1.8	9205660
0204267	32	63	80	60	80.5	61	10	25.5	61.4	M16x1	650	2	9205660

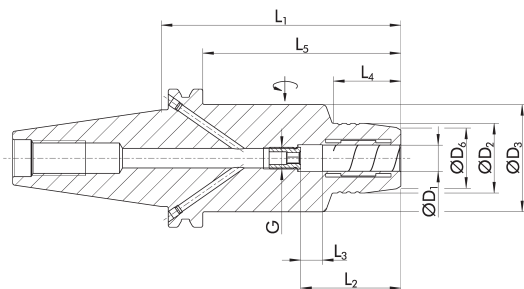
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SK 40 L₁ =110


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204271	6	26	49.5	22	110	37	10	29.5	90.9	M5	16	1.8	9205650
0204272	8	28	49.5	24	110	37	10	30	90.9	M6	23	1.9	9205650
0204273	10	30	49.5	26	110	41	10	31	90.9	M8x1	45	1.9	9205650
0204274	12	32	49.5	28	110	46	10	31.5	90.9	M10x1	90	1.8	9205650
0204275	16	38	49.5	34	110	49	10	33	90.9	M12x1	185	1.9	9205650
0204276	20	42	49.5	38	110	51	10	34	90.9	M16x1	330	1.9	9205650

*Run-out accuracy: at 2.5 x D

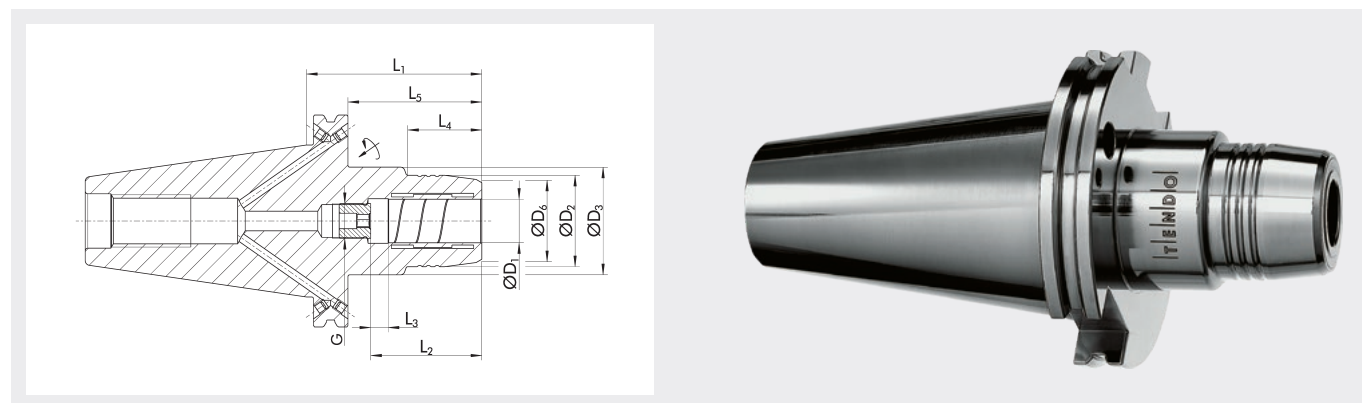
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SK 50



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204246	20	42	49.5	38	80.5	51	10	34	61.4	M16x1	330	3.3	9205650
0204247	32	64	70	60	103.2	61	10	62.5	84.1	M16x1	650	4.4	9205660

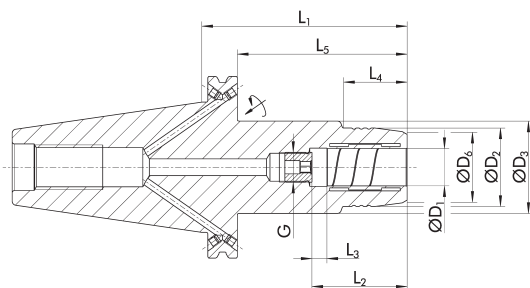
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SK 50 L₁ =110


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204256	20	42	49.5	38	110	51	10	34	90.9	M16x1	330	3.7	9205650

*Run-out accuracy: at 2.5 x D

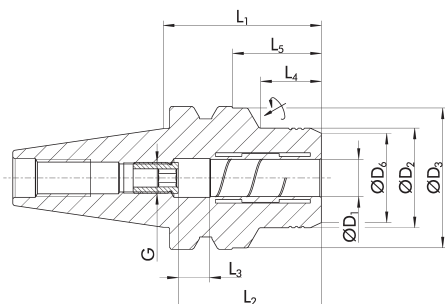
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 30



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm/Inch]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0205631	6	26	22.7	50.8	37	10	17.8	M5	16	0.6	9205640
0205632	8	28	24.7	50.8	37	10	18.4	M6	23	0.6	9205640
0205633	10	30	26.7	50.8	41	10	19	M8x1	45	0.6	9205640
0205634	12	32	28.7	50.8	46	10	19.5	M10x1	90	0.6	9205640
28003673	20	60	46.14	50.8	51	10	21.5	M10x1	330	0.5	9205650
0205641	1/4"	26	22.7	50.8	37	10	17.8	M5	17	0.5	9205640
0205643	3/8"	30	26.7	50.8	41	10	19	M6x1	45	0.5	9205640
0205644	1/2"	32	28.7	50.8	46	10	19.5	M10x1	95	0.5	9205640
28003669	3/4"	60	46.14	50.8	51	10	21.5	M10x1	310	0.5	9205650

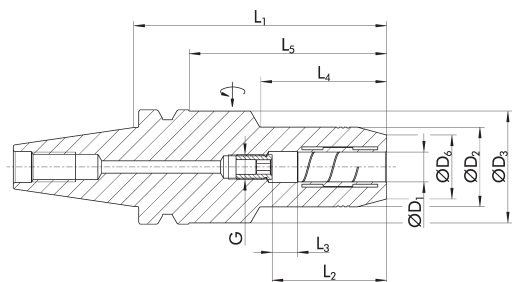
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 30 L₁ = 90


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0205635	16	38	45.5	34	90	49	10	50	68	M10x1	185	0.9	9205650
0205636	20	42	45.5	37.5	90	51	10	50	68	M6	330	0.9	9205650
28003251	3/4"	42	44.5	37.7	90	51	10	50	68	M10x1	310	0.8	9205650

*Run-out accuracy: at 2.5 x D

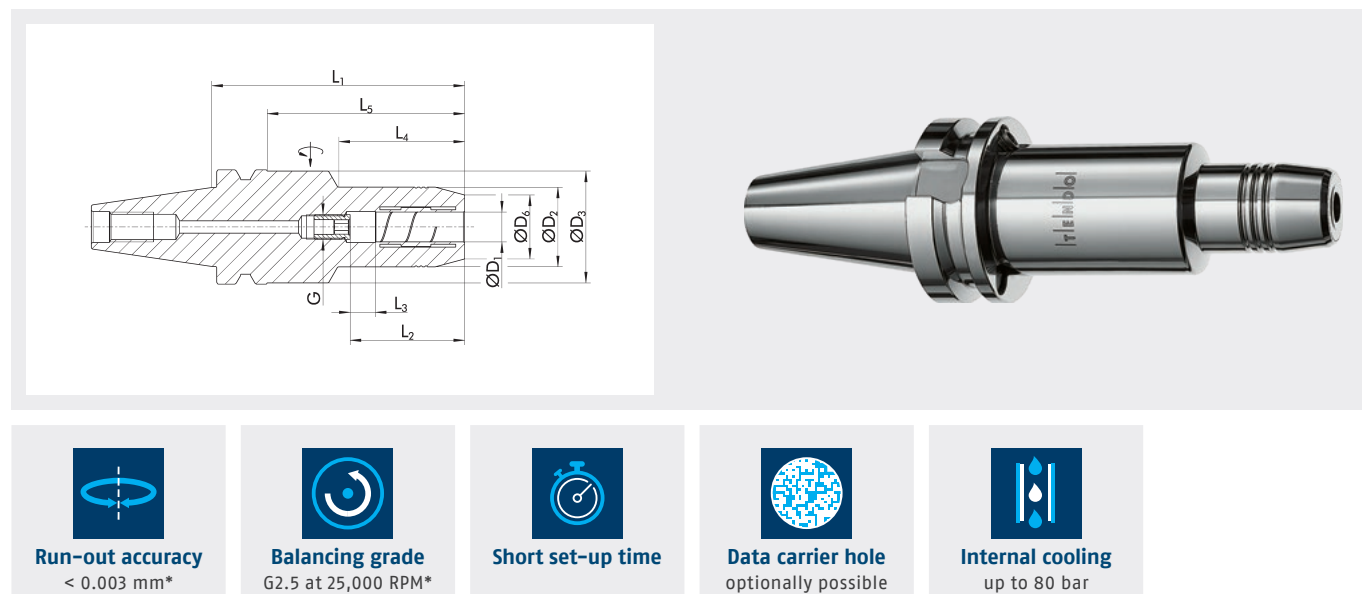
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 30 L₁ = 4"



Technical data

ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0205651	6	26	45	22.2	101.6	37	10	55	79.6	M5	16	2	9205650
0205652	8	26	45	22.2	101.6	37	10	55	79.6	M6	23	2	9205650
0205653	10	30	45	26	101.6	42	10	56.2	79.6	M6x1	45	2	9205650
0205654	12	32	45	26	101.6	46	10	56.7	79.6	M10x1	90	2	9205650
0205656	20	42	45	36	101.6	51	10	60	79.6	M10x1	330	2	9205650
0205661	1/4"	26	45	22.2	101.6	37	10	55	80.2	M5	17	2	9205650
0205663	3/8"	30	45	26	101.6	42	10	56.2	79.7	M6x1	45	2	9205650
0205664	1/2"	32	45	26	101.6	46	10	56.7	79.7	M10x1	95	2	9205650
0205666	3/4"	42	45	36	101.6	51	10	60	79.7	M10x1	310	2	9205650

*Run-out accuracy: at 2.5 x D

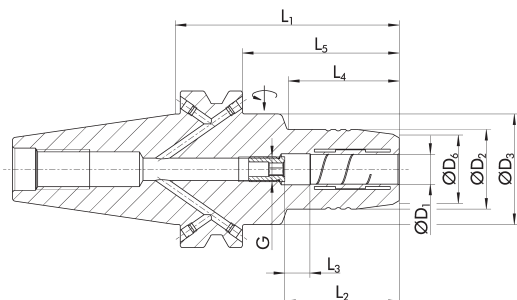
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204440	6	26	44.5	22	90	37	10	43	63	M5	16	1.4	9205650
0204441	8	28	44.5	24	90	37	10	44.5	63	M6	23	1.4	9205650
0204442	10	30	44.5	26	90	41	10	44.5	63	M8x1	45	1.4	9205650
0204443	12	32	44.5	28	90	46	10	44.5	63	M10x1	90	1.4	9205650
0204444	16	38	44.5	34	90	49	10	47.5	63	M12x1	185	1.5	9205650
0204445	20	42	44.5	38	90	51	10	47.5	63	M16x1	330	1.5	9205650
0204465	32	63	73	60	83	61	10	25.5	56	M16x1	650	2.1	9205660

*Run-out accuracy: at 2.5 x D

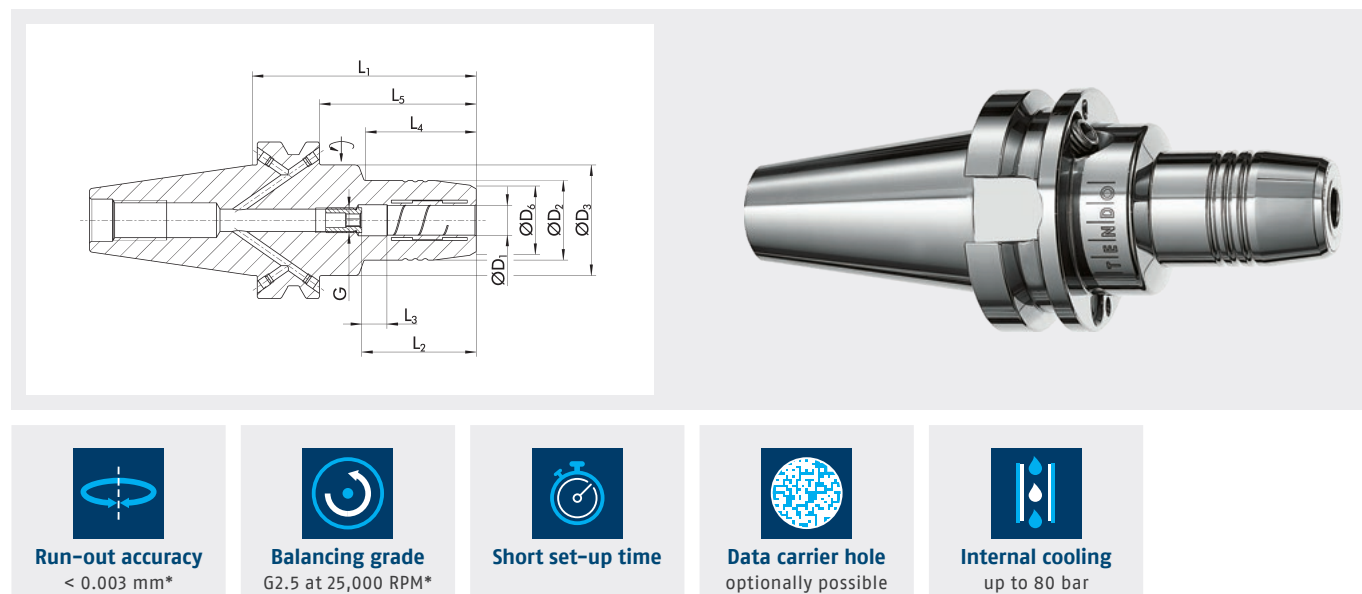
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 40



Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0205140	1/4"	26	44.5	21.5	90	37	10	43	63	M5	17	1.4	9205650
0205142	3/8"	30	44.5	27.5	90	41	10	44.5	63	M6x1	45	1.4	9205650
0205143	1/2"	32	44.5	27.5	90	46	10	44.5	63	M10x1	95	1.4	9205650
0205144	5/8"	38	44.5	33.5	90	49	10	47.5	63	M10x1	185	1.4	9205650
0205145	3/4"	42	44.5	37.5	90	51	10	47.5	63	M10x1	310	1.4	9205650

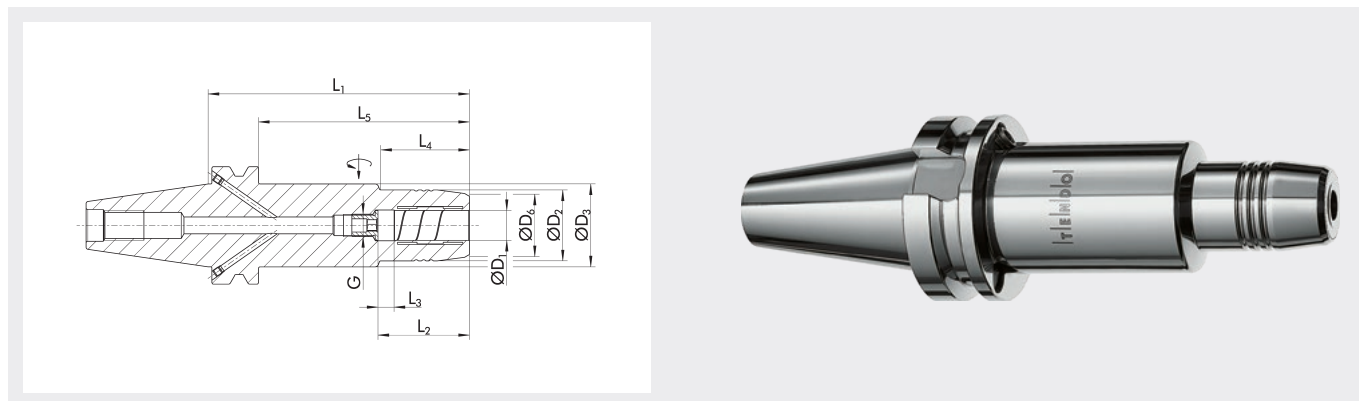
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 40 L₁ =140


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204446	6	26	44.5	22	140	37	10	43	113	M5	16	2	9205650
0204447	8	28	44.5	24	140	37	10	44.5	113	M6	23	2	9205650
0204448	10	30	44.5	26	140	41	10	44.5	113	M8x1	45	2	9205650
0204449	12	32	44.5	28	140	46	10	44.5	113	M10x1	90	2	9205650
0204450	16	38	44.5	34	140	49	10	47.5	113	M12x1	185	2.1	9205650
0204451	20	42	44.5	38	140	51	10	47.5	113	M16x1	330	2.1	9205650

*Run-out accuracy: at 2.5 x D

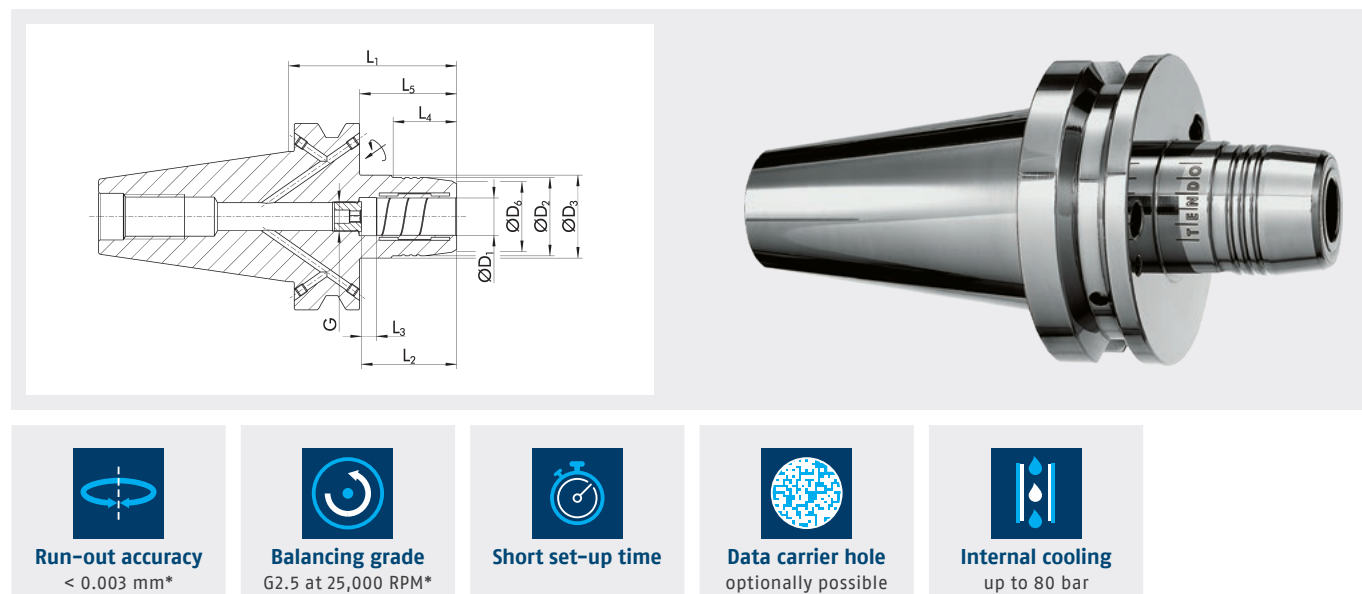
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 50



Technical data

ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204455	12	32	44.5	28	90	46	10	34	52	M10x1	90	4	9205650
0204457	20	42	44.5	38	90	51	10	34	52	M16x1	330	4	9205650
0204458	32	64	70.25	60	120	61	10	62.5	82	M16x1	650	5.3	9205660
0205183	1/2"	32	44.5	27.5	90	46	10	34	52	M10x1	95	4	9205650
0205185	3/4"	42	44.5	37.5	90	51	10	34	52	M16x1	310	4	9205650

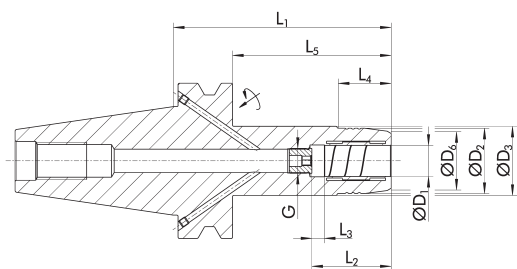
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P JIS-BT 50 L₁ =140


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0204461	12	32	44.5	28	140	46	10	34	102	M10x1	90	4.6	9205650
0204463	20	42	44.5	38	140	51	10	34	102	M16x1	330	4.7	9205650

*Run-out accuracy: at 2.5 x D

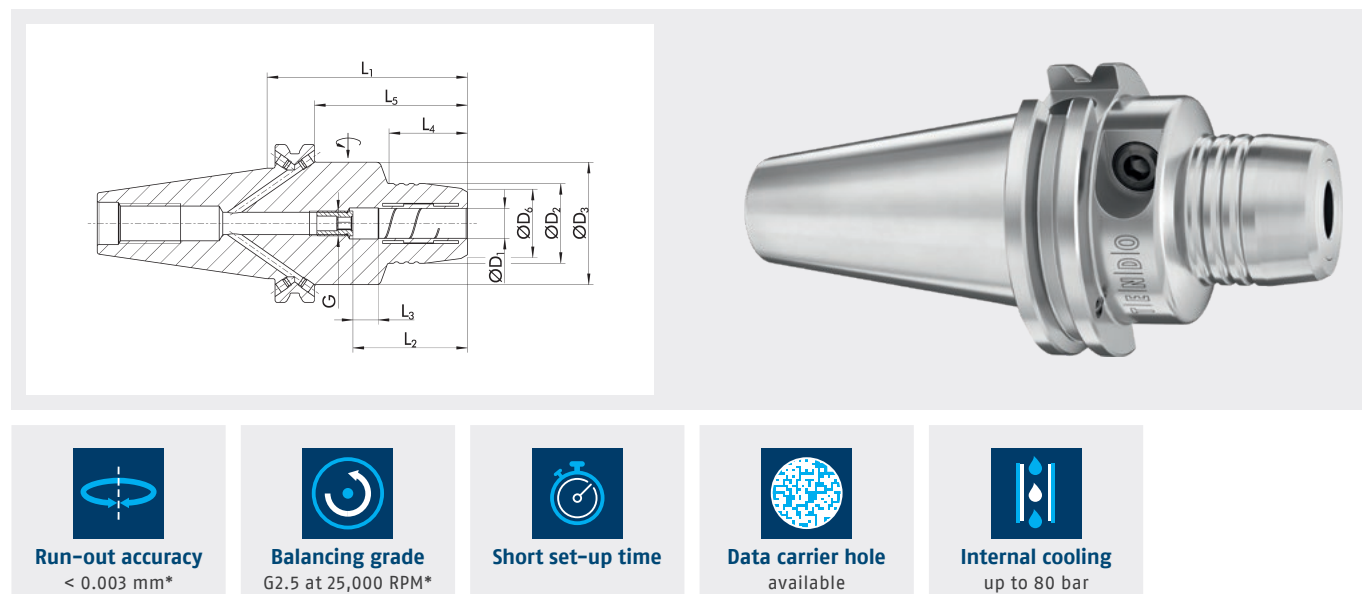
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40



Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447887	6	26	49	19.8	63.5	37	10	24	44.45	M5	16	1.2	9205650
1447888	8	28	49	23.6	63.5	37	10	25	44.45	M5	23	1.2	9205650
1447889	10	30	49	24	63.5	41	10	27	44.45	M5	45	1.1	9205650
1447890	12	32	49	27.1	63.5	46	10	26	44.45	M10x1	90	1.1	9205650
1447891	14	34	49	28.8	63.5	46	10	26	44.45	M10x1	110	1.2	9205650
1447892	16	38	52	33.1	63.5	49	10	27	44.45	M10x1	185	1.2	9205650
1447893	20	42	55	37.6	63.5	51	10	25	44.45	M10x1	330	1.3	9205650

*Run-out accuracy: at 2.5 x D

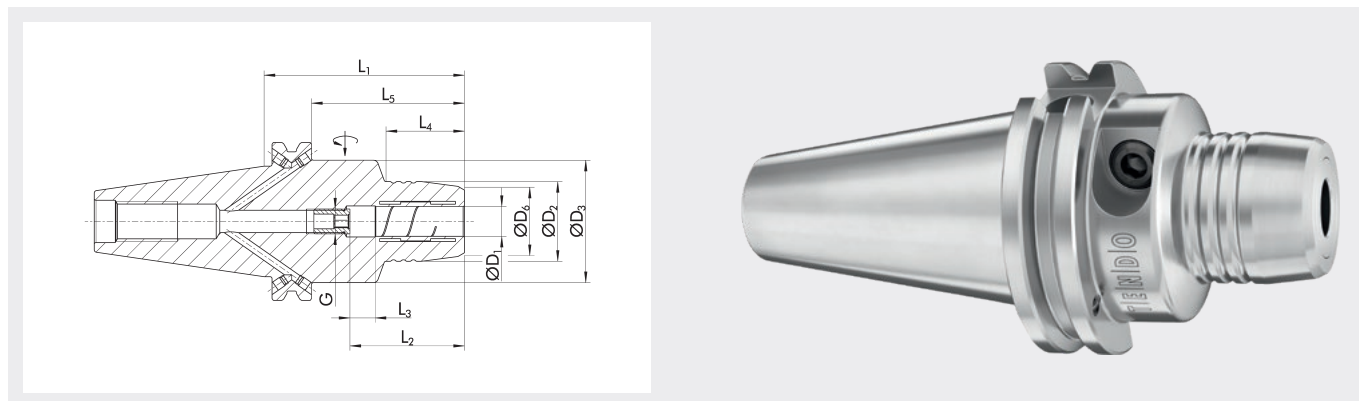
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447880	1/4"	26	44.45	19.8	63.5	37	10	22.64	44.45	M5	17	1.1	9205650
1447882	3/8"	30	49	25	63.5	41	10	22.54	44.45	M5	45	1.2	9205650
1447883	1/2"	32	49	27	63.5	46	10	24.5	44.45	M10x1	95	1.2	9205650
1447884	5/8"	38.05	60	34.5	63.5	49	10	22	44.45	M10x1	185	1.3	9205650
1447885	3/4"	44.45	60	38	63.5	51	10	23.17	44.45	M10x1	310	1.4	9205650

*Run-out accuracy: at 2.5 x D

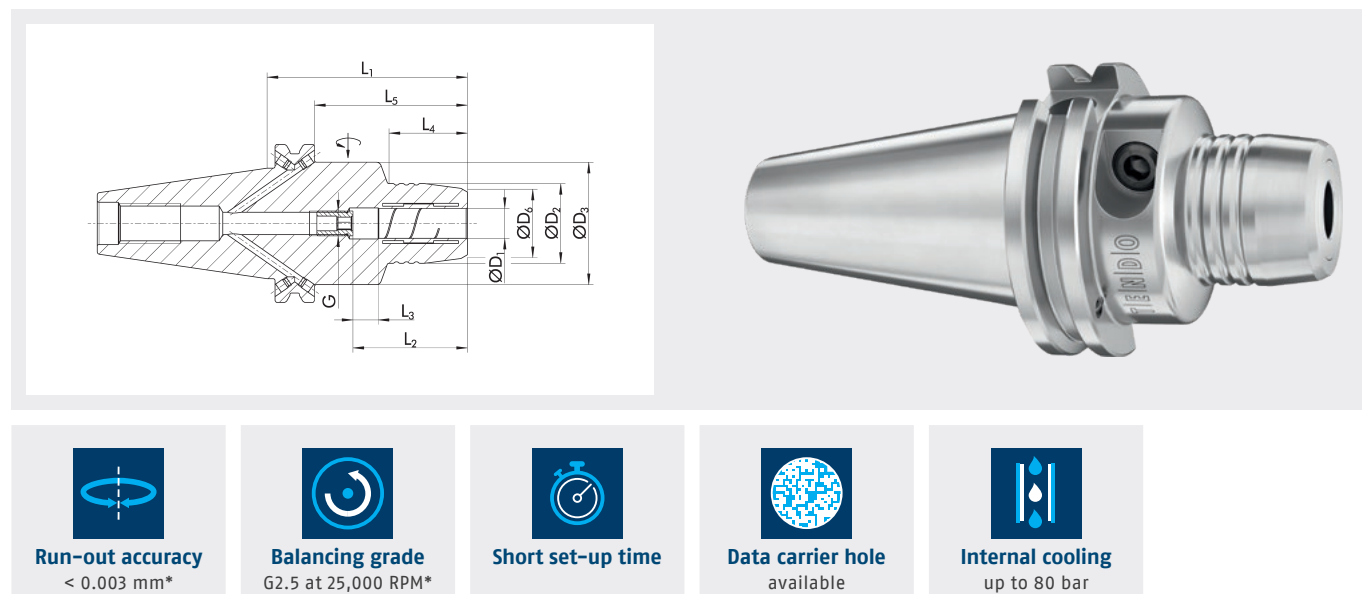
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 81



Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447895	1"	55	62.5	48	81	57	10	40	61.95	M10x1	400	1.7	9205660

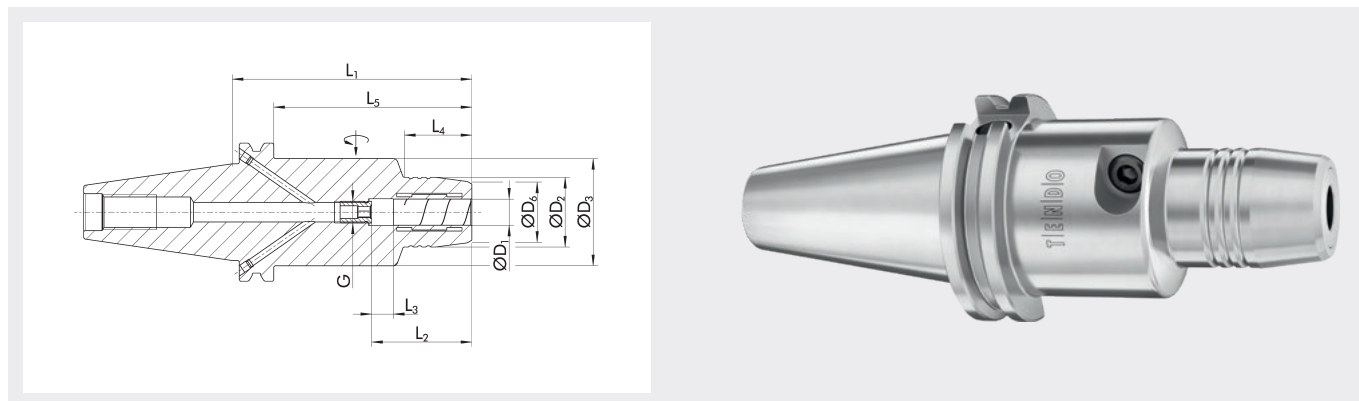
*Run-out accuracy: at 2.5 x D

*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 4"


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447905	6	26	49	19.8	101.6	37	10	24	82.55	M5	16	1.7	9205650
1447906	8	28	49	23.6	101.6	37	10	25	82.55	M5	23	1.7	9205650
1447907	10	30	49	23.8	101.6	41	10	35	82.55	M5	45	1.6	9205650
1447908	12	32	49	25.5	101.6	46	10	40	82.55	M10x1	90	1.6	9205650
1447909	14	34	49	27.8	101.6	46	10	40	82.55	M10x1	110	1.6	9205650
1447910	16	38	49	31.5	101.6	49	10	46	82.55	M10x1	185	1.6	9205650
1447911	20	42	49	35.5	101.6	51	10	48	82.55	M10x1	330	1.6	9205650
1447912	25	48	57	41.5	101.6	57	10	56	82.55	M10x1	400	1.8	9205660
1447913	32	62		55.4	101.6	61	10		82.55	M10x1	650	2.1	9205660

*Run-out accuracy: at 2.5 x D

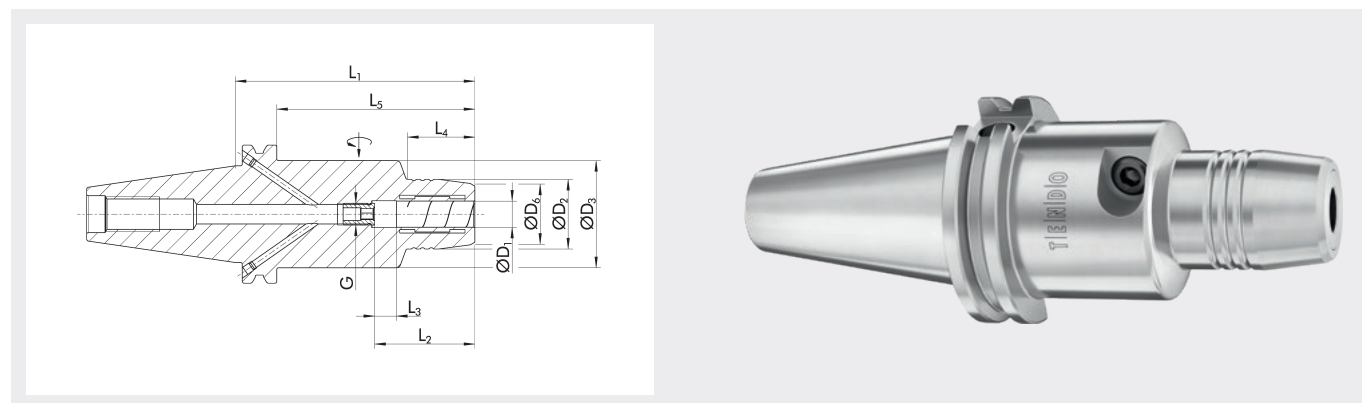
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 4"



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447896	1/4"	26	44.45	19.8	101.6	37	10	28.64	82.55	M5	17	1.5	9205650
1447898	3/8"	30	44.45	24	101.6	41	10	35.37	82.55	M5	45	1.4	9205650
1447899	1/2"	32	44.45	25.8	101.6	46	10	31.5	82.55	M10x1	95	1.5	9205650
1447900	5/8"	38.05	49	31.8	101.6	49	10	33	82.55	M10x1	185	1.7	9205650
1447901	3/4"	44.45	49	35.02	101.6	51	10	43.17	82.55	M10x1	310	1.7	9205650
1447903	1"	55	62	48	101.6	57	10	40	82.55	M10x1	400	2.2	9205660
1447904	1 1/4"	62		55.62	101.6	61	10		82.55	M10x1	650	2.3	9205660

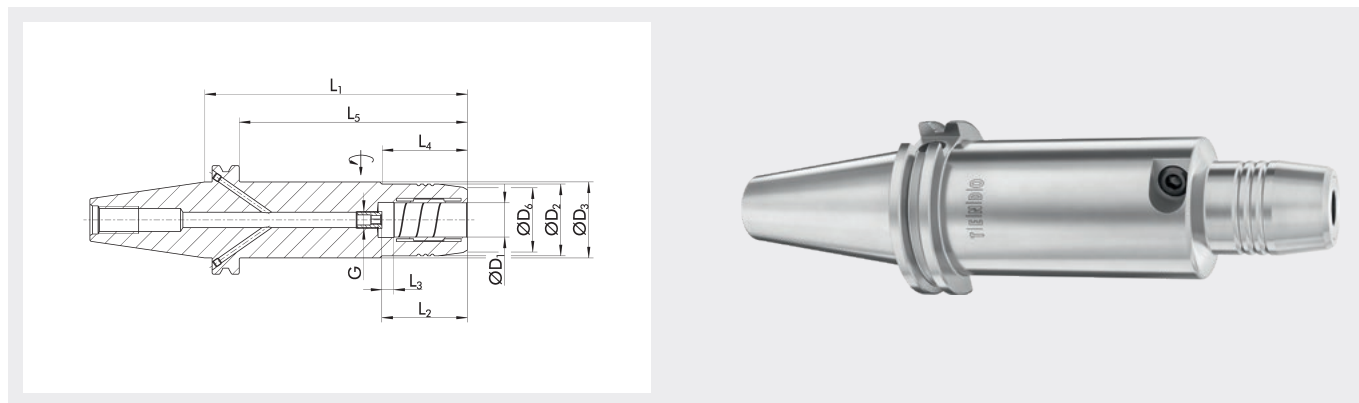
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 6"


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447922	6	26	49	19.8	152.4	37	10	24	133.35	M5	16	2.5	9205650
1447923	8	28	49	23.6	152.4	37	10	25	133.35	M5	23	2.5	9205650
1447924	10	30	49	23.8	152.4	41	10	35	133.35	M5	45	2.4	9205650
1447925	12	32	49	25.5	152.4	46	10	40	133.35	M10x1	90	2.3	9205650
1447926	14	34	49	27.8	152.4	46	10	40	133.35	M10x1	110	2.3	9205650
1447927	16	38	49	31.5	152.4	49	10	46	133.35	M10x1	185	2.3	9205650
1447928	20	42	49	35.5	152.4	51	10	48	133.35	M10x1	330	2.4	9205650
1447929	25	48	57	41.5	152.4	57	10	56	133.35	M10x1	400	2.8	9205660

*Run-out accuracy: at 2.5 x D

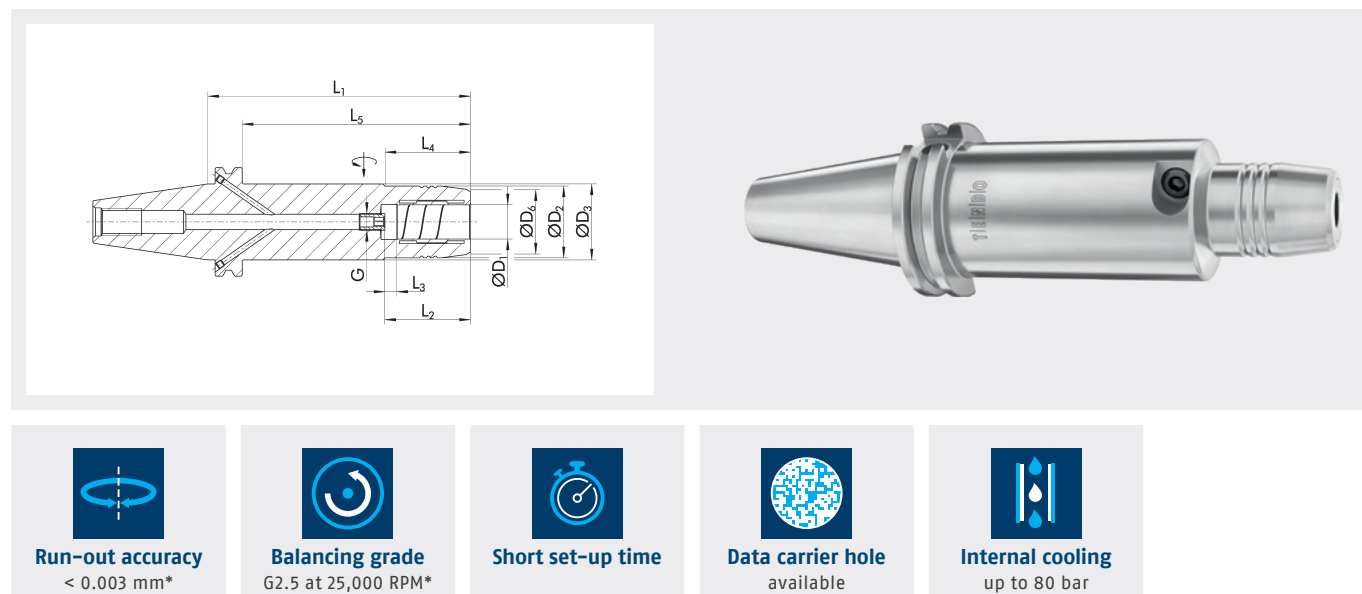
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 6"



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447914	1/4"	26	44.45	19.8	152.4	37	10	28.64	133.35	M5	17	2.2	9205650
1447916	3/8"	30	44.45	24	152.4	41	10	35.37	133.35	M5	45	2.1	9205650
1447917	1/2"	32	44.45	25.8	152.4	46	10	31.5	133.35	M10x1	95	2.1	9205650
1447918	5/8"	38.05	49	31.8	152.4	49	10	33	133.35	M10x1	185	2.4	9205650
1447919	3/4"	44.45	49	35.02	152.4	51	10	43.17	133.35	M10x1	310	2.4	9205650
1447921	1"	55	58	48	152.4	57	10	40	133.35	M10x1	400	3.1	9205660

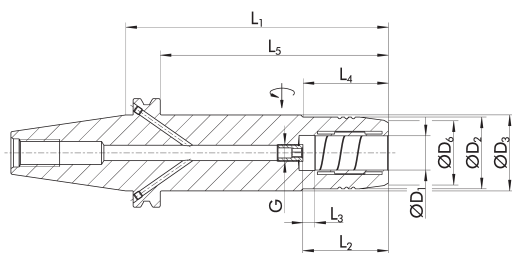
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 40 L₁ = 8"


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm/Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447931	20	42	49	35.5	203.2	51	10	48	184.15	M10x1	310	3.1	9205650
1447930	3/4"	44.45	49	35	203.2	51	10	43.17	184.15	M10x1	310	3.2	9205650

*Run-out accuracy: at 2.5 x D

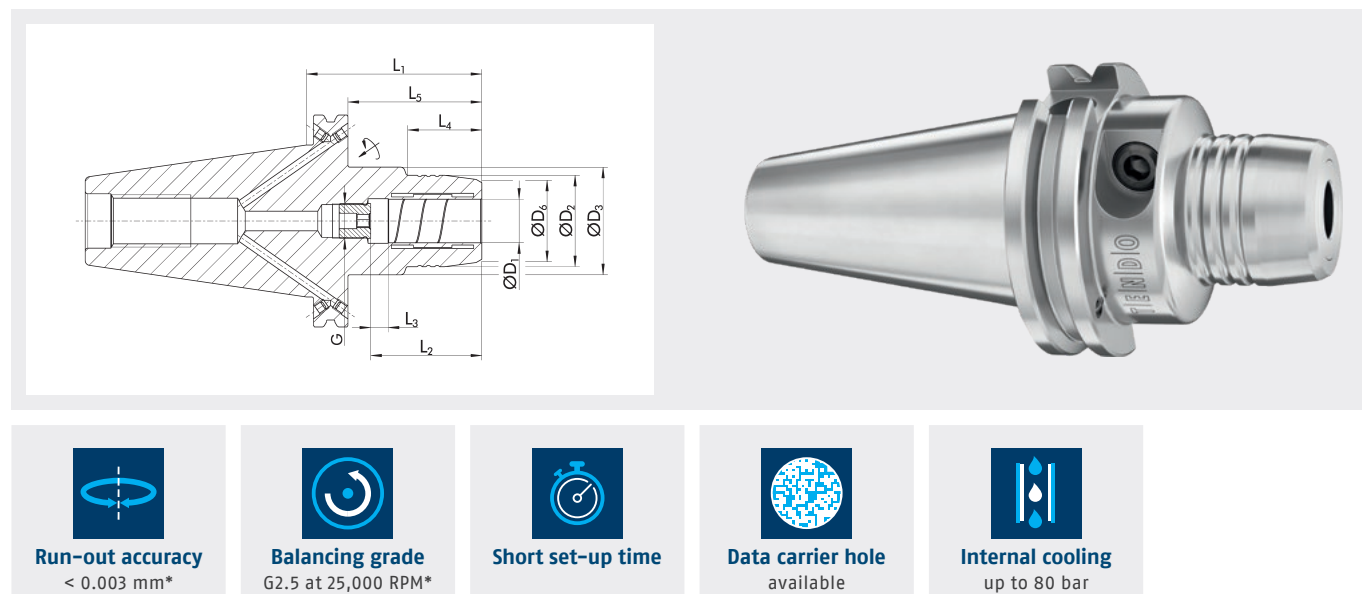
*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50



Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447941	6	26	49	19.8	81	37	10	24	61.95	M5	16	3.3	9205650
1447942	10	30	49	23.8	81	41	10	35	61.95	M5	45	3.2	9205650
1447943	12	32	49	25.5	81	46	10	40	61.95	M10x1	90	3	9205650
1447944	14	34	49	27.8	81	46	10	40	61.95	M10x1	110	3.1	9205650
1447945	16	38	49	31.5	81	49	10	45	61.95	M10x1	185	3.1	9205650
1447946	20	42	51	35.5	81	51	10	46	61.95	M10x1	330	3.1	9205650
1447947	25	48	68	41.5	81	57	10	35.4	61.95	M10x1	400	3.4	9205660
1447948	32	62	75	55.5	81	61	10	40	61.95	M10x1	650	3.7	9205660

*Run-out accuracy: at 2.5 x D

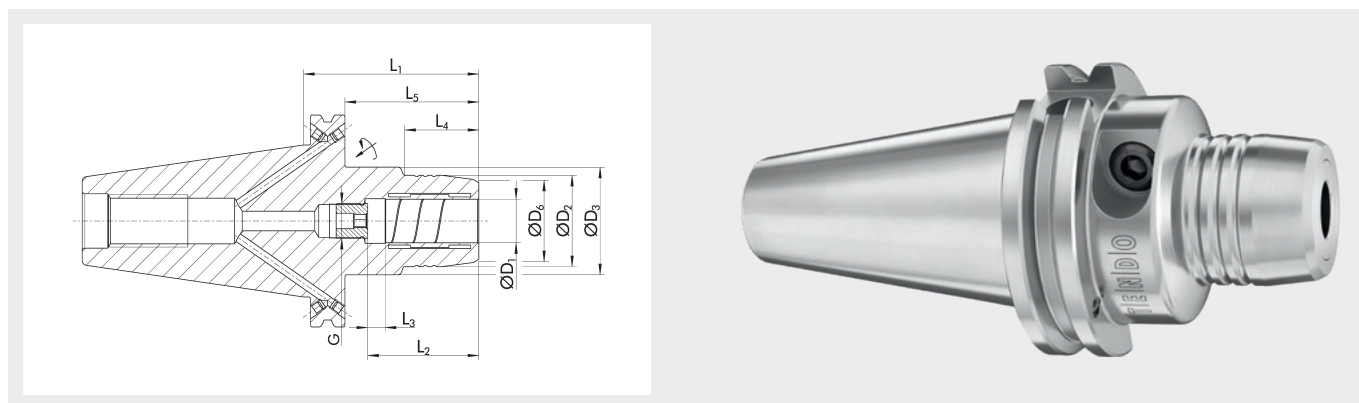
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447932	1/4"	26	44.45	19.8	81	37	10	22.6	61.95	M5	17	3.1	9205650
1447934	3/8"	30	44.45	24	81	41	10	35.37	61.95	M5	45	3	9205650
1447935	1/2"	32	44.45	25.8	81	46	10	31.5	61.95	M10x1	95	3.1	9205650
1447936	5/8"	38.05	49	31.8	81	49	10	33	61.95	M10x1	185	3.2	9205650
1447937	3/4"	44.45	49	35.02	81	51	10	43.17	61.95	M10x1	310	3.2	9205650
1447939	1"	55	63.5	48	81	57	10	38.45	61.95	M10x1	400	3.4	9205660
1447940	1 1/4"	62	80	55.5	81	61	10	38	61.95	M10x1	650	3.9	9205660

*Run-out accuracy: at 2.5 x D

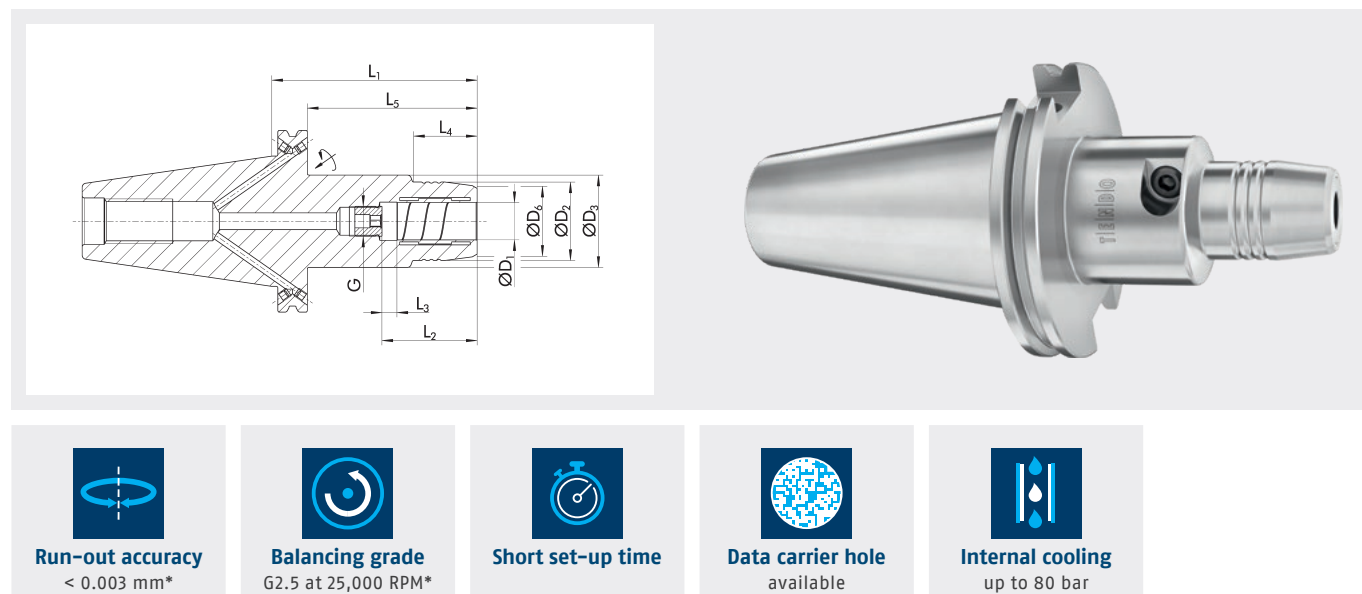
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50 L₁ = 4"



Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447958	6	26	49	19.8	101.6	37	10	24	82.55	M5	16	3.5	9205650
1447959	8	28	49	23.5	101.6	37	10	25	82.55	M5	23	3.5	9205650
1447960	10	30	49	23.8	101.6	41	10	35	82.55	M5	45	3.4	9205650
1447961	12	32	49	25.5	101.6	46	10	40	82.55	M10x1	90	3.3	9205650
1447962	14	34	49	27.8	101.6	46	10	40	82.55	M10x1	110	3.4	9205650
1447963	16	38	49	31.5	101.6	49	10	46	82.55	M10x1	185	3.4	9205650
1447964	20	42	49	35.5	101.6	51	10	48	82.55	M10x1	330	3.4	9205650
1447965	25	48	57	41.5	101.6	57	10	56	82.55	M10x1	400	3.6	9205660
1447966	32	62		55.5	101.6	61	10		82.55	M10x1	650	4	9205660

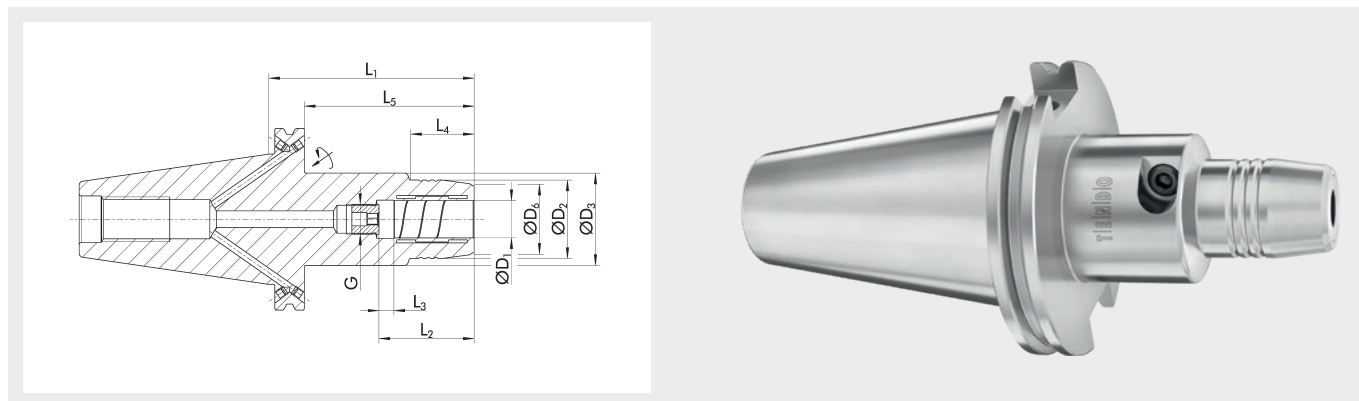
*Run-out accuracy: at 2.5 x D

*Balancing grade: or U_{max} < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50 L₁ = 4"


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447949	1/4"	26	44.45	19.8	101.6	37	10	22.6	82.55	M5	17	3.4	9205650
1447951	3/8"	30	44.45	24	101.6	41	10	35.37	82.55	M5	45	3.3	9205650
1447952	1/2"	32	44.45	25.8	101.6	46	10	31.5	82.55	M10x1	95	3.3	9205650
1447953	5/8"	38.05	49	31.8	101.6	49	10	33	82.55	M10x1	185	3.5	9205650
1447954	3/4"	44.45	49	35.02	101.6	51	10	43.17	82.55	M10x1	310	3.5	9205650
1447956	1"	55	63.5	48	101.6	57	10	38.45	82.55	M10x1	400	4.1	9205660
1447957	1 1/4"	62	80	55.5	101.6	61	10	38	82.55	M10x1	650	4.7	9205660

*Run-out accuracy: at 2.5 x D

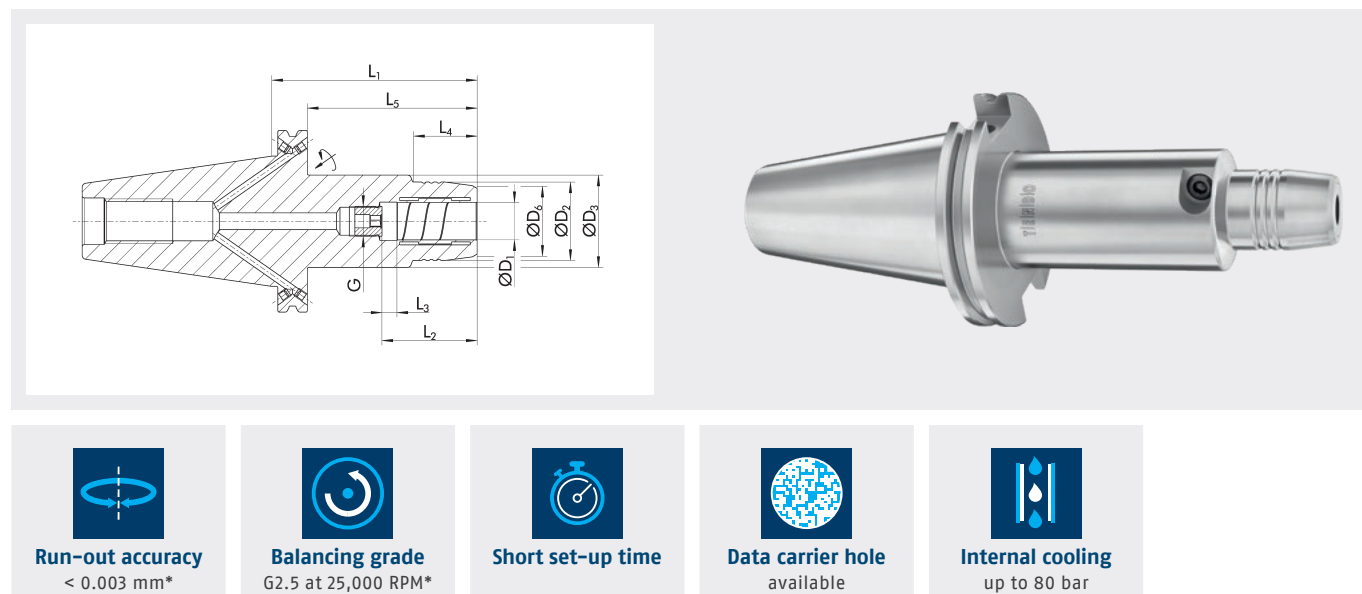
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50 L₁ = 6"



Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447976	6	26	49	19.8	152.4	37	10	24	133.35	M5	16	4.3	9205650
1447977	10	30	49	23.8	152.4	41	10	35	133.35	M5	45	4.1	9205650
1447978	12	32	49	25.5	152.4	46	10	40	133.35	M10x1	90	4.1	9205650
1447979	14	34	49	27.8	152.4	46	10	40	133.35	M10x1	110	4.1	9205650
1447980	16	38	49	31.5	152.4	49	10	46	133.35	M10x1	185	4.1	9205650
1447981	20	42	49	35.5	152.4	51	10	48	133.35	M10x1	330	4.1	9205650
1447982	25	48	57	41.5	152.4	57	10	56	133.35	M10x1	400	4.6	9205660
1447983	32	62		55.5	152.4	61	10		133.35	M10x1	650	5.2	9205660

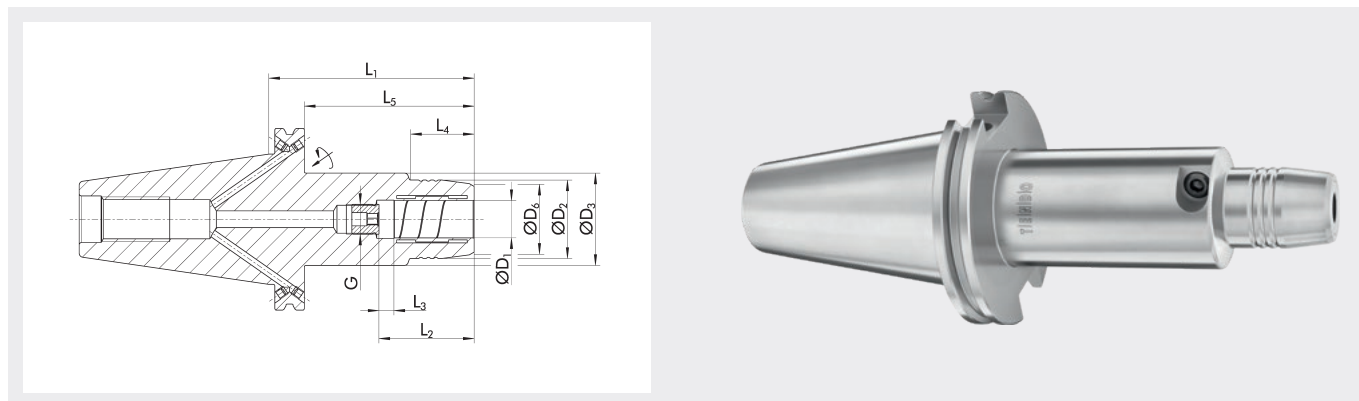
*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50 L₁ = 6"


Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
available



Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
1447967	1/4"	26	44.45	19.8	152.4	37	10	22.6	133.35	M5	17	4	9205650
1447969	3/8"	30	44.45	24	152.4	41	10	35.37	133.35	M5	45	3.9	9205650
1447970	1/2"	32	44.45	25.8	152.4	46	10	31.5	133.35	M10x1	95	3.9	9205650
1447971	5/8"	38.05	49	31.8	152.4	49	10	33	133.35	M10x1	185	4.2	9205650
1447972	3/4"	44.45	49	35.02	152.4	51	10	43.17	133.35	M10x1	310	4.2	9205650
1447974	1"	55	63.5	48	152.4	57	10	38.45	133.35	M10x1	400	5.3	9205660
1447975	1 1/4"	62	80	55.5	152.4	61	10	38	133.35	M10x1	650	6.7	9205660

*Run-out accuracy: at 2.5 x D

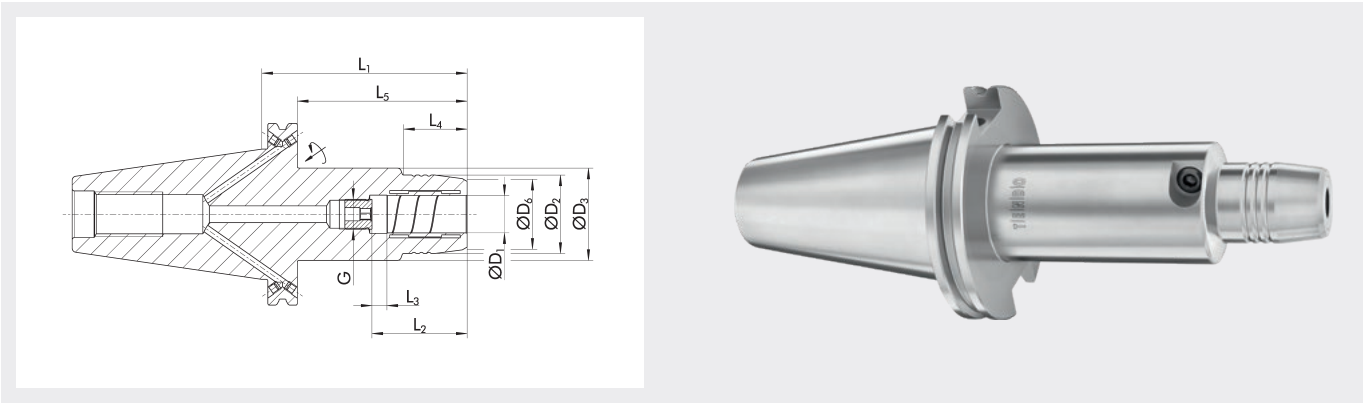
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P CAT 50 L₁ = 8"



Run-out accuracy
< 0.003 mm*

Balancing grade
G2.5 at 25,000 RPM*

Short set-up time

Data carrier hole
available

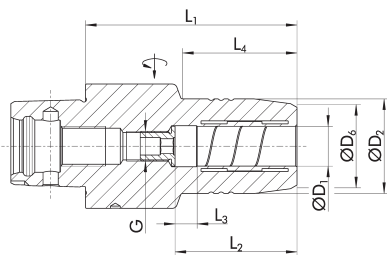
Internal cooling
up to 80 bar

Technical data

ID	D1 [Inch]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Weight [kg]	
1447984	1 1/4"	62	80	55.5	203.2	61	10	38	184.15	M10x1	8.6	9205660

*Run-out accuracy: at 2.5 x D
 *Balancing grade: or U_{max} < 1 gmm
 Additional sizes and customized designs are available upon request
 Cool Flow available on request
 Additional shank diameters can be clamped using intermediate sleeves

TENDO P SCHUNK CAPTO C4



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0201831	6	26	22	66	37	10	35	M5	16	0.5	9205640
0201832	8	28	24	66	37	10	36	M6	23	0.5	9205640
0201833	10	30	26	76	41	10	41	M8x1	45	0.6	9205640
0201834	12	32	28	81	46	10	47	M8x1	90	0.7	9205640

*Run-out accuracy: at 2.5 x D

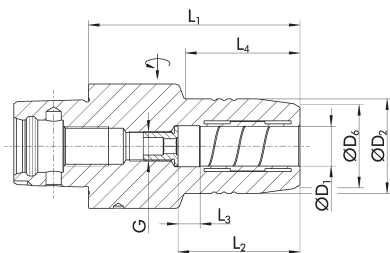
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SCHUNK CAPTO C5



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	G	Mmin [Nm]	Weight [kg]	
0201841	6	26	22	70	37	10	30	M5	16	0.8	9205650
0201842	8	28	24	70	37	10	30	M6	23	0.8	9205650
0201843	10	30	26	80	41	10	35	M8x1	45	0.95	9205650
0201844	12	32	28	85	46	10	44	M10x1	90	0.9	9205650
0201849	14	34	30	85	46	10	46	M10x1	110	1.05	9205650
0201845	16	38	34	90	49	10	51	M12x1	185	1.05	9205650
0201840	18	40	36	90	49	10	51	M12x1	240	1.05	9205650
0201846	20	42	38	90	51	10	52	M16x1	330	1.05	9205650

*Run-out accuracy: at 2.5 x D

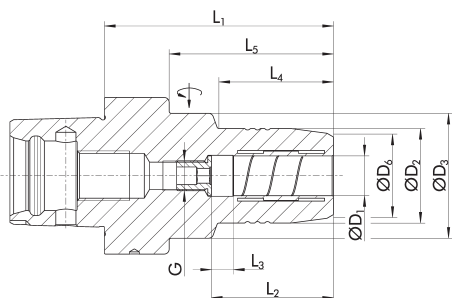
*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves

TENDO P SCHUNK CAPTO C6



Run-out accuracy
< 0.003 mm*



Balancing grade
G2.5 at 25,000 RPM*



Short set-up time



Data carrier hole
optionally possible



Internal cooling
up to 80 bar

Technical data

ID	D1 [mm]	D2 [mm]	D3 [mm]	D6 [mm]	L1 [mm]	L2 [mm]	L3 [mm]	L4 [mm]	L5 [mm]	G	Mmin [Nm]	Weight [kg]	
0201851	6	26	50	22	72	37	10	25	46	M5	16	1.3	9205650
0201852	8	28	50	24	72	37	10	25	46	M6	23	1.3	9205650
0201853	10	30	50	26	82	41	10	36	56	M8x1	45	1.3	9205650
0201854	12	32	50	28	87	46	10	39	61	M10x1	90	1.3	9205650
0201859	14	34	50	30	87	46	10	41	61	M10x1	110	1.3	9205650
0201855	16	38	50	34	92	49	10	46	66	M12x1	185	1.5	9205650
0201850	18	40	50	36	92	49	10	46	66	M12x1	240	1.5	9205650
0201856	20	42		38	97	51	10	55		M16x1	330	1.6	9205650
0201857	25	57		53	102	57	10	61		M16x1	400	2.4	9205660
0201858	32	62.5		59	110	61	10	62		M16x1	650	2.8	9205660

*Run-out accuracy: at 2.5 x D

*Balancing grade: or Umax < 1 gmm

Additional sizes and customized designs are available upon request

Cool Flow available on request

Additional shank diameters can be clamped using intermediate sleeves



SCHUNK SE & Co. KG

Spanntechnik

Greiftechnik

Automatisierungstechnik

Bahnhofstr. 106 - 134

D-74348 Lauffen/Neckar

Tel. +49-7133-103-0

Fax +49-7133-103-2399

CMS@de.schunk.com

schunk.com