



KESSLER

KESSLER develops and produces core components such as motor spindles, rotary tables, swivelling axes, swivelling spindle heads as well as asynchronous and synchronous motors, for use in machining centres. By using almost exclusively self-made motors, KESSLER products can be controlled with all common CNC.

Together with leading machine manufacturers, the product portfolio is continually extended and technically efficient solutions are developed.

The name KESSLER stands for continuity and innovation in the area of development of high precision and technically advanced components for machine tools.

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KESSLER



The heart of the machine

All information was carefully produced and checked. The printed illustrations are of an explanatory nature and may differ from the actual design. However, we cannot accept liability for possible errors.

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Franz Kessler GmbH was founded in Chemnitz in 1923 as a special motor factory for machine tools and textile machines. After the Second World War, the company was re-located to Bad Buchau. Through continuous further development of the product range, KESSLER acquired an excellent reputation as a motor manufacturer. Based on many years of experience as a developer and manufacturer of motors for main drives for machine tools, KESSLER gained a leading position in the field of directly driven motor spindles.



On a production area of 25,000 m², KESSLER produces, assembles and tests the high precision components. The wide production range and the ability to produce all components ourselves offers customers maximum flexibility and safety. This is achieved with modern machinery, flexible assembly lines and state-of-the-art testing technology as well as systematic training and further training measures. The majority of our specialists have undergone in-house training. State-of-the-art production methods and a controlled workflow are designed for the reliability of the customers. As a system supplier, KESSLER always keeps the requirements of the OEM customers in mind.

KESSLER intends to set records. Our core competencies are motors, bearings, tool clamping and release technology, media supply and sensory mechanisms. The product portfolio is supplemented with swivelling spindle heads and workpiece axes as well as special solutions according to customers' requirements. Customers can choose from a wide range of standard products. On request, special designs are also developed and implemented together with the customer. The portfolio is rounded off with an efficient and worldwide established service and repair department with an integrated replacement parts service.



Motor spindles	Workpiece axes	Milling spindles	DMS / SMS	from page 2
DMS	DTE			
AC asynchronous motor spindles are characterised by a large number of application options for milling, turning or grinding.	The rotary table unit with the direct drive concept is used to position the workpiece for mechanical machining.			
SMS	DTS	Turning spindles	DMS / SMS	from page 64
AC synchronous motor spindles are characterised by high dynamics combined with compact dimensions. Integrated automatic tool clamping systems and rotary unions round off the range of functions.	The rotary-swivel table enables movement in two axes and provides many more machining options.			
GNS	Swivelling spindle heads	Grinding spindles	DMS / SMS	from page 74
Cost-optimised grinding spindles with a compact design with a long service life.	SWS			
GHP	The swivelling system allows the tool to be positioned via several axes. Special solutions can thus be implemented.	Swivelling spindles	DMS / SMS	from page 82
High-performance grinding spindles with a reinforced bearing and powerful motors for even more demanding applications.	SWE			
	The compact 2-axis head with an integrated motor spindle in the designs MINI, SMALL, MEDIUM and LARGE allows a wide variety of applications in the machine tool.	Special spindles	DMS / SMS	from page 94
Motors		Liquid-cooled motors	DMR / SMR	from page 102
DMR				
Liquid-cooled asynchronous motors are frequently used in confined spaces in connection with a low heat input in the machine.		Air-cooled motors	DMQ	from page 130
SMR				
Liquid-cooled synchronous motors include all the advantages of asynchronous motors but are more dynamic and constant in acceleration.		Swivelling spindle heads	SWE / SWS	from page 142
		Workpiece axes	DTE / DTS /	from page 150
		KESSLER Service		from page 159
		KESSLER Akademie		from page 161

All charts in the catalog are performed in the operating mode S6



Milling spindles from KESSLER matching the customers requirements. Minimized short non-productive times, reduced moved mass, high power density, a compact design and low maintenance intervals are outstanding features of KESSLER products.

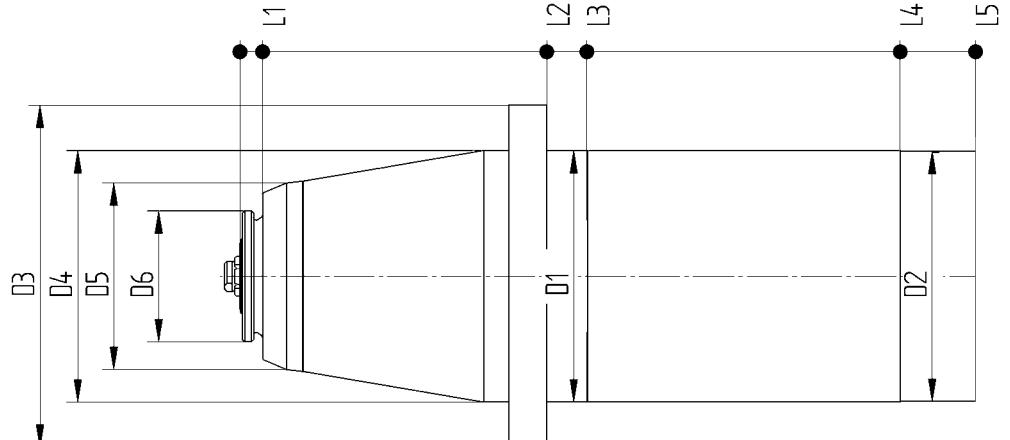
A large number of different versions are available for various applications. With speeds over 40,000 rpm and torques more than 1000 Nm in the S1 mode KESSLER offers customers a comprehensive portfolio of standard products. Complemented by a wide range of interfaces, media supply, a compact design or versions with synchronous motor with more dynamics and bending rigidity, there is more scope for versatile applications.

KESSLER milling spindles are equipped with KESSLER-motors that can be driven with all common CNC controllers. KESSLER provides the parameter sets for our customers - for maximum safety and convenience in the operation of our products.

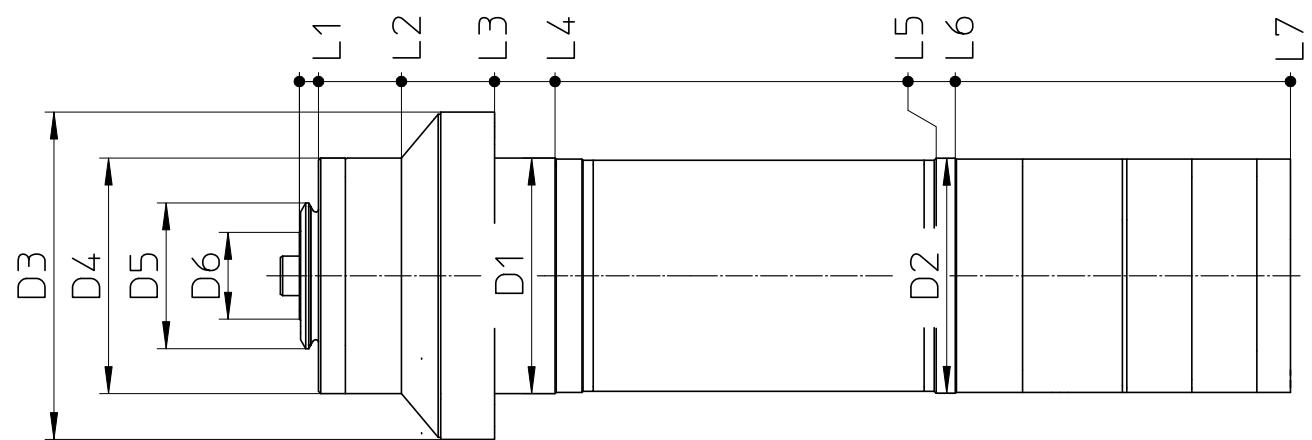
Milling spindles

Fitting measurement

100 - 140 mm

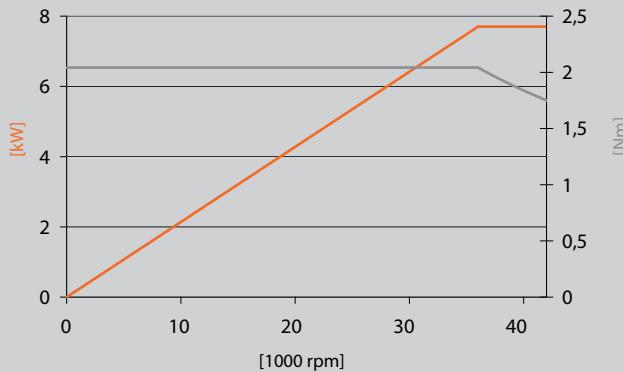


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
100	99,75	136	100	74	52	9	122	138	371,7	391,7	—	—



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
105	104,8	146	105	65	38,7	8,5	45,5	87	114	284	292,5	442

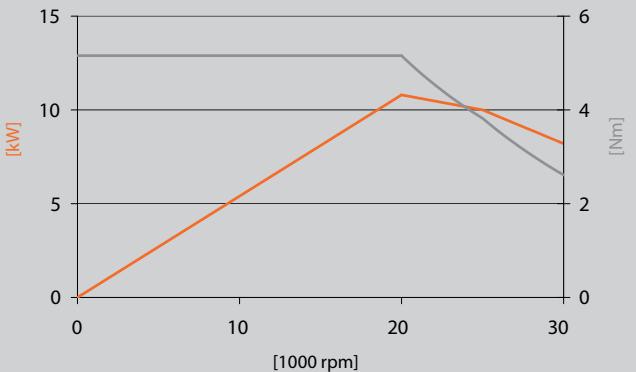
Model	SMS 060-642.902
Torque S1	[Nm] 1.7
Torque S6 (40%)	[Nm] 2.0
Power S1	[kW] 6.0
Power S6 (40%)	[kW] 7.7
Speed	[rpm] 42,000
Weight	[kg] 14
Motor type	synchronous
Tool interface	HSK-E25
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

Model	DMS 040-612.769
Torque S1	[Nm] 4.1
Torque S6 (40%)	[Nm] 5.2
Power S1	[kW] 8.6
Power S6 (40%)	[kW] 10.8
Speed	[rpm] 30,000
Weight	[kg] 25
Motor type	asynchronous
Tool interface	HSK-A40
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

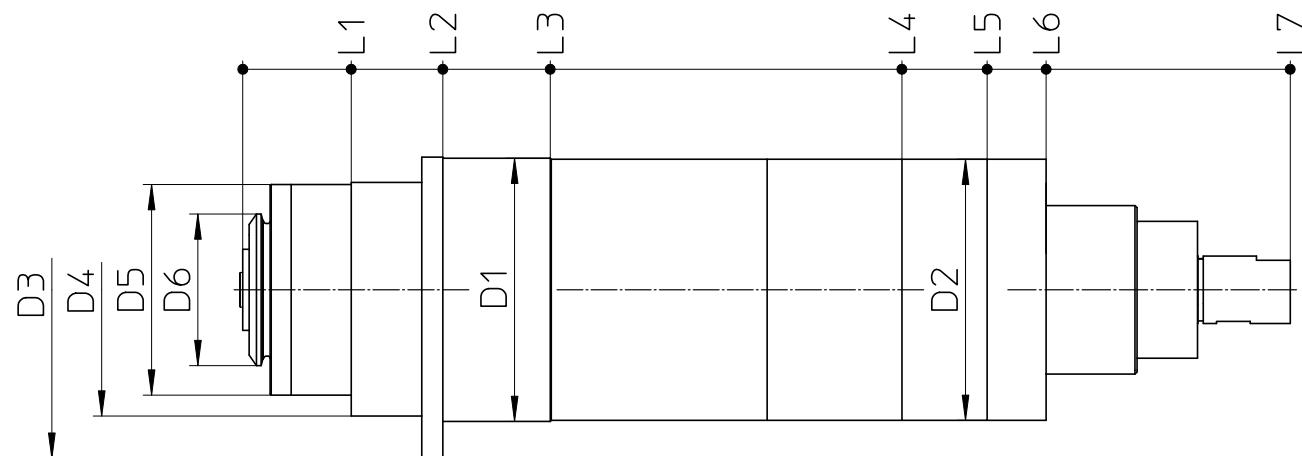
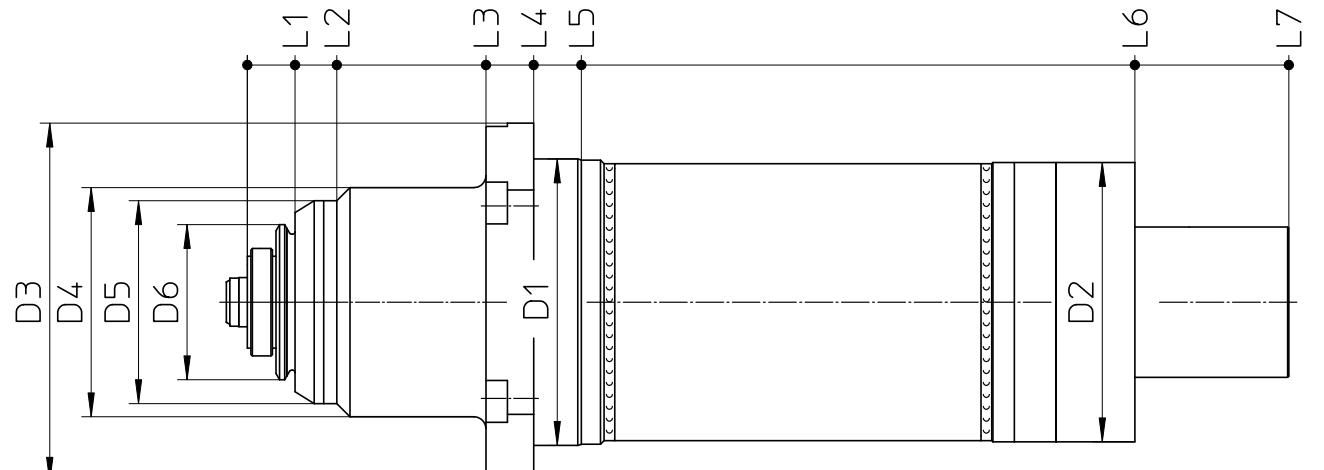
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- [Control of surface contact]
- [Rotary union]
- [Clamp]



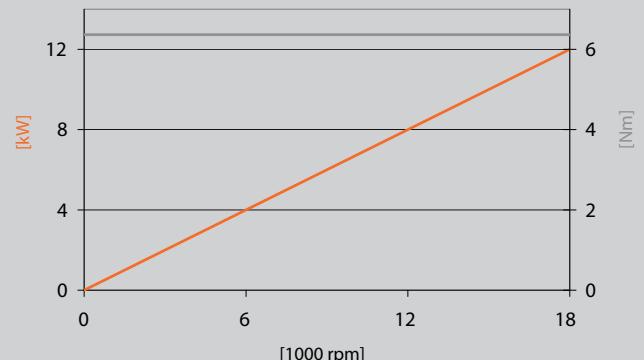
Milling spindles

Fitting measurement

100 - 140 mm

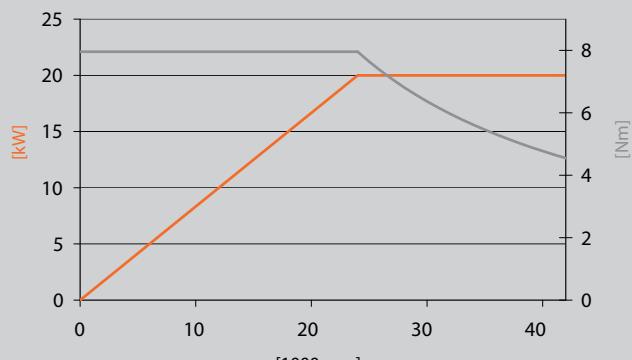


Model	DMS 040-618.075
Torque S1	[Nm] 5.0
Torque S6 (40%)	[Nm] 6.3
Power S1	[kW] 9.4
Power S6 (40%)	[kW] 12.0
Speed	[rpm] 18,000
Weight	[kg] 22
Motor type	asynchronous
Tool interface	HSK-C40
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring] ●
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

Model	SMS 060-646.570
Torque S1	[Nm] 6.0
Torque S6 (40%)	[Nm] 8.0
Power S1	[kW] 15.0
Power S6 (40%)	[kW] 20.0
Speed	[rpm] 42,000
Weight	[kg] 28
Motor type	synchronous
Tool interface	HSK-E40
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

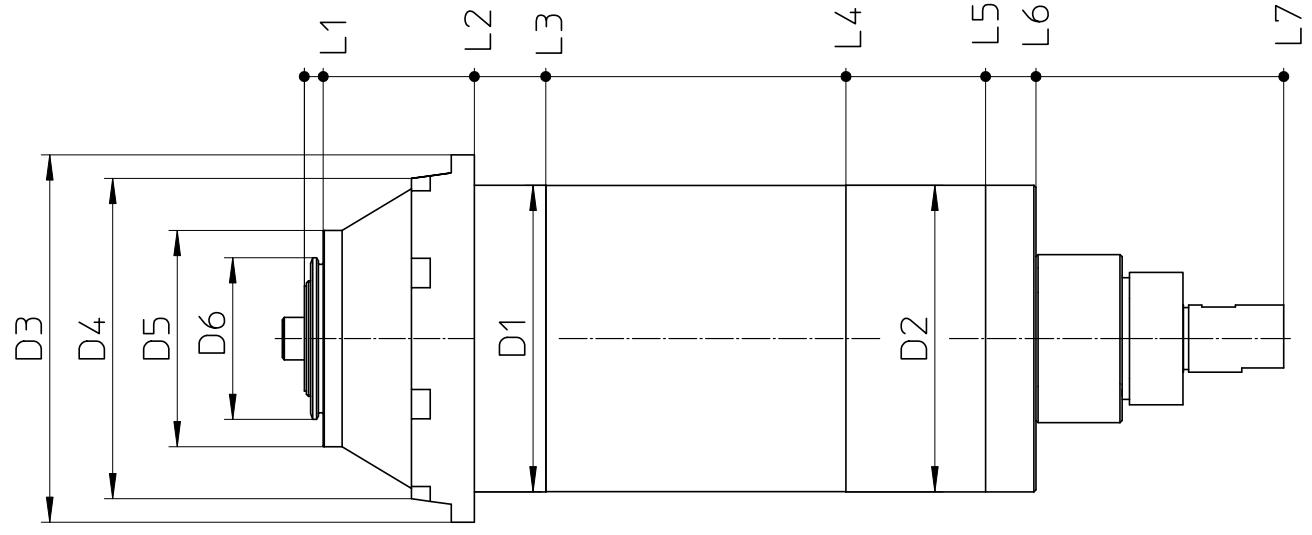


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- [Clamp]

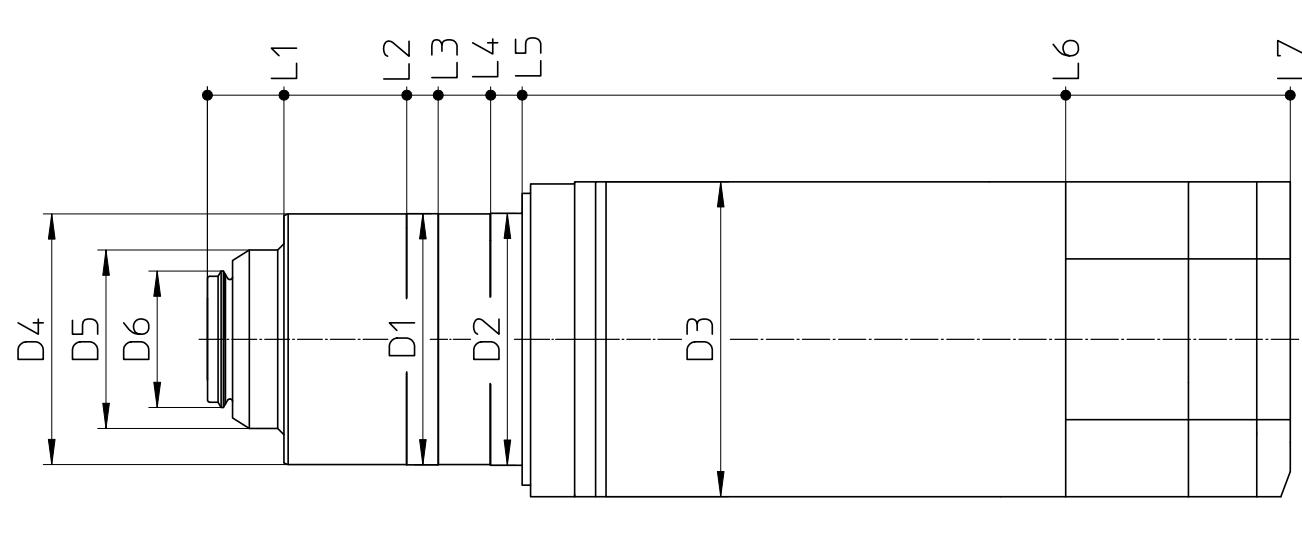
Milling spindles

Fitting measurement

141 - 180 mm

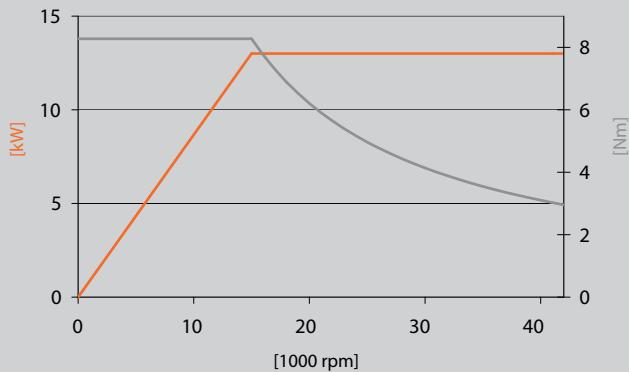


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
146	146	175	153	103	77	9	81	115	258	325	349	467

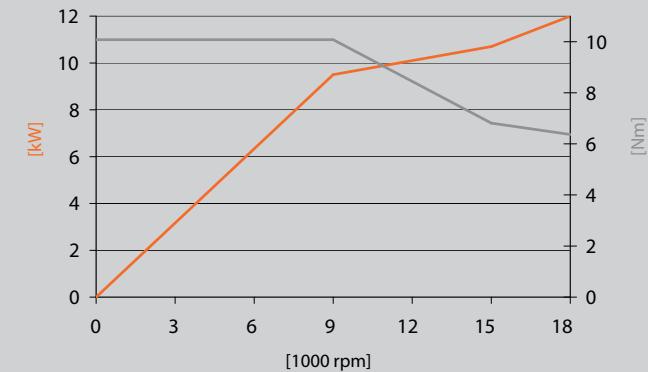


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
120	120	150	119	85	65	36,5	95	110	135	150	409	516

Model	DMS 080-632.925
Torque S1	[Nm] 6.4
Torque S6 (40%)	[Nm] 8.3
Power S1	[kW] 10.0
Power S6 (40%)	[kW] 13.0
Speed	[rpm] 42,000
Weight	[kg] 39
Motor type	asynchronous
Tool interface	HSK-E50
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMS 080-619.674
Torque S1	[Nm] 7.4
Torque S6 (40%)	[Nm] 10.0
Power S1	[kW] 7.0
Power S6 (40%)	[kW] 12.0
Speed	[rpm] 18,000
Weight	[kg] 47
Motor type	asynchronous
Tool interface	HSK-A40
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



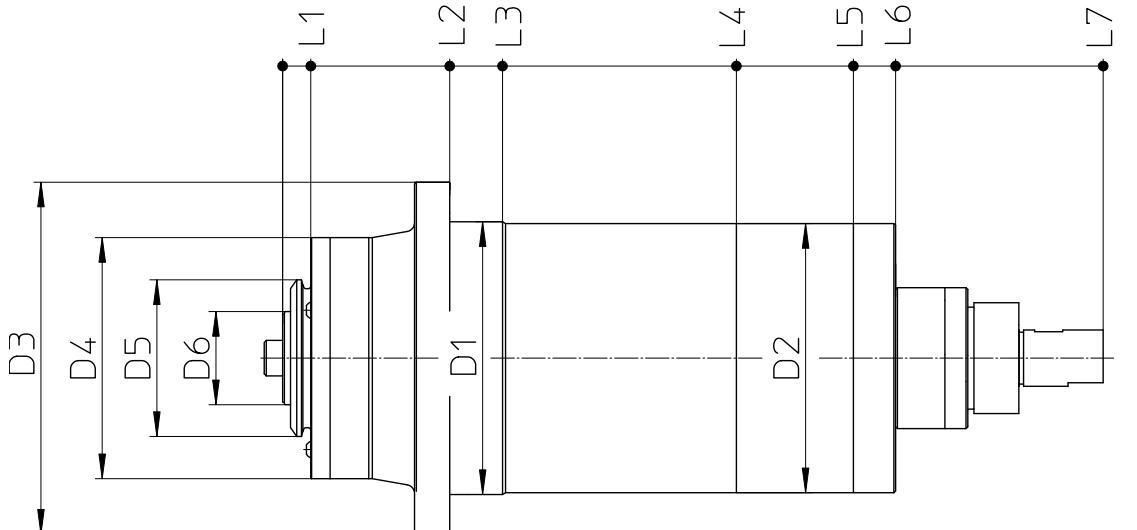
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- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
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- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

- [Temperature sensor PT-100] ●
- [Vibration sensor]
- [Cooling jacket] ●
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- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

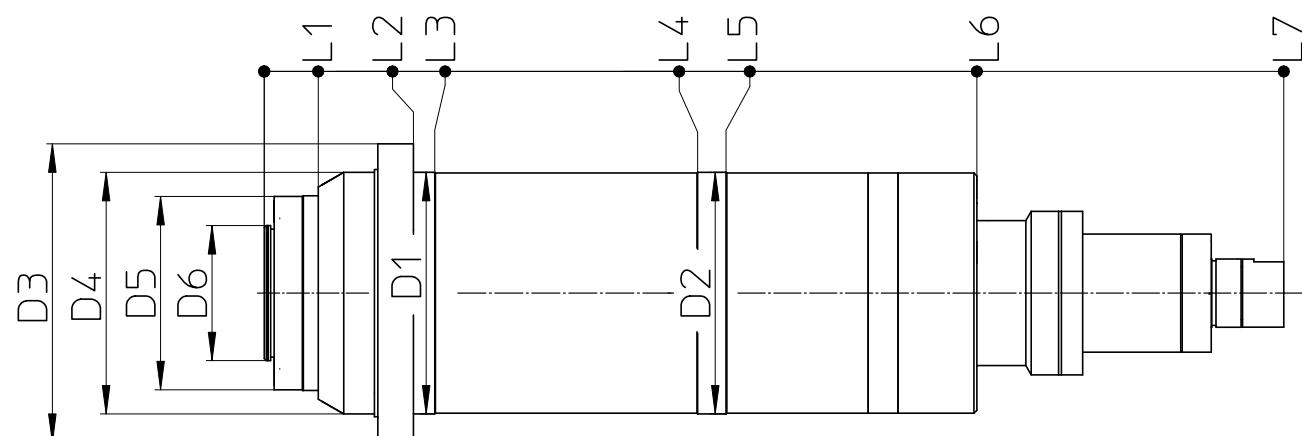
Milling spindles

Fitting measurement

141 - 180 mm

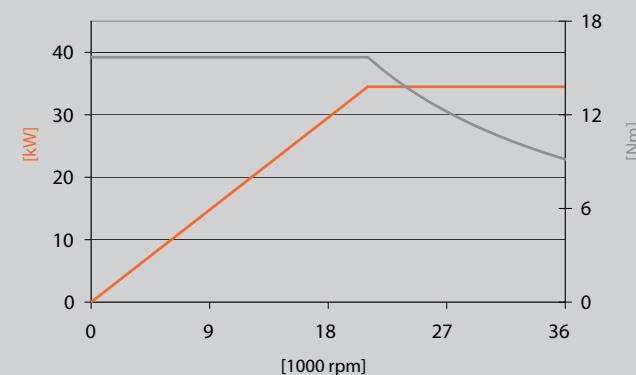


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
155	153	200	137	89	53	16	95	125	258	325	349	467

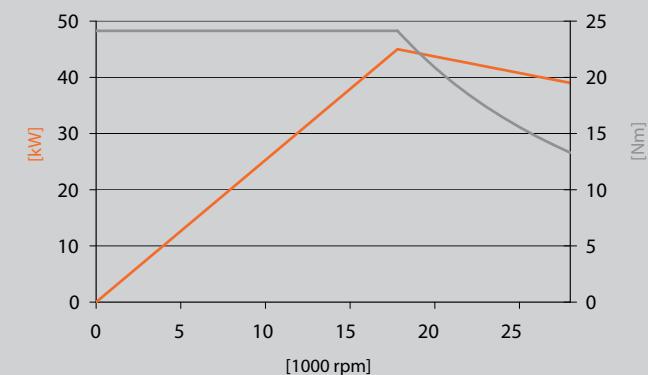


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
170	170	210	170	136	95	38	105	120	305	502	718	

Model	SMS 080-641.490
Torque S1	[Nm] 12.0
Torque S6 (40%)	[Nm] 15.6
Power S1	[kW] 26.5
Power S6 (40%)	[kW] 34.5
Speed	[rpm] 36,000
Weight	[kg] 39
Motor type	synchronous
Tool interface	HSK-E50
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMS 080-619.035
Torque S1	[Nm] 16.0
Torque S6 (40%)	[Nm] 24.6
Power S1	[kW] 30.0
Power S6 (40%)	[kW] 45.0
Speed	[rpm] 28,000
Weight	[kg] 57
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



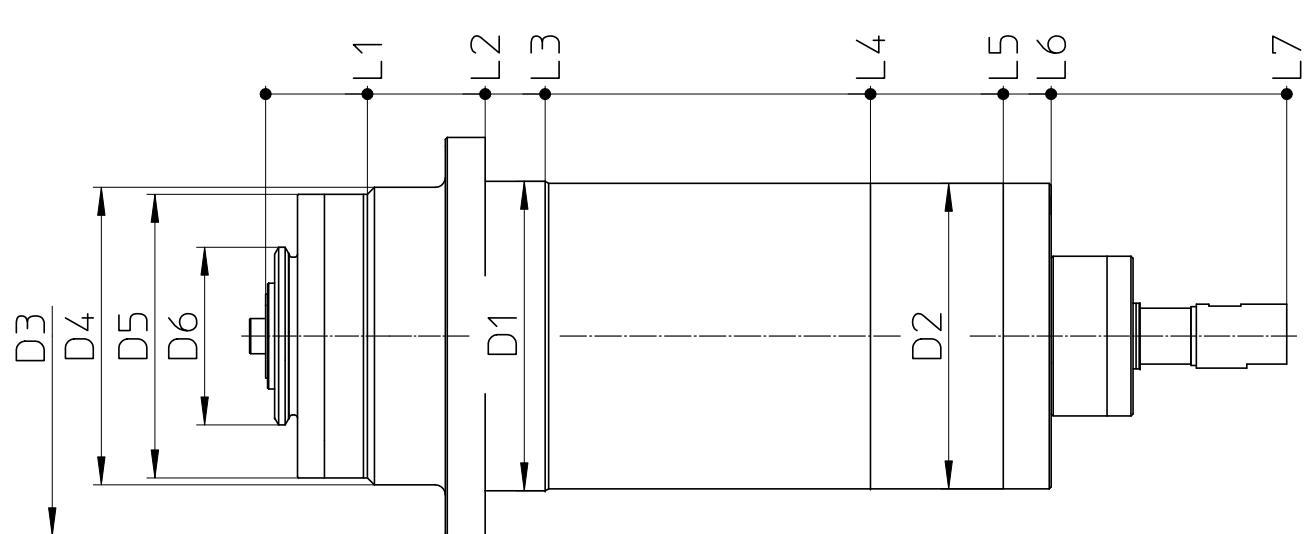
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- [Temperature compensation] •
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- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
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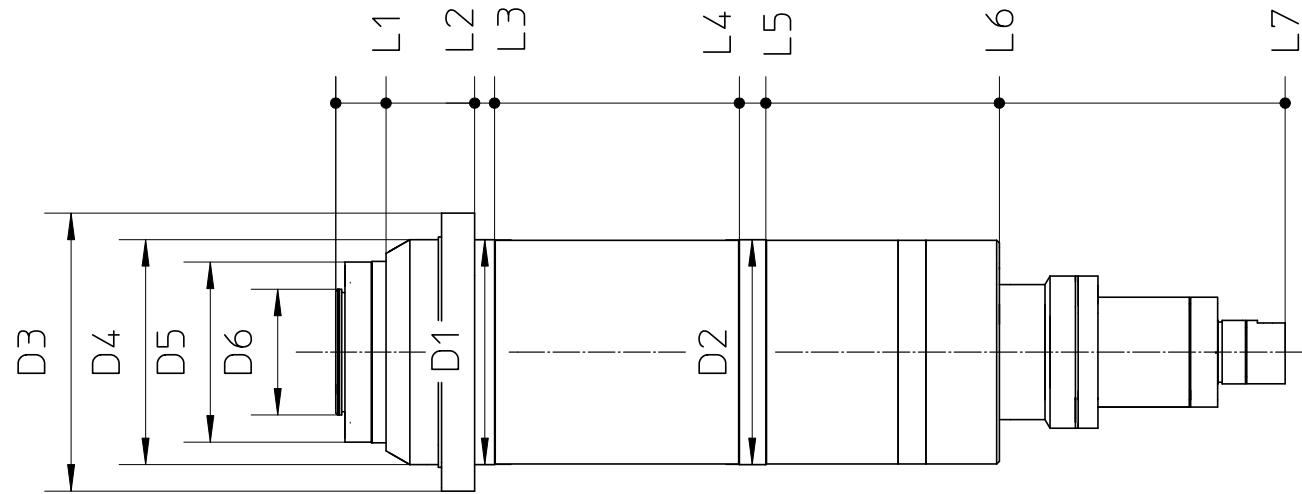
Milling spindles

Fitting measurement

141 - 180 mm

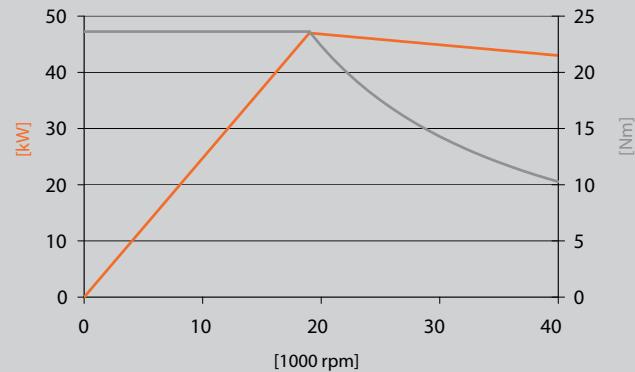


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
155	153	200	149	142	89	51	110	140	303	369,5	393,5	511,5

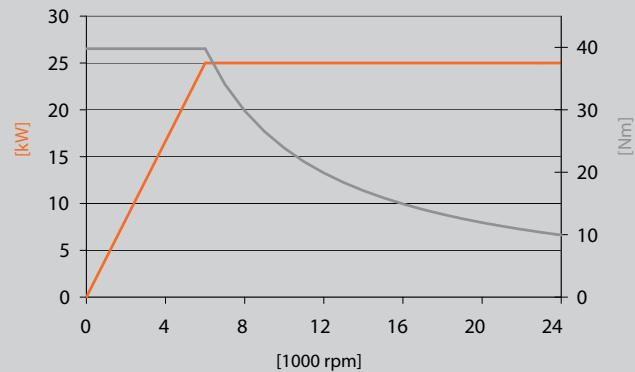


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
170	170	210	170	136	95	38	105	120	305	325	502	718

Model	SMS 080-648.069
Torque S1	[Nm] 18.5
Torque S6 (40%)	[Nm] 23.6
Power S1	[kW] 37.0
Power S6 (40%)	[kW] 47.0
Speed	[rpm] 40,000
Weight	[kg] 39
Motor type	synchronous
Tool interface	HSK-E40
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMS 080-601.092
Torque S1	[Nm] 32.0
Torque S6 (40%)	[Nm] 40.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 25.0
Speed	[rpm] 24,000
Weight	[kg] 56
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



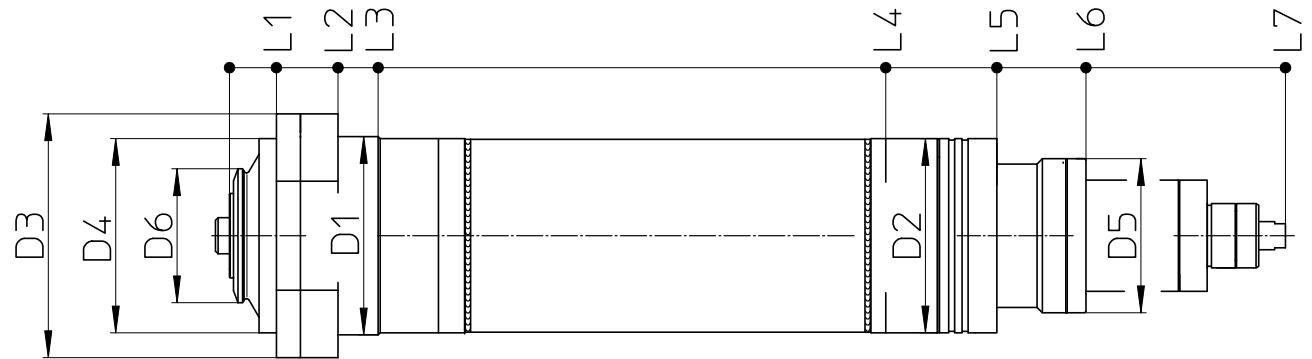
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[Temperature compensation]	●
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

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[Control of surface contact]	
[Rotary union]	●
[Clamp]	

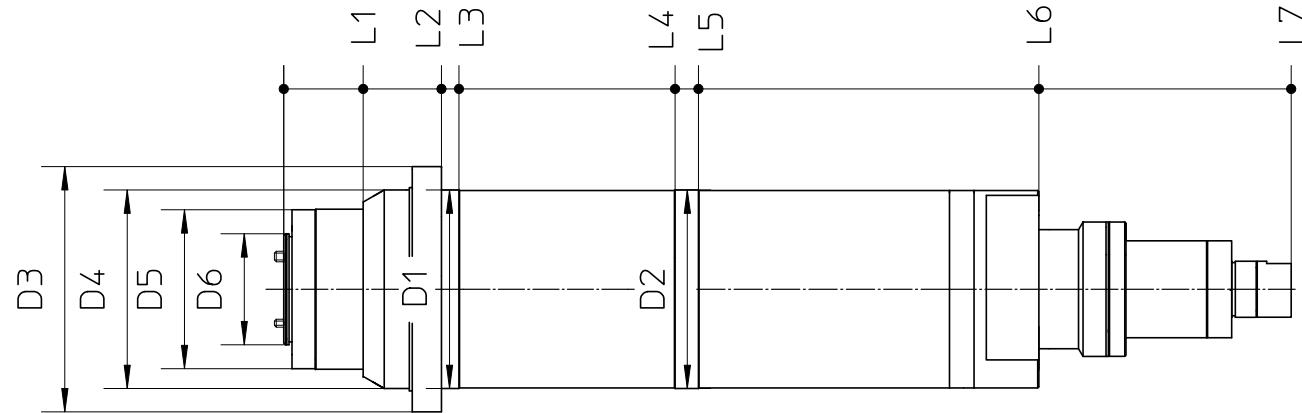
Milling spindles

Fitting measurement

141 - 180 mm

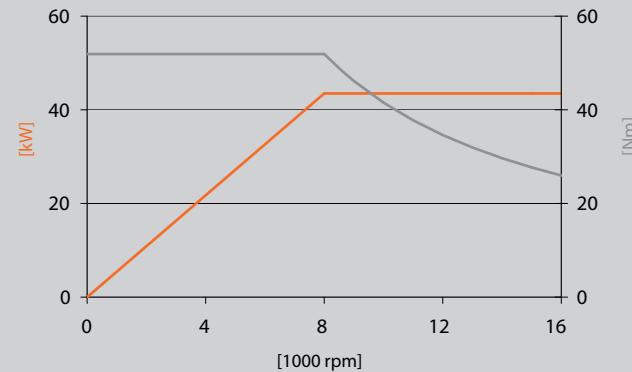


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
148	145	182	145	115	100	35	81	111	490	573	640	789

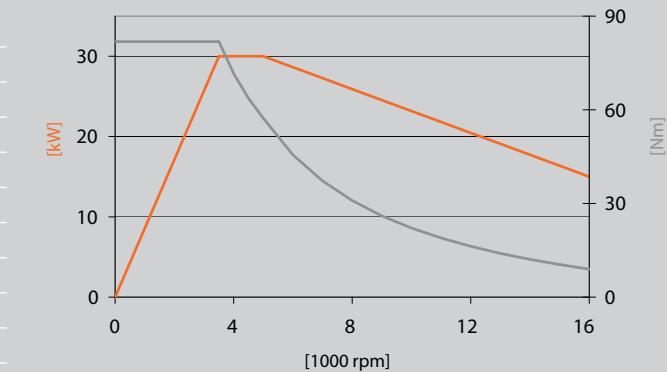


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
170	170	210	170	136	95	68	135	150	335	335	647	863

Model	SMS 060-637.821
Torque S1	[Nm] 39.0
Torque S6 (40%)	[Nm] 52.0
Power S1	[kW] 33.0
Power S6 (40%)	[kW] 43.5
Speed	[rpm] 16,000
Weight	[kg] 65
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	SMS 080-621.164
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 82.0
Power S1	[kW] 22.0
Power S6 (40%)	[kW] 20.0
Speed	[rpm] 16,000
Weight	[kg] 70
Motor type	synchronous
Tool interface	SK 40
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



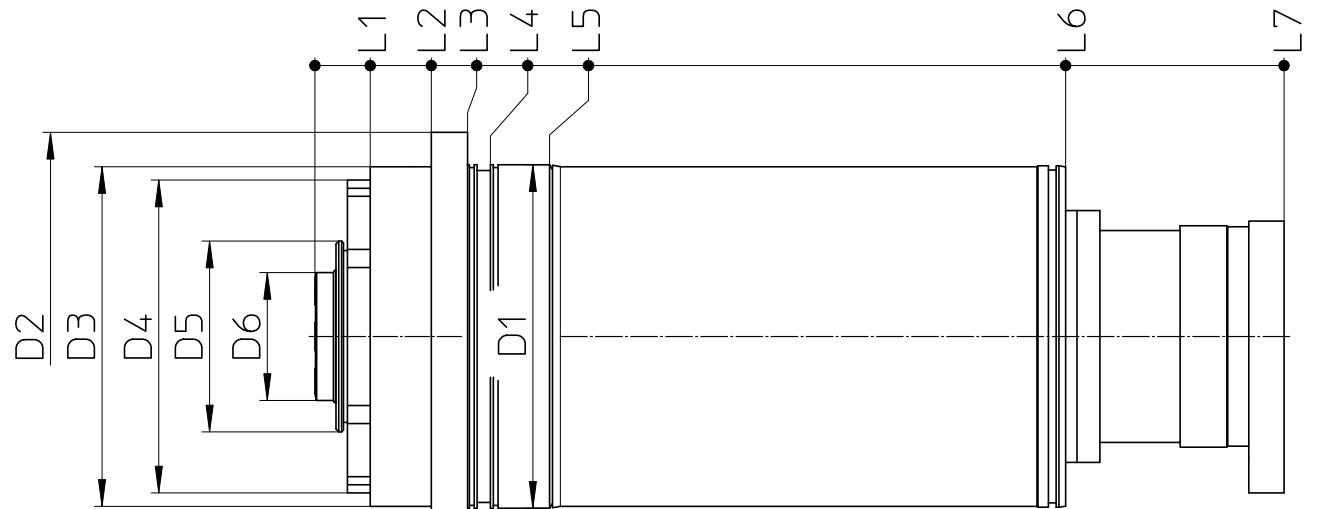
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[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	
[Clamp]	

[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
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[Clamp]	

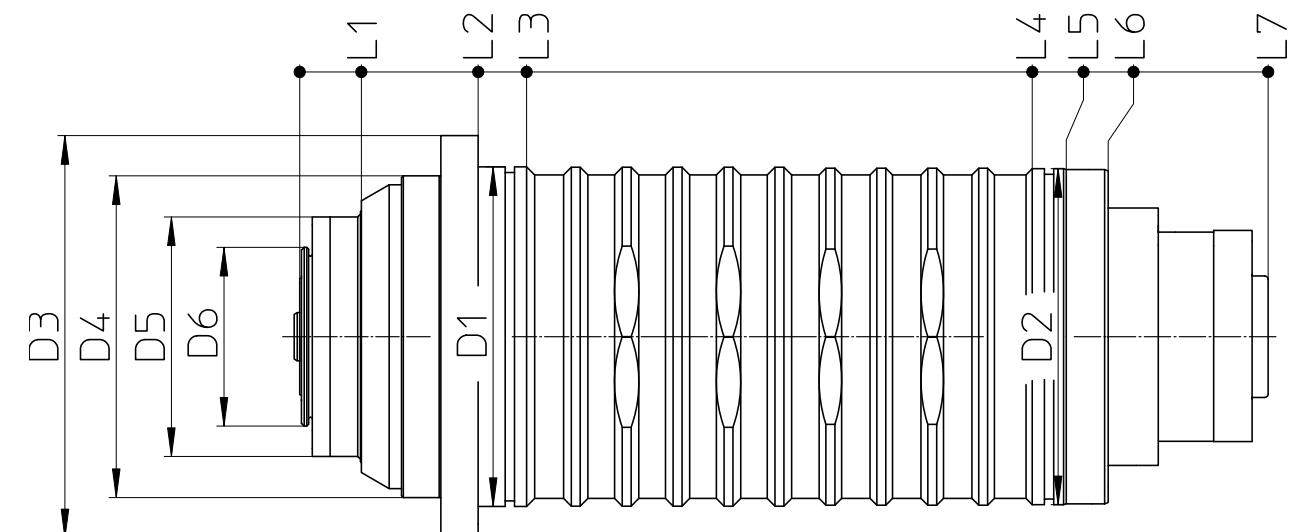
Milling spindles

Fitting measurement

141 - 180 mm

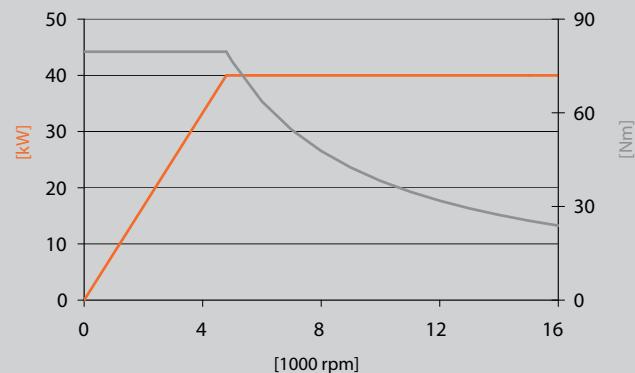


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
180	214	178	164	100	67	29	61	80	92	123	394	508



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
180	178	230	176	136	100	18	110	125	390	400	453	542

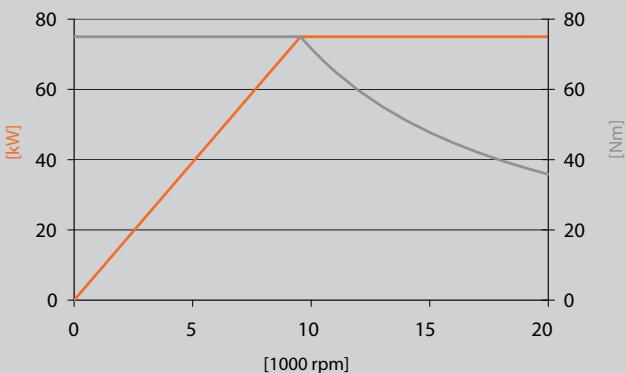
Model	SMS 090-634.583
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 80.0
Power S1	[kW] 30.0
Power S6 (40%)	[kW] 40.0
Speed	[rpm] 16,000
Weight	[kg] 50
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Model	SMS 080-646.918
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 75.0
Power S1	[kW] 60.0
Power S6 (40%)	[kW] 75.0
Speed	[rpm] 20,000
Weight	[kg] 70
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

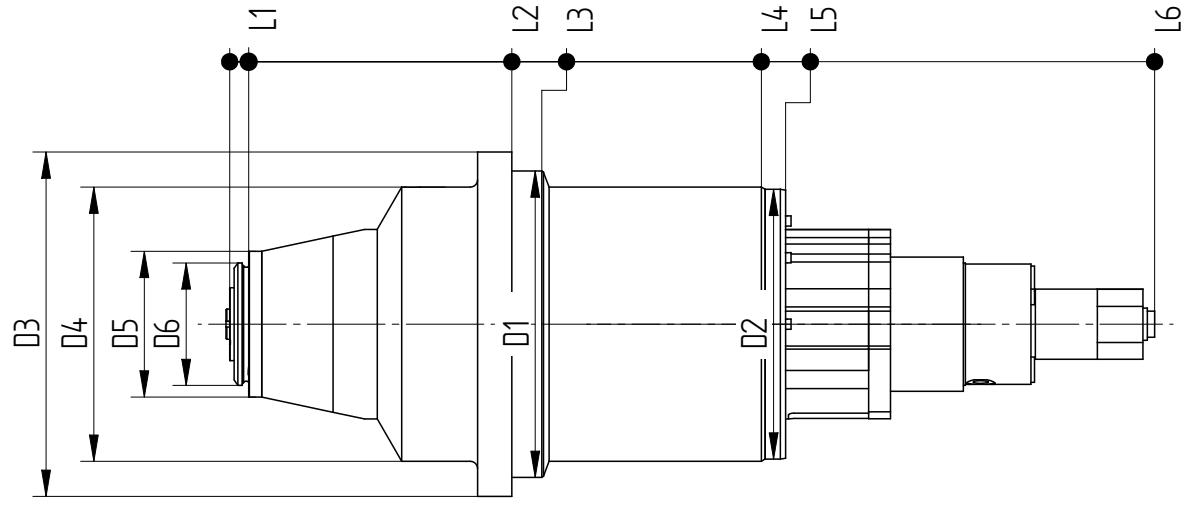
- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]



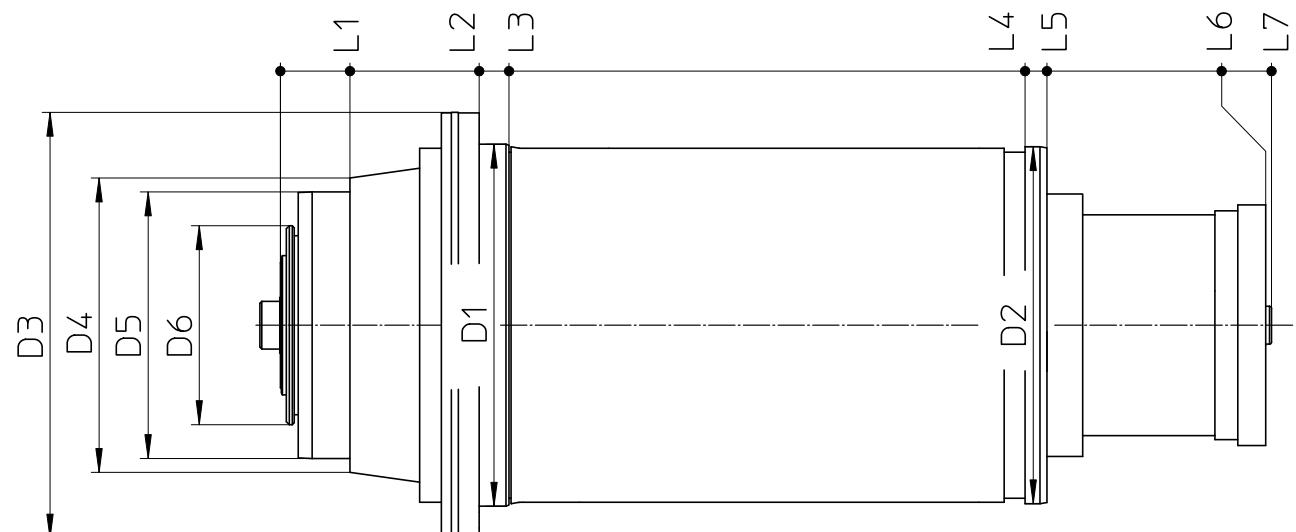
Milling spindles

Fitting measurement

181 - 220 mm

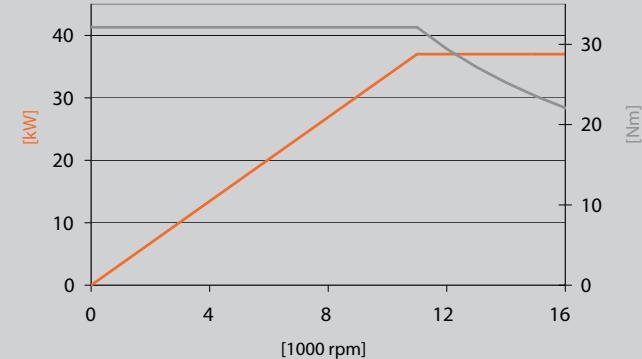


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
210	185	236	188	100	84	13	193,5	214	364,6	381,2	643,3	—

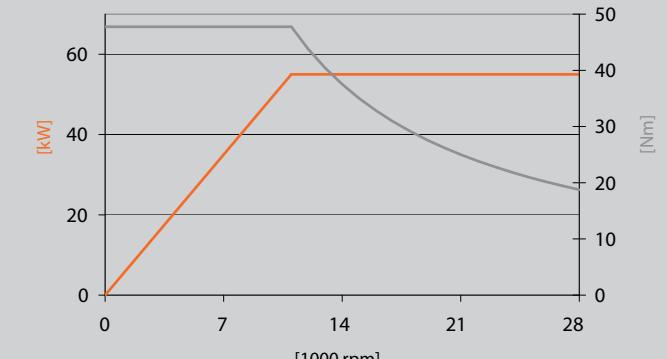


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
182	180	214	148	134	100	35	100	115	375	386	496	498

Model	SMS 080-647.664
Torque S1	[Nm] 24.0
Torque S6 (40%)	[Nm] 32.0
Power S1	[kW] 28.0
Power S6 (40%)	[kW] 37.0
Speed	[rpm] 30,000
Weight	[kg] 67
Motor type	synchronous
Tool interface	HSK A50
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	SMS 090-646.660
Torque S1	[Nm] 38.0
Torque S6 (40%)	[Nm] 48.0
Power S1	[kW] 27.0
Power S6 (40%)	[kW] 55.0
Speed	[rpm] 28,000
Weight	[kg] 65
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



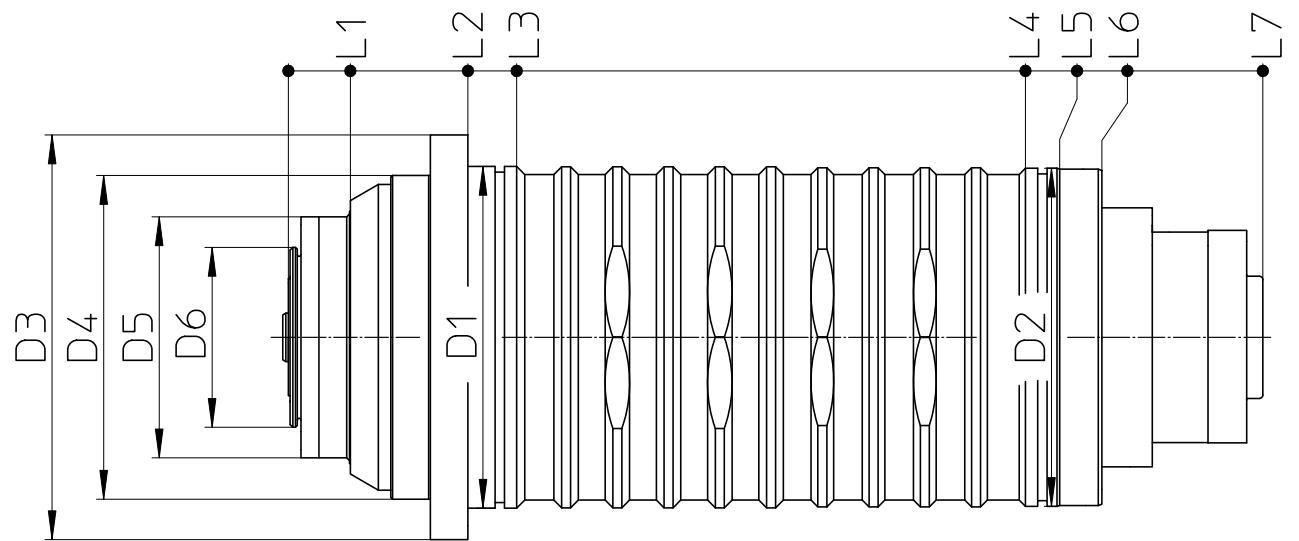
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[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

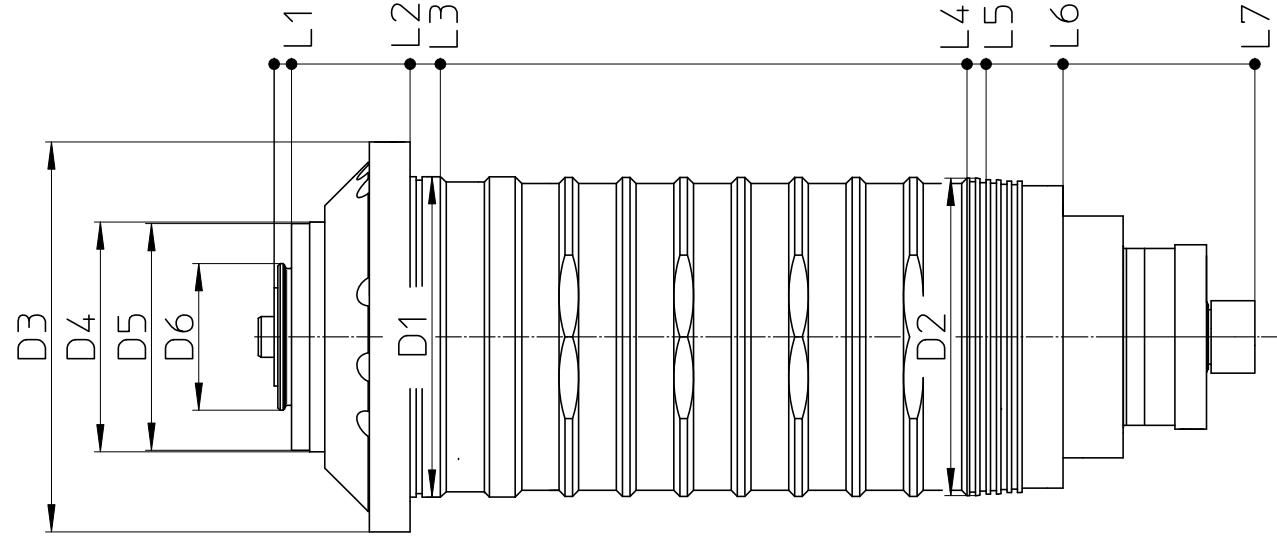
Milling spindles

Fitting measurement

181 - 220 mm

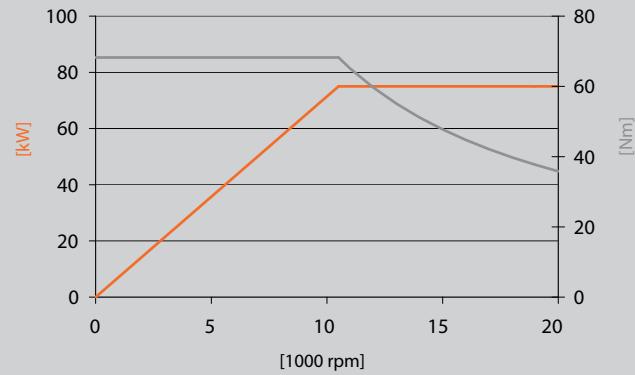


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
190	188	225	180	134	100	34,5	99,9	127	410	429	453	542



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
212	210	258	152	150	97	11,5	90	110	459	471	522	649

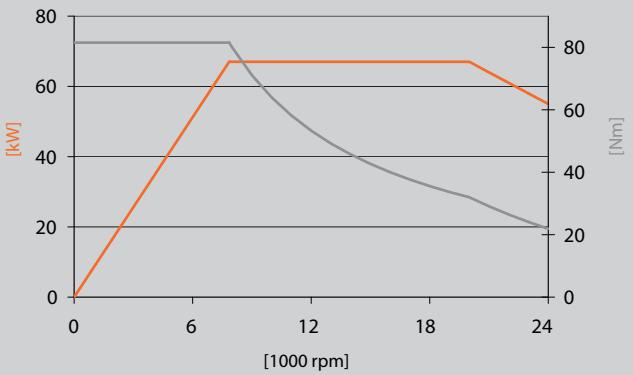
Model	SMS 080-637.586
Torque S1	[Nm] 55.0
Torque S6 (40%)	[Nm] 68.0
Power S1	[kW] 60.0
Power S6 (40%)	[kW] 75.0
Speed	[rpm] 20,000
Weight	[kg] 79
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

Model	DMS 100-636.494
Torque S1	[Nm] 55.0
Torque S6 (40%)	[Nm] 82.0
Power S1	[kW] 45.0
Power S6 (40%)	[kW] 67.0
Speed	[rpm] 24,000
Weight	[kg] 87
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

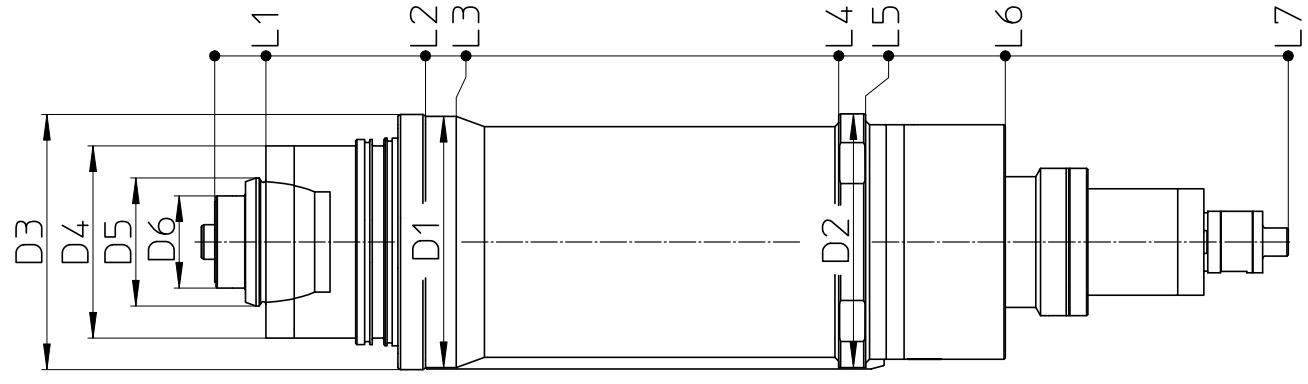
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- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]



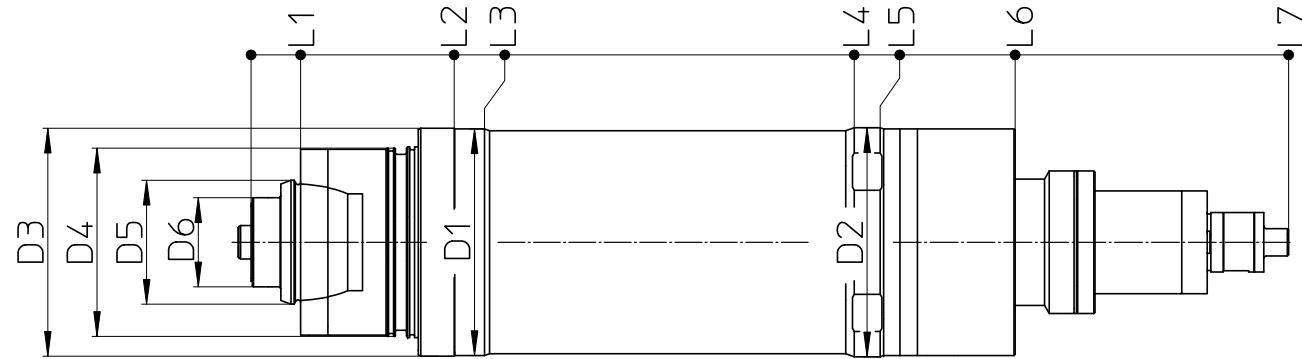
Milling spindles

Fitting measurement

181 - 220 mm

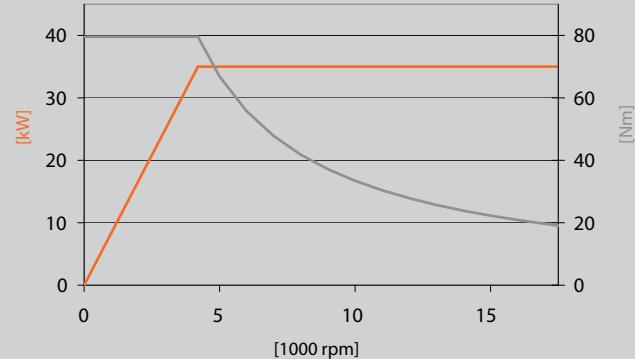


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
196	200	199	150	100	72	40	165	189	487	508	617	838



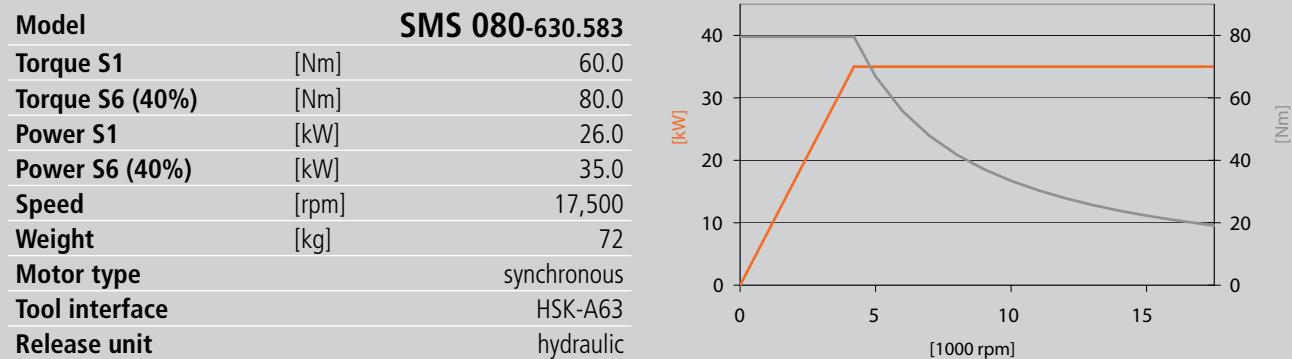
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
183	185	184	152	100	72	40	164.5	188.5	487	508	617	837.8

Model	SMS 080-634.240
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 80.0
Power S1	[kW] 26.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 17,500
Weight	[kg] 76
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	●
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	

Model	SMS 080-630.583
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 80.0
Power S1	[kW] 26.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 17,500
Weight	[kg] 72
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

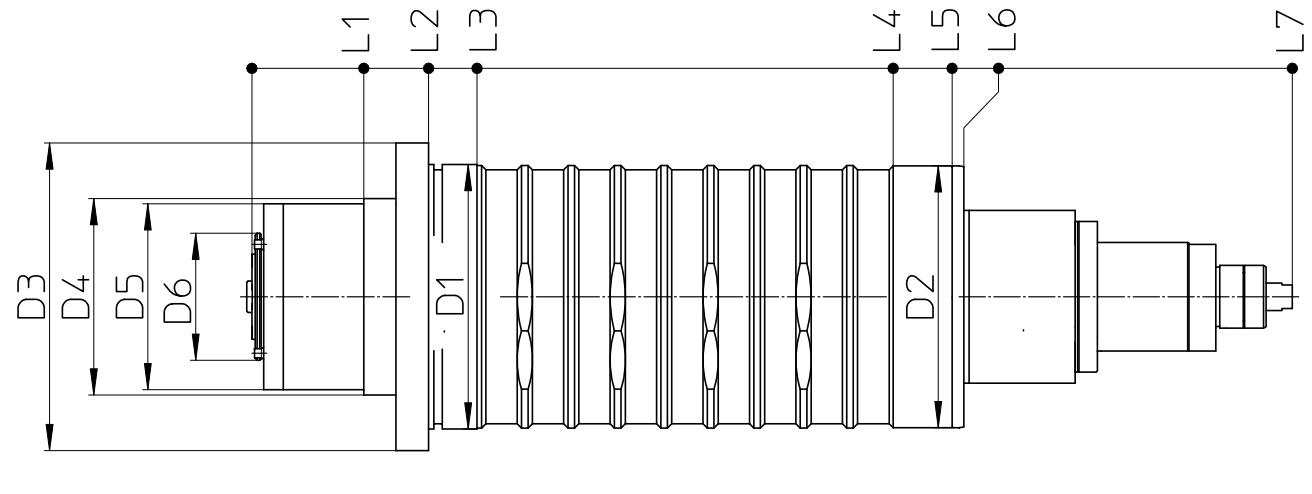
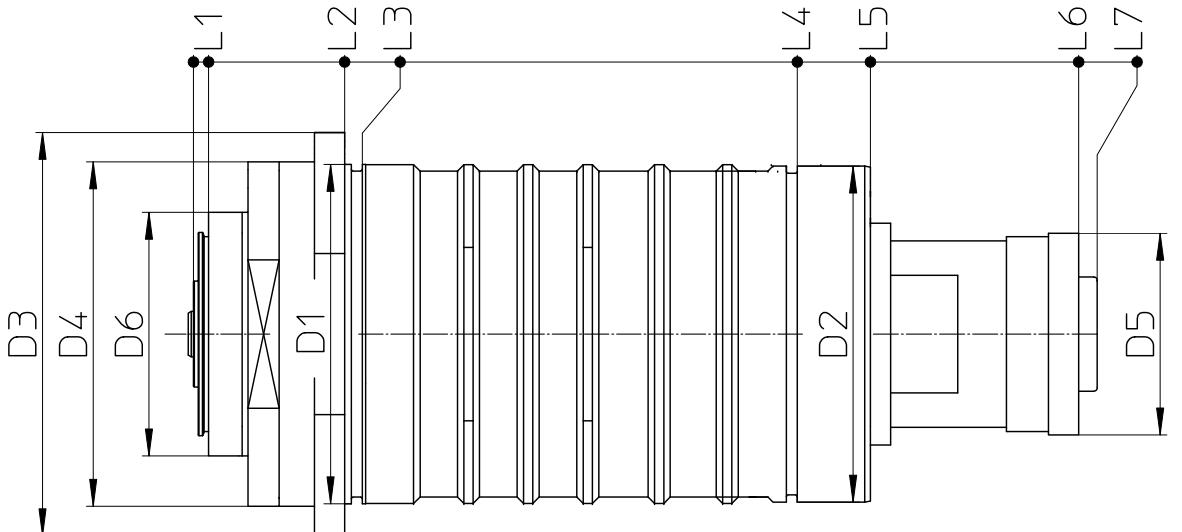


[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
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[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	

Milling spindles

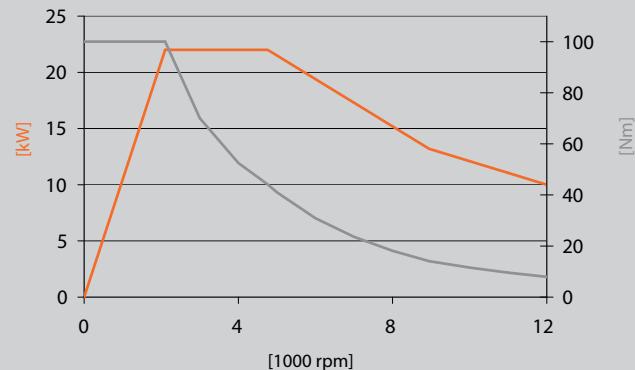
Fitting measurement

181 - 220 mm



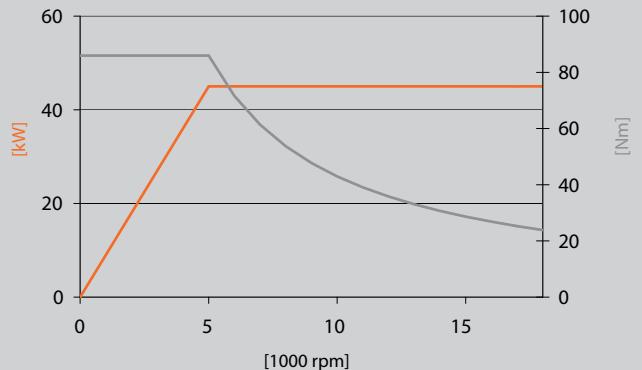
Model	DMS 100-628.549
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 100.0
Power S1	[kW] 13.2
Power S6 (40%)	[kW] 22.0
Speed	[rpm] 12,000
Weight	[kg] 80
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	●



Model	DMS 100-638.180
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 86.0
Power S1	[kW] 31.5
Power S6 (40%)	[kW] 45.0
Speed	[rpm] 15,000
Weight	[kg] 98
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

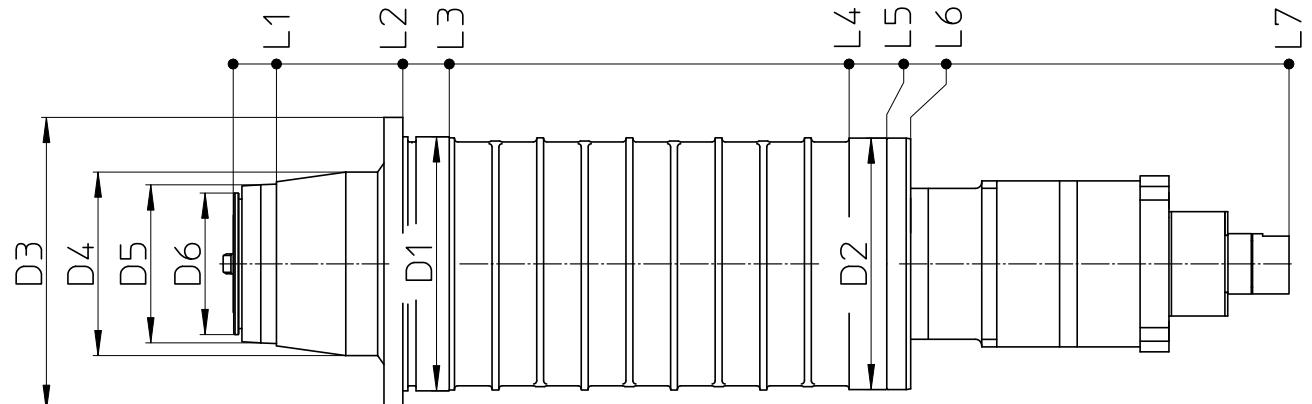
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[Vibration sensor]	
[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	



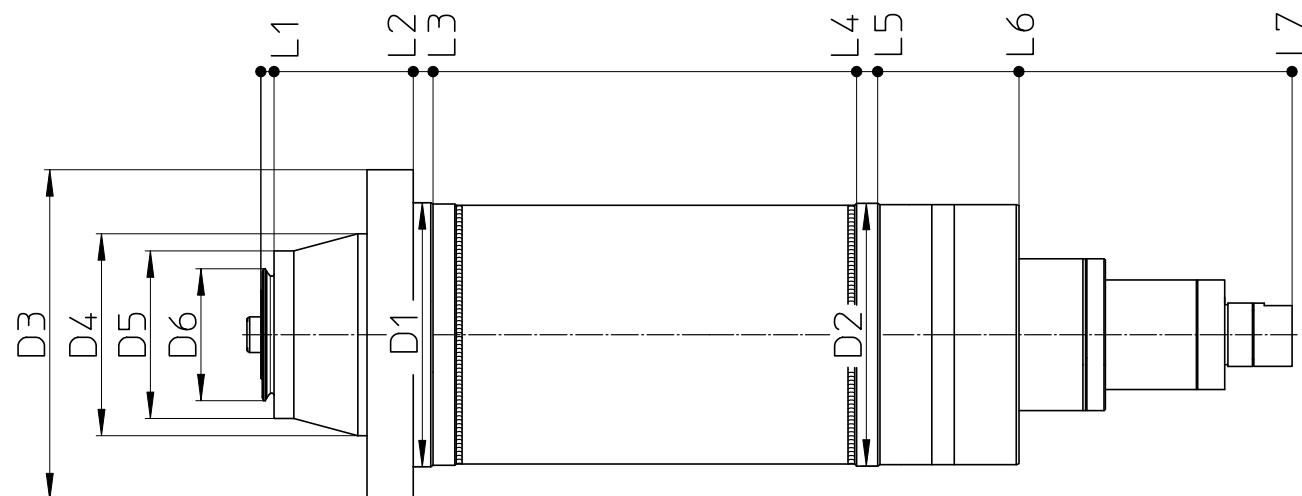
Milling spindles

Fitting measurement

181 - 220 mm

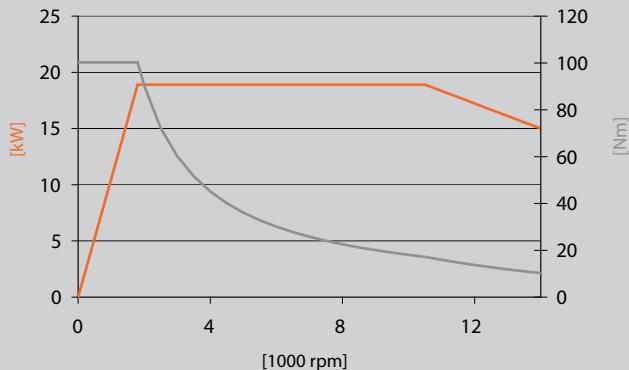


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
202	200	233	146	126	113	34,5	135	172	490	520	539	840

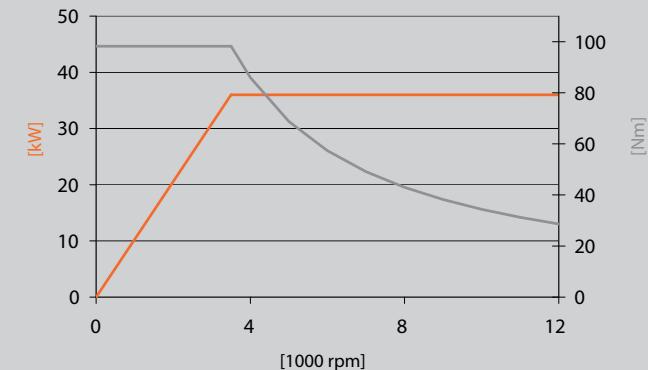


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
200	199	250	153	127	100	10	116	131	452	468	575	782

Model		DMS 100-647.074
Torque S1	[Nm]	74.0
Torque S6 (40%)	[Nm]	100.0
Power S1	[kW]	14.0
Power S6 (40%)	[kW]	18.9
Speed	[rpm]	14,000
Weight	[kg]	97
Motor type		asynchronous
Tool interface		SK 40
Release unit		pneumatic
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain



Model		SMS 100-630.222
Torque S1	[Nm]	80.0
Torque S6 (40%)	[Nm]	98.0
Power S1	[kW]	29.0
Power S6 (40%)	[kW]	36.0
Speed	[rpm]	12,000
Weight	[kg]	112
Motor type		synchronous
Tool interface		HSK-A63
Release unit		hydraulic
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain



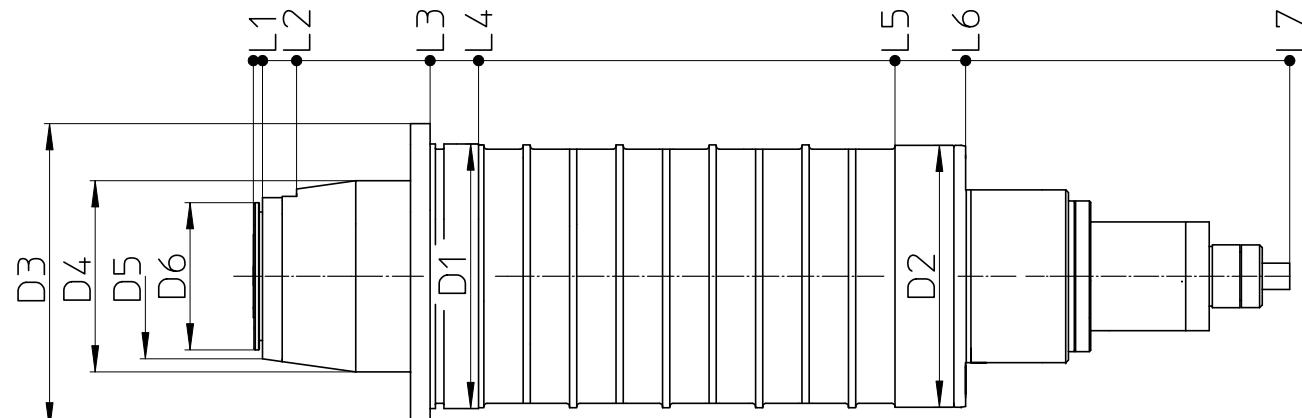
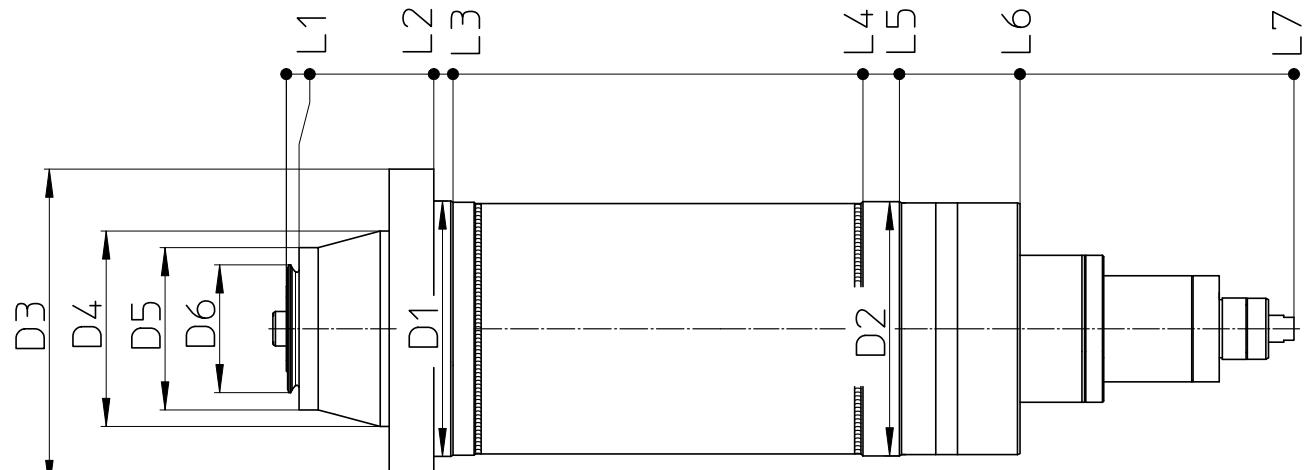
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[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

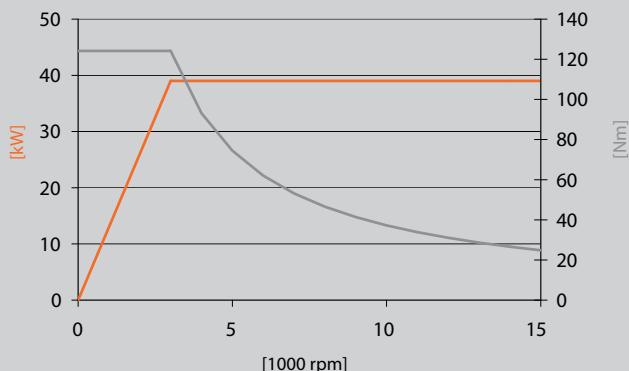
Milling spindles

Fitting measurement

181 - 220 mm

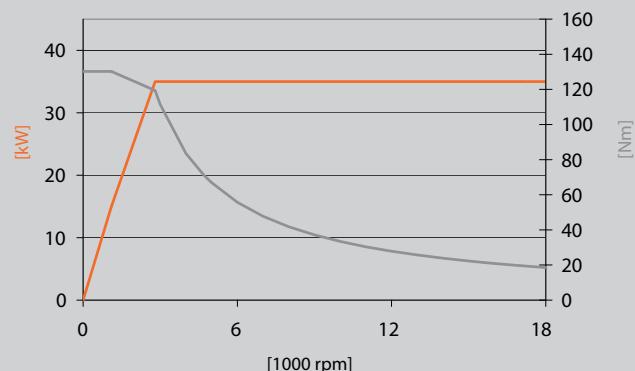


Model	SMS 090-638.698
Torque S1	[Nm] 86.0
Torque S6 (40%)	[Nm] 124.0
Power S1	[kW] 27.0
Power S6 (40%)	[kW] 39.0
Speed	[rpm] 15,000
Weight	[kg] 111
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Model	DMS 100-633.048
Torque S1	[Nm] 86.0
Torque S6 (40%)	[Nm] 130.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 18,000
Weight	[kg] 93
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

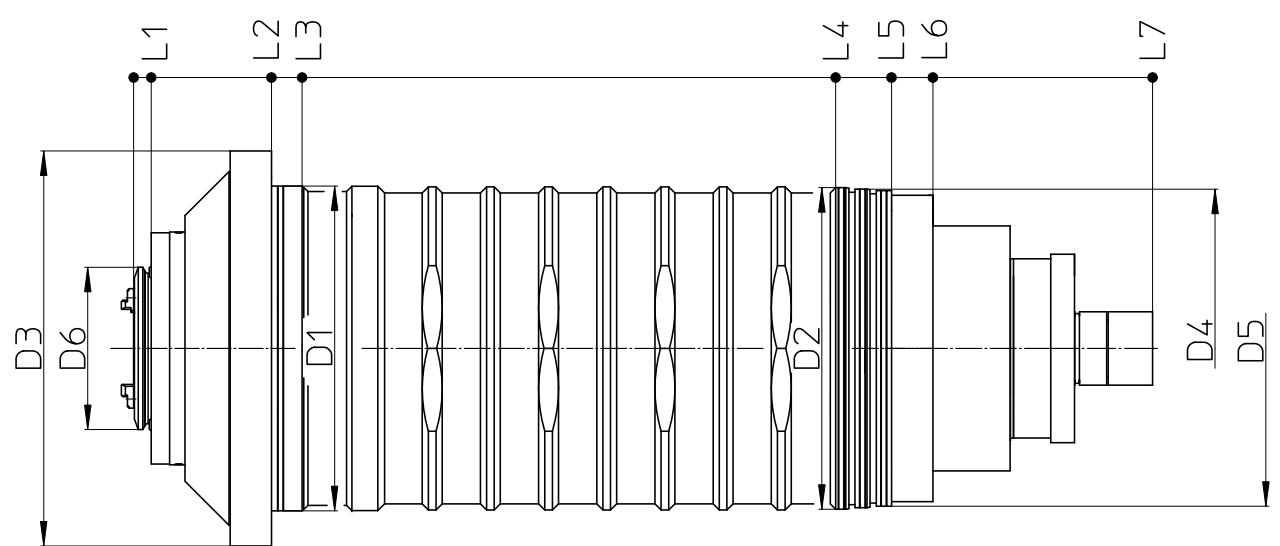


- [Temperature sensor PT-100]
- [Vibration sensor] •
- [Cooling jacket]
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

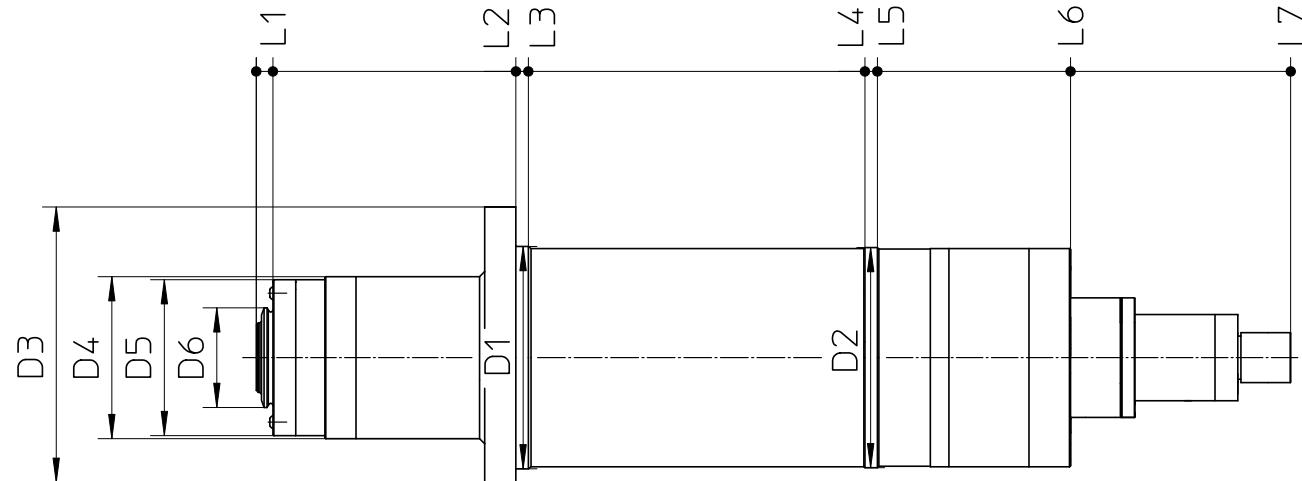
Milling spindles

Fitting measurement

181 - 220 mm

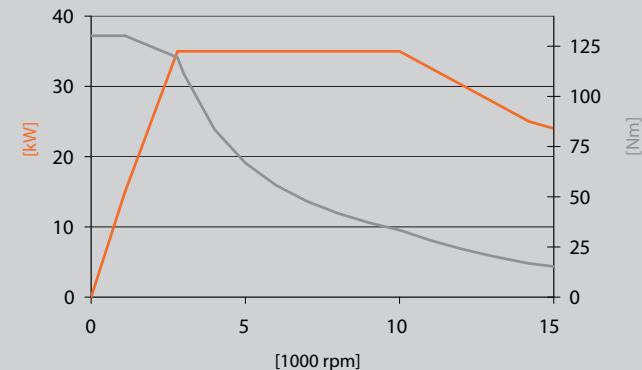


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
212	210	258	208	206	106	11,5	90	110	459	495	522	666



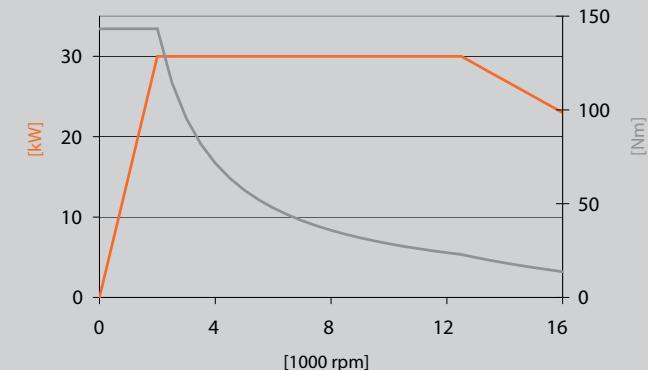
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
214	212	290	156	150	96	16	250	262	586	598	784	996

Model	DMS 100-642.089
Torque S1	[Nm] 87.0
Torque S6 (40%)	[Nm] 130.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 15,000
Weight	[kg] 98
Motor type	asynchronous
Tool interface	SK 40
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Model	DMS 100-610.350
Torque S1	[Nm] 100.0
Torque S6 (40%)	[Nm] 143.0
Power S1	[kW] 21.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 16,000
Weight	[kg] 144
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

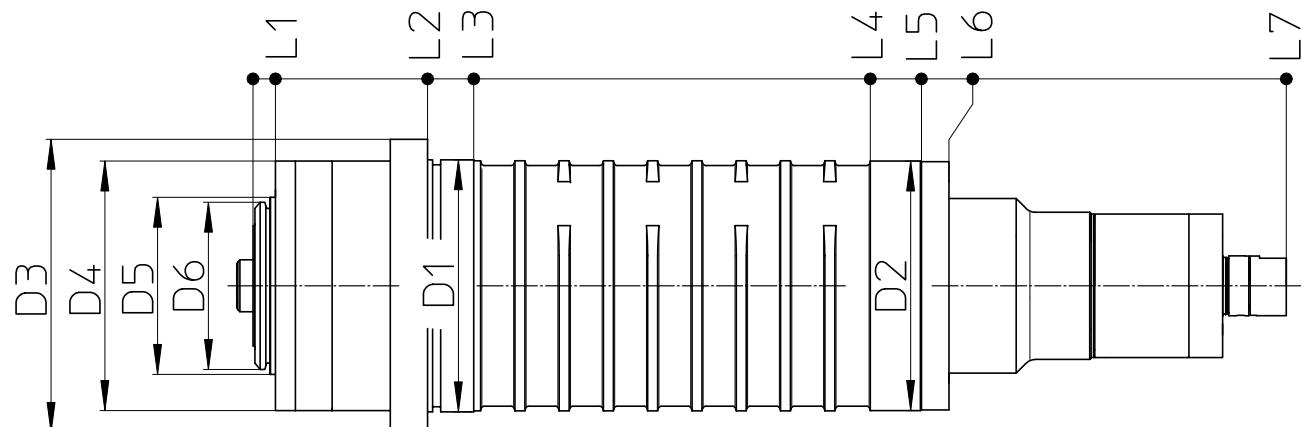


- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

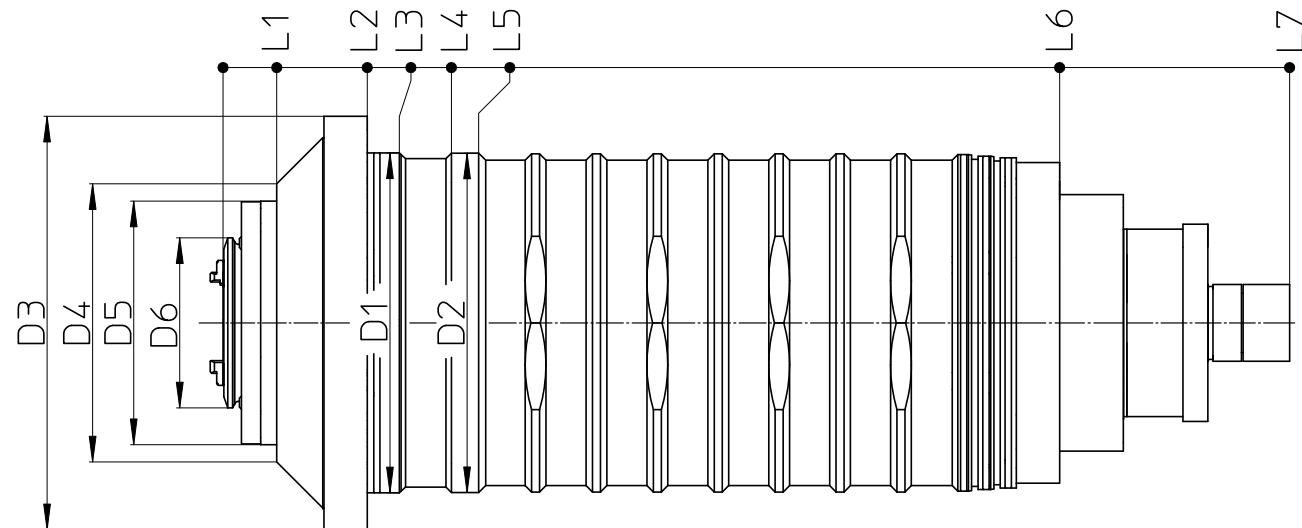
Milling spindles

Fitting measurement

181 - 220 mm

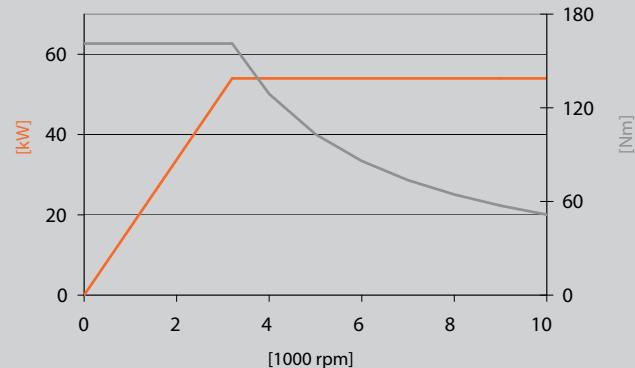


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
202	200	235	200	142	134	18	140	177	495	536	558	829

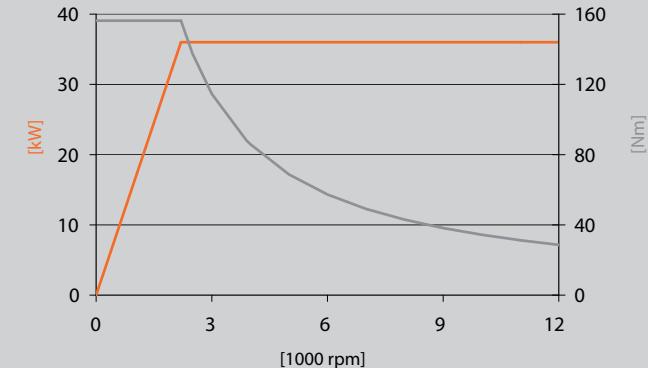


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
212	212	258	174	152	106	33,5	90	110	143	160	522	666

Model	SMS 100-634.204
Torque S1	[Nm] 119.0
Torque S6 (40%)	[Nm] 161.0
Power S1	[kW] 40.0
Power S6 (40%)	[kW] 54.0
Speed	[rpm] 10,000
Weight	[kg] 94
Motor type	synchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMS 100-642.504
Torque S1	[Nm] 121.0
Torque S6 (40%)	[Nm] 156.0
Power S1	[kW] 28.0
Power S6 (40%)	[kW] 36.0
Speed	[rpm] 12,000
Weight	[kg] 94
Motor type	synchronous
Tool interface	SK 40
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



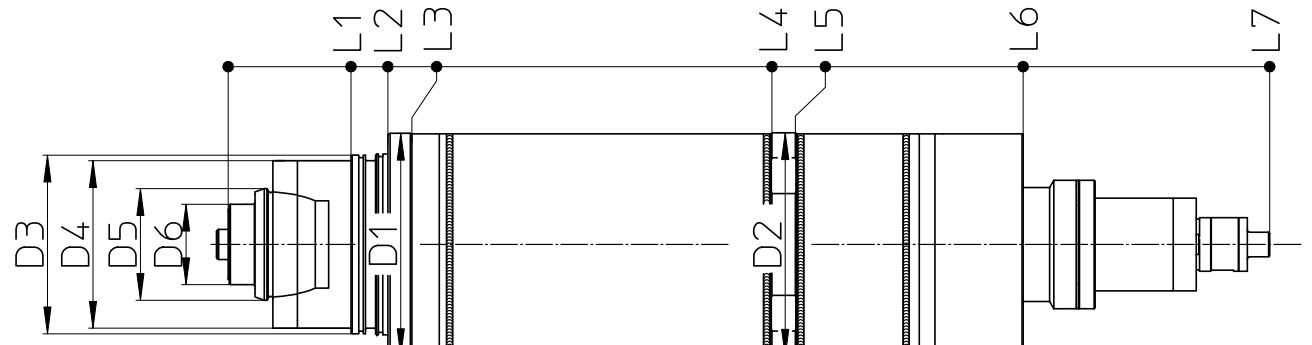
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[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	●
[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

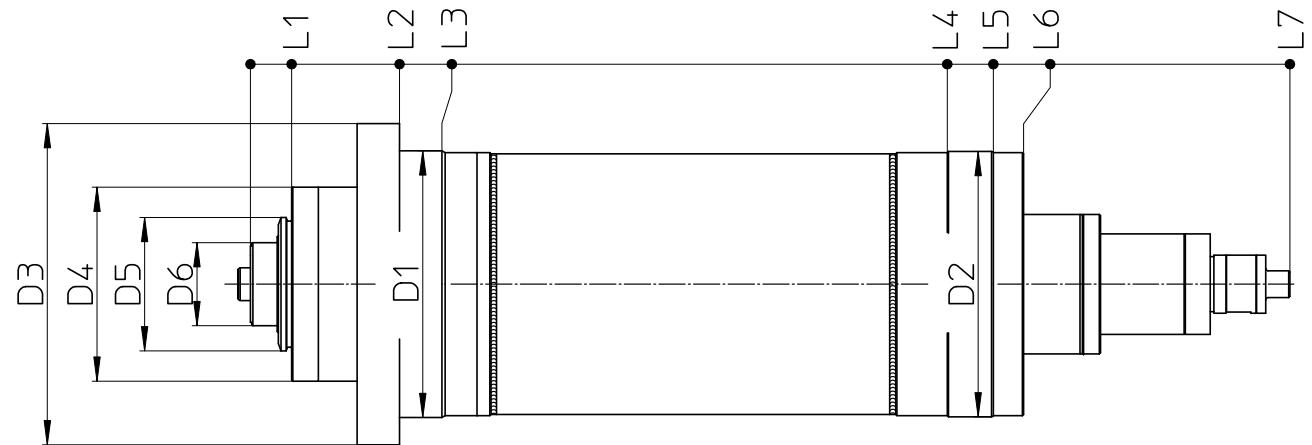
Milling spindles

Fitting measurement

181 - 220 mm

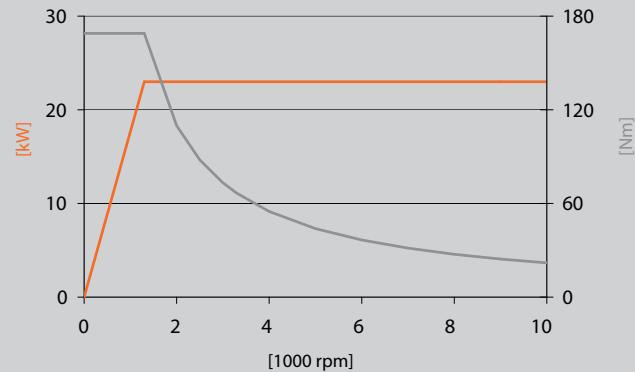


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
199	200	160	150	100	72	110	143	165	487	508	712	933

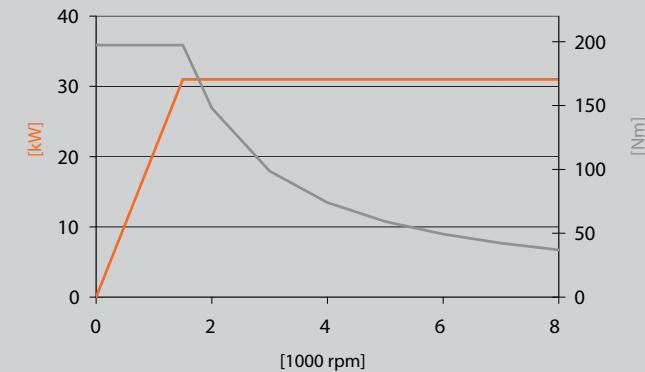


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
220	219	265	160	110	68,5	34	123	158	575	613	638	857,8

Model	SMS 100-630.584
Torque S1	[Nm] 132.0
Torque S6 (40%)	[Nm] 170.0
Power S1	[kW] 18.0
Power S6 (40%)	[kW] 23.0
Speed	[rpm] 10,000
Weight	[kg] 128
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	SMS 100-635.675
Torque S1	[Nm] 150.0
Torque S6 (40%)	[Nm] 197.0
Power S1	[kW] 23.5
Power S6 (40%)	[kW] 31.0
Speed	[rpm] 8,000
Weight	[kg] 94
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



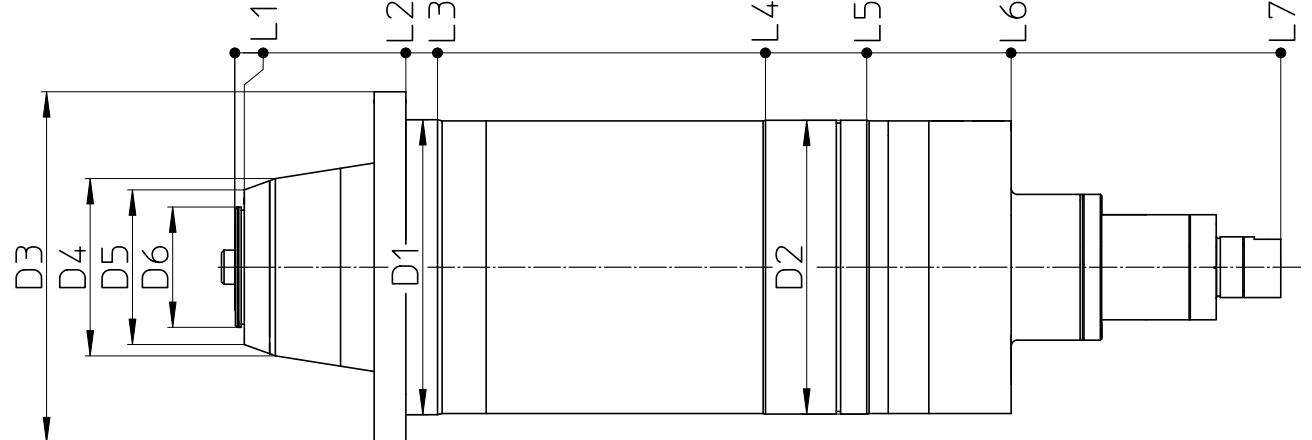
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[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	

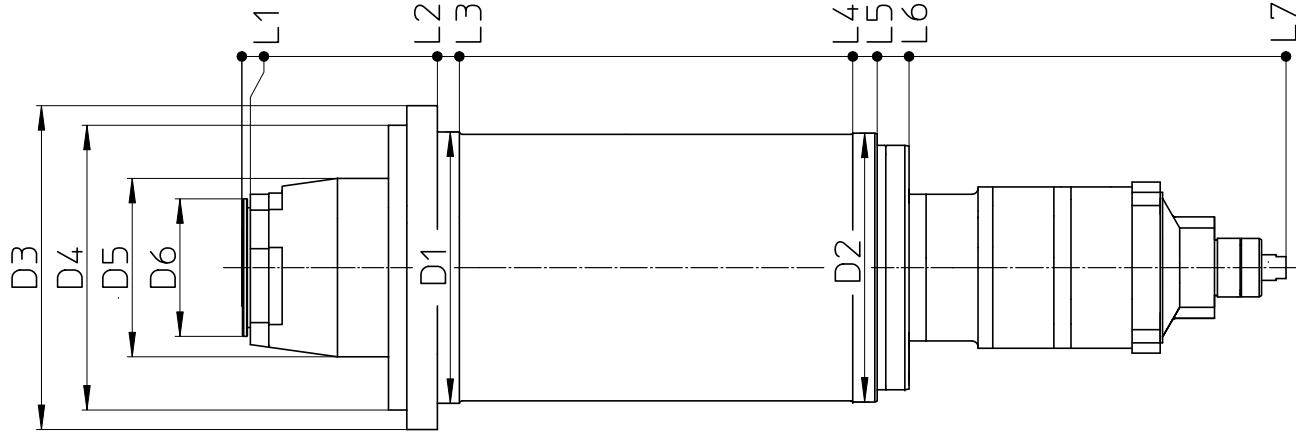
Milling spindles

Fitting measurement

221 - 260 mm

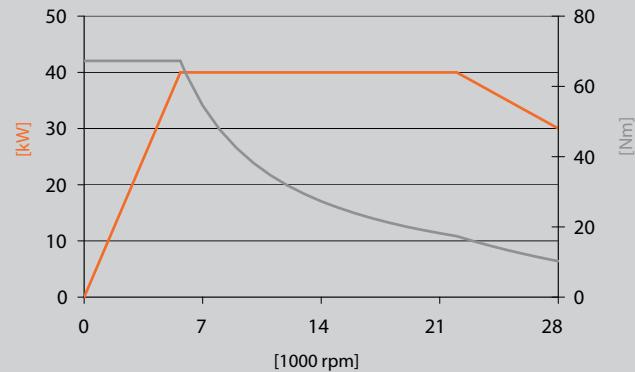


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
233	232	277	140	122	95	7.5	135	160	419	499	613	826

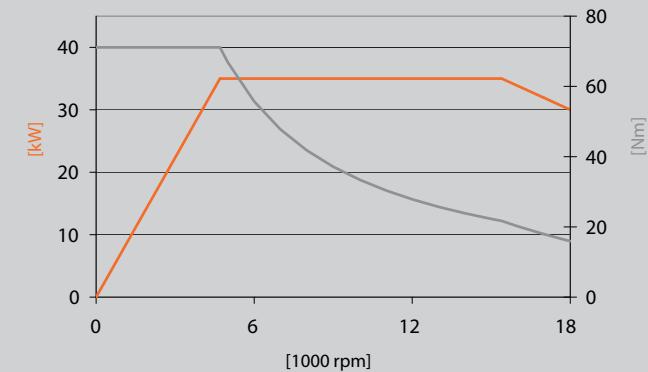


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
222	220	265	233	146	112.5	7	160	178	500	520	546	854.5

Model	DMS 090-648.495
Torque S1	[Nm] 50.0
Torque S6 (40%)	[Nm] 67.0
Power S1	[kW] 30.0
Power S6 (40%)	[kW] 40.0
Speed	[rpm] 28,000
Weight	[kg] 116
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMS 100-642.217
Torque S1	[Nm] 51.0
Torque S6 (40%)	[Nm] 72.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 18,000
Weight	[kg] 118
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



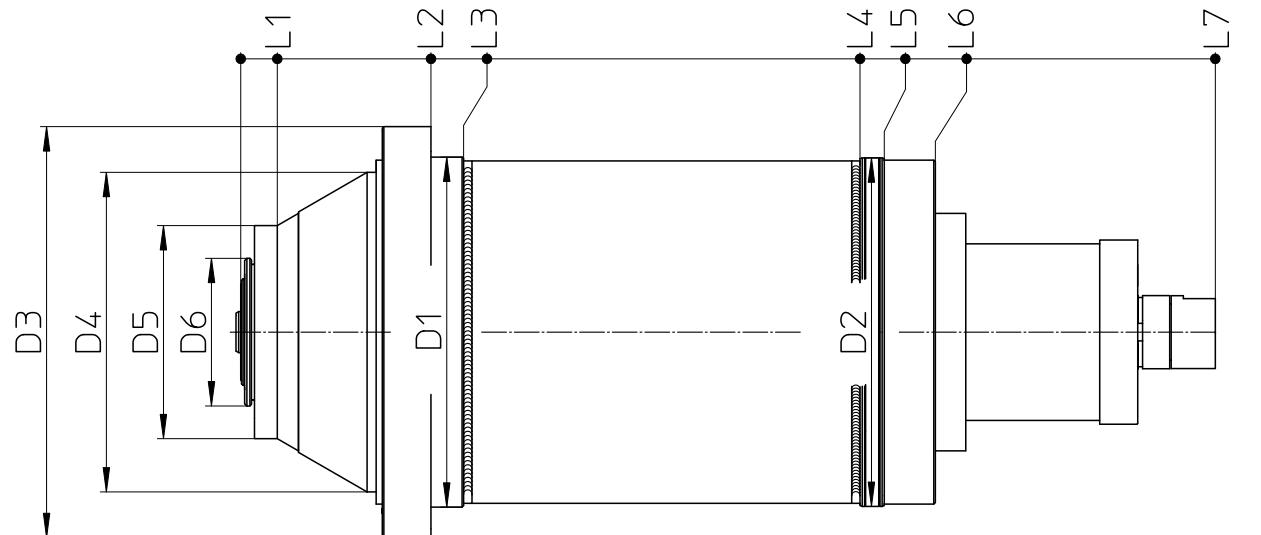
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[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
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[Minimum quantity lubrication]	
[Control of surface contact]	
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[Clamp]	

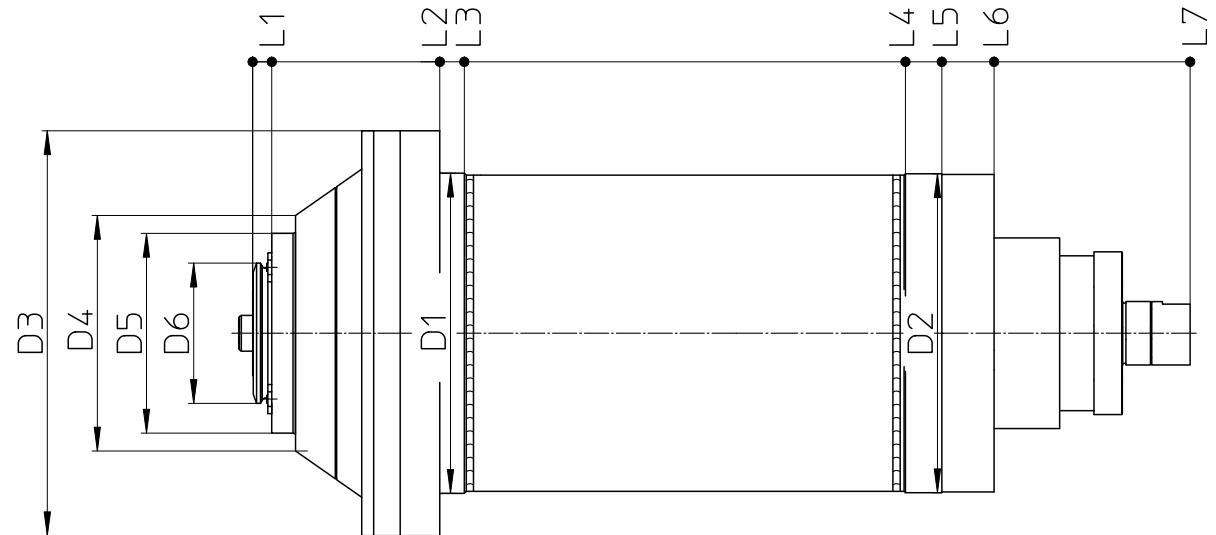
Milling spindles

Fitting measurement

221 - 260 mm

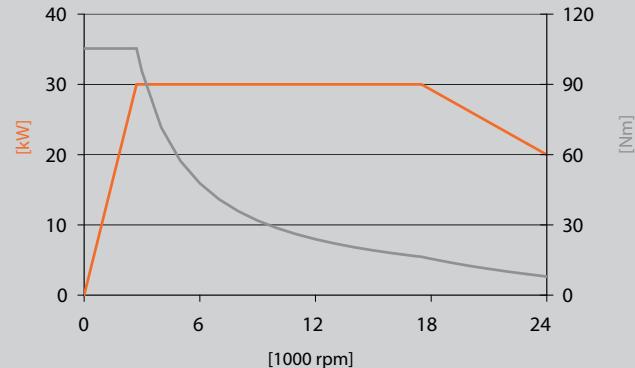


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
230	229	270	210	140	97	24	125	146.5	407	423	456.5	640.5



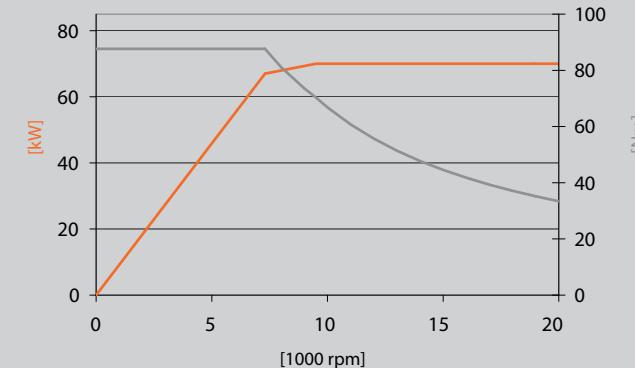
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	241	306	178	151	106	14,5	141,5	160	493,5	521	560,5	708,7

Model	DMS 100-631.713
Torque S1	[Nm] 70.0
Torque S6 (40%)	[Nm] 105.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 24,000
Weight	[kg] 120
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Vibration sensor] ●
- [Cooling jacket] ●
- [Leakage monitoring] ●
- [Temperature compensation] ●
- [Retaining clamping set] ●
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

Model	SMS 112-627.824
Torque S1	[Nm] 70.0
Torque S6 (40%)	[Nm] 87.5
Power S1	[kW] 54.0
Power S6 (40%)	[kW] 70.0
Speed	[rpm] 20,000
Weight	[kg] 132
Motor type	synchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

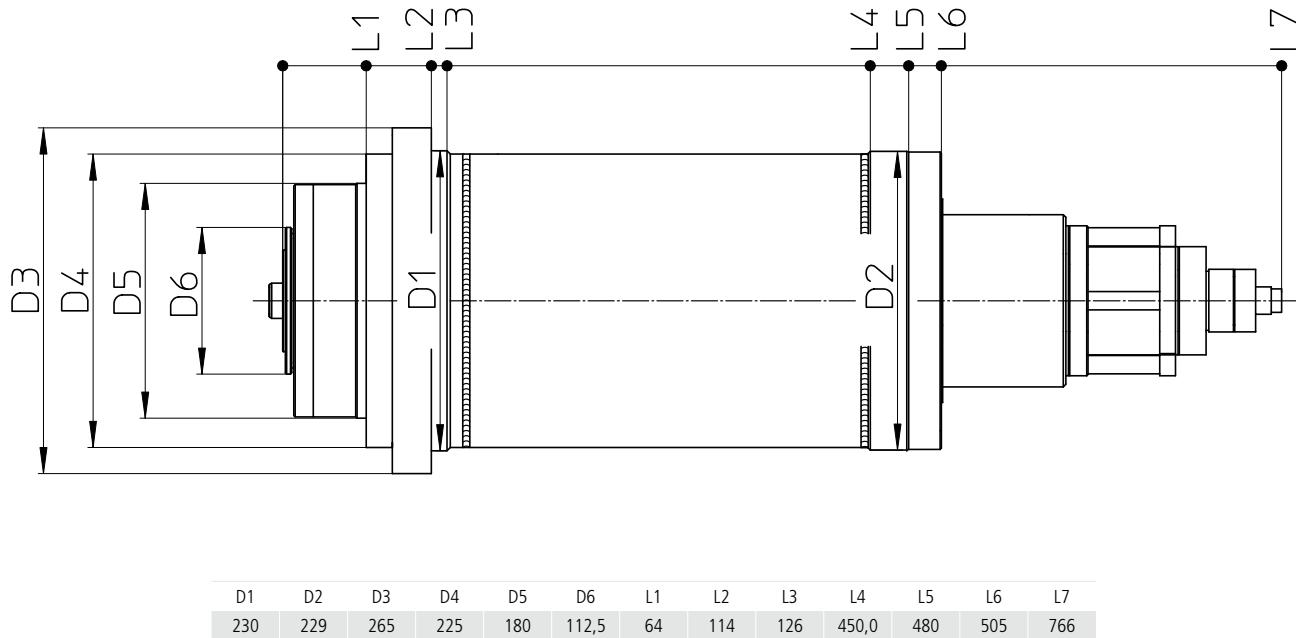
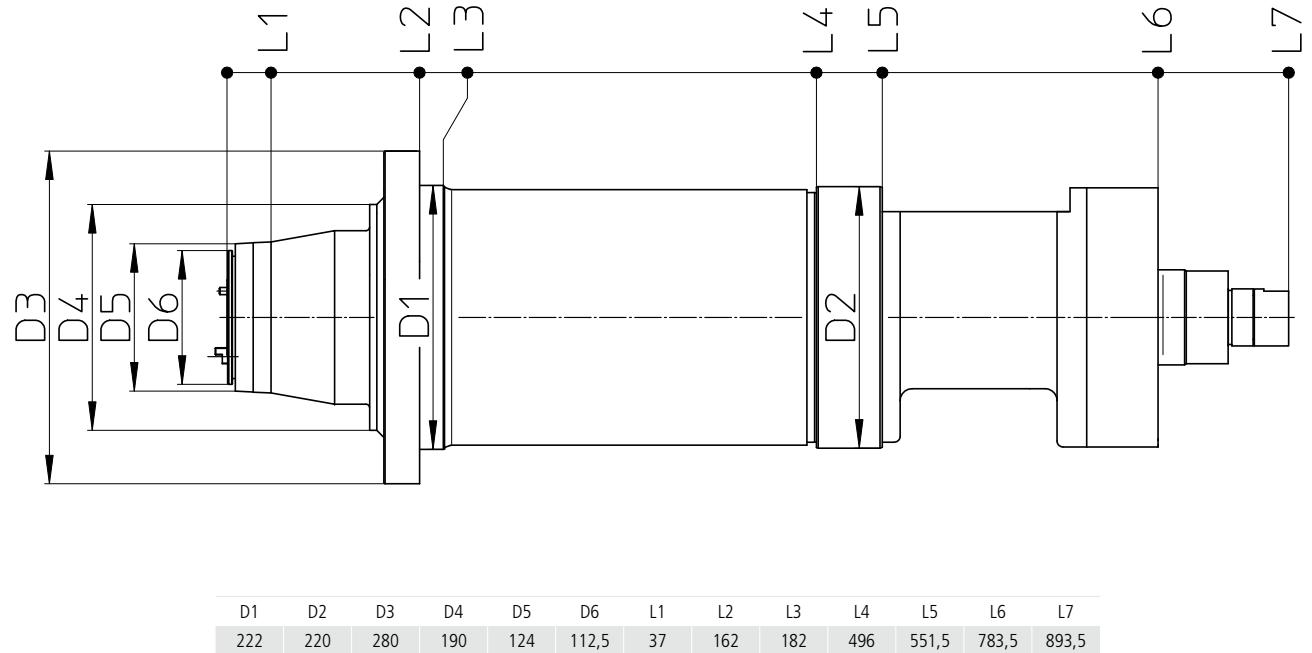


- [Temperature sensor PT-100]
- [Vibration sensor] ●
- [Cooling jacket] ●
- [Leakage monitoring] ●
- [Temperature compensation]
- [Retaining clamping set] ●
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

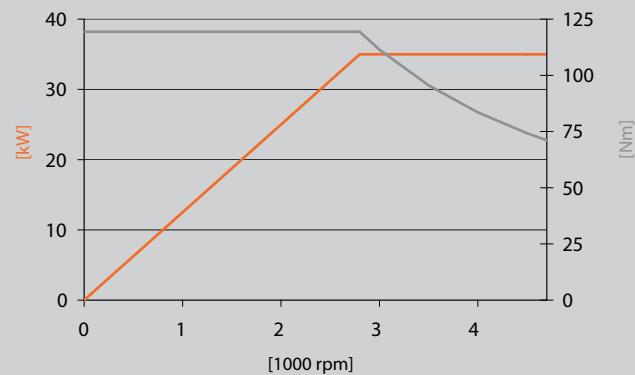
Milling spindles

Fitting measurement

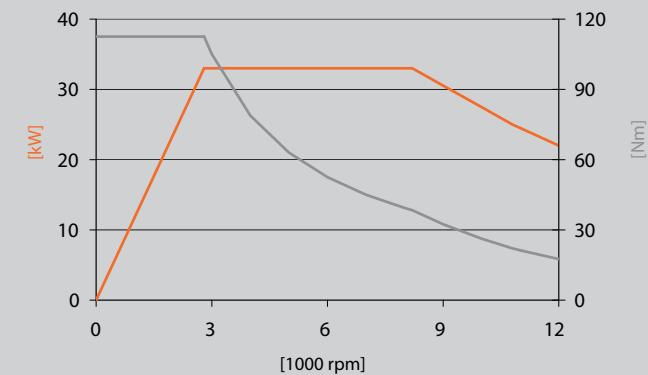
221 - 260 mm



Model	DMS 112-637.810
Torque S1	[Nm] 76.0
Torque S6 (40%)	[Nm] 120.0
Power S1	[kW] 22.5
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 12,000
Weight	[kg] 110
Motor type	asynchronous
Tool interface	SK 40
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMS 100-631.758
Torque S1	[Nm] 85.0
Torque S6 (40%)	[Nm] 112.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 33.0
Speed	[rpm] 12,000
Weight	[kg] 129
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



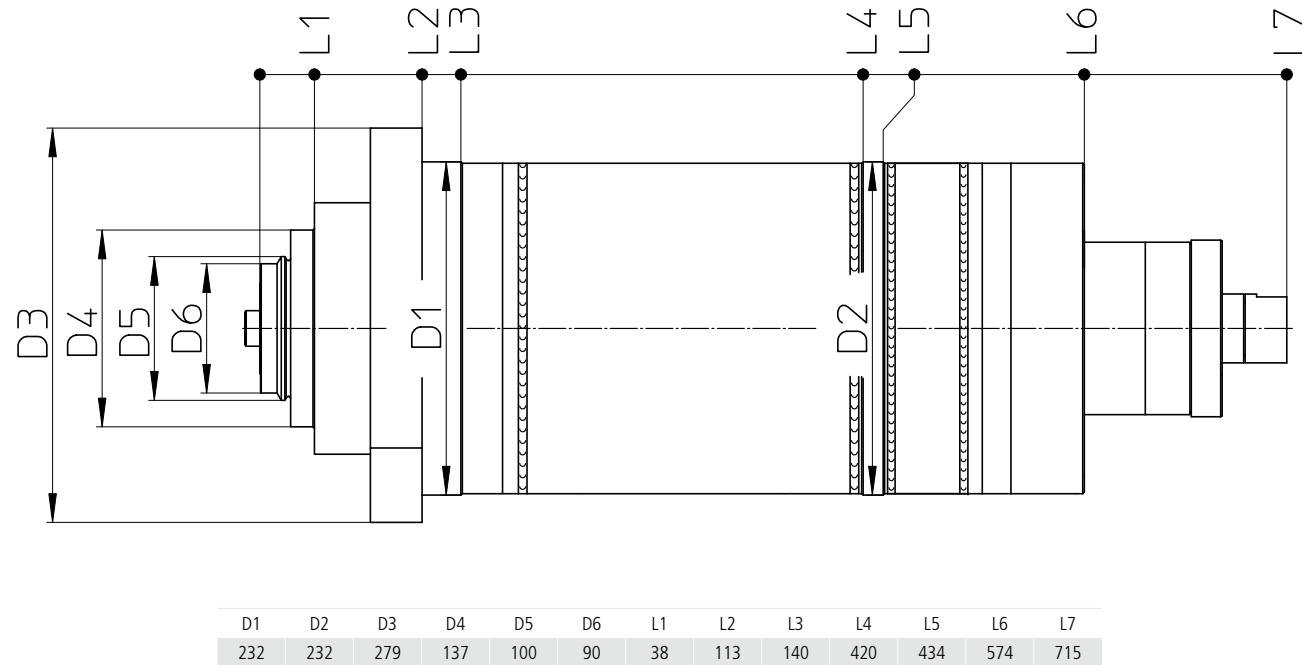
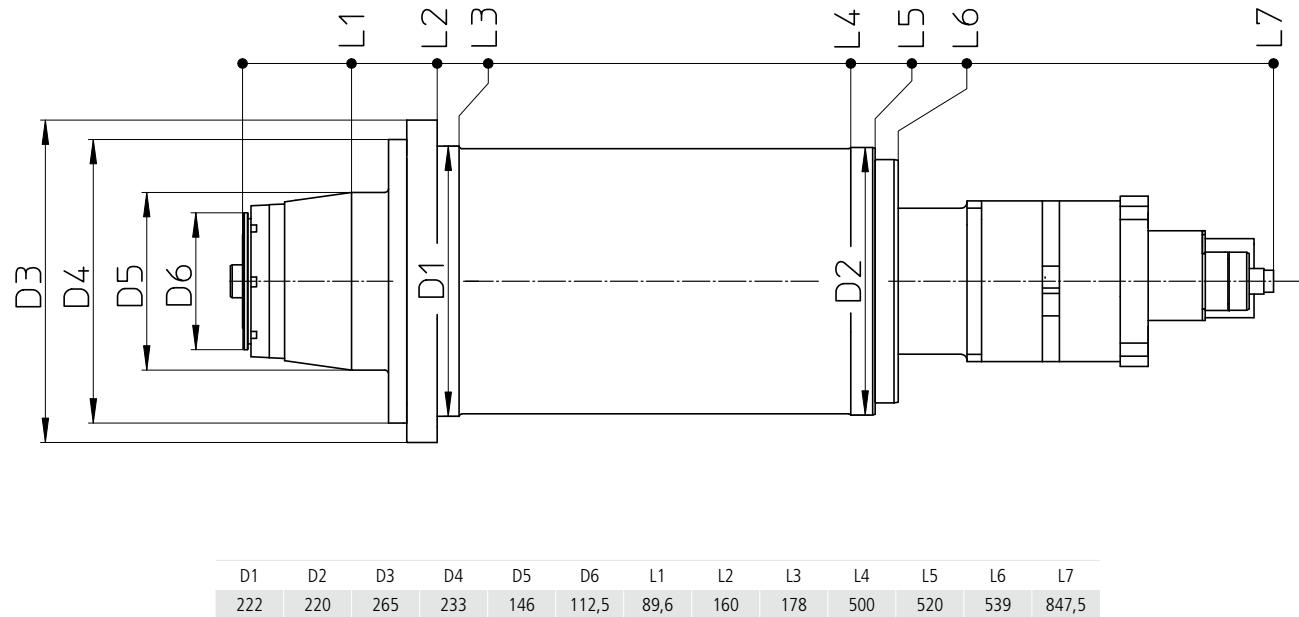
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	●
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[Minimum quantity lubrication]	
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[Clamp]	●

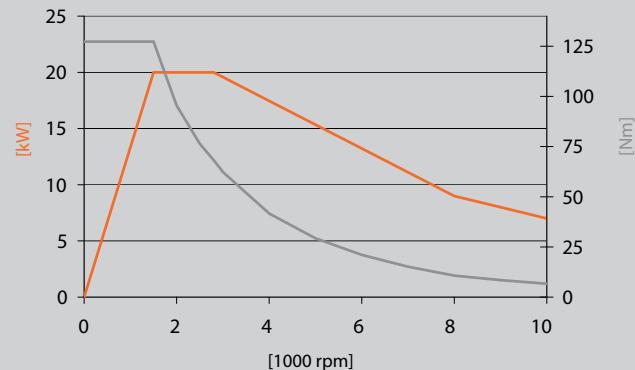
Milling spindles

Fitting measurement

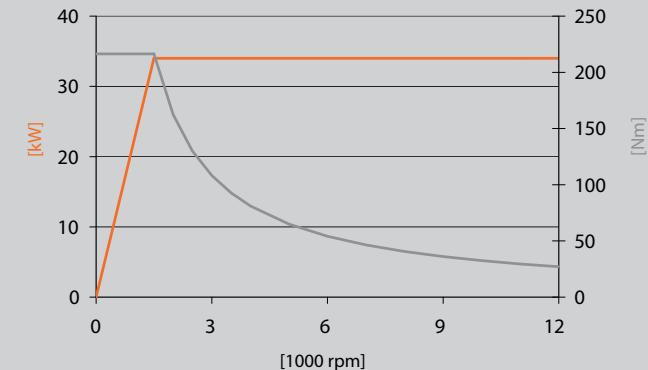
221 - 260 mm



Model		DMS 100-640.602
Torque S1	[Nm]	85.0
Torque S6 (40%)	[Nm]	125.0
Power S1	[kW]	13.5
Power S6 (40%)	[kW]	20.0
Speed	[rpm]	10,000
Weight	[kg]	115
Motor type		asynchronous
Tool interface		HSK-A63
Release unit		pneumatic
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain



Model		DMS 112-634.080
Torque S1	[Nm]	153.0
Torque S6 (40%)	[Nm]	216.0
Power S1	[kW]	24.0
Power S6 (40%)	[kW]	34.0
Speed	[rpm]	12,000
Weight	[kg]	130
Motor type		asynchronous
Tool interface		HSK-A63
Release unit		hydraulic
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain



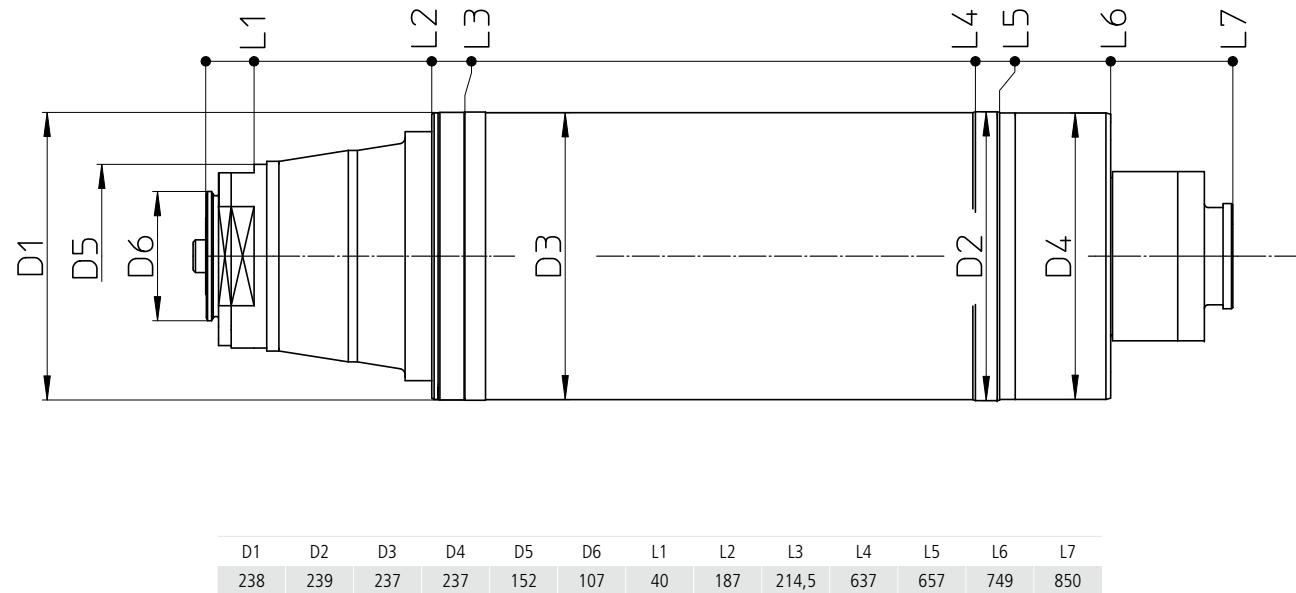
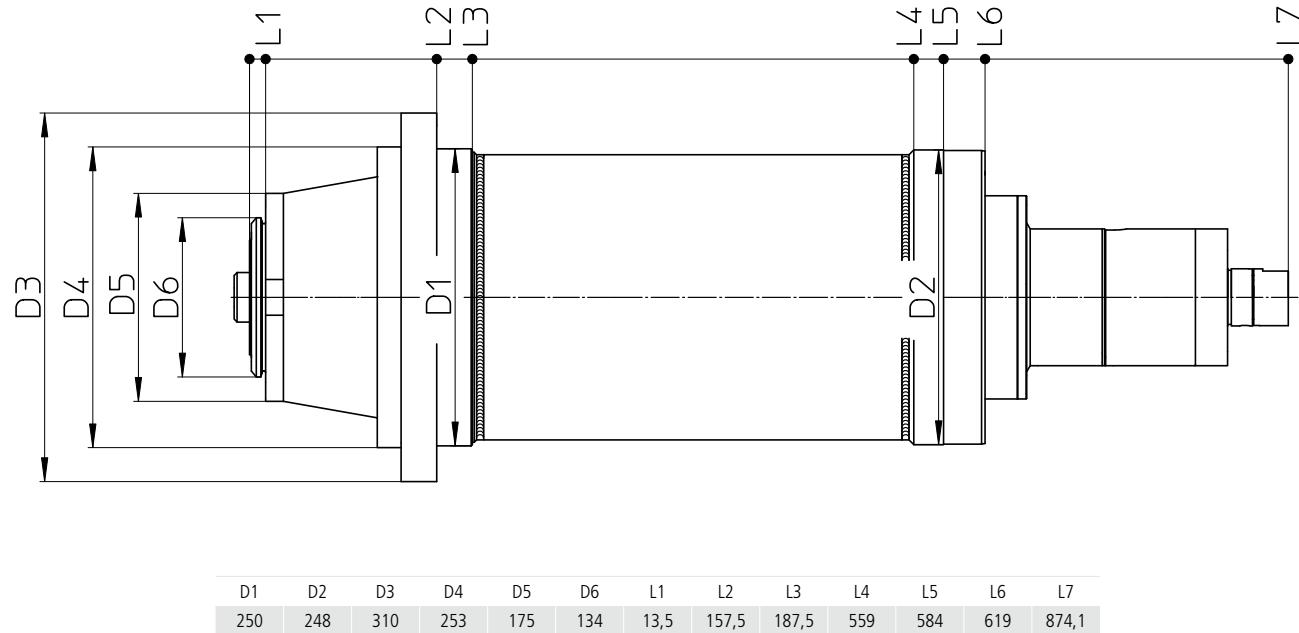
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[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

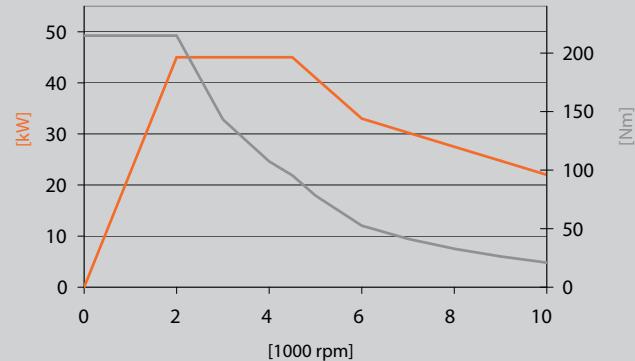
Milling spindles

Fitting measurement

221 - 260 mm

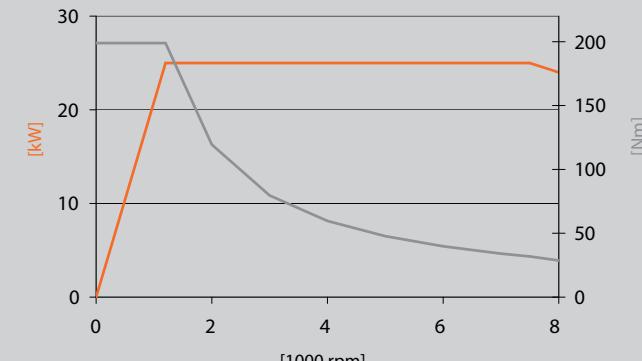


Model	DMS 112-631.029
Torque S1	[Nm] 157.0
Torque S6 (40%)	[Nm] 214.0
Power S1	[kW] 33.0
Power S6 (40%)	[kW] 45.0
Speed	[rpm] 10,000
Weight	[kg] 180
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]	
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

Model	DMS 112-632.882
Torque S1	[Nm] 159.0
Torque S6 (40%)	[Nm] 199.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 25.0
Speed	[rpm] 8,000
Weight	[kg] 166
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

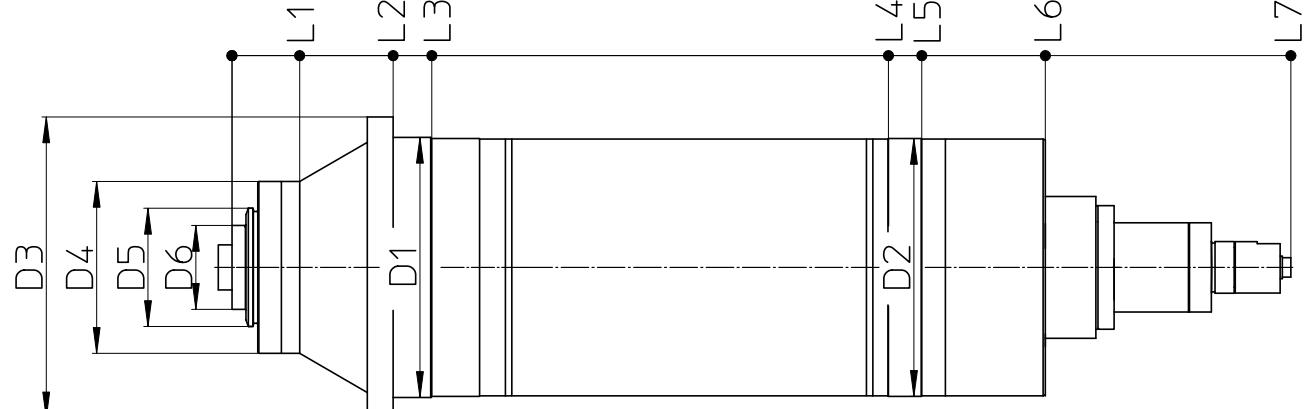


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[Leakage monitoring]	●
[Temperature compensation]	
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[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

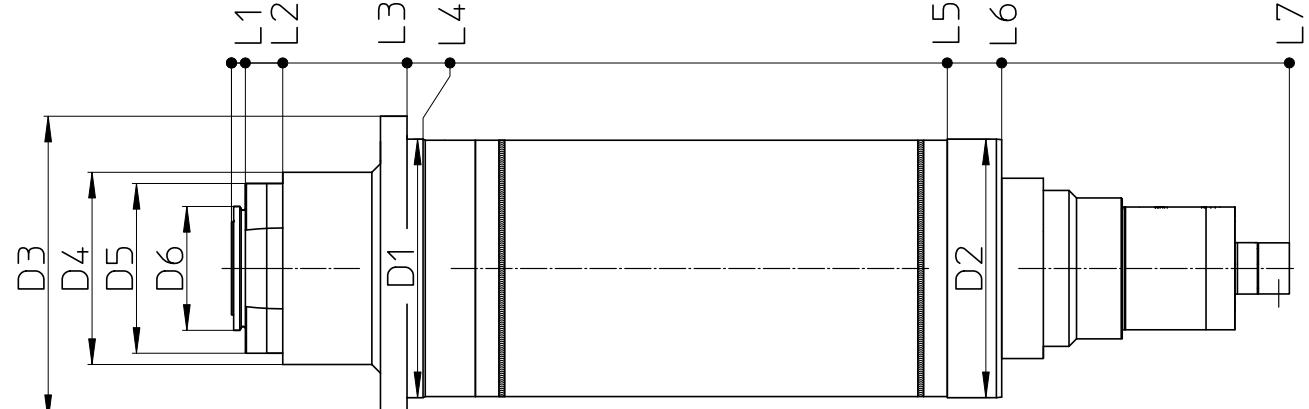
Milling spindles

Fitting measurement

221 - 260 mm

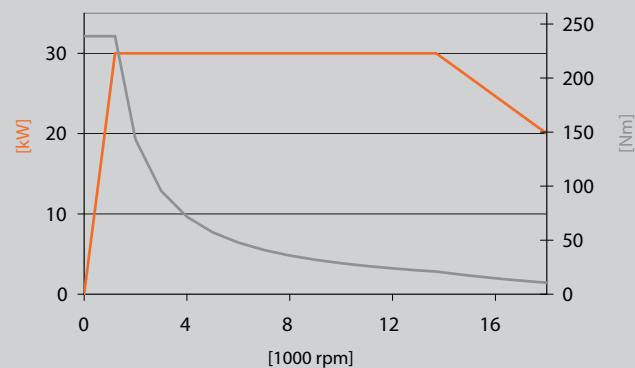


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	240	280	160	110	78	63	150	186	611	642	757	985,5



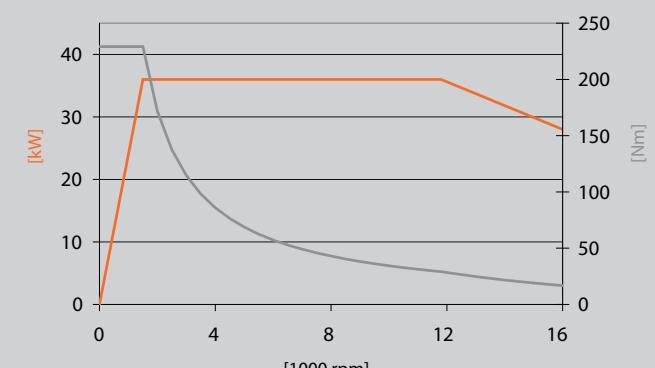
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	242	285	159	116	180	13	48	164,5	179,5	670,5	721,5	991

Model	DMS 112-627.148
Torque S1	[Nm] 160.0
Torque S6 (40%)	[Nm] 239.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 10,000
Weight	[kg] 190
Motor type	asynchronous
Tool interface	HSK-A80
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	●
[Retaining clamping set]	●
[Minimum quantity lubrication]	●
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	●

Model	DMS 112-609.147
Torque S1	[Nm] 160.0
Torque S6 (40%)	[Nm] 239.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 37.5
Speed	[rpm] 16,000
Weight	[kg] 210
Motor type	asynchronous
Tool interface	HSK-A80
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

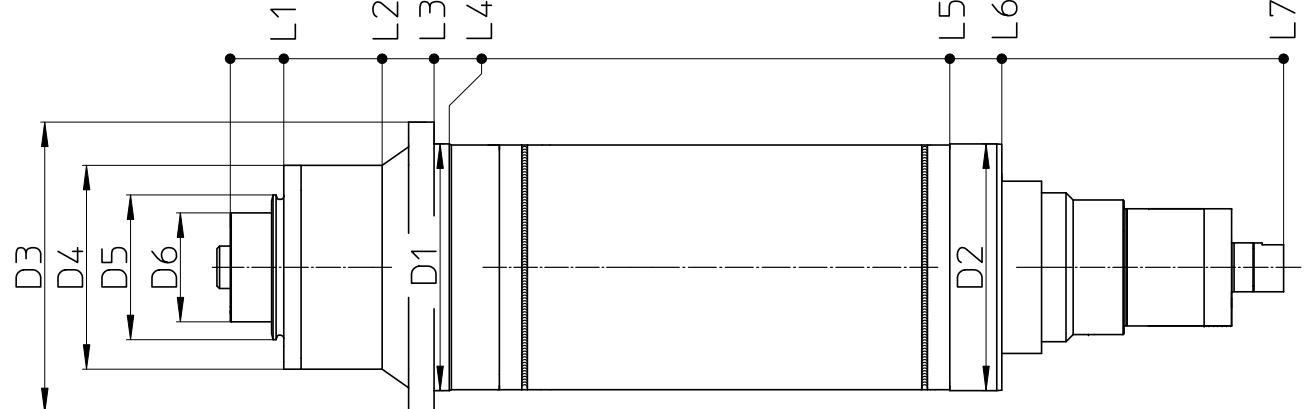


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[Leakage monitoring]	●
[Temperature compensation]	●
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[Control of surface contact]	●
[Rotary union]	●
[Clamp]	●

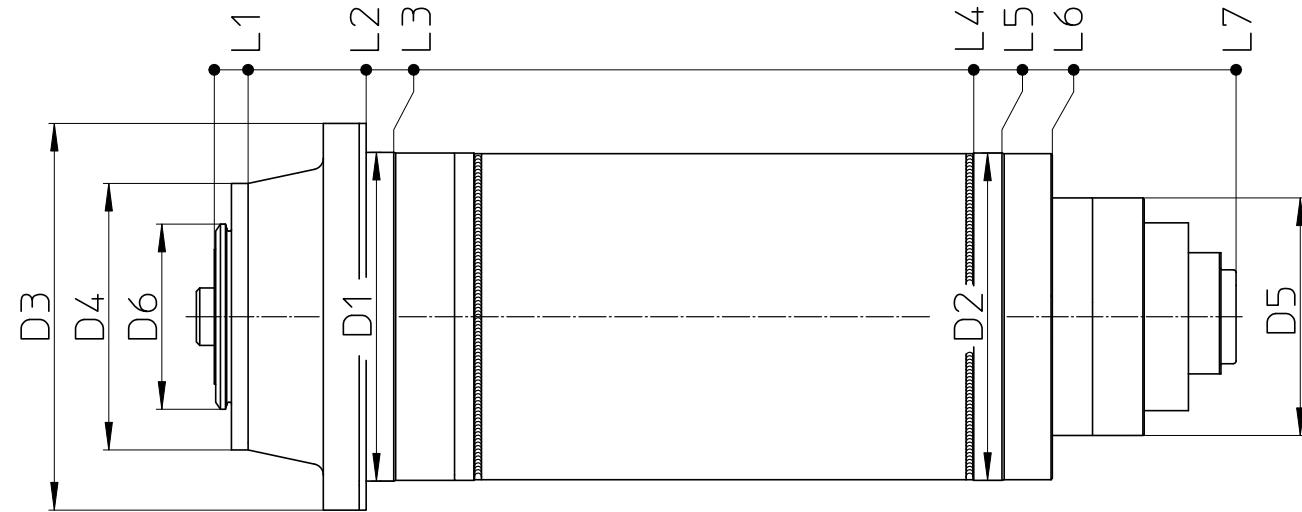
Milling spindles

Fitting measurement

221 - 260 mm

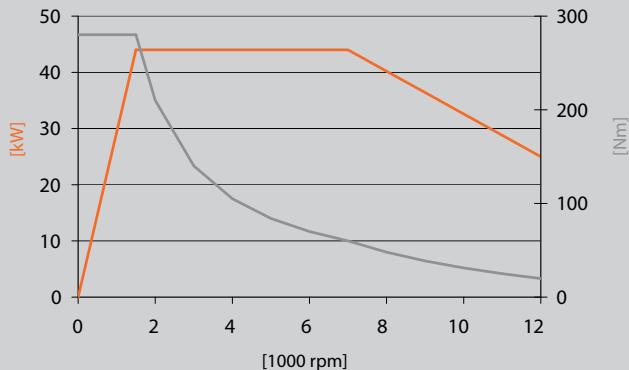


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	242	285	200	142	106,9	52,6	149,1	200	215	706,1	757,1	1034

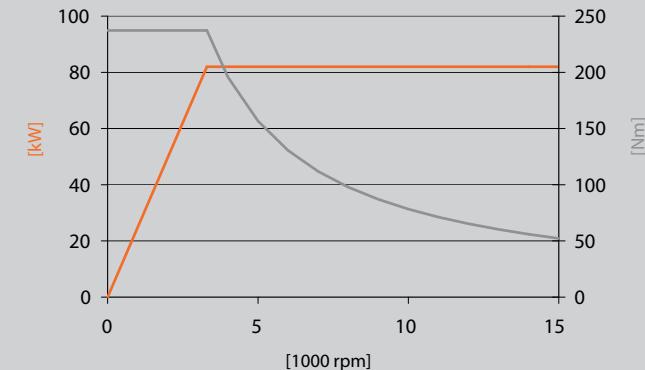


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
238	237	280	193	172	134	24,5	110	130	550	570,5	607	740

Model	DMS 112-638.375
Torque S1	[Nm] 160.0
Torque S6 (40%)	[Nm] 280.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 44.0
Speed	[rpm] 12,000
Weight	[kg] 211
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMS 112-629.203
Torque S1	[Nm] 173.0
Torque S6 (40%)	[Nm] 237.0
Power S1	[kW] 60.0
Power S6 (40%)	[kW] 82.0
Speed	[rpm] 15,000
Weight	[kg] 174
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



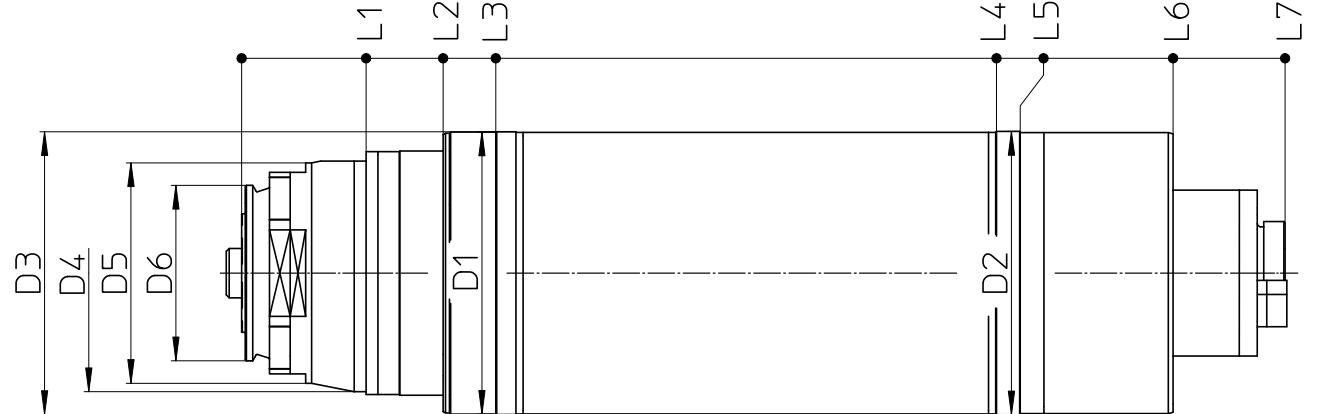
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[Vibration sensor]	●
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[Leakage monitoring]	●
[Temperature compensation]	●
[Retaining clamping set]	●
[Minimum quantity lubrication]	●
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	●

[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	●
[Retaining clamping set]	●
[Minimum quantity lubrication]	●
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	●

Milling spindles

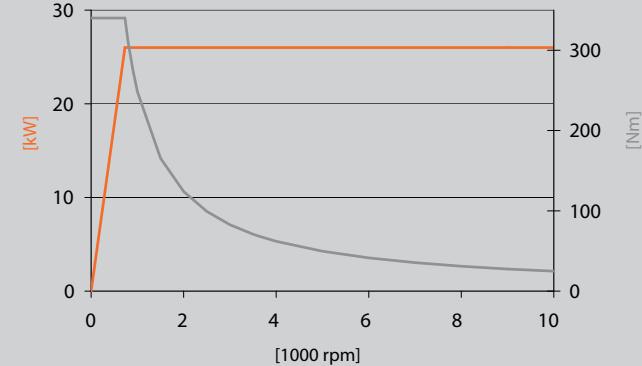
Fitting measurement

221 - 260 mm



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
238	239	238,5	200	185	148	105	170	214,5	637	657	786	880,5

Model	DMS 112-636.940	
Torque S1	[Nm]	262.0
Torque S6 (40%)	[Nm]	340.0
Power S1	[kW]	20.0
Power S6 (40%)	[kW]	26.0
Speed	[rpm]	10,000
Weight	[kg]	190
Motor type	asynchronous	
Tool interface	HSK-A100	
Release unit	hydraulic	
Cooling	liquid cooled	
Bearing lubrication	lubricated with grease	
Control	Siemens/Fanuc/Heidenhain	

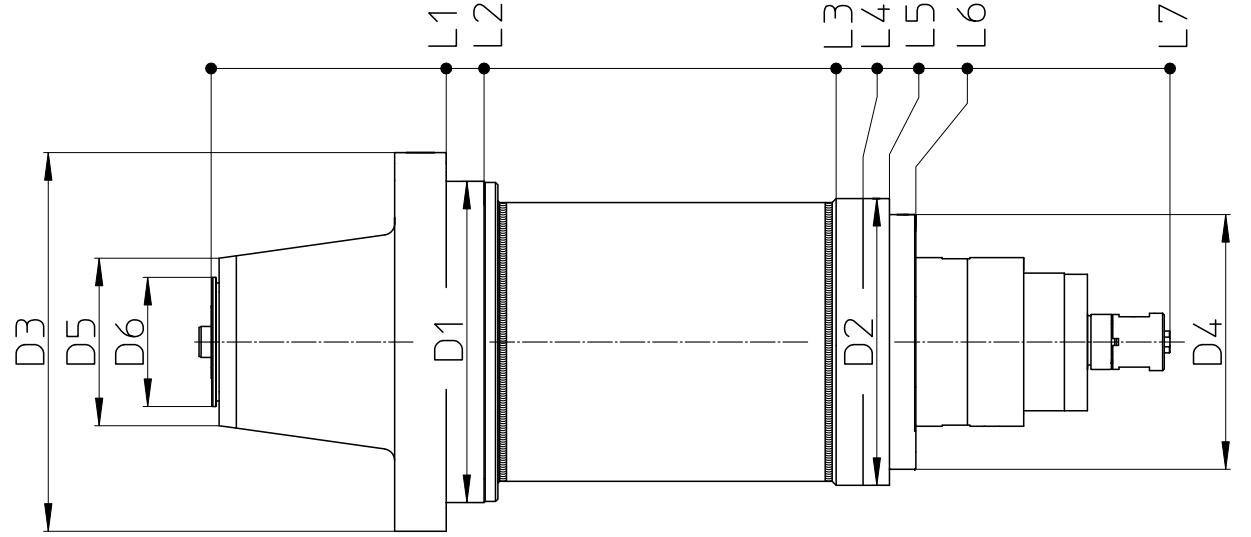


- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket] •
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

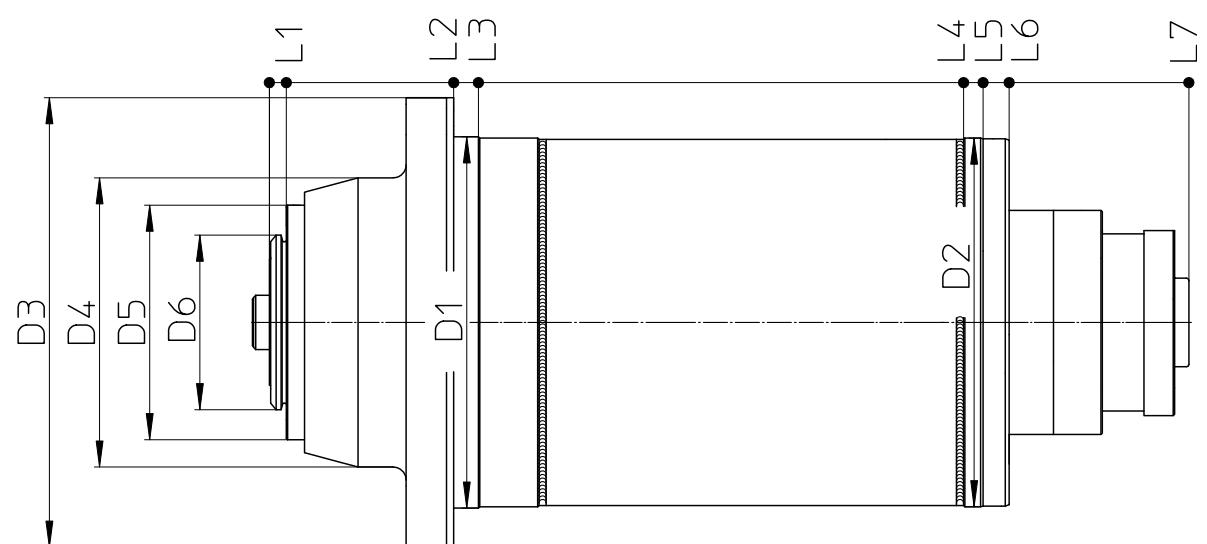
Milling spindles

Fitting measurement

261 - 300 mm

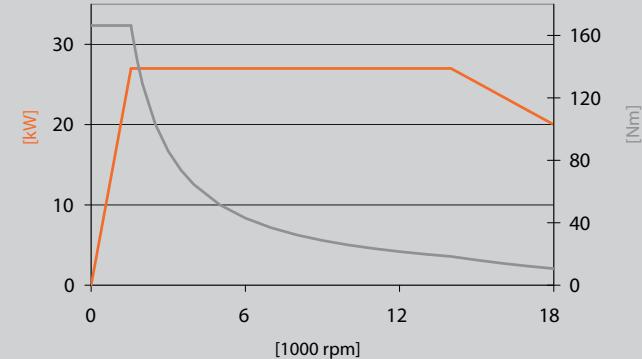


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
280	250	330	222	146	112	205	238	545	568,5	591,5	614,5	836,1



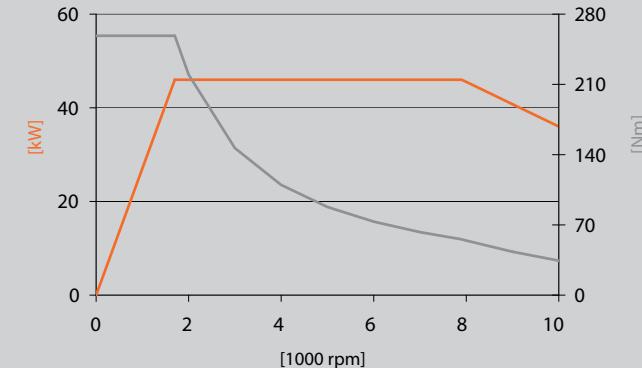
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
285	283	345	222	180	134	13	141,5	160,5	553	548	568	706

Model	DMS 112-637.203
Torque S1	[Nm] 108.0
Torque S6 (40%)	[Nm] 165.0
Power S1	[kW] 17.5
Power S6 (40%)	[kW] 27.5
Speed	[rpm] 18,000
Weight	[kg] 167
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Model	DMS 132-637.077
Torque S1	[Nm] 180.0
Torque S6 (40%)	[Nm] 257.0
Power S1	[kW] 32.0
Power S6 (40%)	[kW] 46.0
Speed	[rpm] 10,000
Weight	[kg] 216
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

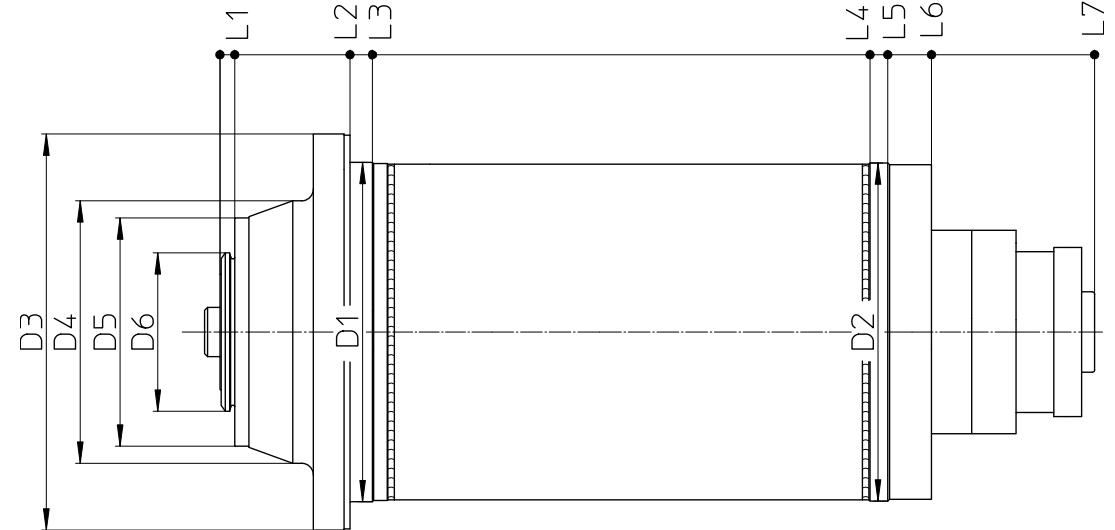
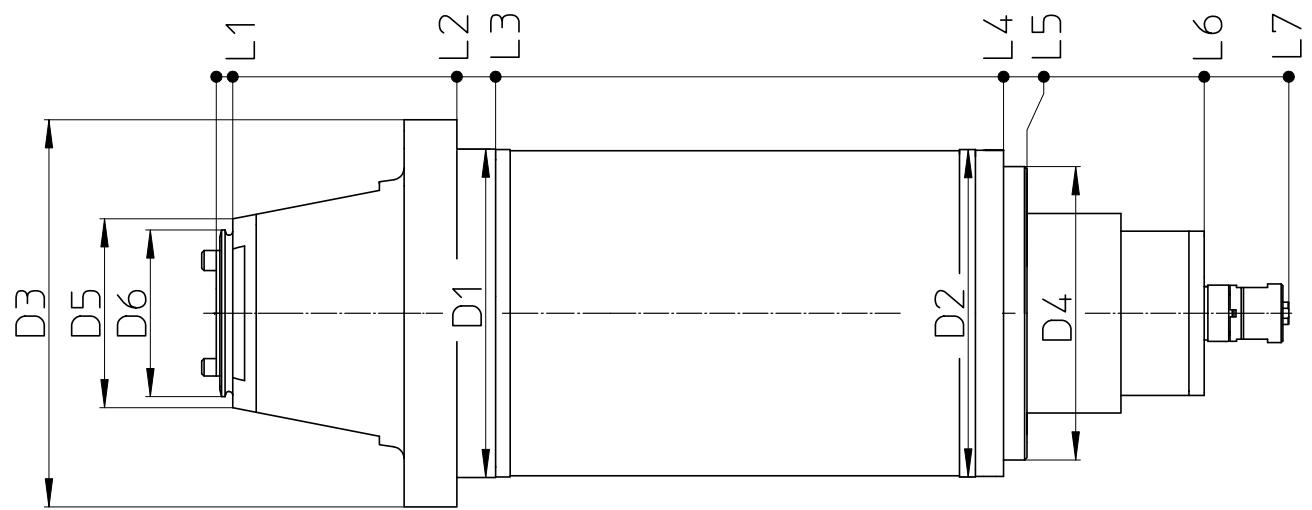


- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Milling spindles

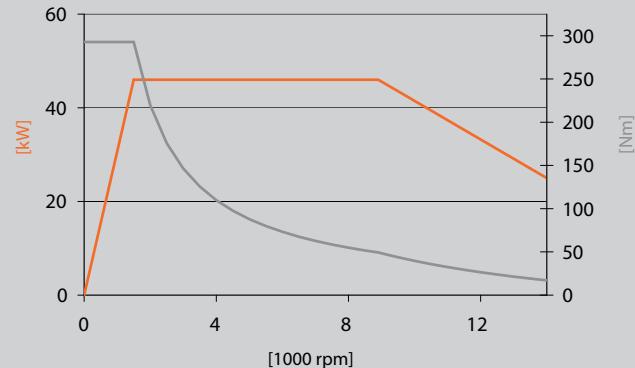
Fitting measurement

261 - 300 mm



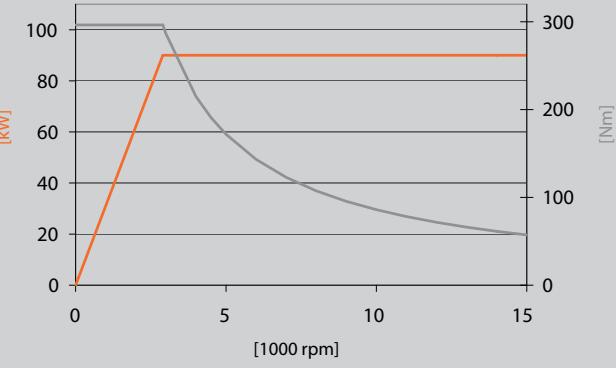
Model	DMS 132-634.362	
Torque S1	[Nm]	197.0
Torque S6 (40%)	[Nm]	293.0
Power S1	[kW]	31.0
Power S6 (40%)	[kW]	46.0
Speed	[rpm]	10,000
Weight	[kg]	260
Motor type	asynchronous	
Tool interface	SK 50	
Release unit	hydraulic	
Cooling	liquid cooled	
Bearing lubrication	lubricated with oil-air	
Control	Siemens/Fanuc/Heidenhain	

- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]



Model	DMS 132-631.987	
Torque S1	[Nm]	230.0
Torque S6 (40%)	[Nm]	296.0
Power S1	[kW]	70.0
Power S6 (40%)	[kW]	90.0
Speed	[rpm]	15,000
Weight	[kg]	250
Motor type	asynchronous	
Tool interface	HSK-A100	
Release unit	hydraulic	
Cooling	liquid cooled	
Bearing lubrication	lubricated with oil-air	
Control	Siemens/Fanuc/Heidenhain	

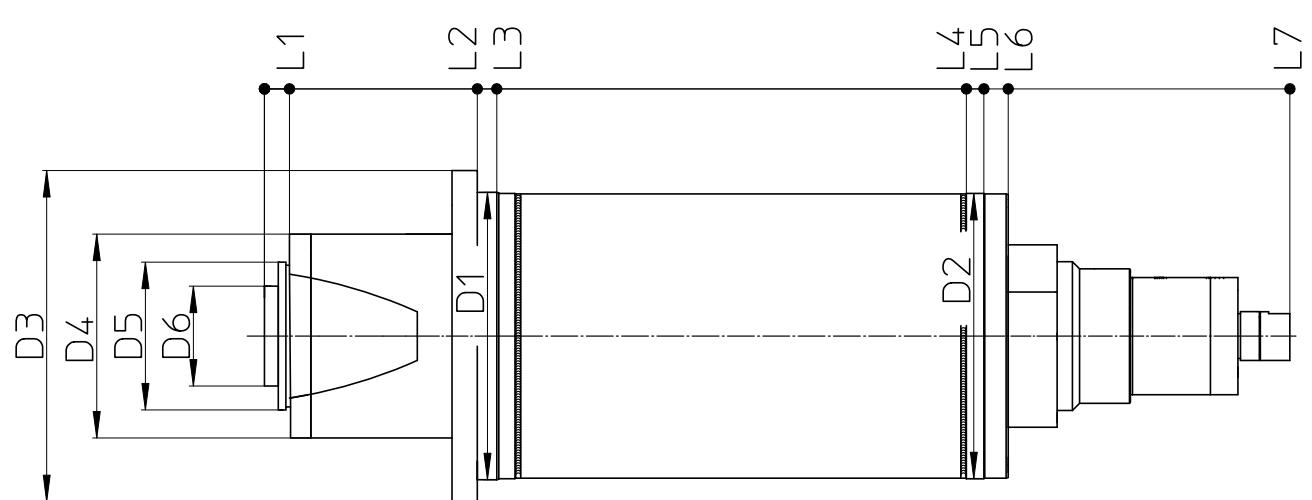
- [Temperature sensor PT-100] •
- [Vibration sensor] •
- [Cooling jacket] •
- [Leakage monitoring] •
- [Temperature compensation] •
- [Retaining clamping set] •
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]



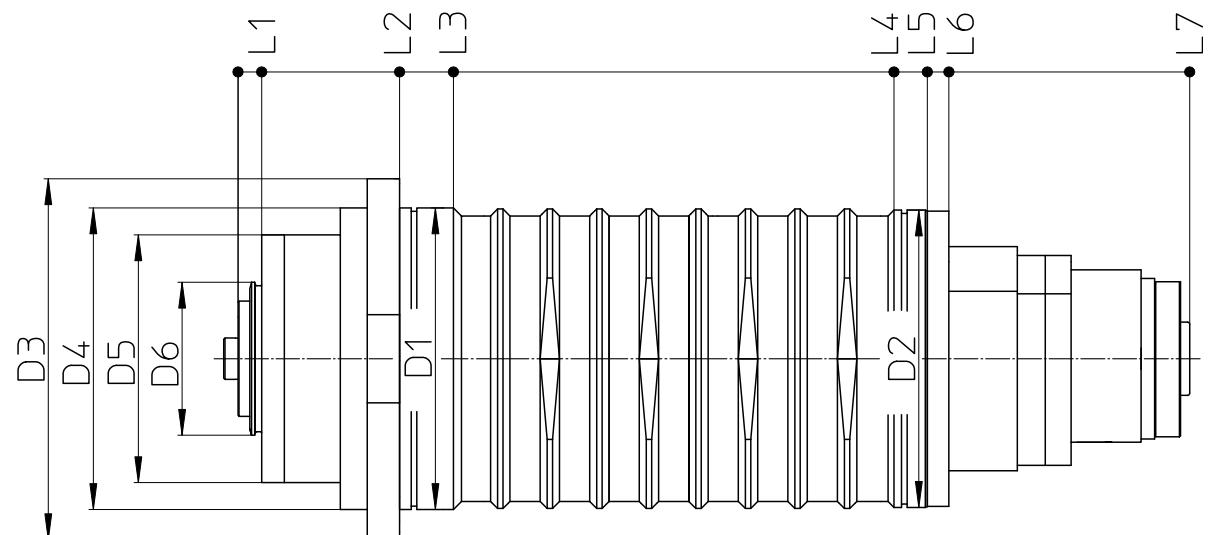
Milling spindles

Fitting measurement

261 - 300 mm

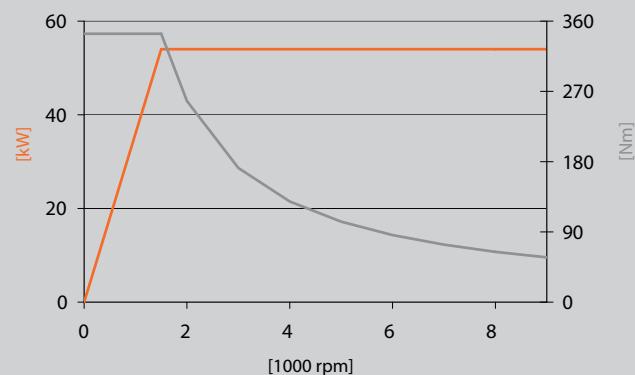


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
282	280	325	200	145	98	24,5	208,9	228	689	706	730	1007

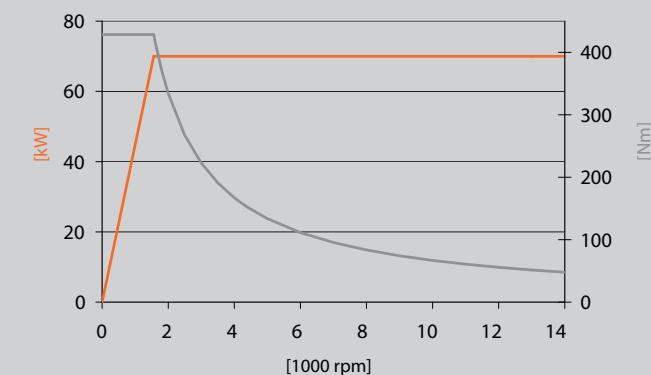


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
280	276	335	280	230	142	22	150	200	609	640	660	883,5

Model	DMS 132-631.630
Torque S1	[Nm] 230.0
Torque S6 (40%)	[Nm] 340.0
Power S1	[kW] 36.0
Power S6 (40%)	[kW] 54.0
Speed	[rpm] 9,000
Weight	[kg] 250
Motor type	asynchronous
Tool interface	SK 50
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMS 132-631.460
Torque S1	[Nm] 275.0
Torque S6 (40%)	[Nm] 430.0
Power S1	[kW] 45.0
Power S6 (40%)	[kW] 70.0
Speed	[rpm] 14,000
Weight	[kg] 249
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



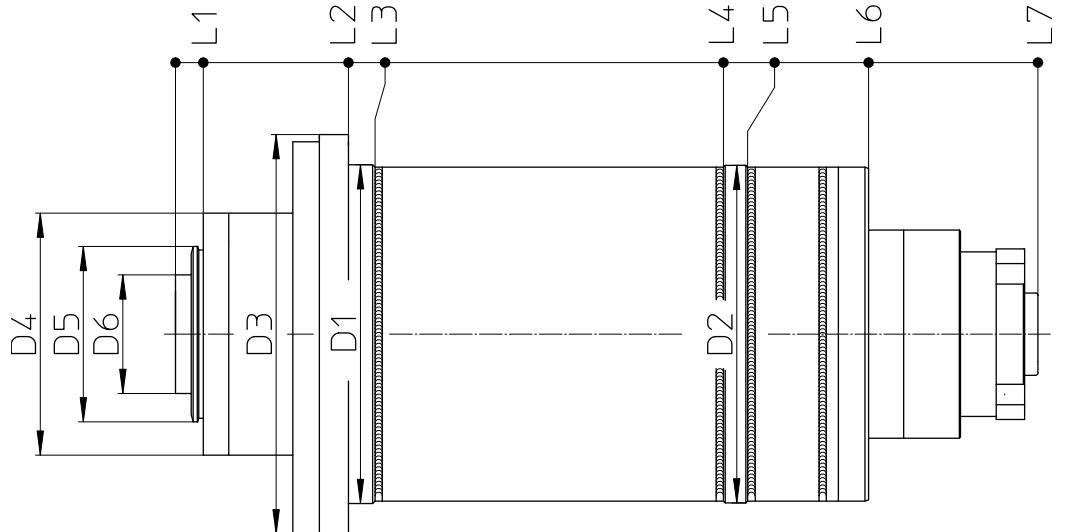
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[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	●
[Vibration sensor]	
[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	●

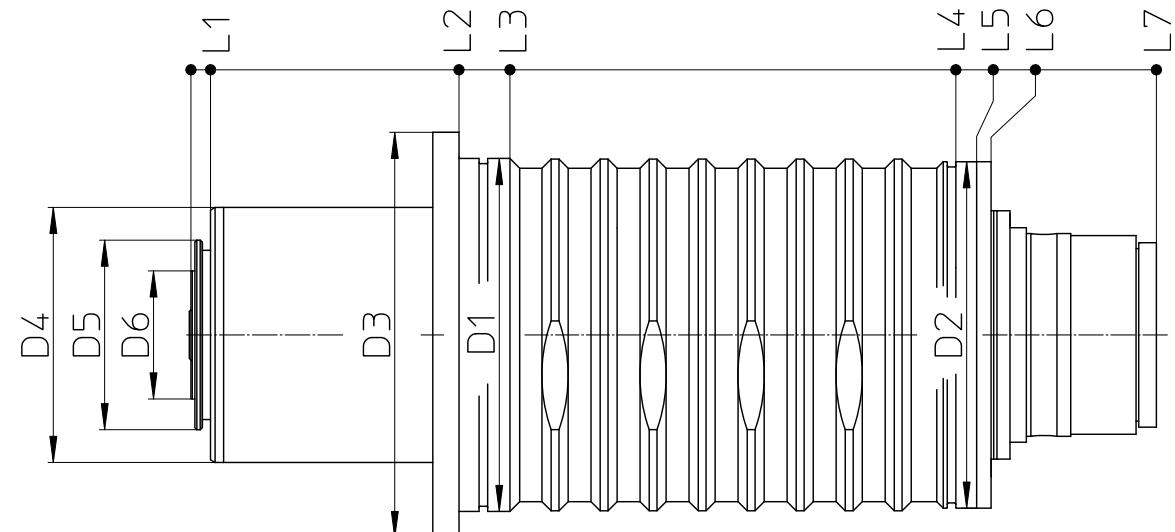
Milling spindles

Fitting measurement

261 - 300 mm

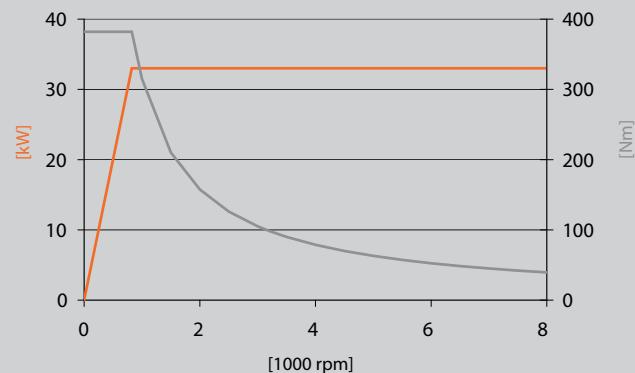


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
280	279	330	200	145	98	23	143	165	453	473	573	713



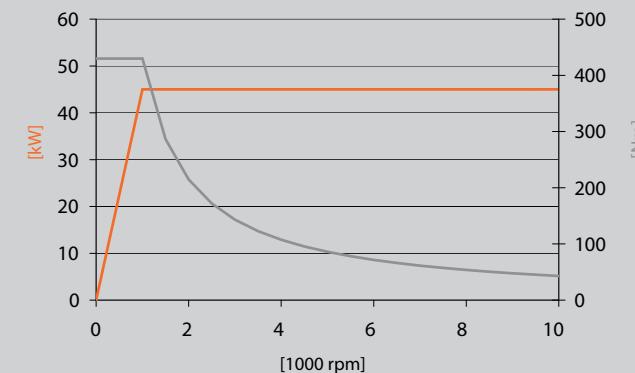
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
270	265	310	195	145	98	15	205	244	585,1	601	612	738,5

Model	DMS 132-639.574
Torque S1	[Nm] 278.0
Torque S6 (40%)	[Nm] 382.0
Power S1	[kW] 24.0
Power S6 (40%)	[kW] 33.0
Speed	[rpm] 8,000
Weight	[kg] 230
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

Model	DMS 132-638.627
Torque S1	[Nm] 296.0
Torque S6 (40%)	[Nm] 430.0
Power S1	[kW] 31.0
Power S6 (40%)	[kW] 45.0
Speed	[rpm] 10,000
Weight	[kg] 194
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

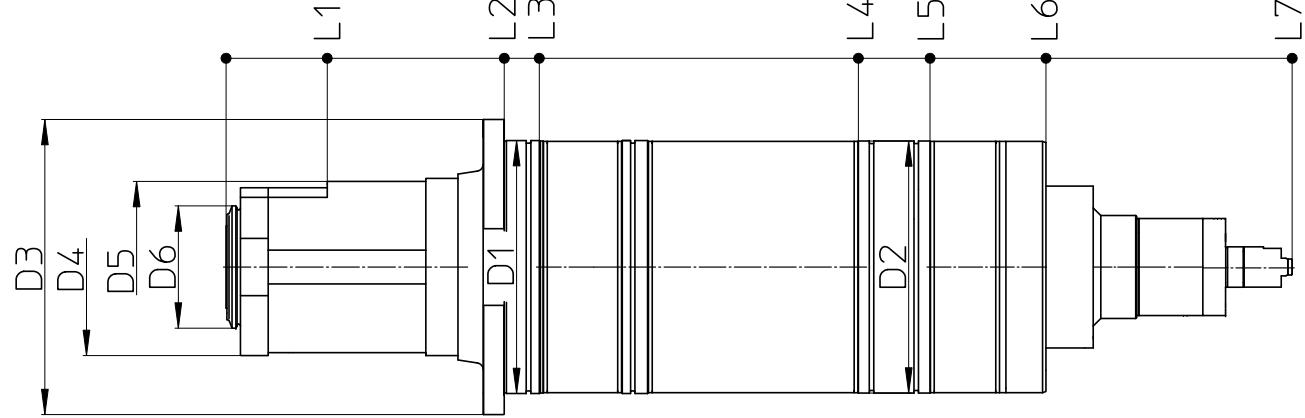


[Temperature sensor PT-100]	●
[Vibration sensor]	
[Cooling jacket]	
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

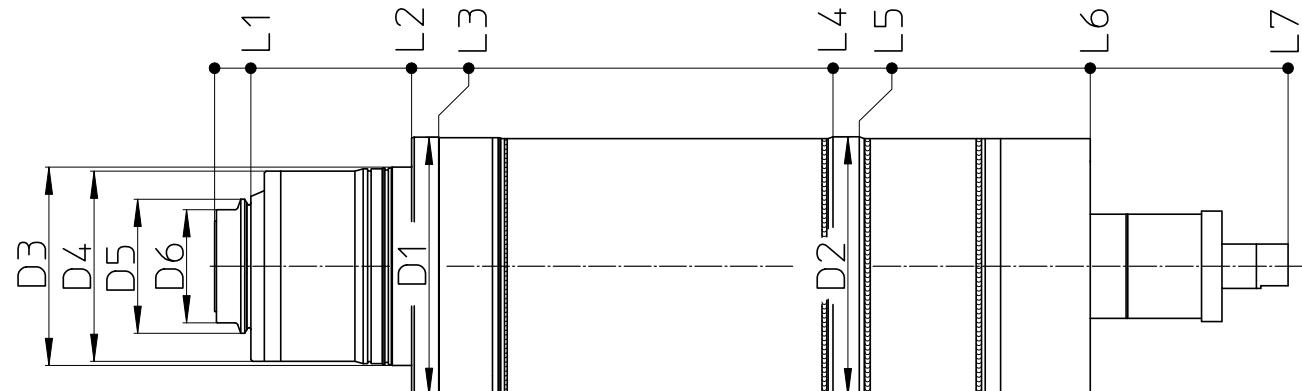
Milling spindles

Fitting measurement

261 - 300 mm

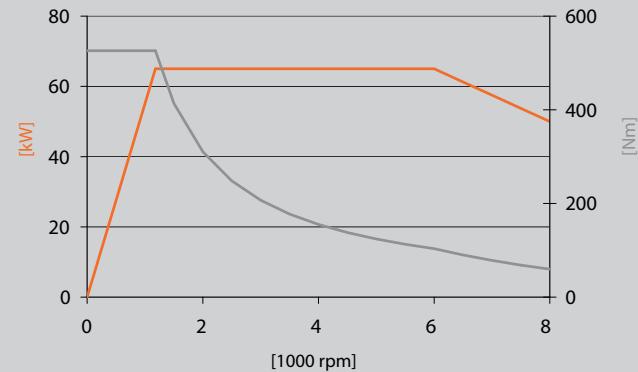


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
300	299	350	210	202,9	145	120	330	371,5	750	835	972,5	1265

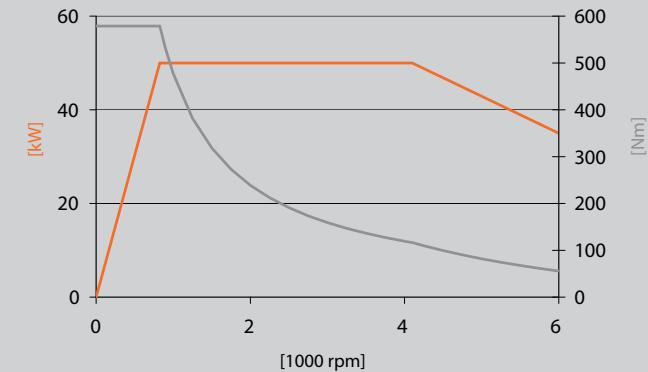


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
285	286	219	210	148	125	40	217,5	247,5	683	712	967	1186

Model	DMS 132-627.567
Torque S1	[Nm] 405.0
Torque S6 (40%)	[Nm] 526.0
Power S1	[kW] 50.0
Power S6 (40%)	[kW] 65.0
Speed	[rpm] 8,000
Weight	[kg] 375
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMS 132-627.585
Torque S1	[Nm] 451.0
Torque S6 (40%)	[Nm] 579.0
Power S1	[kW] 39.0
Power S6 (40%)	[kW] 50.0
Speed	[rpm] 6,000
Weight	[kg] 330
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



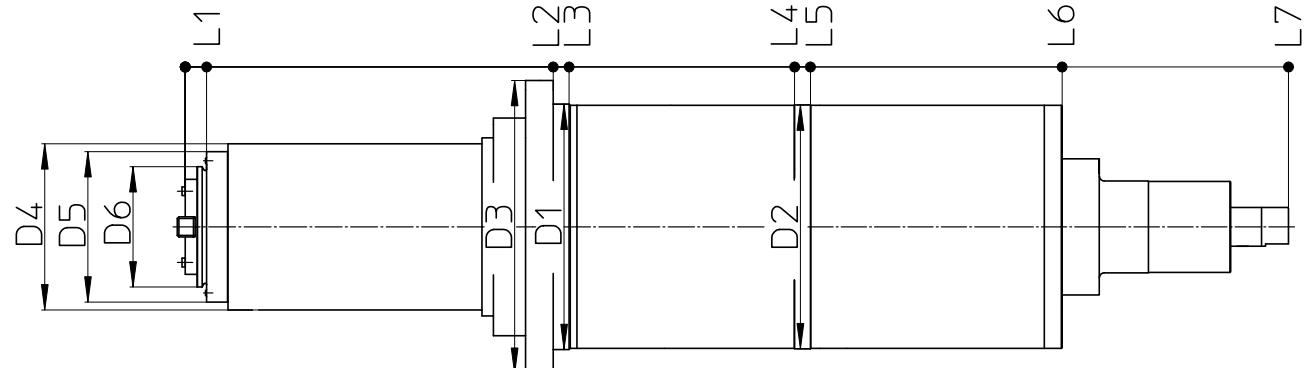
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[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	

[Temperature sensor PT-100]	
[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	●
[Minimum quantity lubrication]	
[Control of surface contact]	●
[Rotary union]	●
[Clamp]	

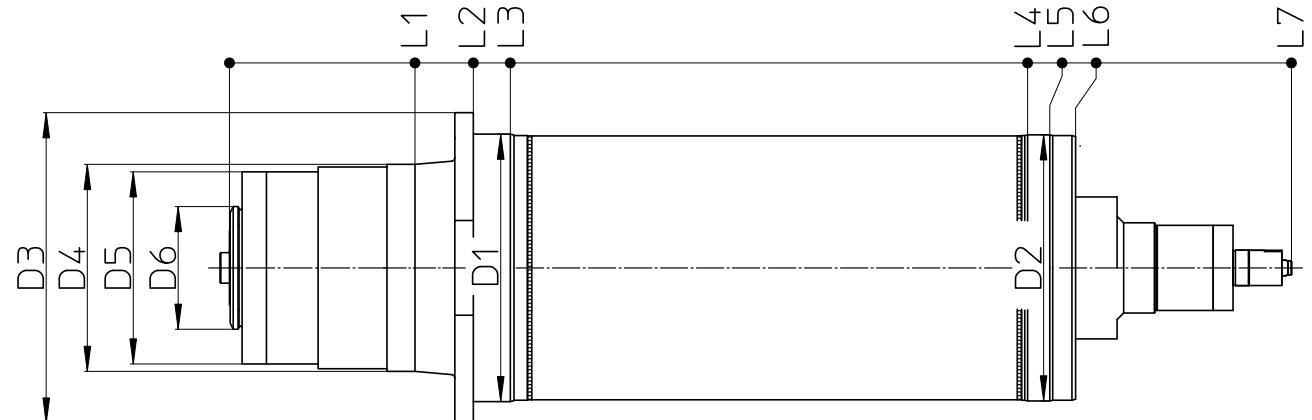
Milling spindles

Fitting measurement

301 - 400 mm

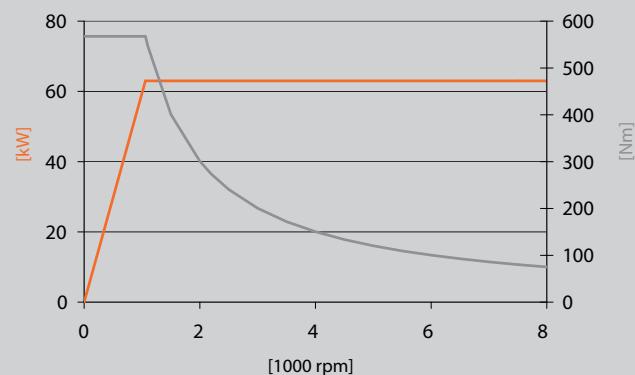


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
310	308	370	275	190	152	27	465	485	770	790	1108	1394



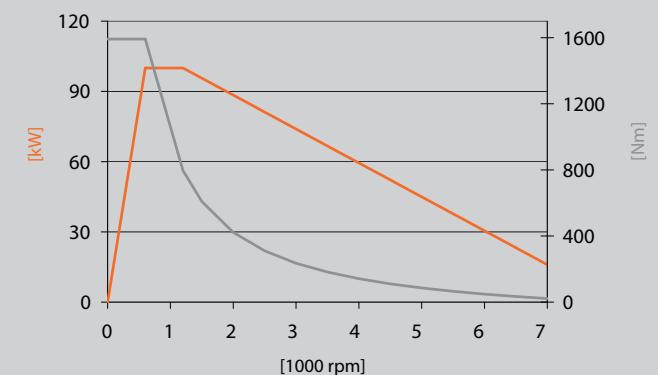
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
362	360	420	280	260	166	251	330	380	1080	1110	1145	1437

Model	DMS 132-639.136
Torque S1	[Nm] 450.0
Torque S6 (40%)	[Nm] 568.0
Power S1	[kW] 50.0
Power S6 (40%)	[kW] 63.0
Speed	[rpm] 8,000
Weight	[kg] 360
Motor type	asynchronous
Tool interface	SK 50
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

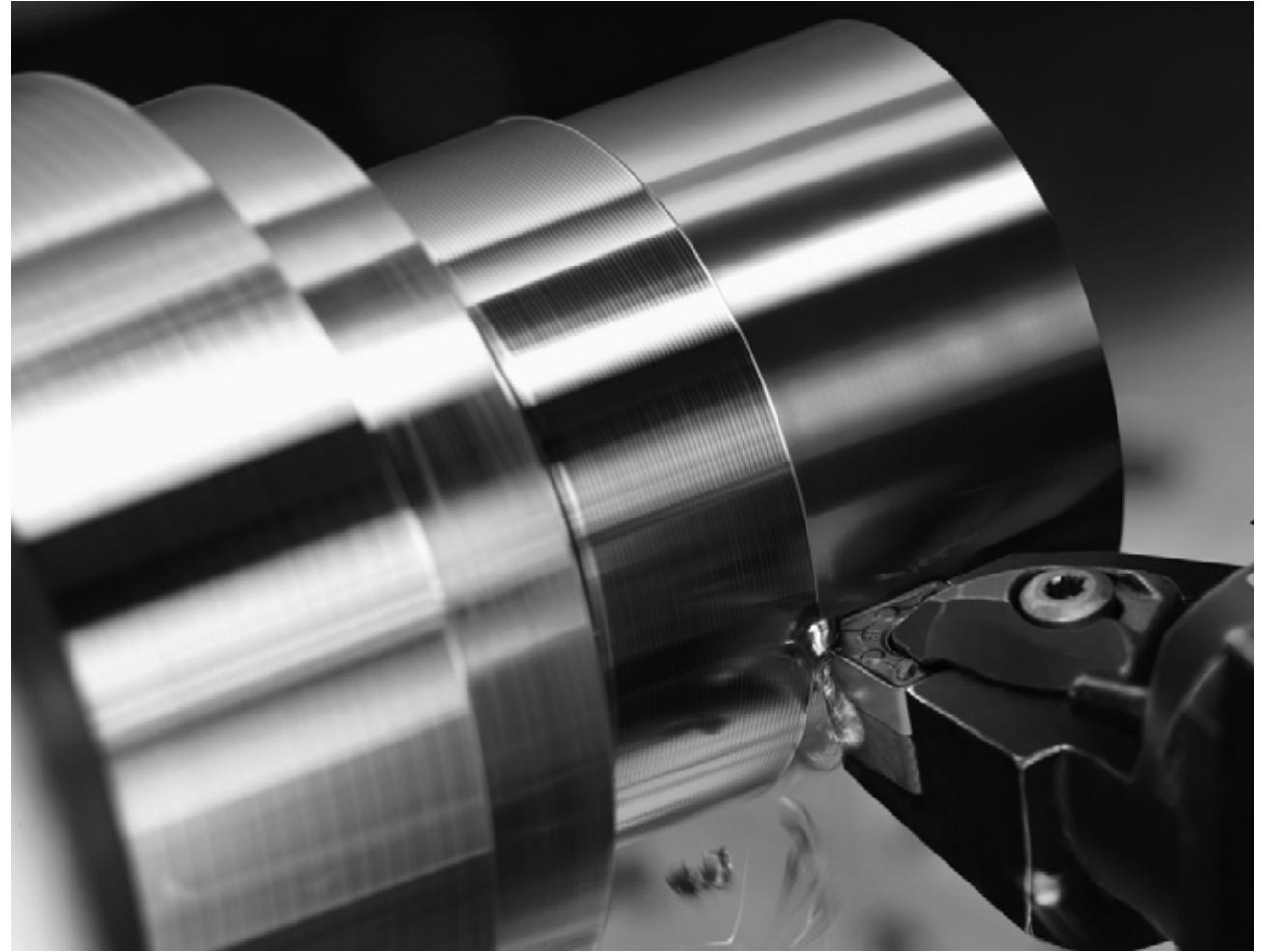


[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	

Model	DMS 180-634.970
Torque S1	[Nm] 1,273.0
Torque S6 (40%)	[Nm] 1,592.0
Power S1	[kW] 80.0
Power S6 (40%)	[kW] 100.0
Speed	[rpm] 7,000
Weight	[kg] 679
Motor type	asynchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]	●
[Vibration sensor]	●
[Cooling jacket]	●
[Leakage monitoring]	●
[Temperature compensation]	
[Retaining clamping set]	
[Minimum quantity lubrication]	
[Control of surface contact]	
[Rotary union]	●
[Clamp]	



Turning spindles from KESSLER - successfully in use for years. A wide variety of designs and a large number of different interfaces offer flexibility and maximum power reserves in machine design.

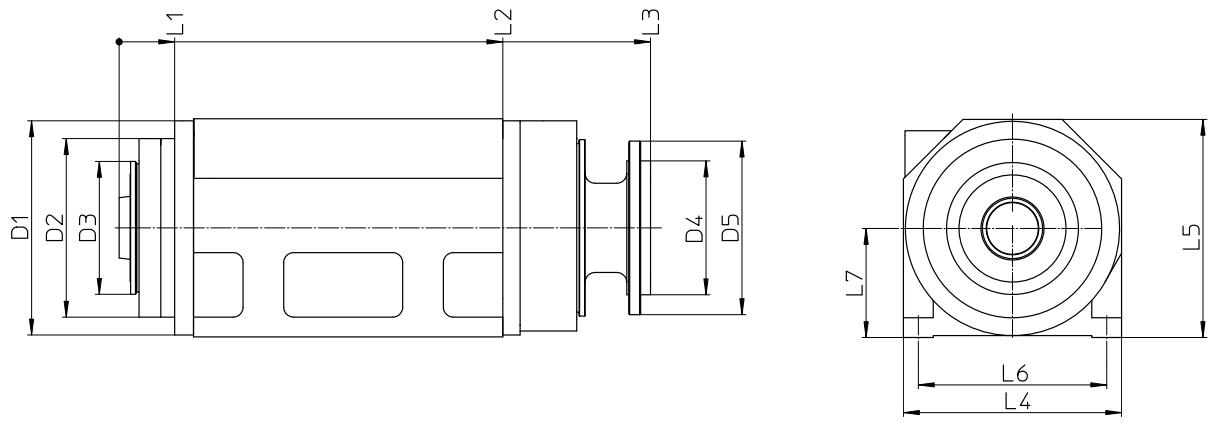
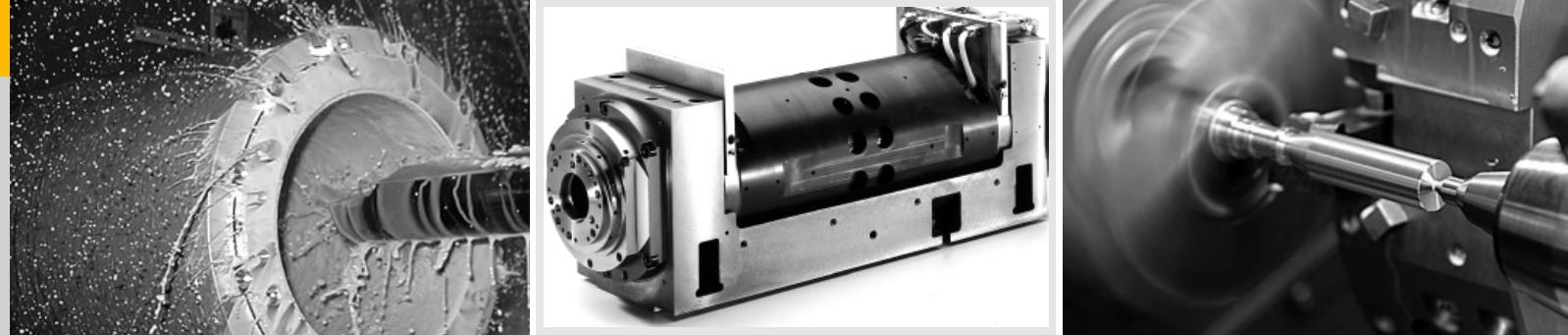
With speeds up to 8,000 rpm and torques more than 1,700 Nm, KESSLER turning spindles offer the right drive for every application. Standard interfaces from A4 to A15 matching interfaces for various requirements.

Special options such as clamp, integrated temperature sensors or special interfaces such as cylinder holder or Capto C5-C10 are rounding up the product range.

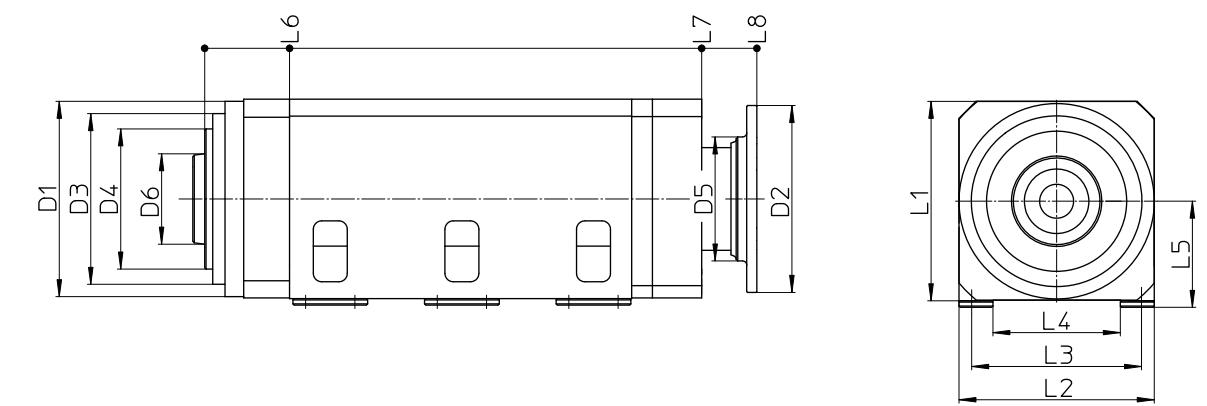
Turning spindles

Fitting measurement

100 - 300 mm

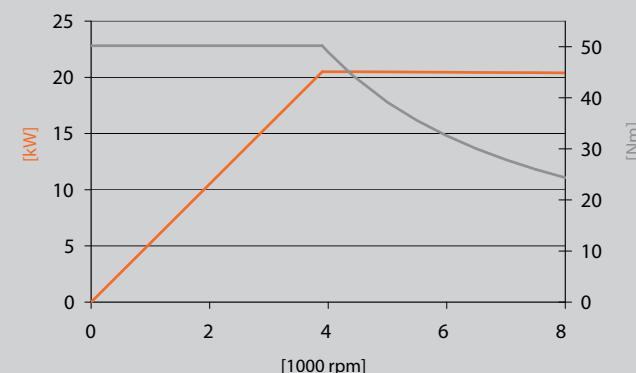


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
216	180	134	135	175	—	56	387	536	220	220	190	110



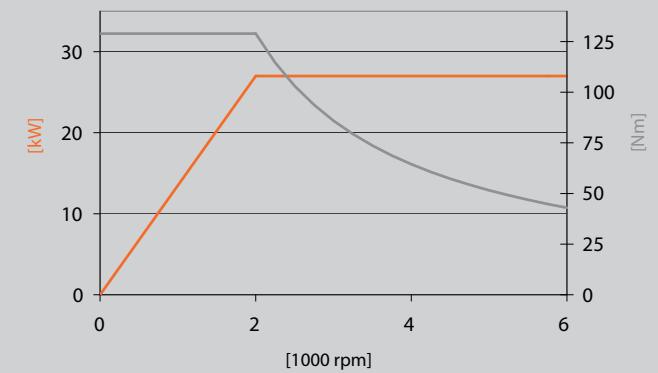
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
230	220	201	165	146	106,4	234,8	230	200	150	125	585,5	650,5

Model	SMS 080-623.300
Torque S1	[Nm] 38.0
Torque S6 (40%)	[Nm] 50.0
Power S1	[kW] 17.5
Power S6 (40%)	[kW] 20.5
Speed	[rpm] 8,000
Weight	[kg] 105
Motor type	synchronous
Tool interface	A4
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]

Model	SMS 100-617.488
Torque S1	[Nm] 76.0
Torque S6 (40%)	[Nm] 130.0
Power S1	[kW] 16.0
Power S6 (40%)	[kW] 27.0
Speed	[rpm] 6,000
Weight	[kg] 188
Motor type	synchronous
Tool interface	A6
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

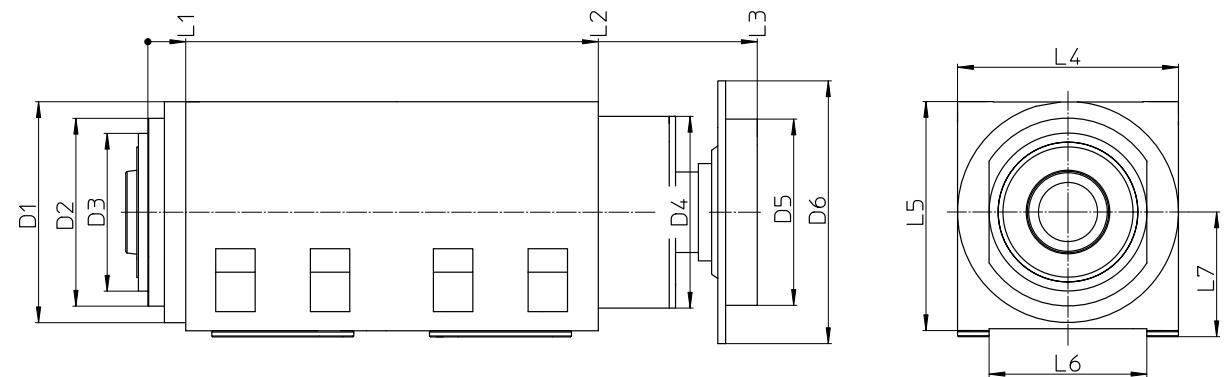
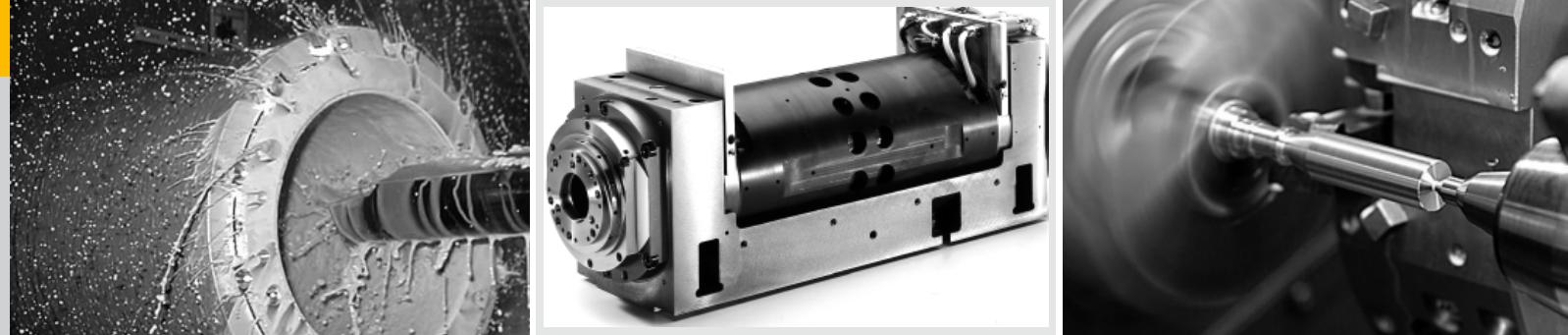


- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]

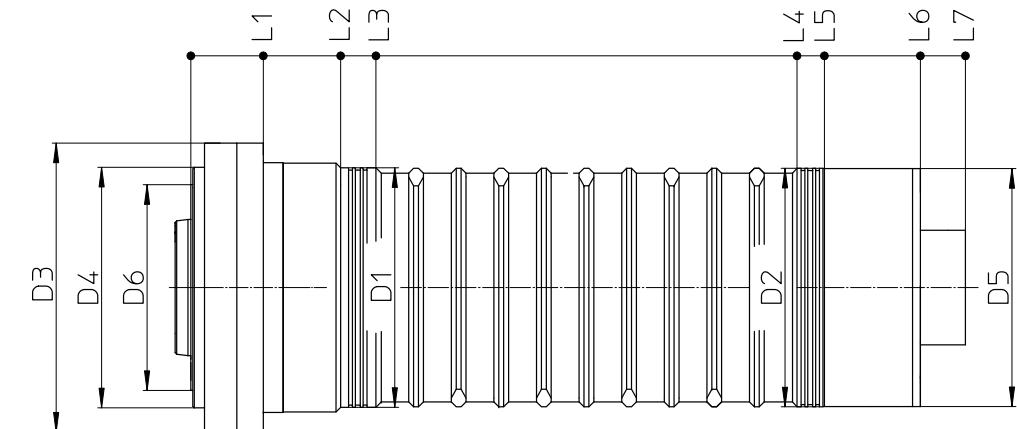
Turning spindles

Fitting measurement

100 - 300 mm

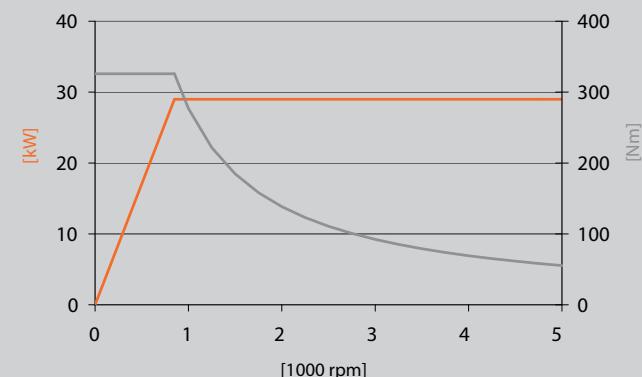


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
280	238	200	243	236	333	48	571	772,5	280	290,3	200	158



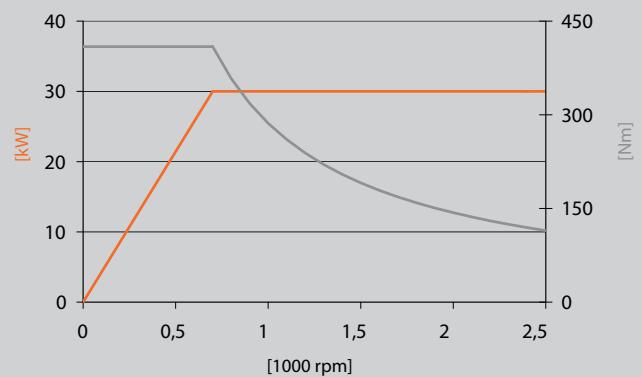
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
244,5	243,5	295	245,5	243	210	74	153	189	619	647	745	791

Model		SMS 132-617.577
Torque S1	[Nm]	270.0
Torque S6 (40%)	[Nm]	325.0
Power S1	[kW]	24.0
Power S6 (40%)	[kW]	29.0
Speed	[rpm]	5,000
Weight	[kg]	315
Motor type		synchronous
Tool interface		A6
Release unit		—
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]

Model		SMS 132-637.588
Torque S1	[Nm]	300.0
Torque S6 (40%)	[Nm]	423.0
Power S1	[kW]	22.0
Power S6 (40%)	[kW]	31.0
Speed	[rpm]	2,500
Weight	[kg]	189
Motor type		synchronous
Tool interface		A8
Release unit		—
Cooling		liquid cooled
Bearing lubrication		lubricated with grease
Control		Siemens/Fanuc/Heidenhain

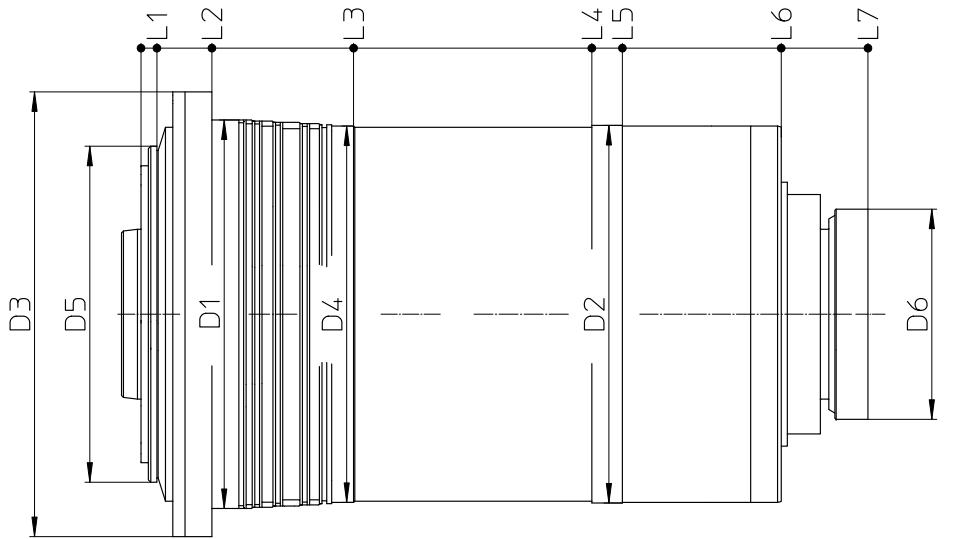
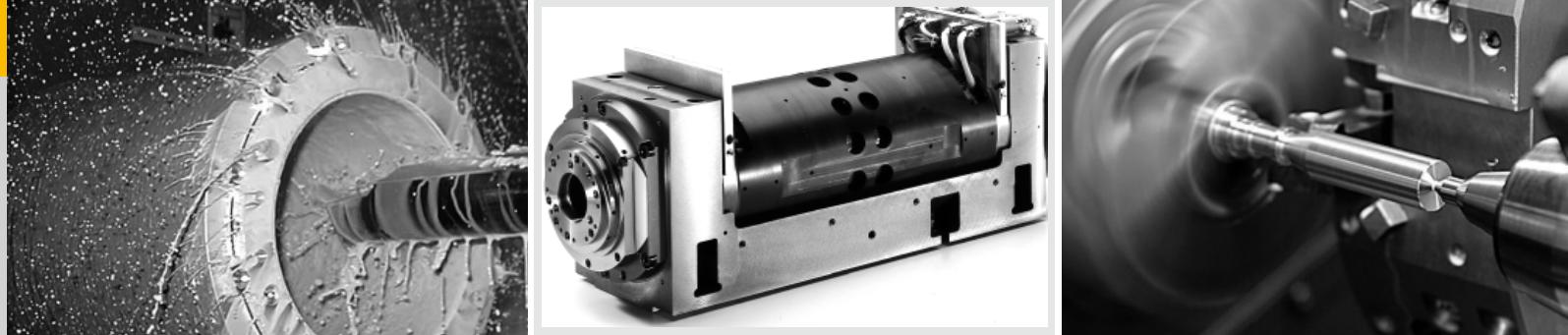


- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]

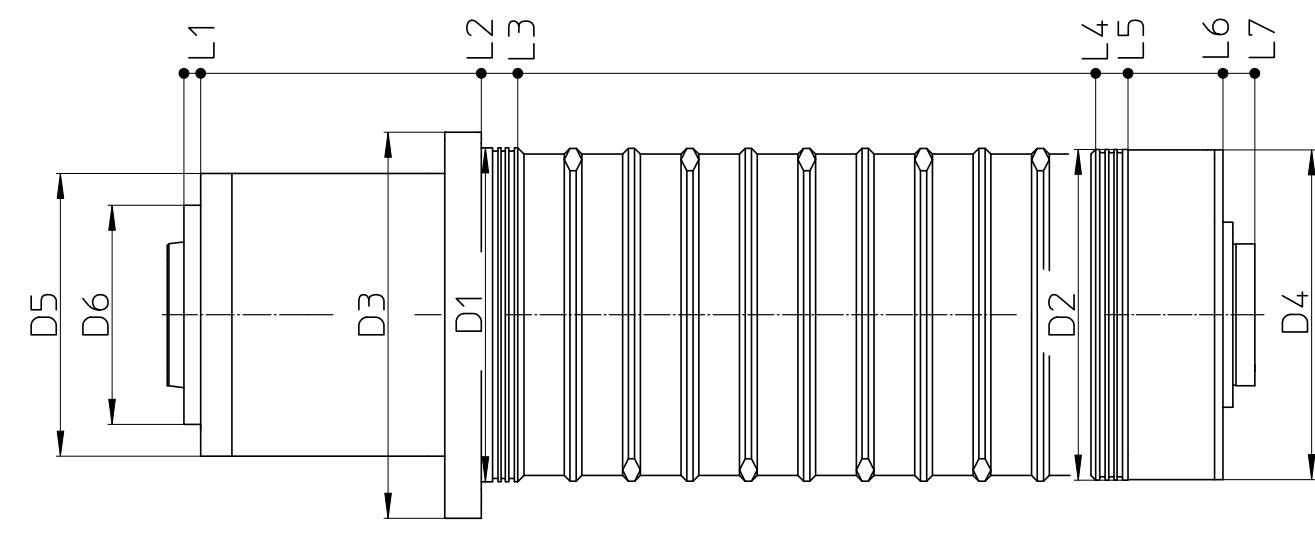
Turning spindles

Fitting measurement

301 - 500 mm

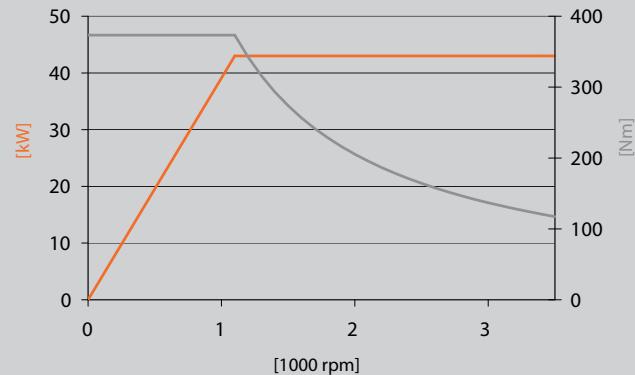


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
318	309	364	308	275	172	13	58	174	369	394	524	595



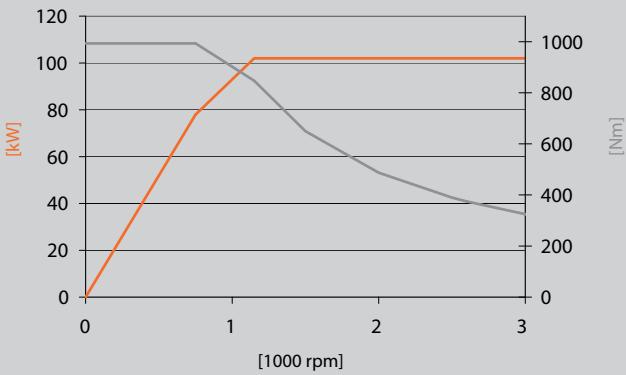
D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
320	317	390	316	271	210	16	285	320	874	905	996	1027

Model	SMS 180-618.063
Torque S1	[Nm] 280.0
Torque S6 (40%)	[Nm] 370.0
Power S1	[kW] 32.0
Power S6 (40%)	[kW] 43.0
Speed	[rpm] 3,500
Weight	[kg] 223
Motor type	synchronous
Tool interface	A8
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



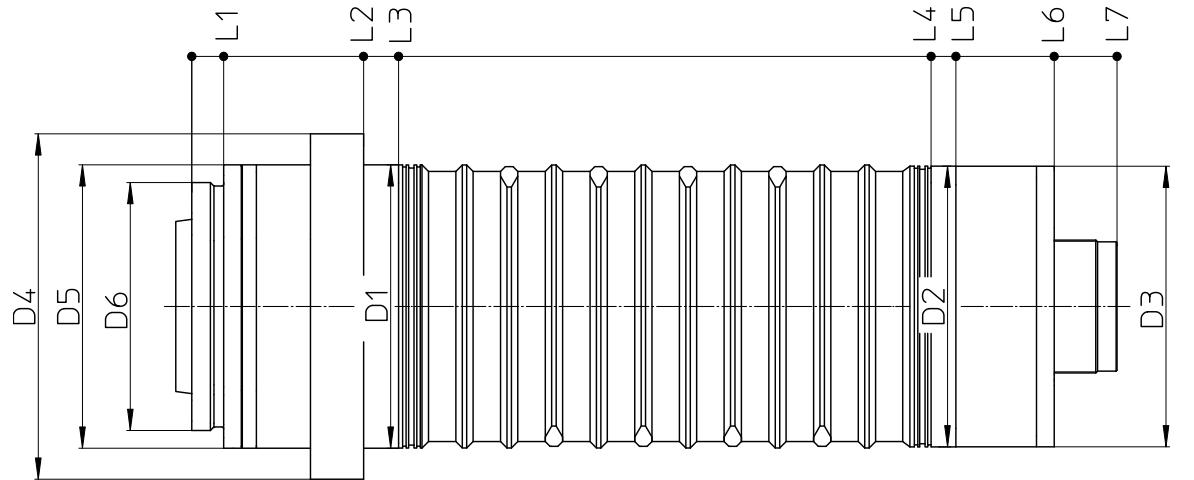
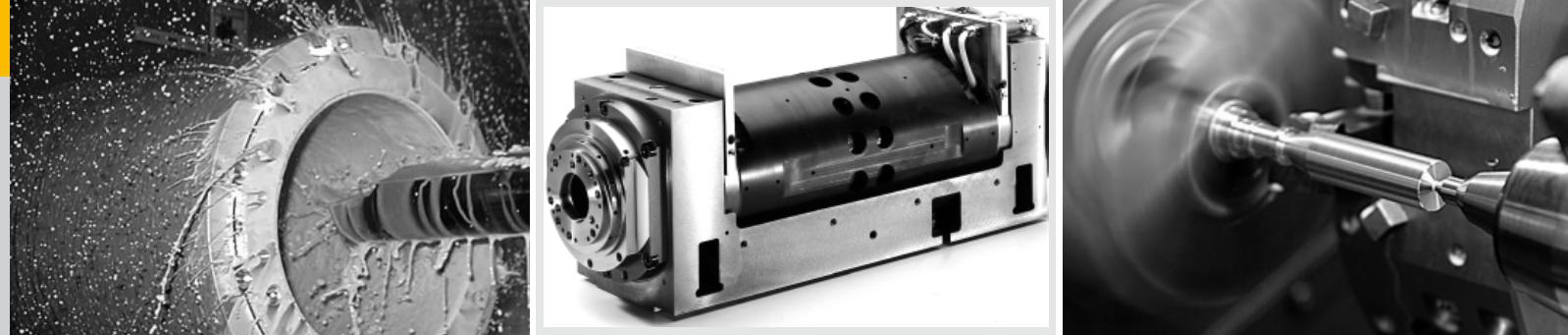
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[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	
[Temperature compensation]	
[Clamp]	●

Model	SMS 180-624.670
Torque S1	[Nm] 818.0
Torque S6 (40%)	[Nm] 955.0
Power S1	[kW] 95.0
Power S6 (40%)	[kW] 102.0
Speed	[rpm] 3,100
Weight	[kg] 416
Motor type	synchronous
Tool interface	A8
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

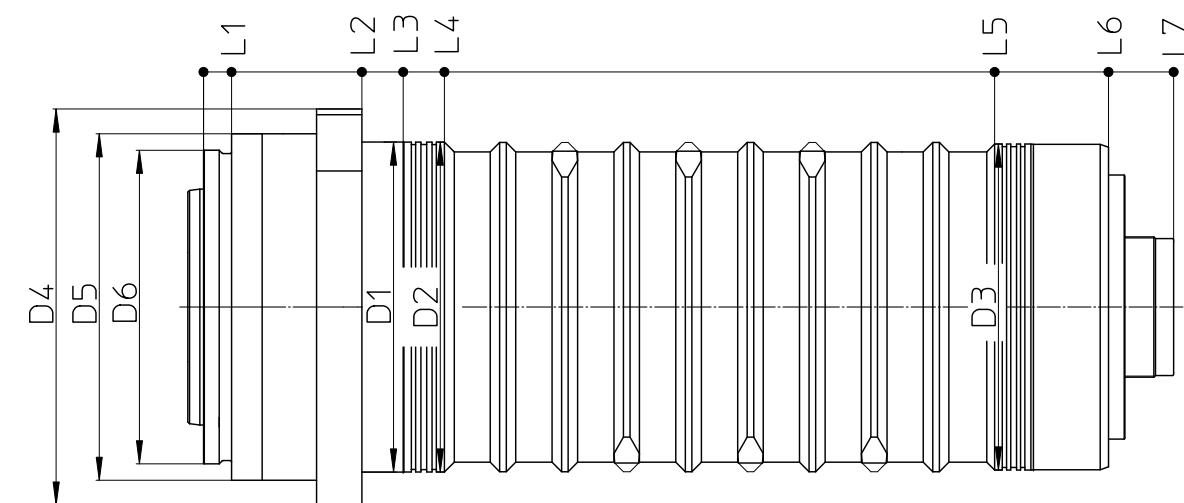


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[Vibration sensor]	
[Cooling jacket]	●
[Leakage monitoring]	
[Temperature compensation]	
[Clamp]	●

Turning spindles
Fitting measurement
301 - 500 mm

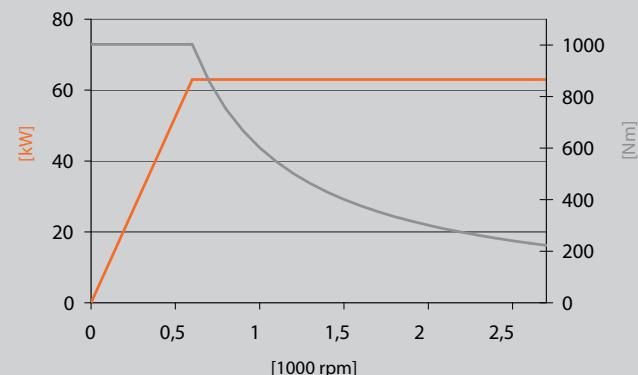


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
320	317	316,8	390	320	280	36	194	233,5	835	863	974	1045

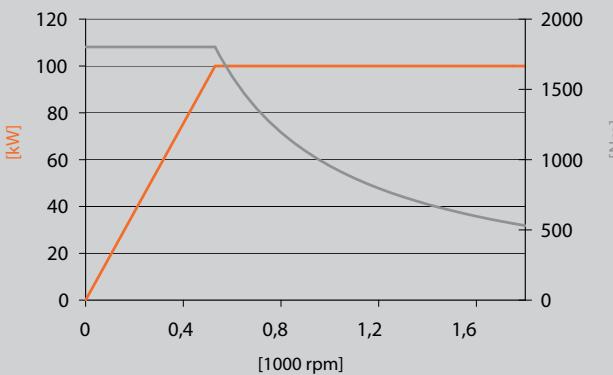


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
400	399,9	395	480	420	380	34	192	242	292	959	1097	1176

Model	SMS 180-615.643
Torque S1	[Nm] 820.0
Torque S6 (40%)	[Nm] 1,000.0
Power S1	[kW] 51.5
Power S6 (40%)	[kW] 63.0
Speed	[rpm] 2.700
Weight	[kg] 423
Motor type	synchronous
Tool interface	A11
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

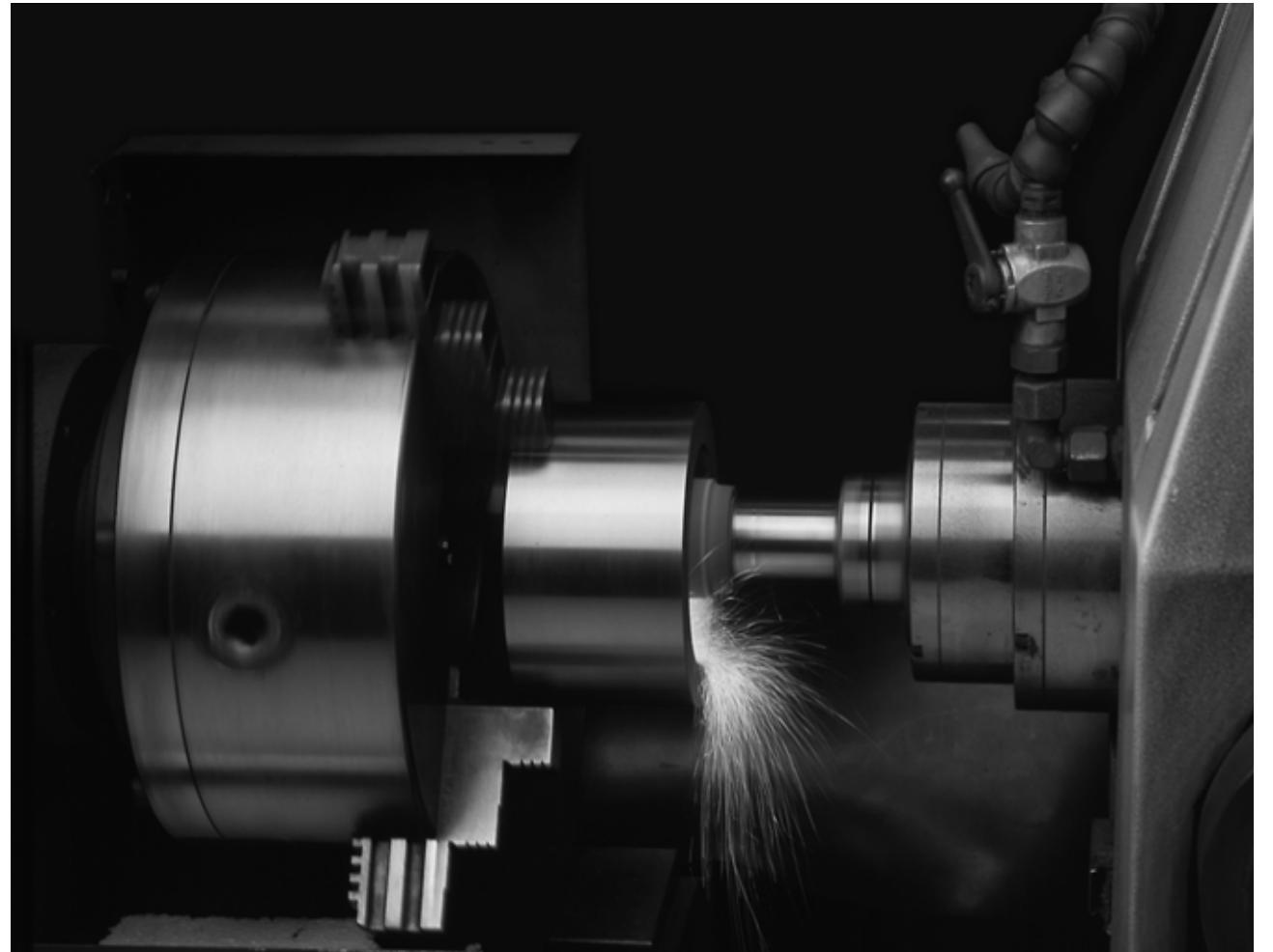


Model	SMS 225-627.343
Torque S1	[Nm] 1,400.0
Torque S6 (40%)	[Nm] 1,800.0
Power S1	[kW] 78.0
Power S6 (40%)	[kW] 100.0
Speed	[rpm] 1,800
Weight	[kg] 785
Motor type	synchronous
Tool interface	A15
Release unit	—
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]

- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Clamp]



Grinding spindles from KESSLER, sold under the brand of GAMFIOR, have been established on the market for many years. These products are characterised by their compact design, long service life and high reliability. Both internal and external grinding spindles are available in sizes from 80 to 250 mm.

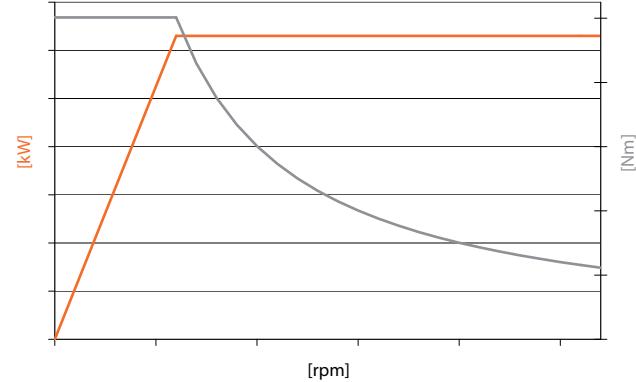
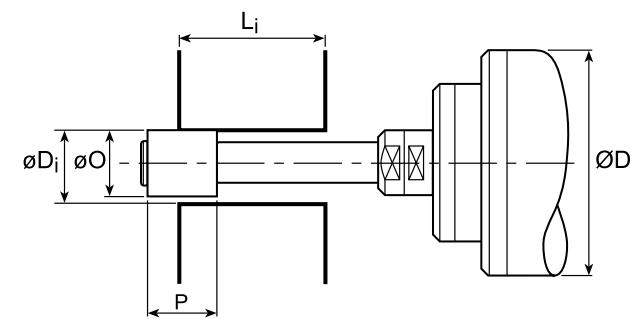
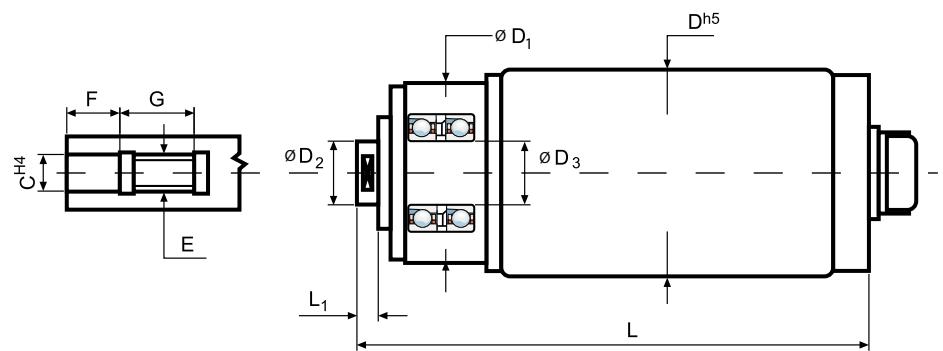
Versions with cooled hybrid bearings have very high radial and axial rigidity over the complete working range. They form the basis for high-precision concentricity, thermal stability and highest vibration quality.

Numerous options such as speed sensor or integrated balancing system offers the customer maximum flexibility and application options.

Grinding spindles

Internal grinding spindles

GNS - Standard series



Designation	Article number	Dimensions [mm]										HSK
		Cylindrical spindle head										
		D	D1	D2	D3	L	L1	C	E	F	G	
80 GNS 120*	GNS 650.266	80	9	10	200	5	5	M5 x0.8	7	9		
80 GNS 90*	GNS 900.002	80	11	12	200	5	6	M6 x1	9	11		
80 GNS 75*	GNS 900.003	80	14	15	210	5	8	M8 x1.25	12	14		
100 GNS 105*	GNS 052-450.006	100	65	14	15	209	6	8	M8 x1.25	12	14	
100 GNS 90*	GNS 060-450.009	100	65	16	17	216	6	9	M9 x1.25	13	14	
100 GNS 75*	GNS 072-450.008	100	71	18	20	250	8	10	M10 x1.5	15	19	
100 GNS 60*	GNS 072-900.004	100	71	23	25	279	9	14	M14 x1.5	21	19	
120 GNS 60*	GNS 080-450.030	120	77	23	25	279	9	14	M14 x1.5	21	19	
120 GNS 51*	GNS 090-450.026	120	98	28	30	309	9	16	M16 x1.5	24	19	HSK-C25
120 GNS 42*	GNS 090-450.024	120	98	38	40	335	11	22	M22 x2	34	25	HSK-C32
120 GNS 30*	GNS 090-450.020	120	120	48	50	389	13	28	M28 x2	42	25	HSK-C40
150 GNS 42*	GNS 115-450.078	150	98	38	40	313	11	22	M22 x2	34	25	HSK-C32
150 GNS 30*	GNS 115-450.077	150	120	53	55	382	14	32	M32 x2	46	25	HSK-C50
150 GNS 24*	GNS 115-450.074	150	127	63	65	386	16	36	M36 x2	50	25	HSK-C63
150 GNS 18*	GNS 115-450.072	150	127	63	65	386	16	36	M36 x2	50	25	HSK-C63
170 GNS 21*	GNS 135-639.773	170	120	48	50	357	13	28	M28 x2	42	25	HSK-C40
170 GNS 19*	GNS 135-450.097	170	120	53	55	379	14	32	M32 x2	46	25	HSK-C50
170 GNS 15*	GNS 135-450.096	170	127	63	65	383	16	36	M36 x2	50	25	HSK-C63
170 GNS 12*	GNS 135-450.093	170	140	68	70	419	18	36	M36 x2	50	25	HSK-C63

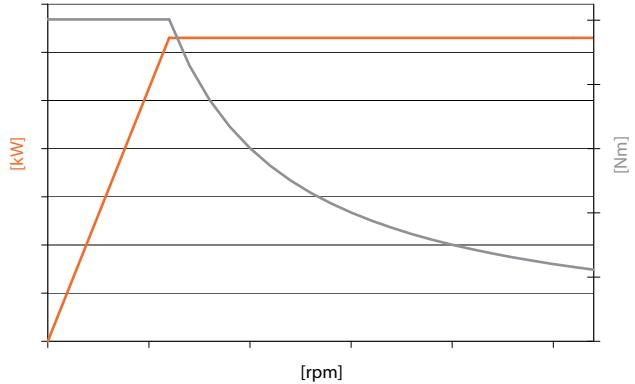
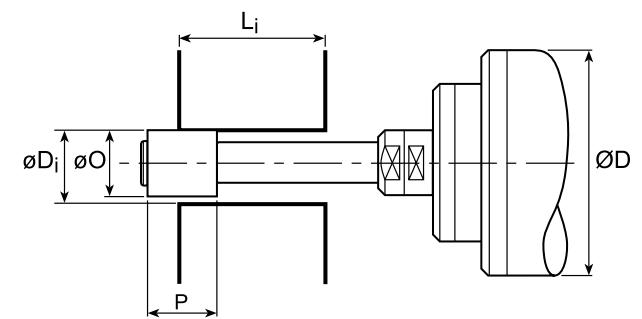
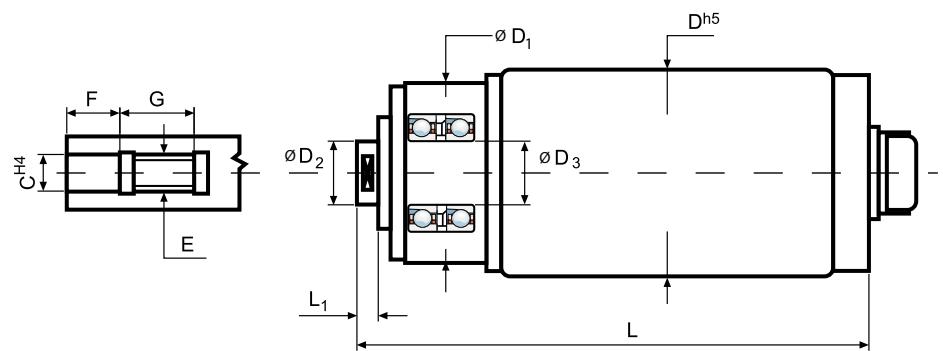
Bearing-lubrication	Operating mode S1 Speed [rpm]	Operating mode S6 60%		Tool dimensions [mm]				
		Speed [rpm]	Output [kW]	Torque [Nm]	for bore holes Di	Li	O	
Oil-air	120,000		1.2	0.07	4...8	10...25	3.5...7	6...10
Oil-air	90,000		2	0.15	8...2	15...30	5...10	6...12
Oil-air	75,000		3	0.3	12...16	20...40	10...14	12...14
Oil-air	105,000		2	0.18	6...12	8...30	5...10	4...12
Oil-air	90,000		3	0.3	8...5	15...35	6...14	6...14
Oil-air	75,000		5	0.6	12...17	20...40	10...16	10...16
Oil-air	60,000		6	1	20...30	30...65	17...25	20...30
Oil-air	60,000	60,000	9	1.4	20...30	30...70	17...25	20...30
Oil-air	51,000	32,000	15	4.5	25...40	35...80	22...35	25...35
Oil-air	42,000	32,000	15	4.5	25...40	35...90	22...35	25...40
Oil-air	30,000	20,000	15.5	7.4	40...60	40...100	35...55	30...40
Oil-air	42,000	30,000	19.5	6.2	35...60	40...100	30...55	30...40
Oil-air	30,000	17,000	23	12.9	40...65	40...110	35...60	35...45
Oil-air	24,000	17,000	23	12.9	45...65	40...130	40...60	35...55
Oil-air	18,000	12,000	18	14.3	55...100	55...160	60...90	45...55
Oil-air	21,000	18,000	37	19.6	55...85	40...100	50...85	35...45
Oil-air	19,000	10,000	26	24.8	35...85	40...120	30...60	40...50
Oil-air	15,000	16,000	36.5	21.8	35...90	40...130	30...85	45...60
Oil-air	12,000	12,000	36.5	29	50...120	65...180	45...110	40...110

*Concept phase of the standard series, subject to technical and dimensional modifications.

Grinding spindles

Internal grinding spindles

GHP - High Performance Series



Designation	Article number	Dimensions [mm]									HSK	
		D	D1	D2	D3	L	L1	C	E	F	G	
Cylindrical spindle head												
80 GHP 180*	GHP 900.005	80	8	8	150	4	4	M4 x 0.7		6	8	
100 GHP 120*	GHP 900.006	100	80	11	12	190	5	6	M6 x 1	9	11	
100 GHP 105*	GHP 900.007	100	60	16	17	240	7	9	M9 x 1.25	13	14	
100 GHP 90*	GHP 060-450.015	100	67	18	20	260	8	10	M10 x 1.5	15	19	
100 GHP 75*	GHP 070-647.991	100	72	23	25	280	9	14	M14 x 1.5	21	19	
120 GHP 75*	GHP 070-640.971	120	72	23	25	270	9	14	M14 x 1.5	21	19	
120 GHP 60*	GHP 090-645.163	120	80	28	30	300	10	16	M16 x 1.5	24	19	HSK 25
120 GHP 45*	GHP 090-900.008	120	100	43	45	344	12	28	M28 x 2	42	25	HSK 40
120 GHP 30*	GHP 090-900.009	120	120	53	55	344	15	32	M32 x 2	46	25	HSK 50
150 GHP 45*	GHP 120-450.090	150	100	43	45	344	12	28	M28 x 2	42	25	HSK 40
150 GHP 30*	GHP 100-635.933	150	130	63	65	389	12	36	M36 x 2	50	25	HSK 63

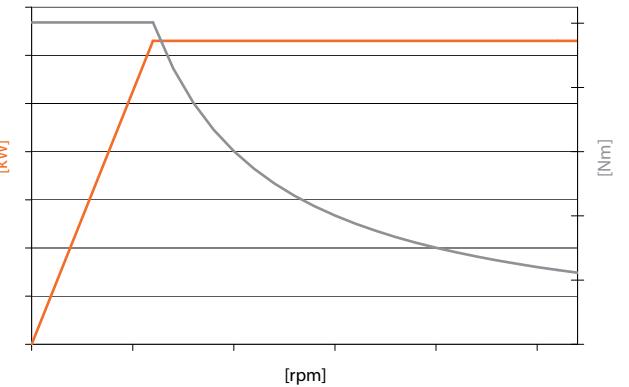
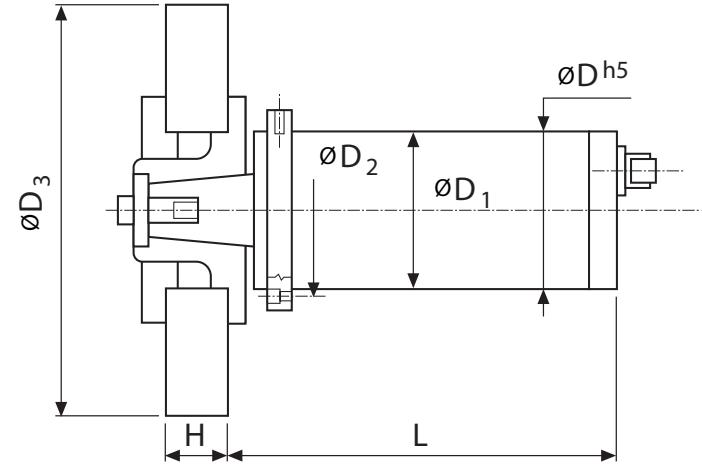
*Concept phase of the standard series, subject to technical and dimensional modifications.

Bearing-lubrication	Operating mode S1		Operating mode S6 60%		Tool dimensions [mm]			
	Speed [rpm]	Speed [rpm]	Output [kW]	Torque [Nm]	for bore holes Di	Li	O	P
Oil-air	180,000		0.6	0.03	3...5	6...8	2.5...4	4...6
Oil-air	120,000		2	0.16	5...10	10...20	4...9	6...10
Oil-air	105,000		2	0.18	6...12	10...25	5...10	6...12
Oil-air	90,000		3	0.32	10...15	20...35	8...13	6...12
Oil-air	75,000		5	0.64	15...20	20...40	12...18	10...18
Oil-air	75,000		7	0.9	20...30	25...50	18...25	15...20
Oil-air	60,000	30,000	13	4	25...35	40...80	25...30	20...30
Oil-air	45,000	30,000	18	5.7	30...45	40...90	25...40	25...35
Oil-air	30,000	24,000	18	7.1	40...70	50...100	35...60	30...40
Oil-air	45,000	21,000	27	12.3	30...50	60...90	35...45	25...35
Oil-air	30,000	21,000	40	18.2	45...80	70...110	40...70	35...50

Grinding spindles

External grinding spindles

OG - with outer cone



Designation	Article number	Dimensions [mm]						Bearing-lubrication	max. speed
		D	D1	D2	D3	L	H		
170 OG 8 / 8.5*	OG 140-648.204	170	205	188	350	533	40	grease	8,000
250 OG 4 / 18*	OG 200-647.591	250	282	260	508	790	80	grease	4,000
250 OG 9 / 36*	OG 200-647.592	250	300	275	500	725	80	grease	9,000

*Concept phase of the standard series, subject to technical and dimensional modifications.

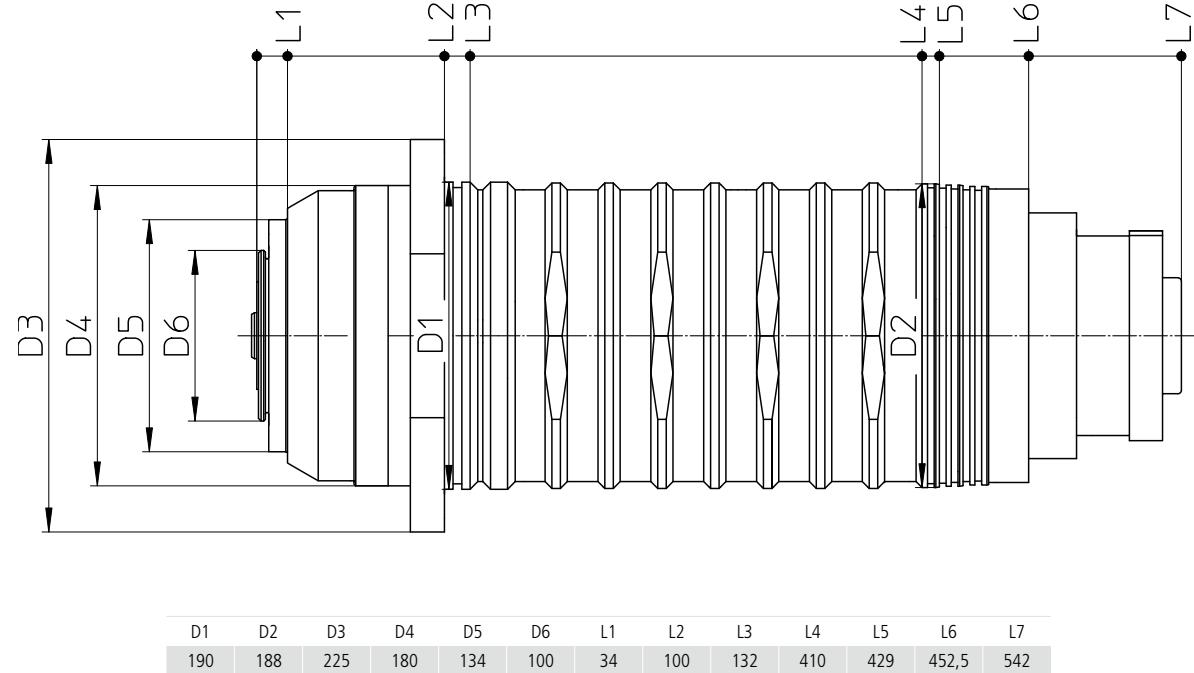
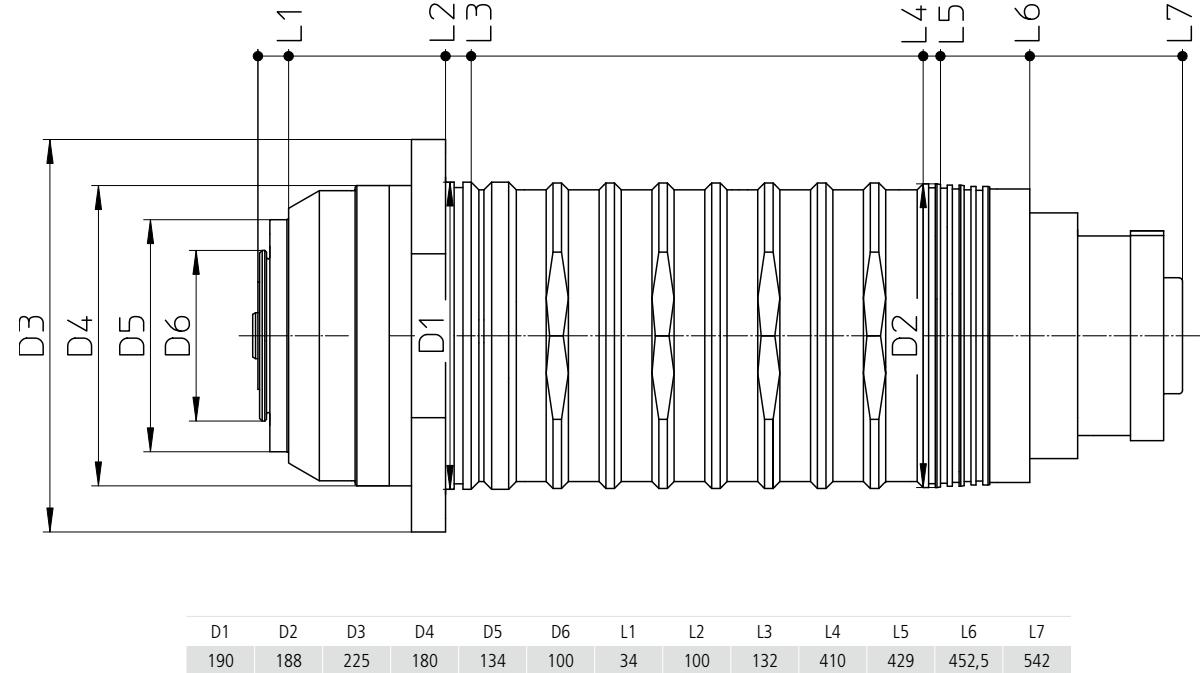
Operating mode S6 60%		
Speed	Output	Torque
[rpm]	[kW]	[Nm]
2,000	8.5	40
1,900	18	90
3,000	36	114



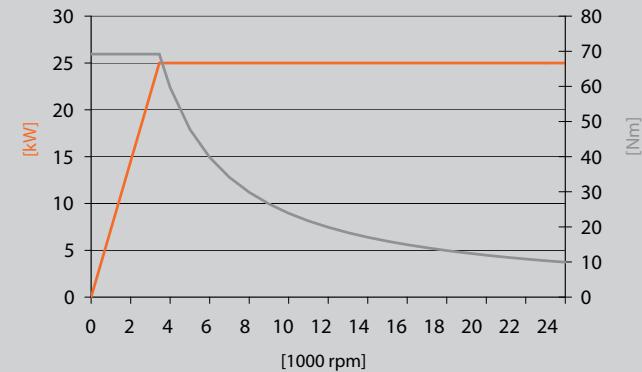
Swivelling spindles from KESSLER are standardised and their fitting measurement is ideally adapted to the available swivelling spindle heads of KESSLER. With speeds of up to 42,000 rpm and high torque, these spindles allow high-precision, efficient machining in a wide variety of applications, such as milling or drilling. You always have the ideal matching solution.

All swivelling spindles are optional equipped with temperature sensor or vibration meter. The use of hydraulic release units ensures quick and safe tool changes. The special labyrinth sealings allowing the use under extreme fluid conditions in the machining area.

Swivelling spindles suitable for SMALL 2AK



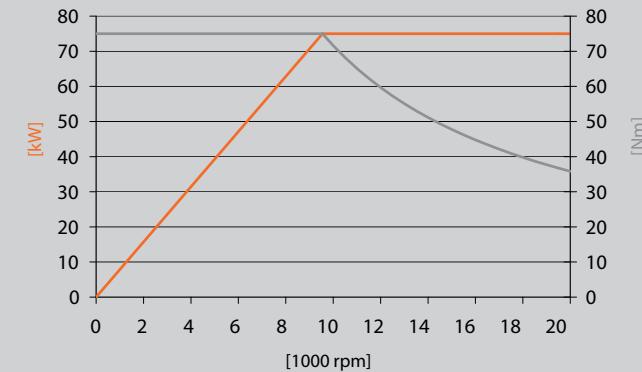
Model	SMS 080-639.251*
Torque S1	[Nm] 55.0
Torque S6 (40%)	[Nm] 69.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 25.0
Speed	[rpm] 24,000
Weight	[kg] 39
Motor type	synchronous
Tool interface	HSK-A 63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



*Design phase of the standard series, subject to technical and dimensional changes. Higher speeds upon request.

- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

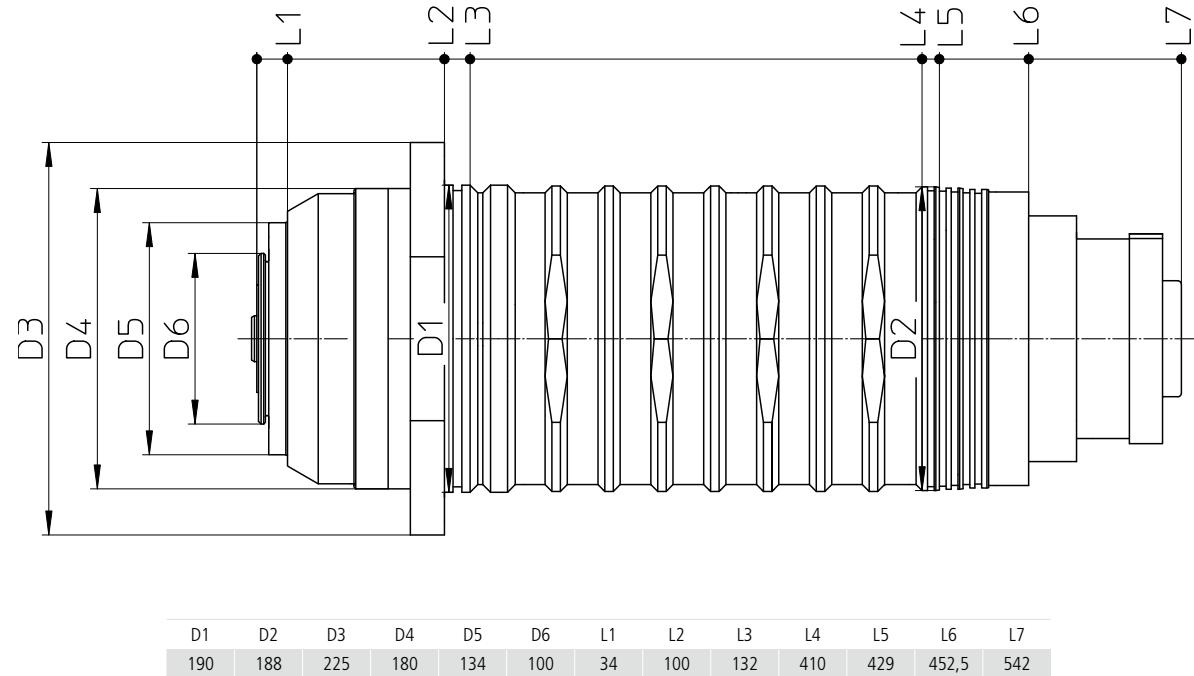
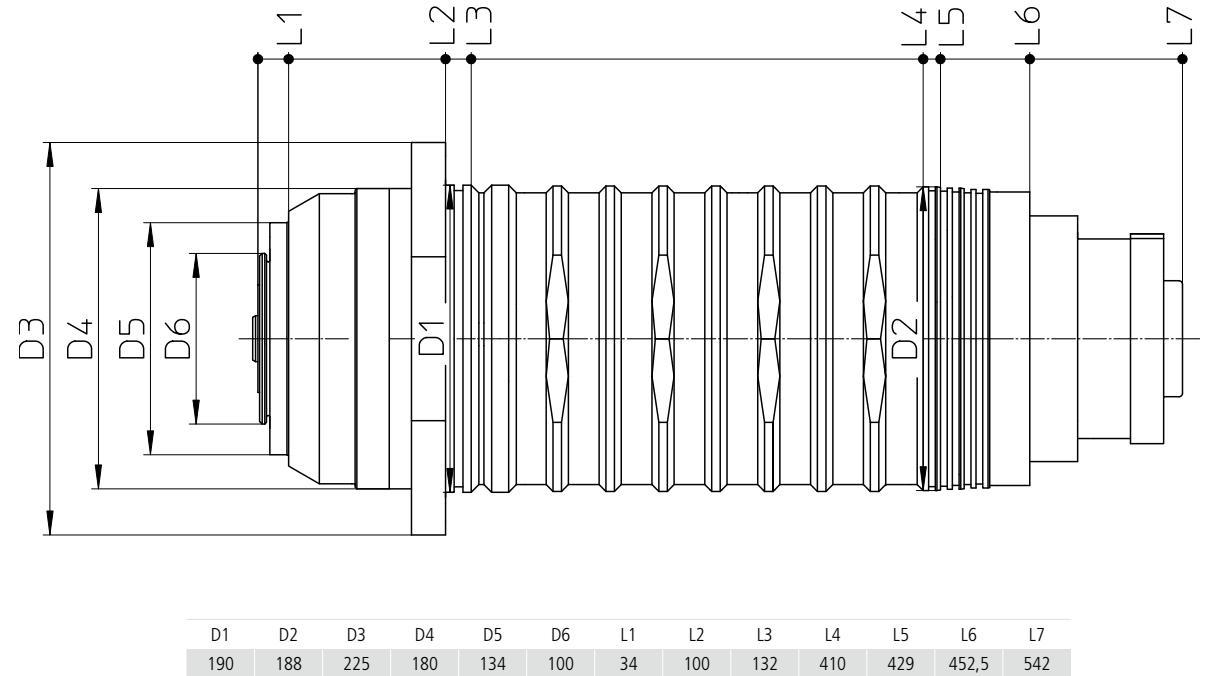
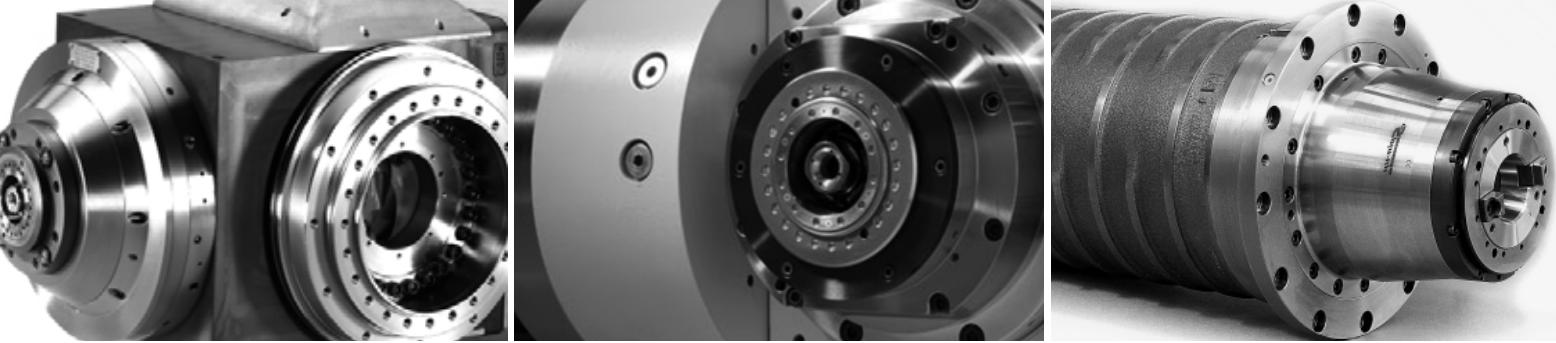
Model	SMS 080-649.744
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 75.0
Power S1	[kW] 60.0
Power S6 (40%)	[kW] 75.0
Speed	[rpm] 20,000
Weight	[kg] 79
Motor type	synchronous
Tool interface	HSK-A 63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



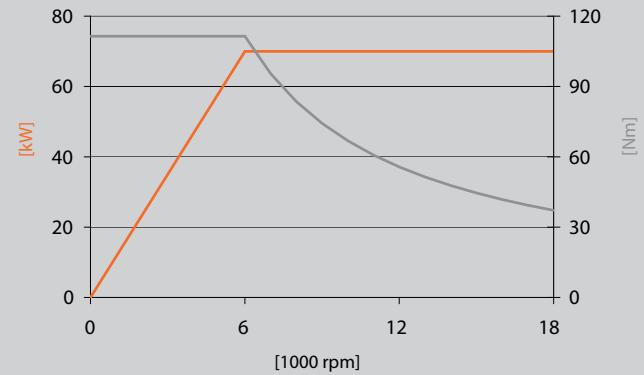
Higher speeds upon request

- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] •
- [Clamp]

Swivelling spindles suitable for SMALL 2AK



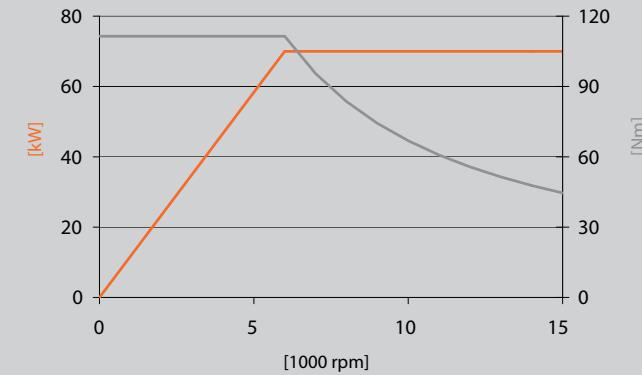
Model	SMS 080-x900.100*
Torque S1	[Nm] 90.0
Torque S6 (40%)	[Nm] 111.0
Power S1	[kW] 56.0
Power S6 (40%)	[kW] 70.0
Speed	[rpm] 18,000
Weight	[kg]
Motor type	synchronous
Tool interface	HSK-A 63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



*Design phase of the standard series, subject to technical and dimensional changes. Higher speeds upon request.

- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

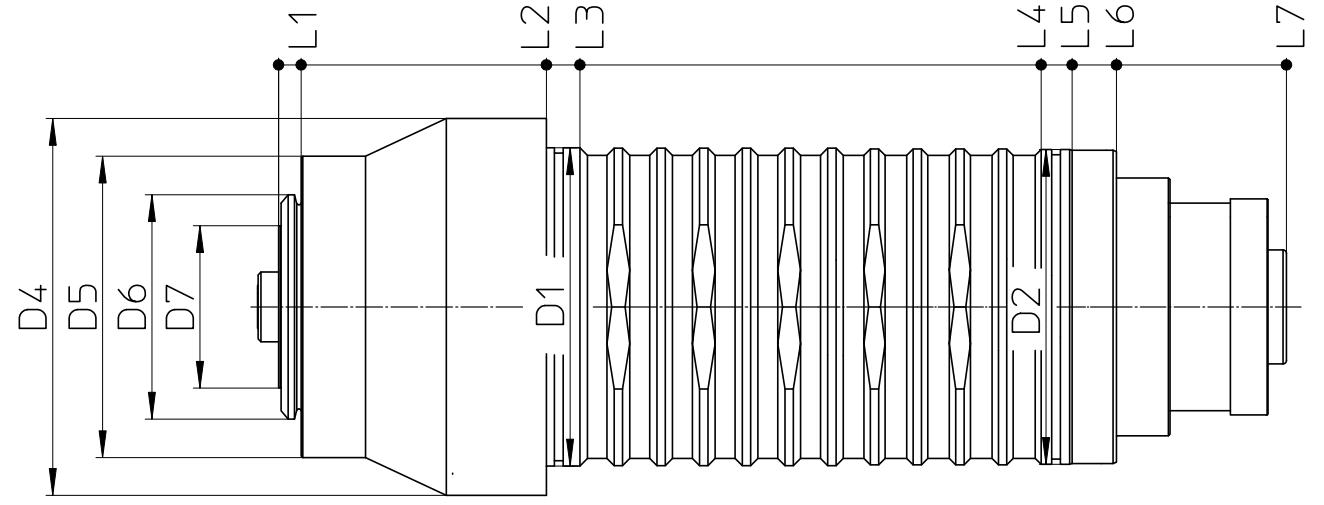
Model	SMS 080-x900.200*
Torque S1	[Nm] 90.0
Torque S6 (40%)	[Nm] 111.0
Power S1	[kW] 56.0
Power S6 (40%)	[kW] 70.0
Speed	[rpm] 15,000
Weight	[kg]
Motor type	synchronous
Tool interface	HSK-A 63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



*Design phase of the standard series, subject to technical and dimensional changes. Higher speeds upon request.

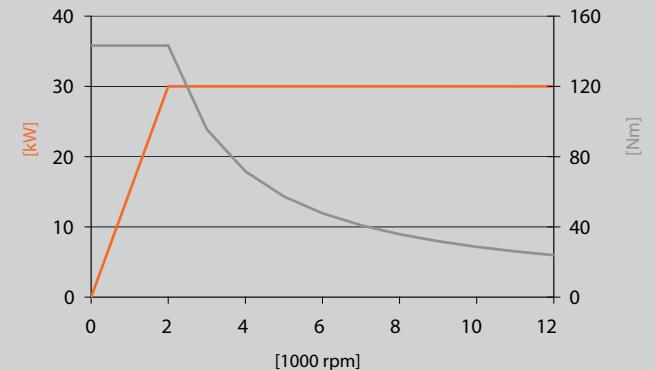
- [Temperature sensor PT-100] •
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

Swivelling spindles suitable for SMALL 2AK



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
190	188	225	180	134	97	13,5	160	180	455,5	474	500,5	602

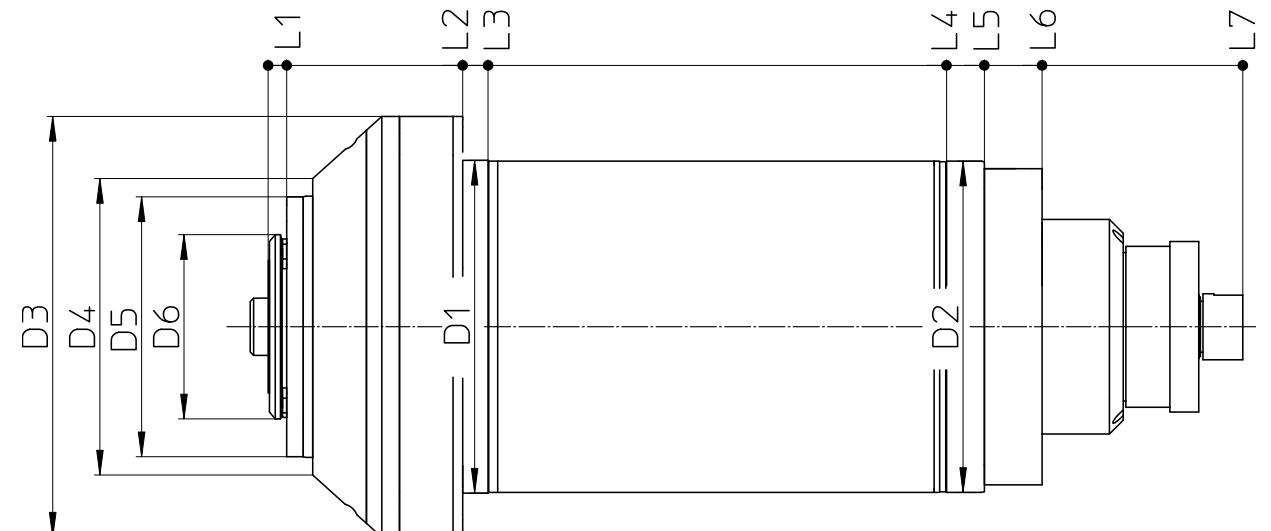
Model	SMS 080-637.673
Torque S1	[Nm] 120.0
Torque S6 (40%)	[Nm] 144.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 12,000
Weight	[kg] 70
Motor type	synchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



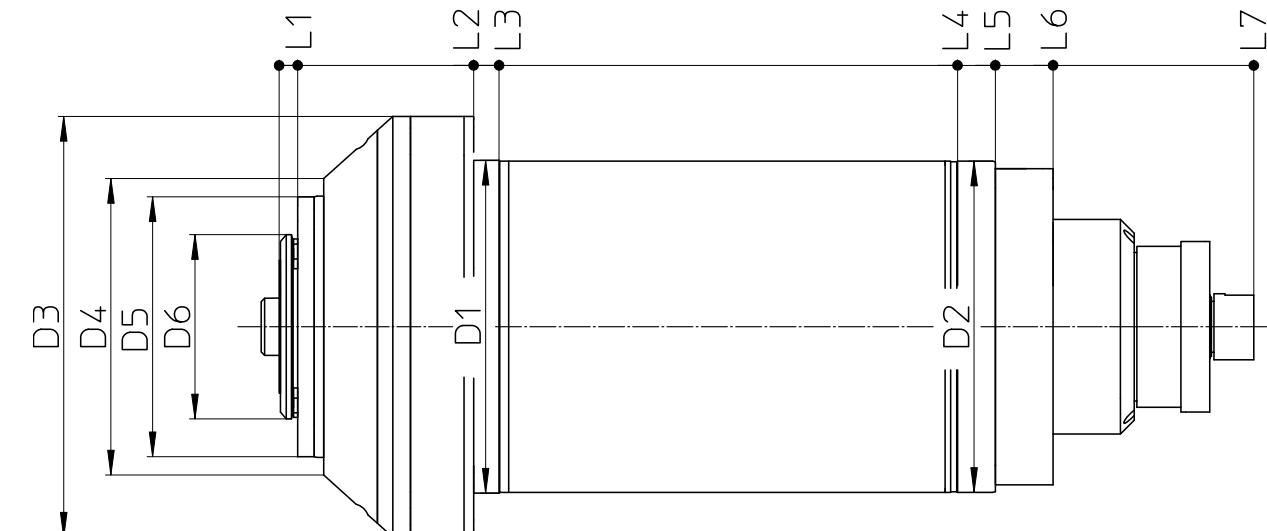
Higher speeds upon request.

- [Temperature sensor PT-100] ●
- [Vibration sensor] ●
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

Swivelling spindles suitable for MEDIUM 2AK

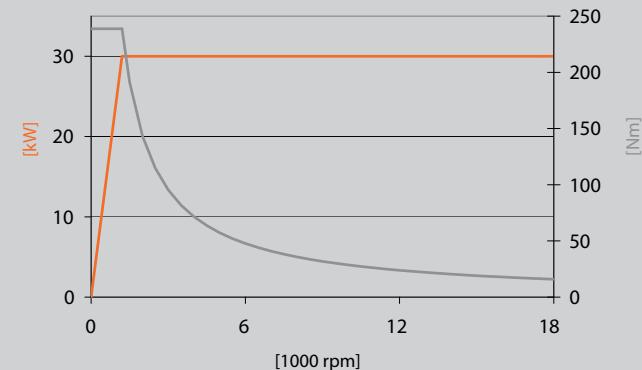


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	241	306	178	151	106	14,5	141,5	160	493,5	521	563	709



D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
242	241	306	215,6	189	134	13,5	141,5	160	493,5	521	563	709

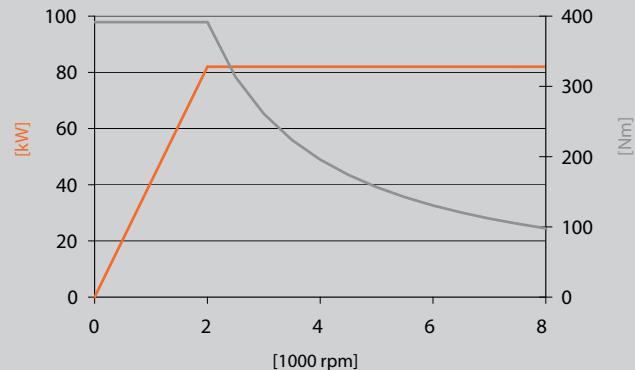
Model	DMS 112-626.389*
Torque S1	[Nm] 160.0
Torque S6 (40%)	[Nm] 239.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 18,000
Weight	[kg] 180
Motor type	asynchronous
Tool interface	HSK-A63
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



*Design phase of the standard series, subject to technical and dimensional changes. Higher speed upon request.

- [Temperature sensor PT-100] ●
- [Vibration sensor] ●
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

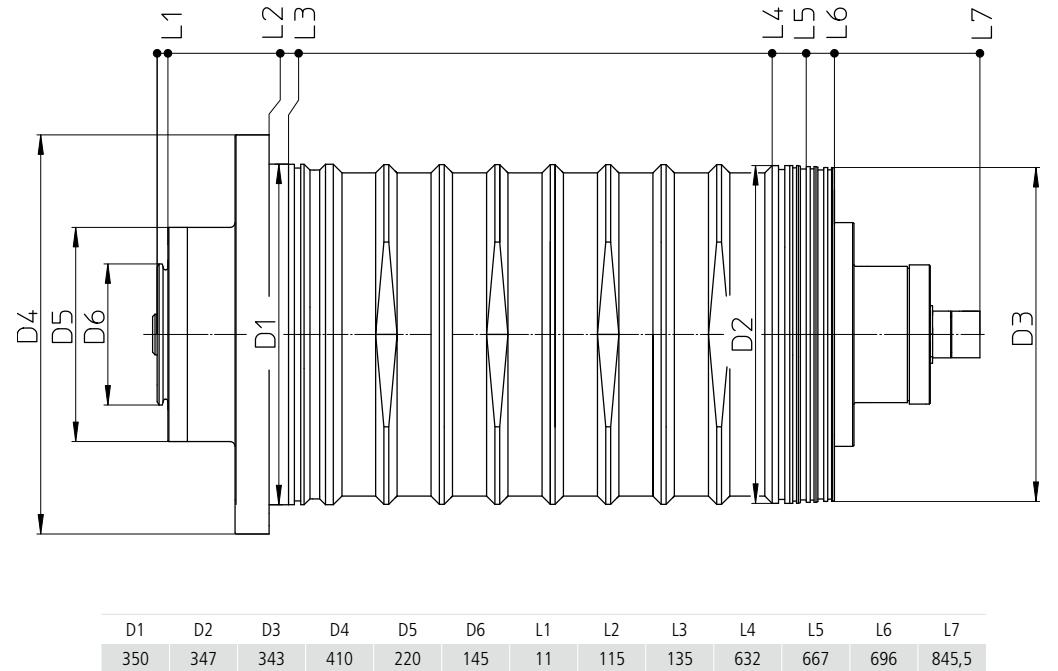
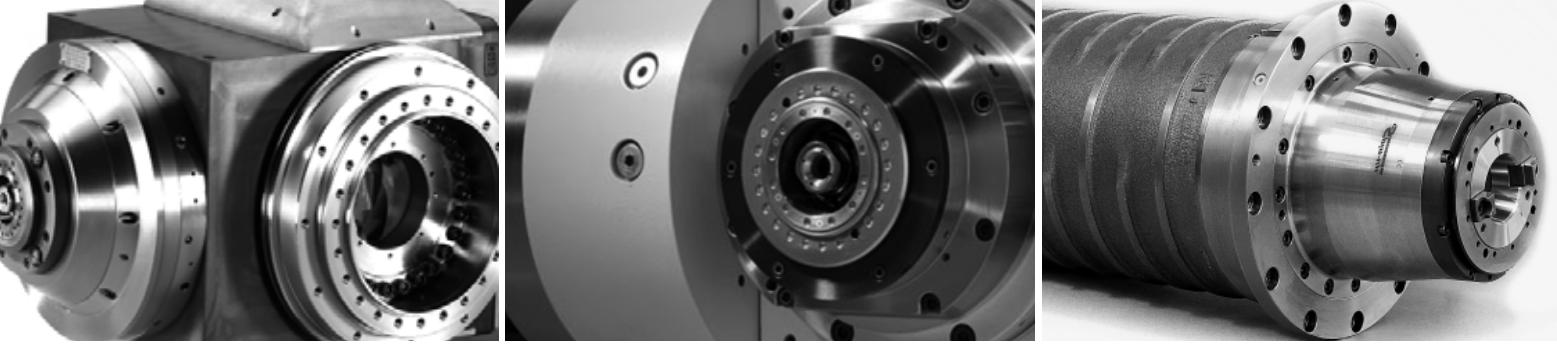
Model	SMS 112-649.215*
Torque S1	[Nm] 315.0
Torque S6 (40%)	[Nm] 392.0
Power S1	[kW] 66.0
Power S6 (40%)	[kW] 82.0
Speed	[rpm] 8,000
Weight	[kg] 145
Motor type	synchronous
Tool interface	HSK-A100
Release unit	hydraulic
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



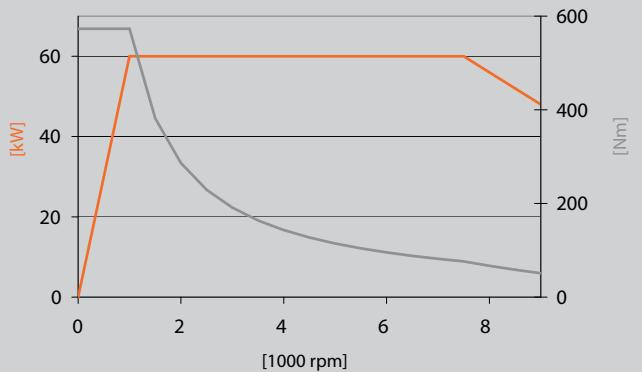
*Design phase of the standard series, subject to technical and dimensional changes. Higher speed upon request.

- [Temperature sensor PT-100] ●
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union] ●
- [Clamp]

Swivelling spindles suitable for LARGE 2AK

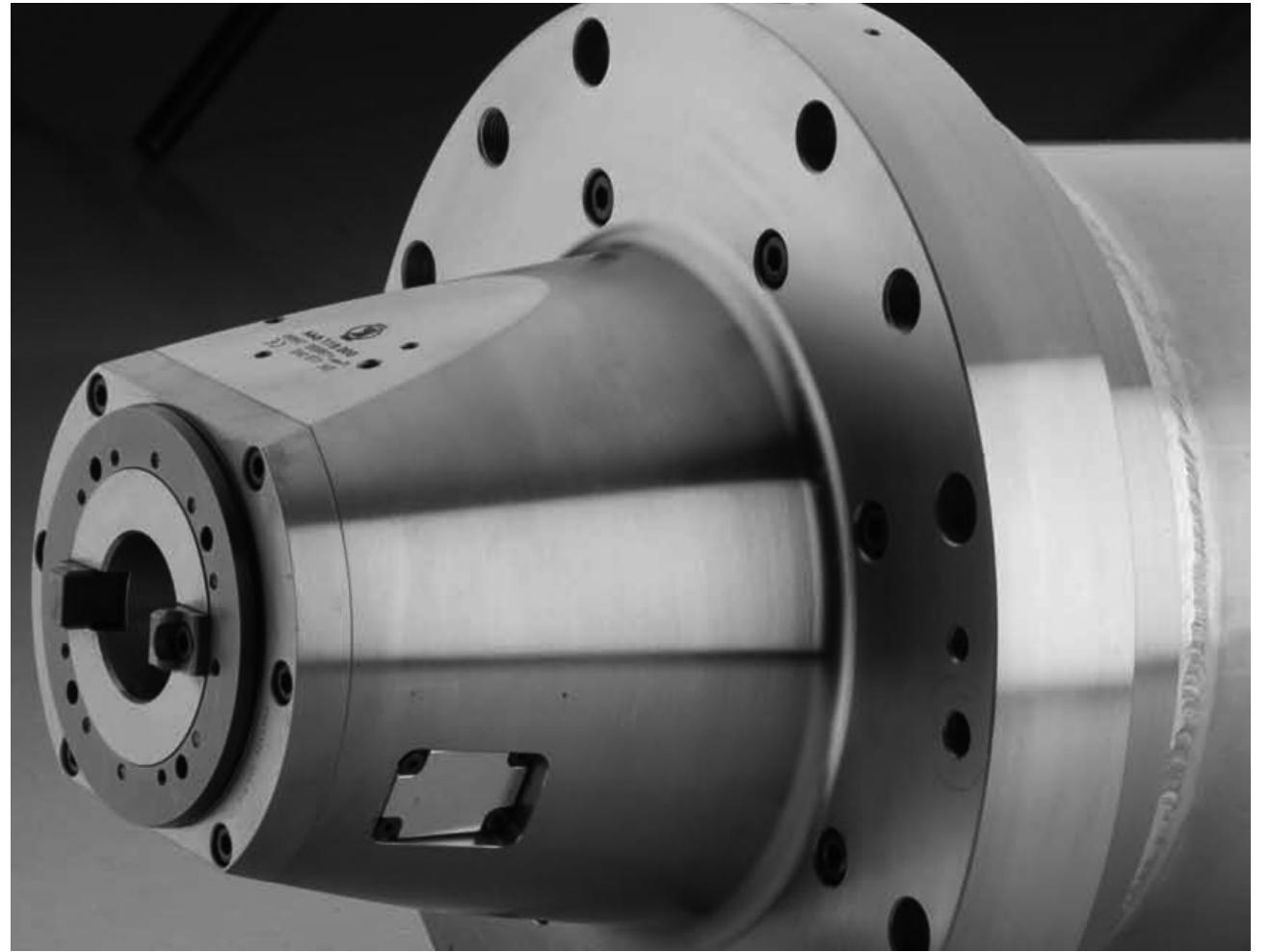


Model	DMS 180-624.150	
Torque S1	[Nm]	455.0
Torque S6 (40%)	[Nm]	575.0
Power S1	[kW]	48.0
Power S6 (40%)	[kW]	60.0
Speed	[rpm]	9,000
Weight	[kg]	385
Motor type	asynchronous	
Tool interface	HSK-A100	
Release unit	hydraulic	
Cooling	liquid cooled	
Bearing lubrication	lubricated with grease	
Control	Siemens/Fanuc/Heidenhain	



Higher speed upon request.

- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket]
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]



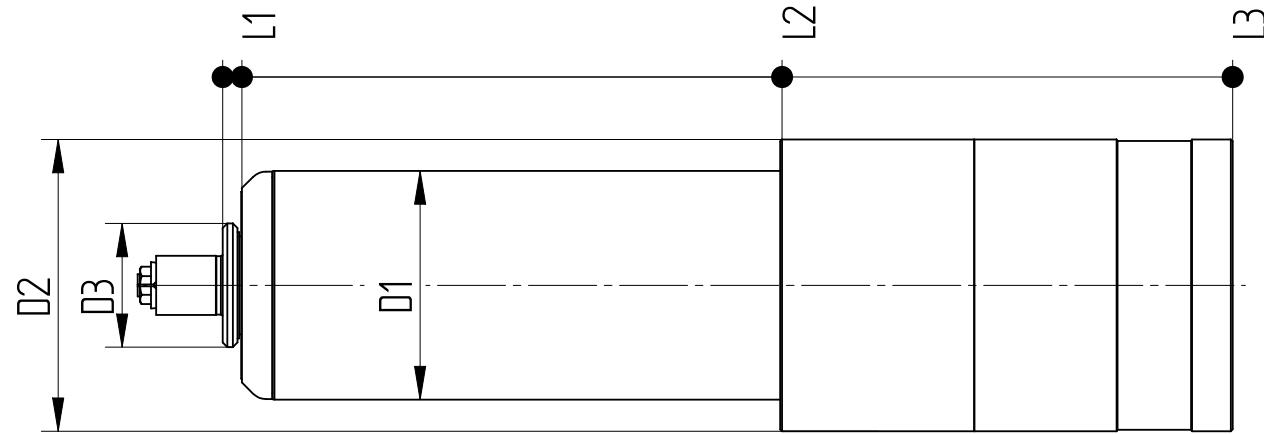
Special spindles for various areas of application are another product range of KESSLER. In addition to the standard spindles KESSLER designs and manufactures for more than 20 years a variety of customized spindles, tailored to specific customer requirements.

A subgroup of them are PCB spindles (printed circuit board). Compact motor spindles grease lubricated with speeds up to 80,000 rpm make them proper to be used for PCB routing or for precision cutting of miniature series parts or for small moulds and dies. Equipped with the high precision direct tool chucking interface with exchangeable collets with 3 mm, 1/8" and 6 mm the customer remains flexible

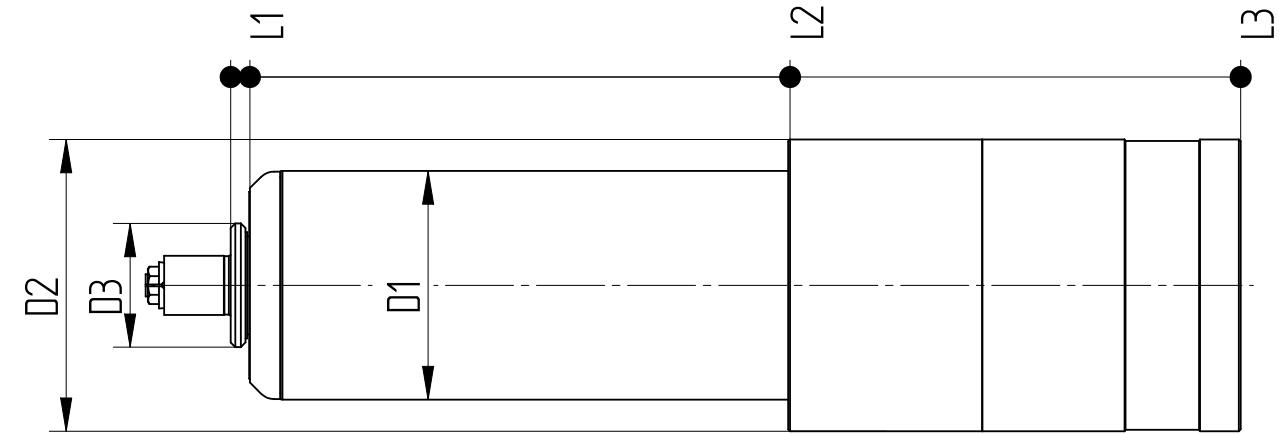
The low weight of 4.5 kg and the pneumatic release unit make these spindles predestined for high speed machining.

Special spindles

PCB spindles

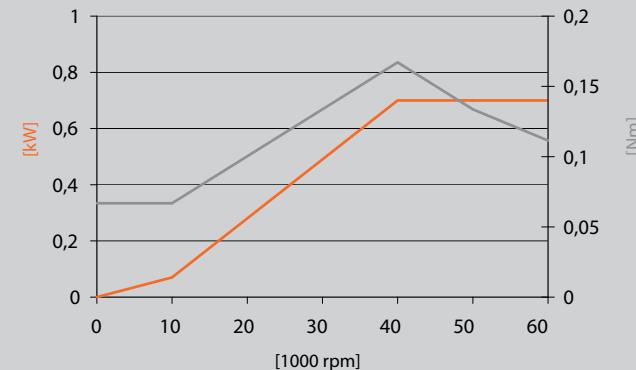


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

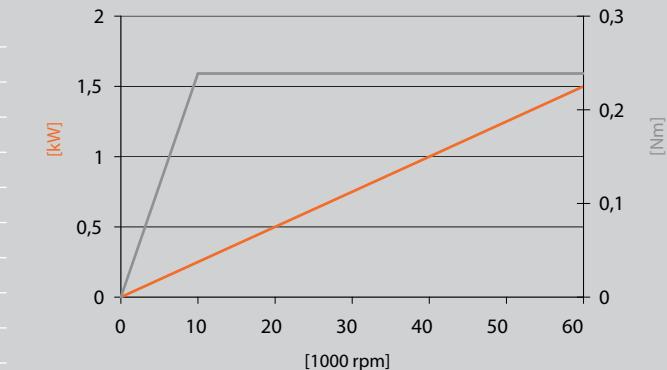


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

Model	DMS 060-643.949
Torque S1	[Nm] 0.14
Torque S6 (40%)	[Nm] 0.17
Power S1	[kW] 0.6
Power S6 (40%)	[kW] 0.7
Speed	[rpm] 60,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	1/8" direct clamping set
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer



Model	DMS 060-646.923
Torque S1	[Nm] 0.2
Torque S6 (40%)	[Nm] 0.23
Power S1	[kW] 1.2
Power S6 (40%)	[kW] 1.5
Speed	[rpm] 60,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	6 mm collet chuck
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer



[Temperature sensor PT-100]

[Vibration sensor]

[Cooling jacket]

[Leakage monitoring]

[Temperature compensation]

[Retaining clamping set]

[Minimum quantity lubrication]

[Control of surface contact]

[Rotary union]

[Clamp]

[Temperature sensor PT-100]

[Vibration sensor]

[Cooling jacket]

[Leakage monitoring]

[Temperature compensation]

[Retaining clamping set]

[Minimum quantity lubrication]

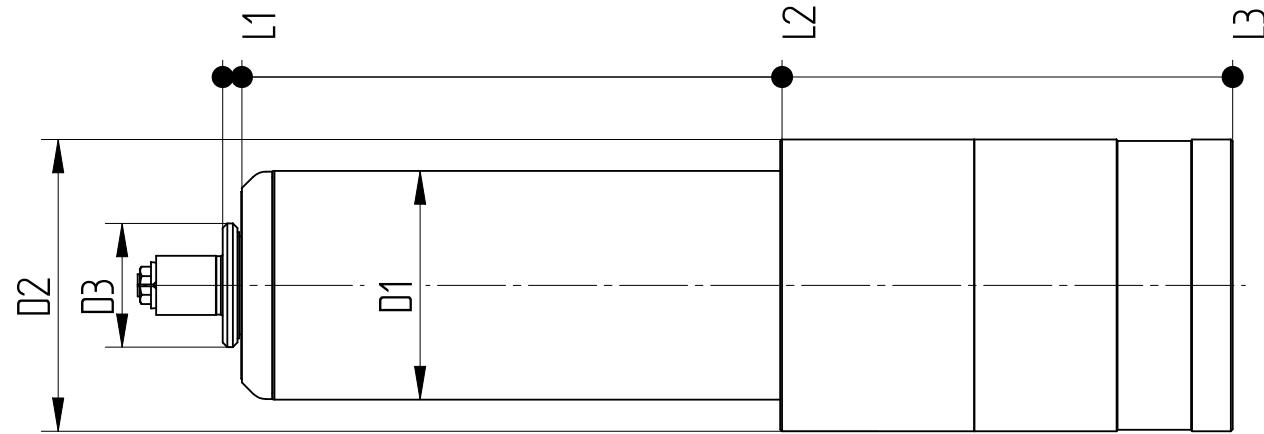
[Control of surface contact]

[Rotary union]

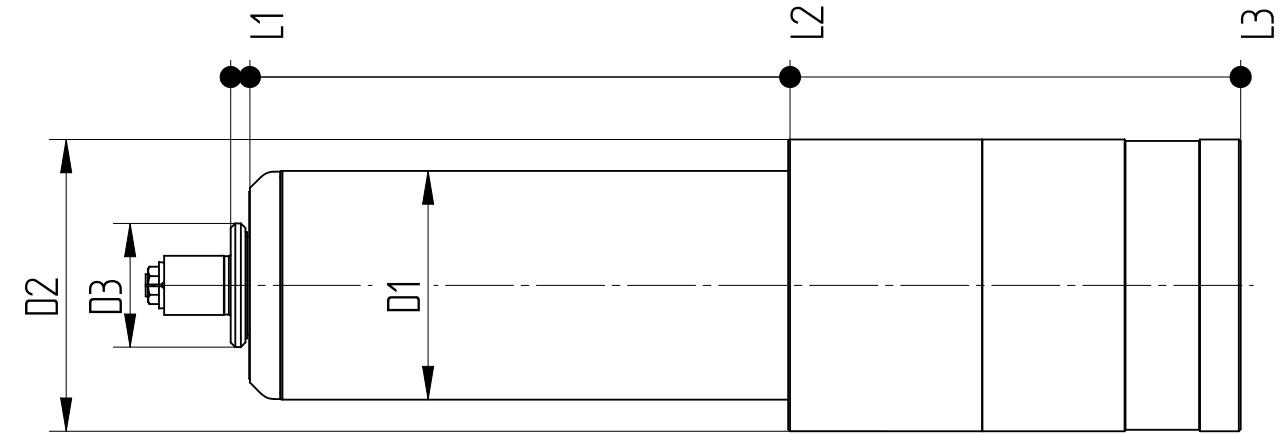
[Clamp]

Special spindles

PCB spindles

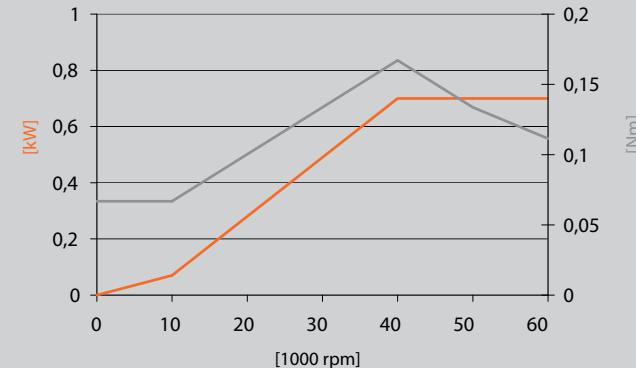


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

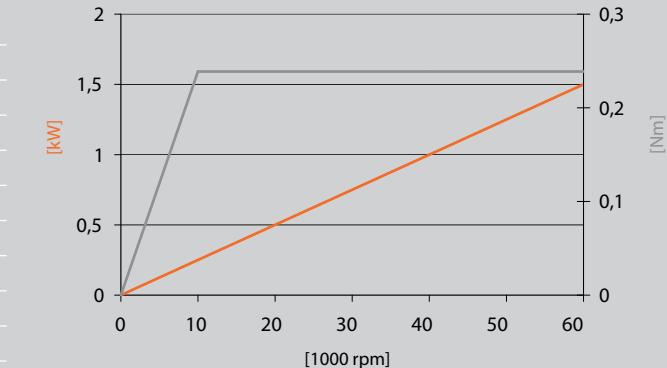


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

Model	DMS 060-645.414
Torque S1	[Nm] 0.14
Torque S6 (40%)	[Nm] 0.17
Power S1	[kW] 0.6
Power S6 (40%)	[kW] 0.7
Speed	[rpm] 60,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	1/8" direct clamping set
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer



Model	DMS 060-648.637
Torque S1	[Nm] 0.2
Torque S6 (40%)	[Nm] 0.23
Power S1	[kW] 1.2
Power S6 (40%)	[kW] 1.5
Speed	[rpm] 60,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	1/8" direct clamping set
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer

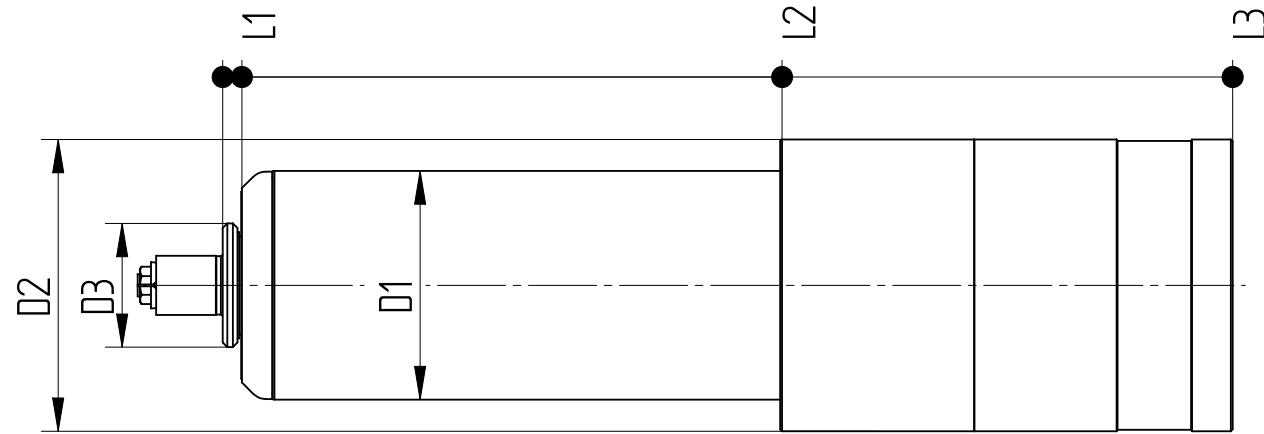


- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

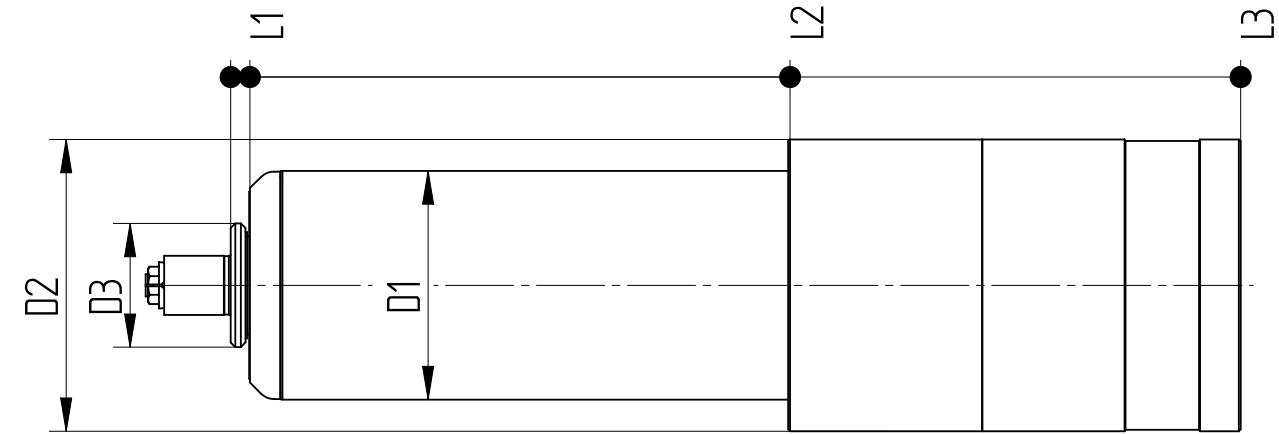
- [Temperature sensor PT-100]
- [Vibration sensor]
- [Cooling jacket] ●
- [Leakage monitoring]
- [Temperature compensation]
- [Retaining clamping set]
- [Minimum quantity lubrication]
- [Control of surface contact]
- [Rotary union]
- [Clamp]

Special spindles

PCB spindles

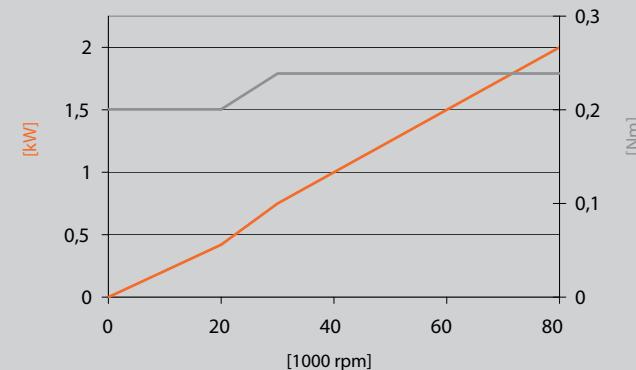


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

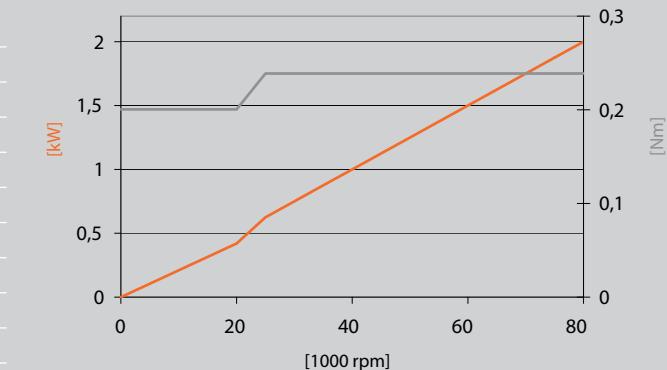


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
61,9	79	33,5	—	—	—	5,2	151,5	273,5	—	—	—	—

Model	DMS 080-645.463
Torque S1	[Nm] 0.15
Torque S6 (40%)	[Nm] 0.24
Power S1	[kW] 1.0
Power S6 (40%)	[kW] 2.0
Speed	[rpm] 80,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	1/8" direct clamping set
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer



Model	DMS 080-649.976
Torque S1	[Nm] 0.15
Torque S6 (40%)	[Nm] 0.24
Power S1	[kW] 1.0
Power S6 (40%)	[kW] 2.0
Speed	[rpm] 80,000
Weight	[kg] 4.5
Motor type	asynchronous
Tool interface	3 mm collet chuck
Release unit	pneumatic
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	E.g. Sieb & Meyer



[Temperature sensor PT-100]
[Vibration sensor]
[Cooling jacket]
[Leakage monitoring]
[Temperature compensation]
[Retaining clamping set]
[Minimum quantity lubrication]
[Control of surface contact]
[Rotary union]
[Clamp]

[Temperature sensor PT-100]
[Vibration sensor]
[Cooling jacket]
[Leakage monitoring]
[Temperature compensation]
[Retaining clamping set]
[Minimum quantity lubrication]
[Control of surface contact]
[Rotary union]
[Clamp]

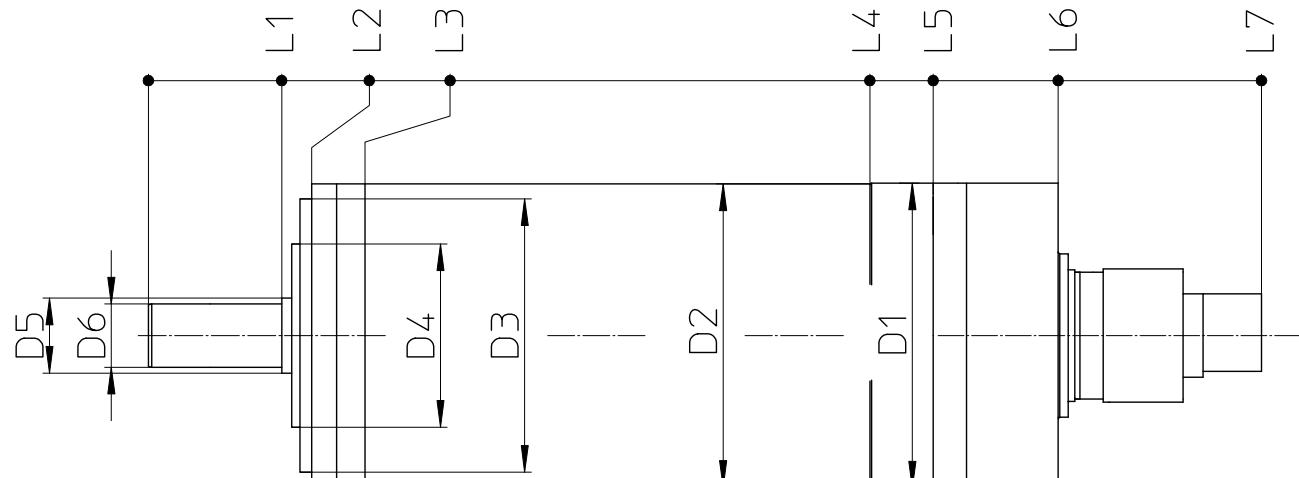


Liquid-cooled motors are a very popular and technically advanced solution. Liquid cooling enables higher heat dissipation, which leads to an increase in power output and torque. Liquid-cooled motors are especially suitable for compact types of construction or restricted installation space. They are of course compatible with conventional control systems. Versions with an asynchronous motor or also with a synchronous motor with higher acceleration and torque offer a large number of options.

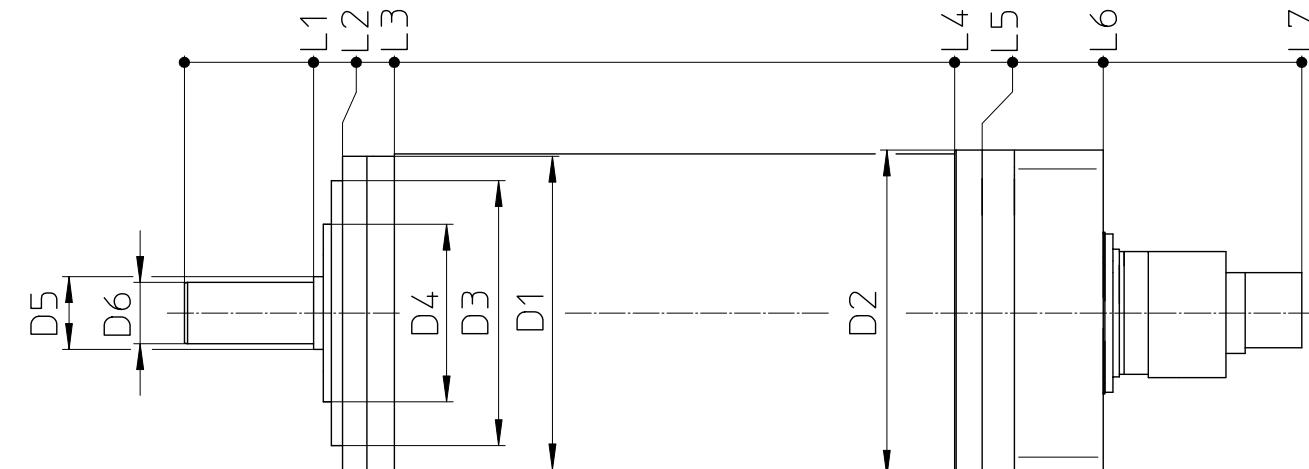
Options such as a hollow shaft, rotary union or pressure rod with a mounted release unit round off the portfolio.

Liquid-cooled motors

Size 80 - 112

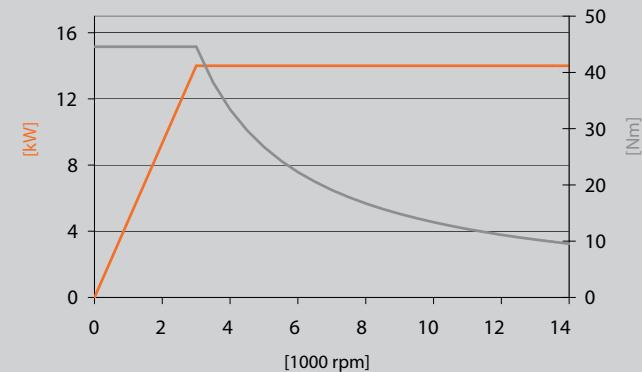


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
183	182	164	110	45	38	80	98	130	433	471	546	668

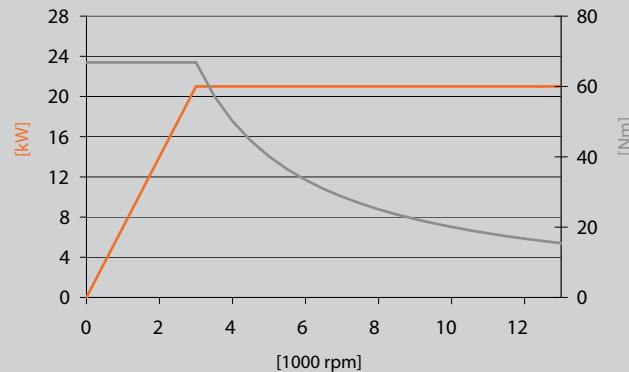


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
194	202	164	110	45	38	80	98	130	477	494	569	692

Model	DMR 080-603.657
Torque S1	[Nm] 30.0
Torque S6 (40%)	[Nm] 44.0
Power S1	[kW] 9.5
Power S6 (40%)	[kW] 14.0
Speed	[rpm] 14,000
Weight	[kg] 65
Motor type	asynchronous
Interface	cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 090-603.610
Torque S1	[Nm] 44.5
Torque S6 (40%)	[Nm] 67.0
Power S1	[kW] 14.0
Power S6 (40%)	[kW] 21.0
Speed	[rpm] 15,000
Weight	[kg] 80
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

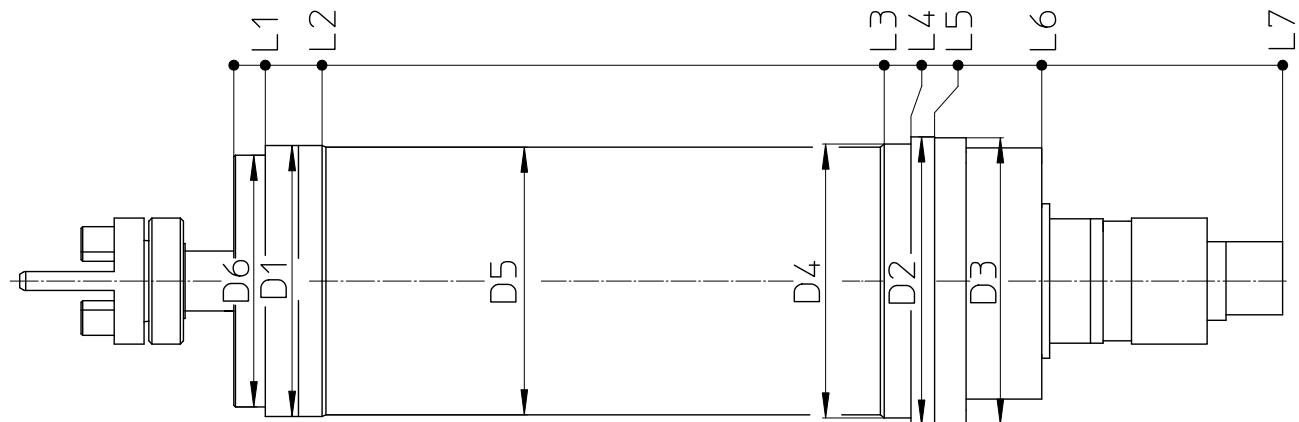


- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket] •

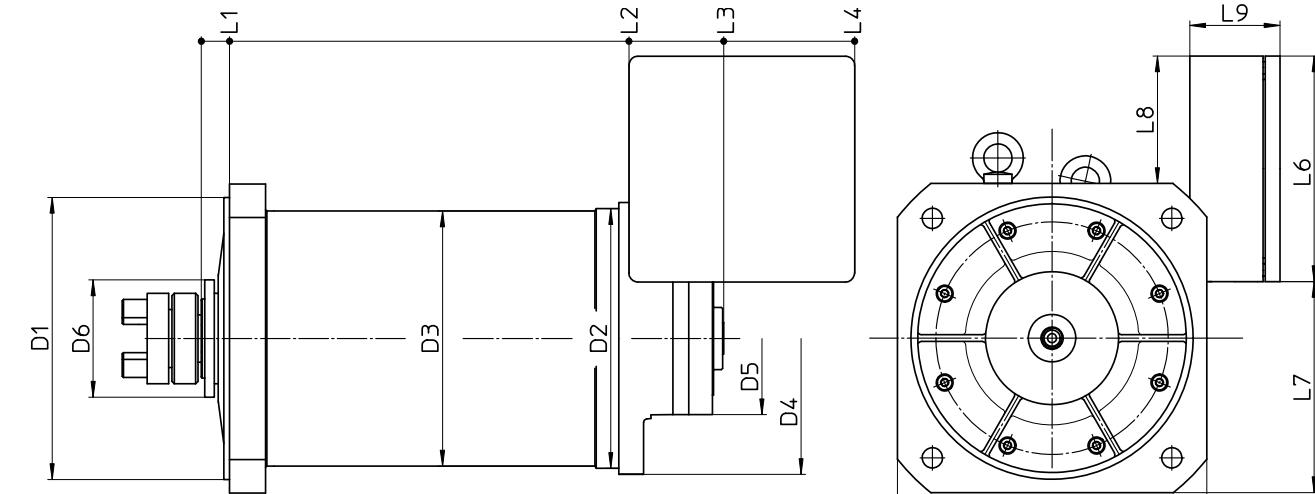
- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket] •

Liquid-cooled motors

Size 80 - 112

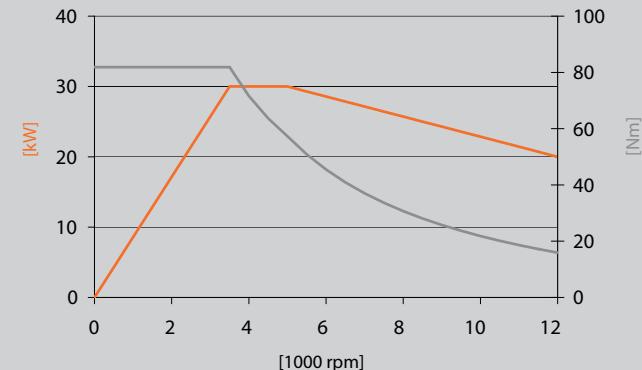


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
172	183	182	174	170	159,8	20	56	413	430	445	513	666

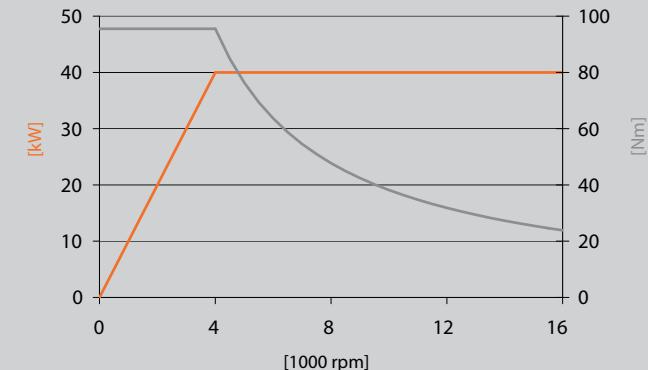


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
250	230	226	242	135	104	25	379	463	579	274	200	187

Model	SMR 080-616.993
Torque S1	[Nm] 60.0
Torque S6 (40%)	[Nm] 82.0
Power S1	[kW] 22.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 12,000
Weight	[kg] 65
Motor type	synchronous
Interface	coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMR 100-621.581
Torque S1	[Nm] 72.0
Torque S6 (40%)	[Nm] 96.0
Power S1	[kW] 30.0
Power S6 (40%)	[kW] 40.0
Speed	[rpm] 16,000
Weight	[kg] 120
Motor type	synchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

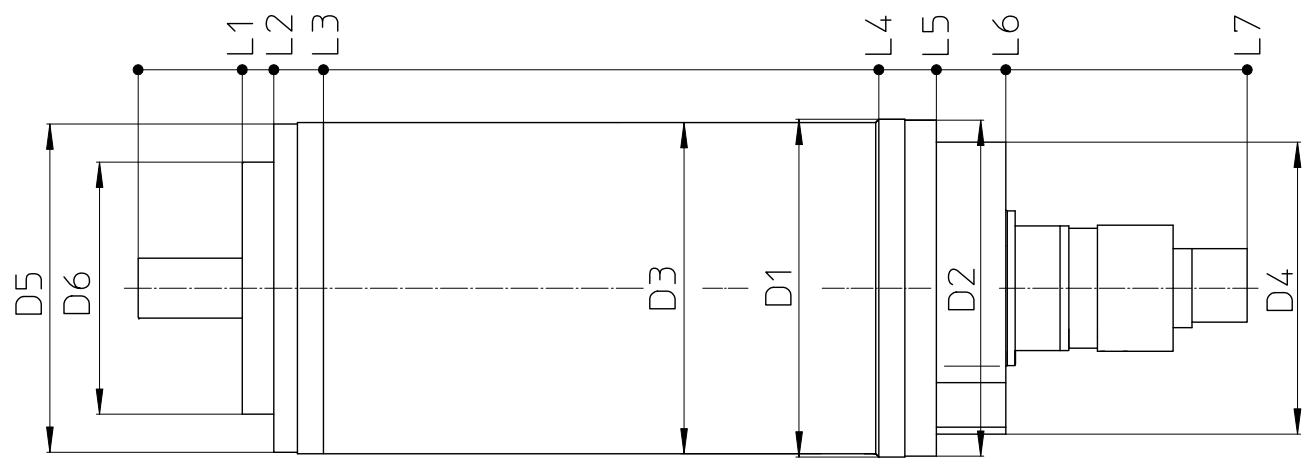
[Release unit]

[Cooling jacket]

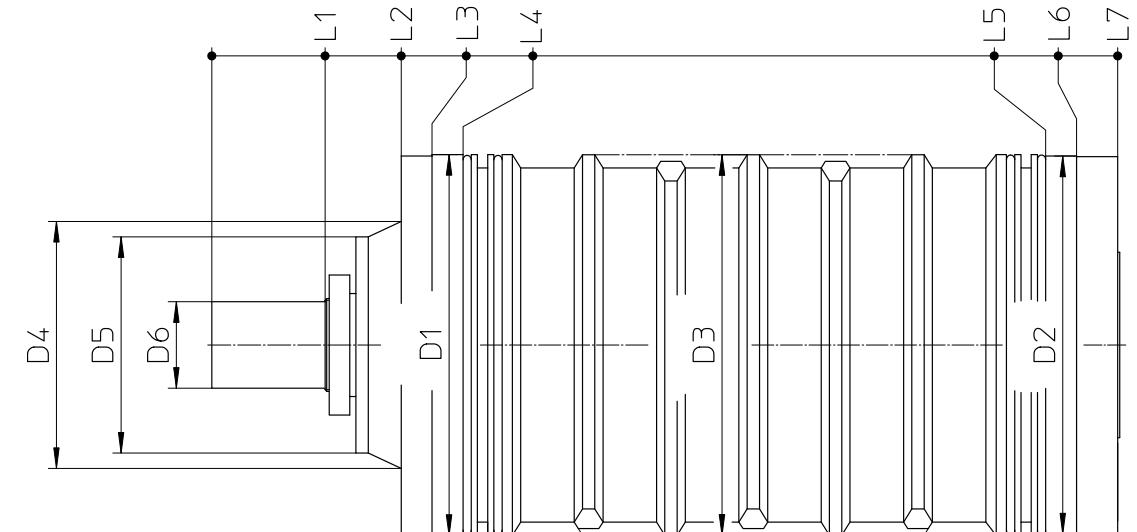


Liquid-cooled motors

Size 80 - 112

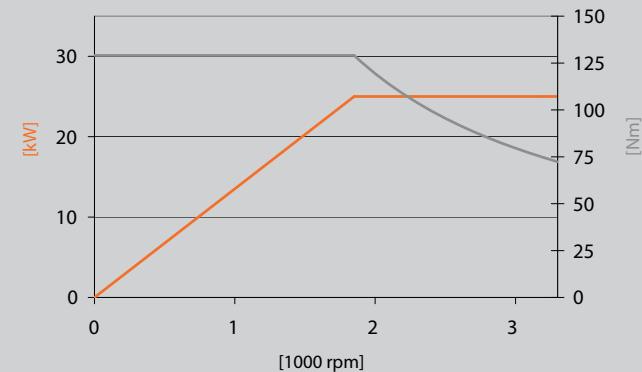


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
214	213	210	185	208	159,8	66	86	117,5	469,5	506	550	703

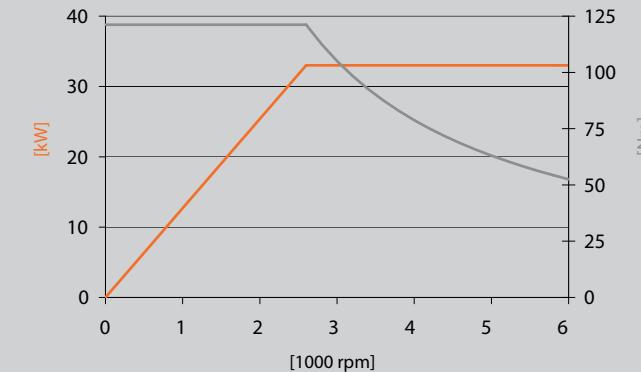


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
185	183,5	184,7	120	105	42	55	92	107	122	405	420	440

Model	DMR 100-616.994
Torque S1	[Nm] 87.0
Torque S6 (40%)	[Nm] 129.0
Power S1	[kW] 17.0
Power S6 (40%)	[kW] 25.0
Speed	[rpm] 12,000
Weight	[kg] 85
Motor type	asynchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMR 090-633.609
Torque S1	[Nm] 90.0
Torque S6 (40%)	[Nm] 121.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 33.0
Speed	[rpm] 6,000
Weight	[kg] 80
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]



[Temperature sensor PT-100]

[Leakage monitoring]

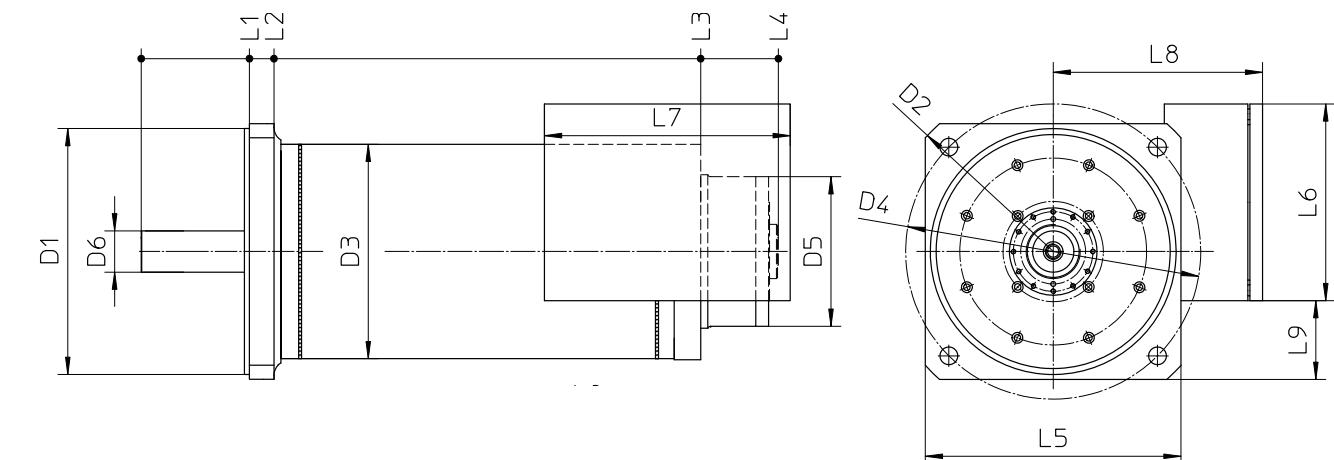
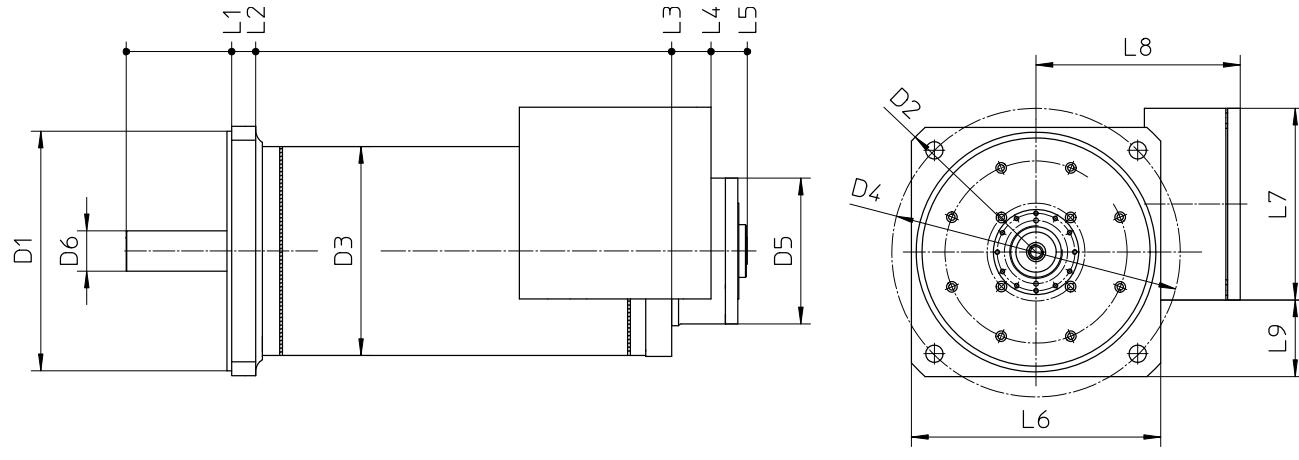
[Rotary union]

[Release unit]

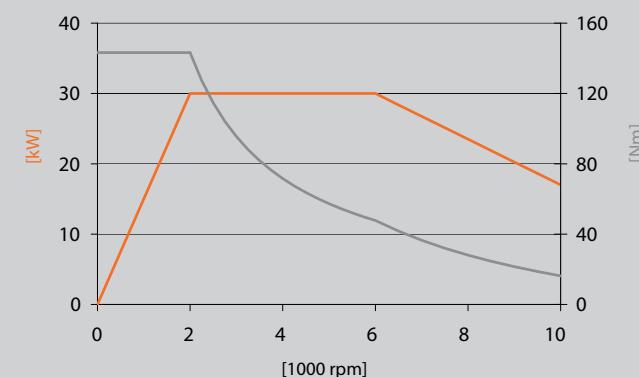
[Cooling jacket]

Liquid-cooled motors

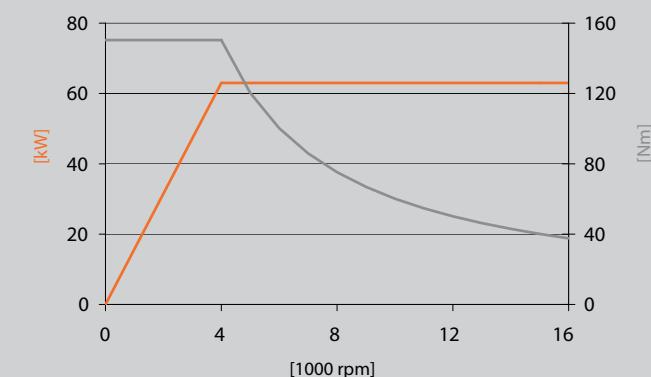
Size 80 - 112



Model	DMR 100-608.464
Torque S1	[Nm] 95.0
Torque S6 (40%)	[Nm] 143.0
Power S1	[kW] 20.0
Power S6 (40%)	[kW] 30.0
Speed	[rpm] 10,000
Weight	[kg] 105
Motor type	asynchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMR 100-621.654
Torque S1	[Nm] 110.0
Torque S6 (40%)	[Nm] 150.0
Power S1	[kW] 46.0
Power S6 (40%)	[kW] 63.0
Speed	[rpm] 16,000
Weight	[kg] 57
Motor type	synchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

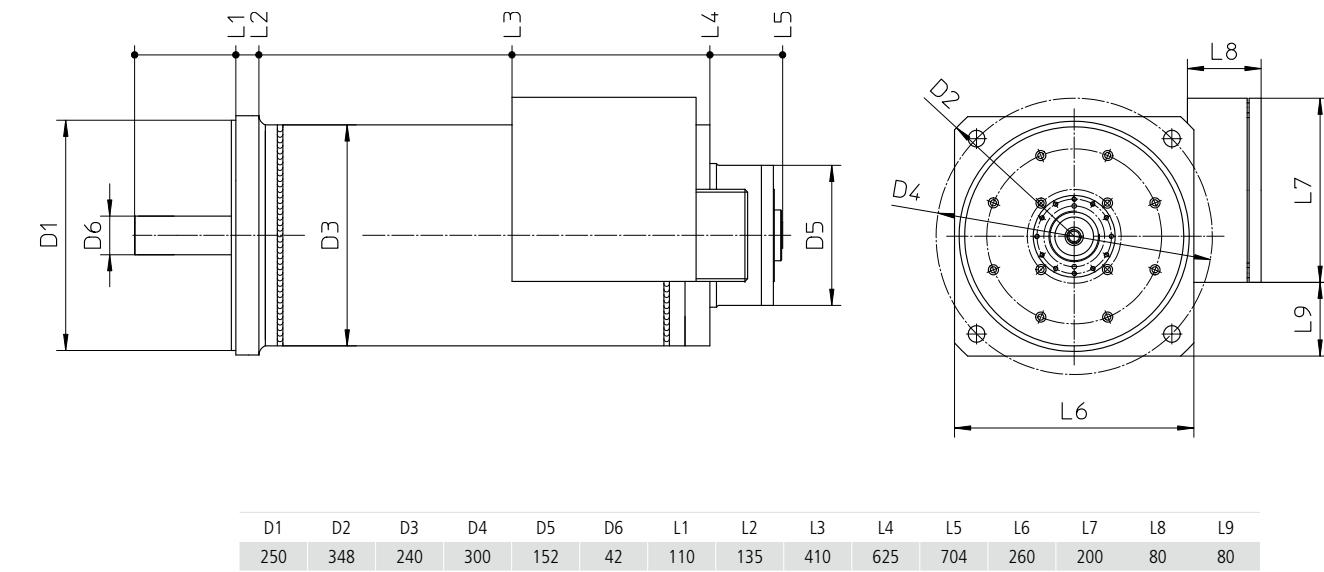
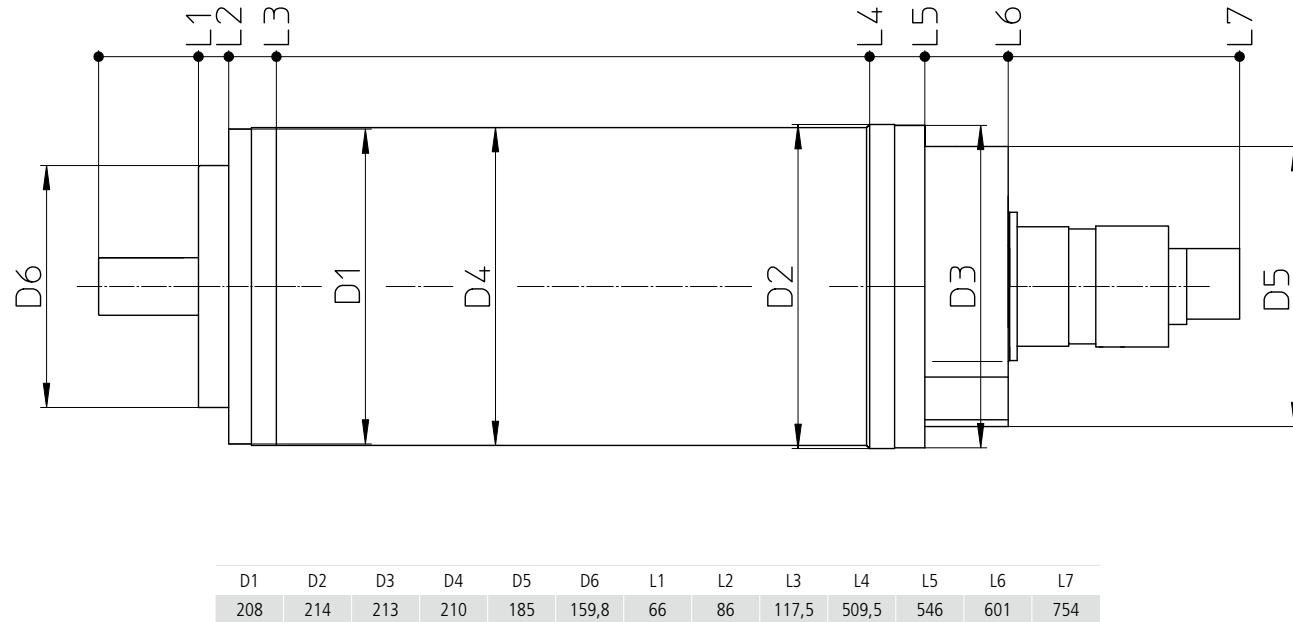


- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket]

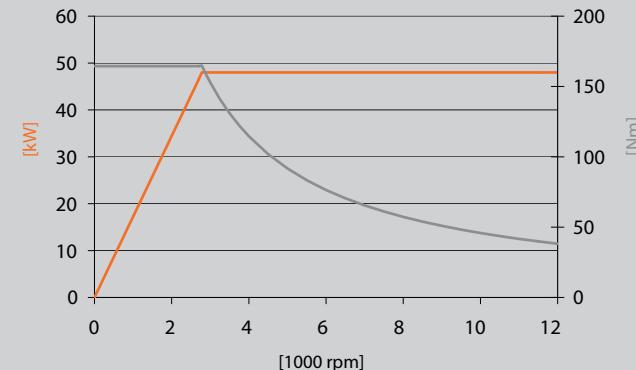
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- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket]

Liquid-cooled motors

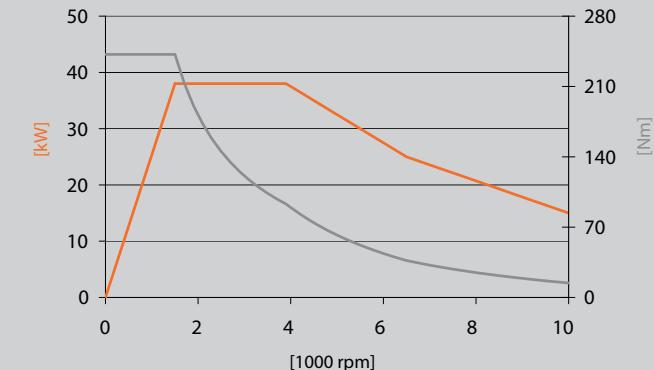
Size 80 - 112



Model	SMR 100-616.992
Torque S1	[Nm] 130.0
Torque S6 (40%)	[Nm] 165.0
Power S1	[kW] 38.0
Power S6 (40%)	[kW] 48.0
Speed	[rpm] 12,000
Weight	[kg] 120
Motor type	synchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 112-609.115
Torque S1	[Nm] 159.0
Torque S6 (40%)	[Nm] 242.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 38.0
Speed	[rpm] 10,000
Weight	[kg] 147
Motor type	asynchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain

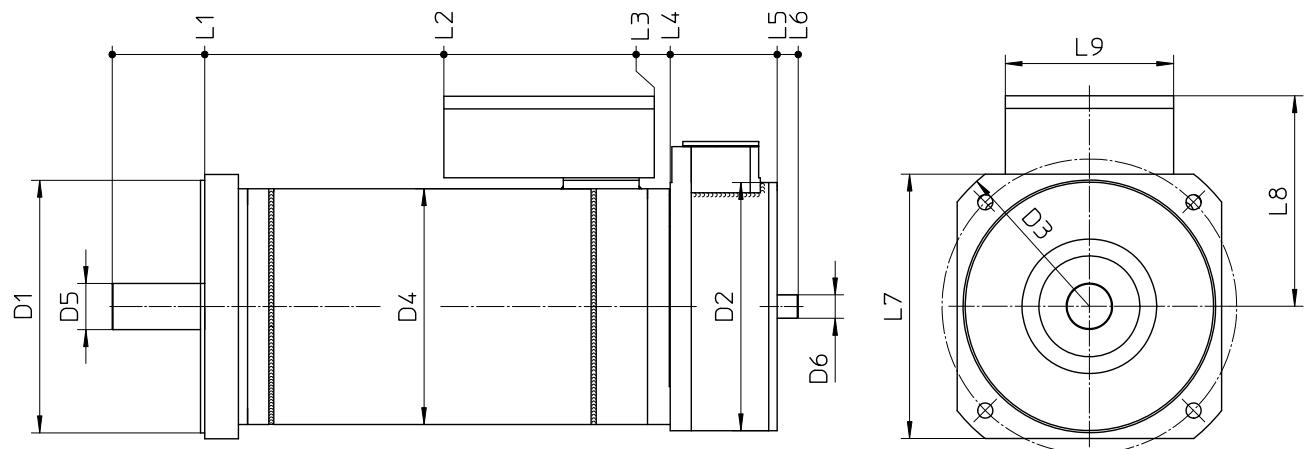


- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union] •
- [Release unit] •
- [Cooling jacket] •

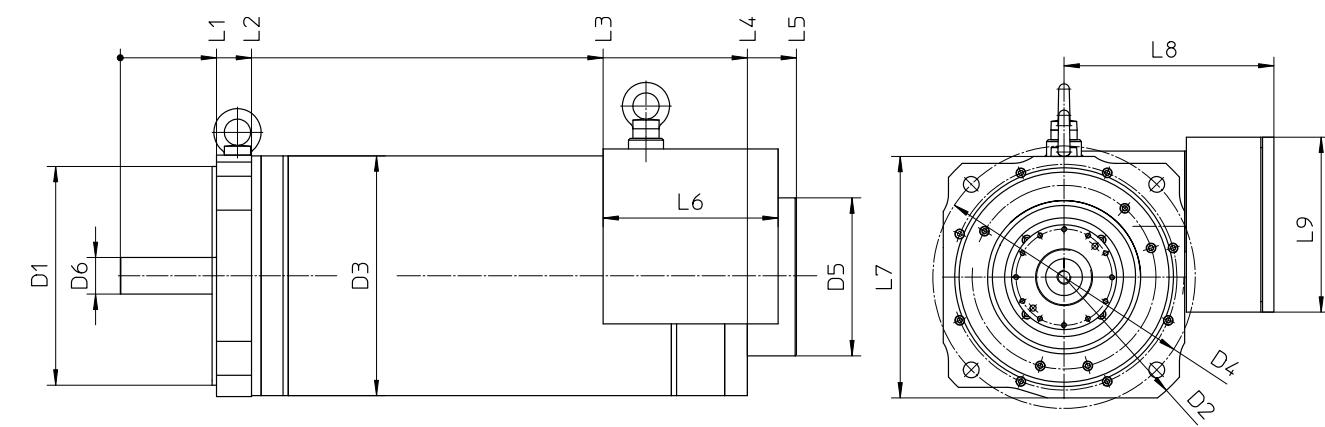
- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket] •

Liquid-cooled motors

Size 132 - 180

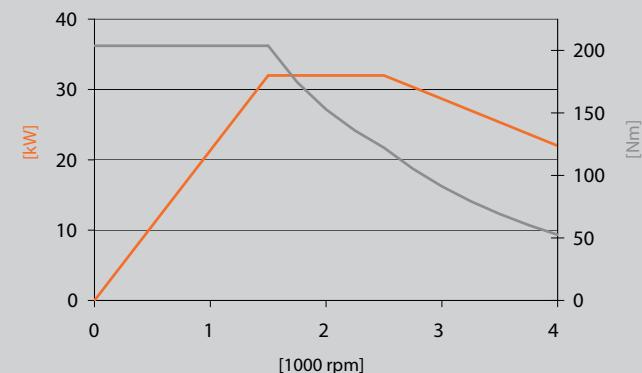


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9
300	295	400	280	55	28	110	394	644	663	790	815	314	250	200

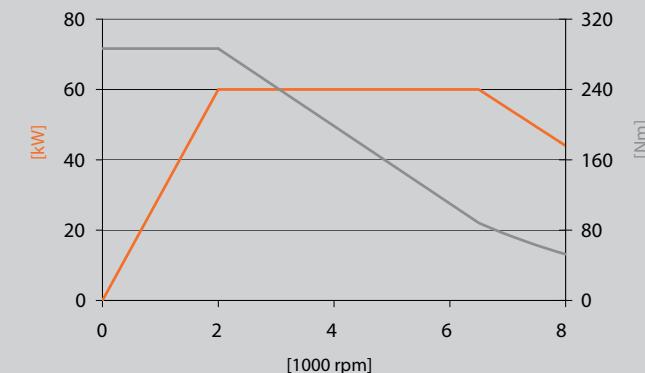


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9
250	349	274	300	180,5	42	110	150	552	717	773	200	276	240	200

Model	DMR 132-602.265
Torque S1	[Nm] 140.0
Torque S6 (40%)	[Nm] 206.0
Power S1	[kW] 22.0
Power S6 (40%)	[kW] 32.0
Speed	[rpm] 4,000
Weight	[kg] 180
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 132-605.425
Torque S1	[Nm] 191.0
Torque S6 (40%)	[Nm] 286.0
Power S1	[kW] 40.0
Power S6 (40%)	[kW] 60.0
Speed	[rpm] 8,000
Weight	[kg] 200
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

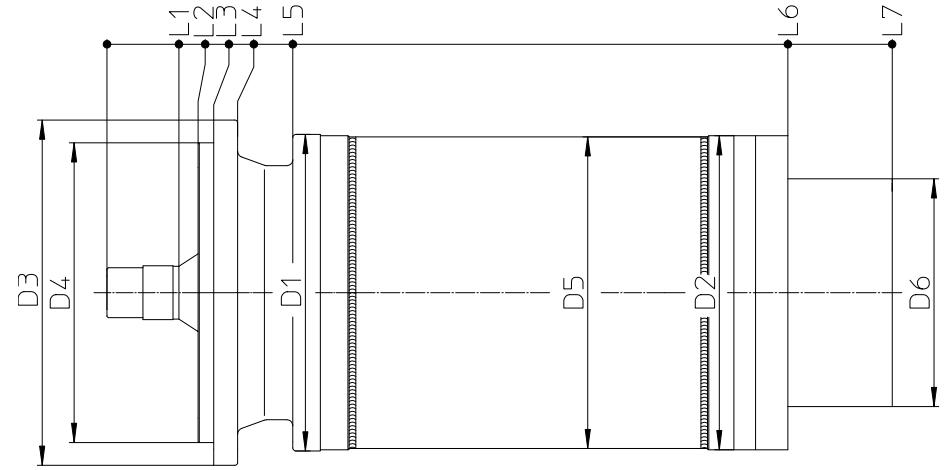
[Rotary union]

[Release unit]

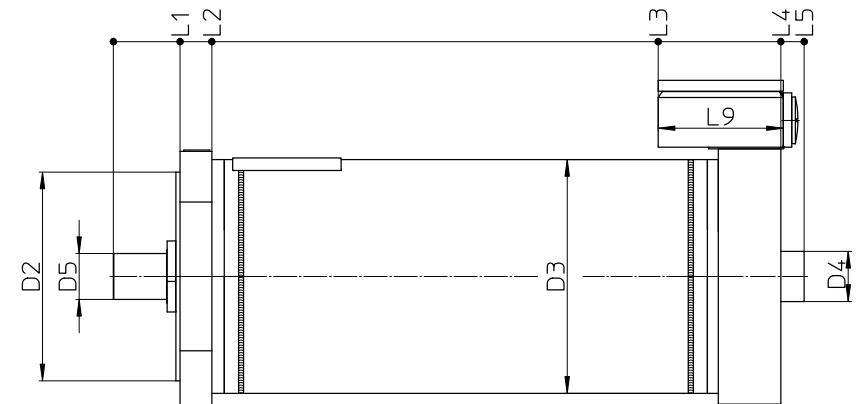
[Cooling jacket]

Liquid-cooled motors

Size 132 - 180

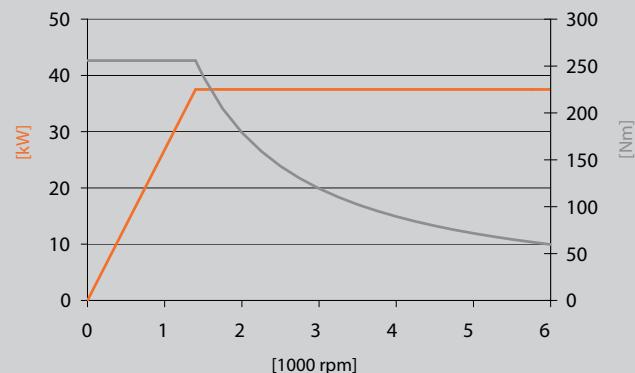


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
264	262	288	250	260	190	60	76	89	109	155	568	655

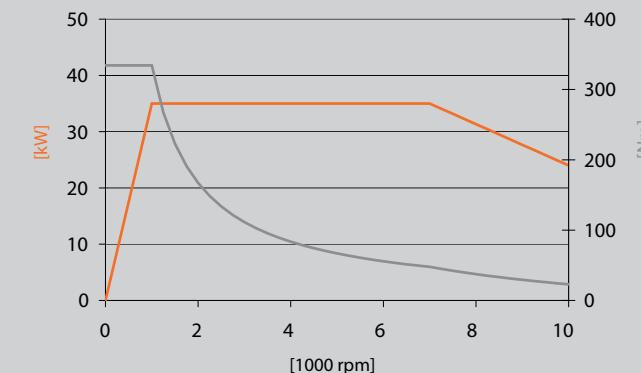


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
350	250	280	60	55	—	80	118	653	800	828	300	235

Model	SMR 132-613.616
Torque S1	[Nm] 200.0
Torque S6 (40%)	[Nm] 260.0
Power S1	[kW] 29.0
Power S6 (40%)	[kW] 37.5
Speed	[rpm] 6,000
Weight	[kg] 175
Motor type	synchronous
Interface	Gearing
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 132-629.177
Torque S1	[Nm] 229.0
Torque S6 (40%)	[Nm] 332.0
Power S1	[kW] 24.0
Power S6 (40%)	[kW] 35.0
Speed	[rpm] 10,000
Weight	[kg] 210
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]

[Temperature sensor PT-100]

[Leakage monitoring]

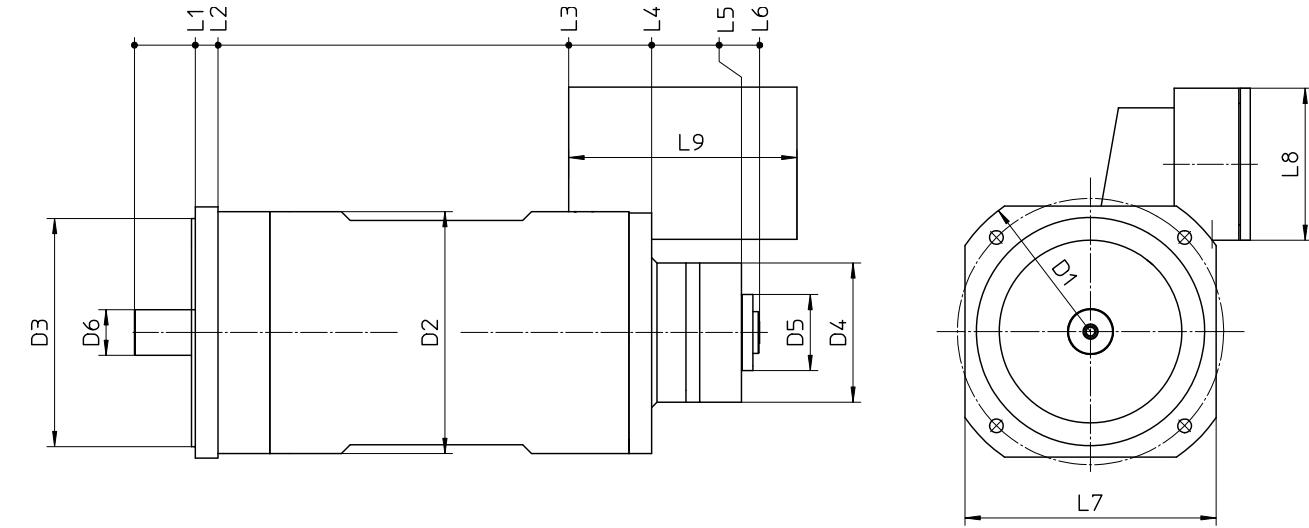
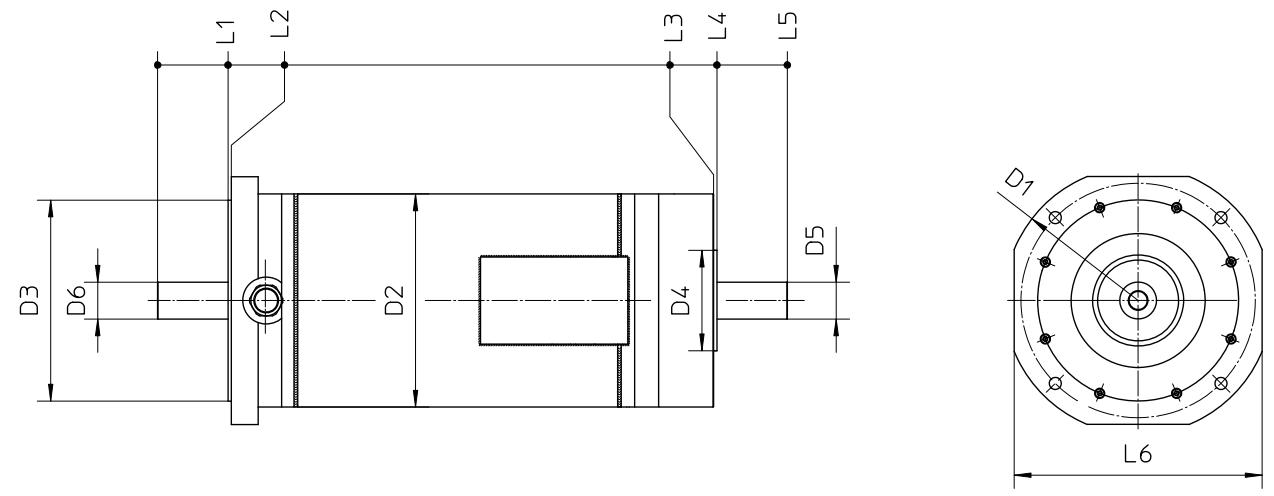
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[Release unit]

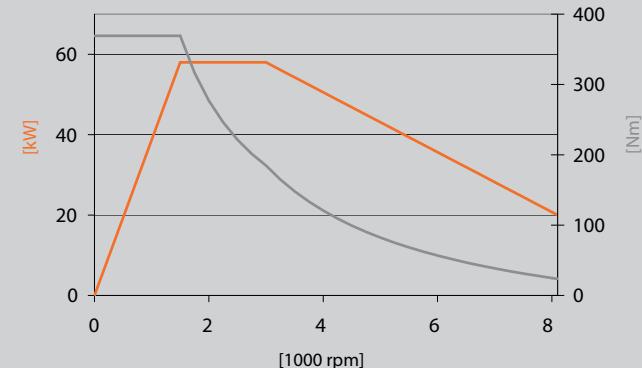
[Cooling jacket]

Liquid-cooled motors

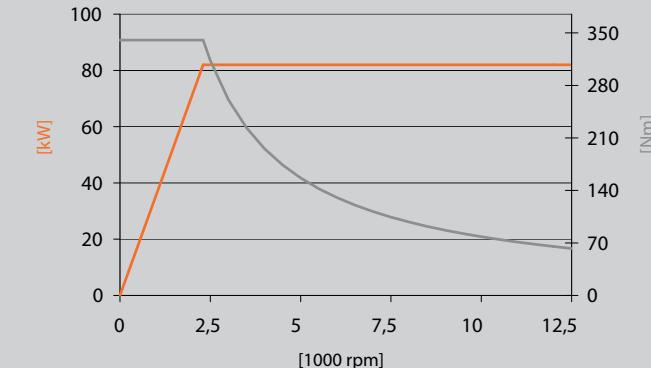
Size 132 - 180



Model	DMR 160-605.257
Torque S1	[Nm] 248.0
Torque S6 (40%)	[Nm] 368.0
Power S1	[kW] 39.0
Power S6 (40%)	[kW] 58.0
Speed	[rpm] 8,100
Weight	[kg] 240
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMR 132-612.867
Torque S1	[Nm] 250.0
Torque S6 (40%)	[Nm] 341.0
Power S1	[kW] 65.5
Power S6 (40%)	[kW] 82.0
Speed	[rpm] 12,500
Weight	[kg] 290
Motor type	synchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

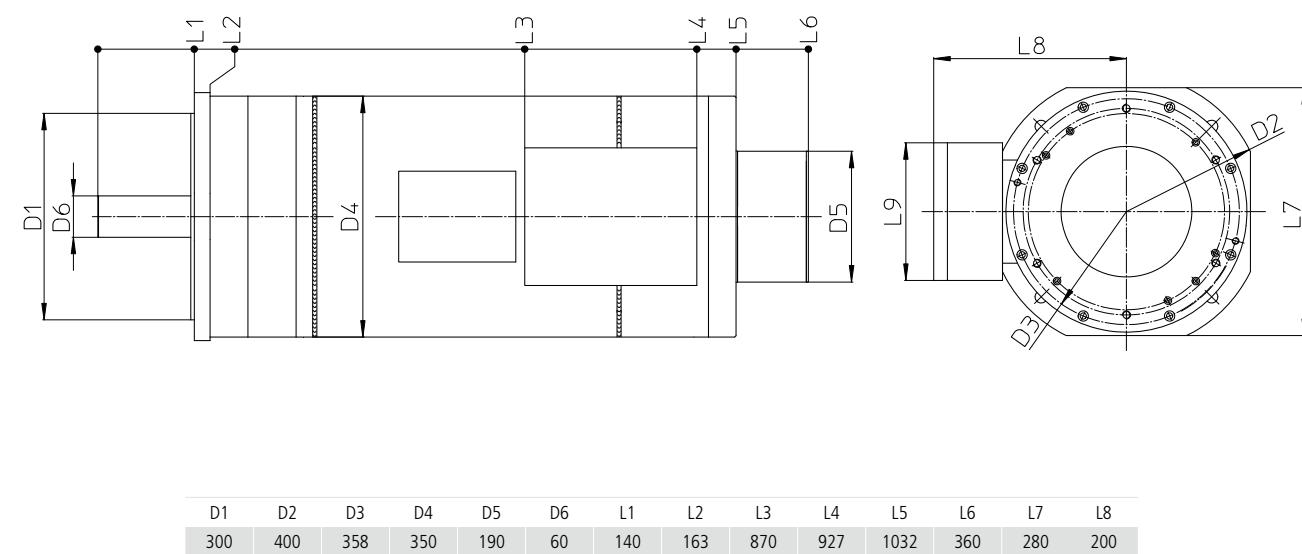
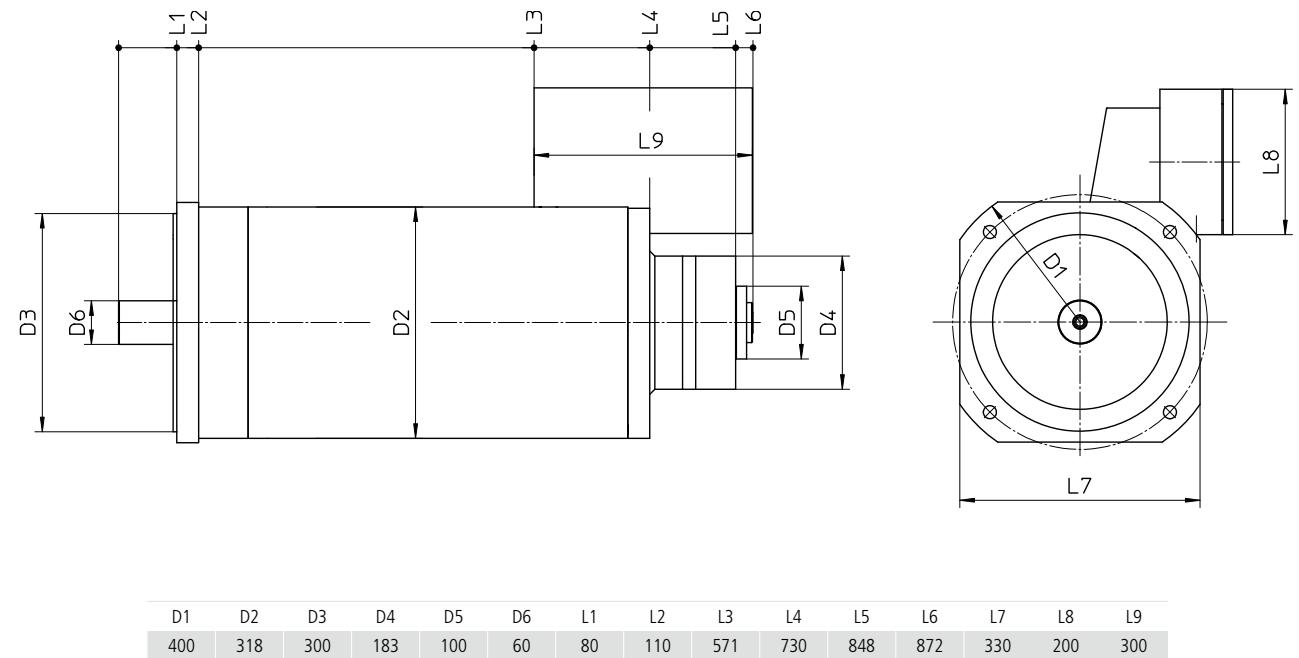
[Rotary union]

[Release unit]

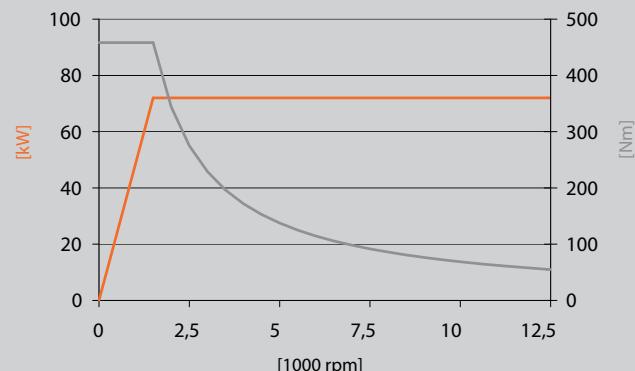
[Cooling jacket]

Liquid-cooled motors

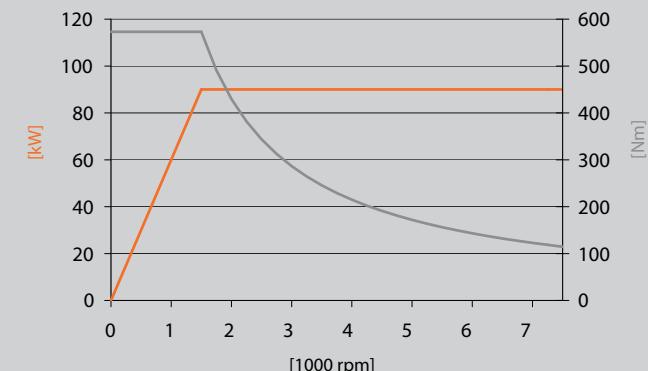
Size 132 - 180



Model	DMR 160-606.976
Torque S1	[Nm] 305.0
Torque S6 (40%)	[Nm] 459.0
Power S1	[kW] 48.0
Power S6 (40%)	[kW] 72.0
Speed	[rpm] 12,500
Weight	[kg] 270
Motor type	asynchronous
Interface	Coupling
Cooling	liquid cooled
Bearing lubrication	lubricated with oil-air
Control	Siemens/Fanuc/Heidenhain



Model	DMR 180-608.658
Torque S1	[Nm] 445.0
Torque S6 (40%)	[Nm] 570.0
Power S1	[kW] 70.0
Power S6 (40%)	[kW] 90.0
Speed	[rpm] 7,500
Weight	[kg] 450
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket]

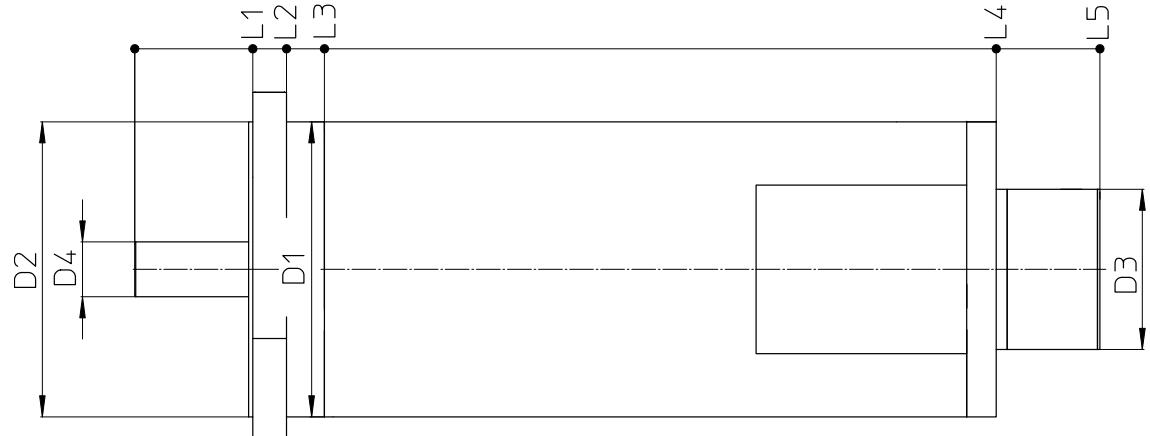


- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]
- [Cooling jacket]

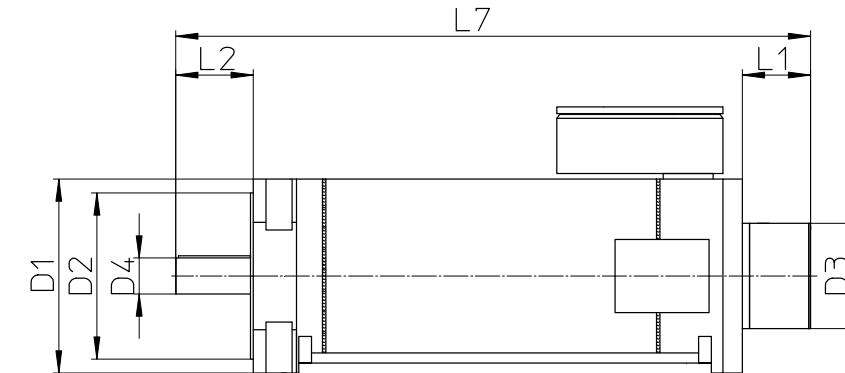


Liquid-cooled motors

Size 132 - 180

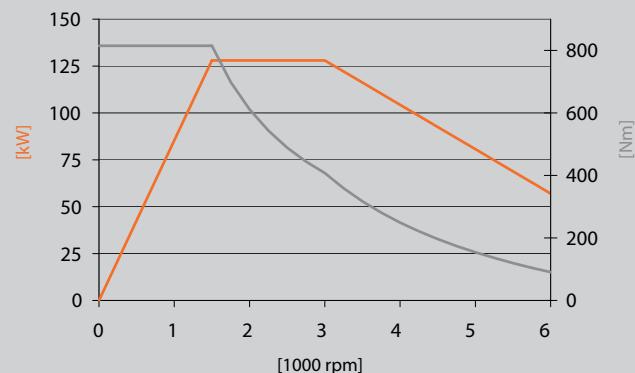


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
350	350	190	65	—	—	140	180	225	1022	1145	—	—

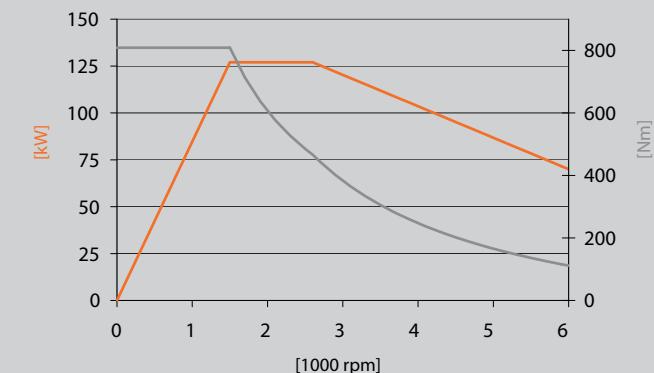


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
350	300	190	65	—	—	123	140	180	279	305	350	1146

Model	DMR 180-604.745
Torque S1	[Nm] 579.0
Torque S6 (40%)	[Nm] 810.0
Power S1	[kW] 91.0
Power S6 (40%)	[kW] 128.0
Speed	[rpm] 6,000
Weight	[kg] 530
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 180-621.398
Torque S1	[Nm] 581.0
Torque S6 (40%)	[Nm] 810.0
Power S1	[kW] 91.0
Power S6 (40%)	[kW] 127.0
Speed	[rpm] 6,000
Weight	[kg] 540
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

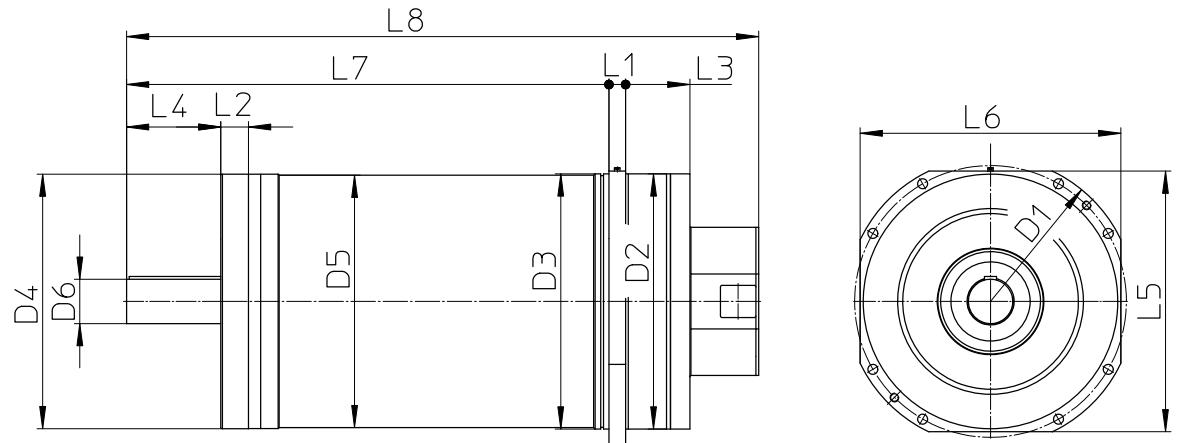
[Release unit]

[Cooling jacket]

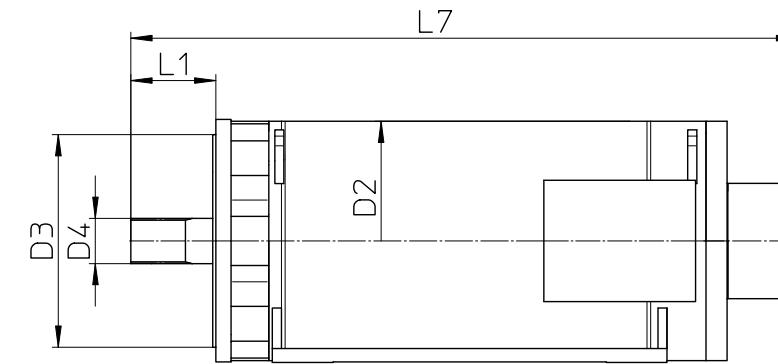


Liquid-cooled motors

Size 200 - 250

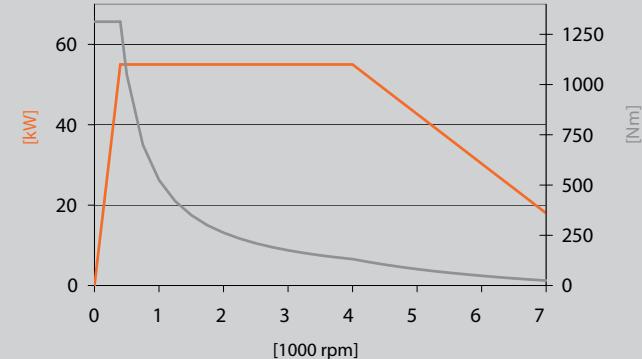


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
520	460	460	459	455	80	30	50	116	170	470	870	1140

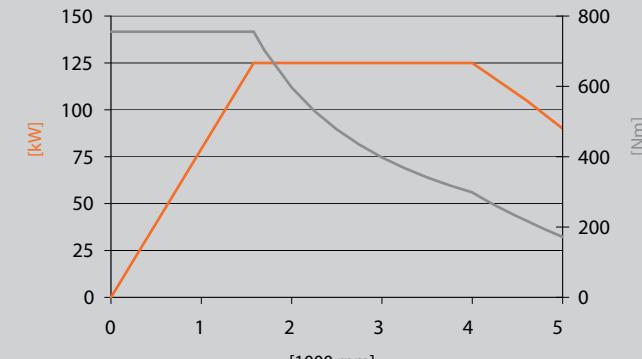


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
450	394	350	74,4	—	—	140	200	310	318	400	400	1098

Model	DMR 225-629.889
Torque S1	[Nm] 1,000.0
Torque S6 (40%)	[Nm] 1,300.0
Power S1	[kW] 42.0
Power S6 (40%)	[kW] 55.0
Speed	[rpm] 7,000
Weight	[kg] 820
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 200-635.816
Torque S1	[Nm] 634.0
Torque S6 (40%)	[Nm] 755.0
Power S1	[kW] 105.0
Power S6 (40%)	[kW] 125.0
Speed	[rpm] 5,000
Weight	[kg] 600
Motor type	asynchronous
Interface	Gearing
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

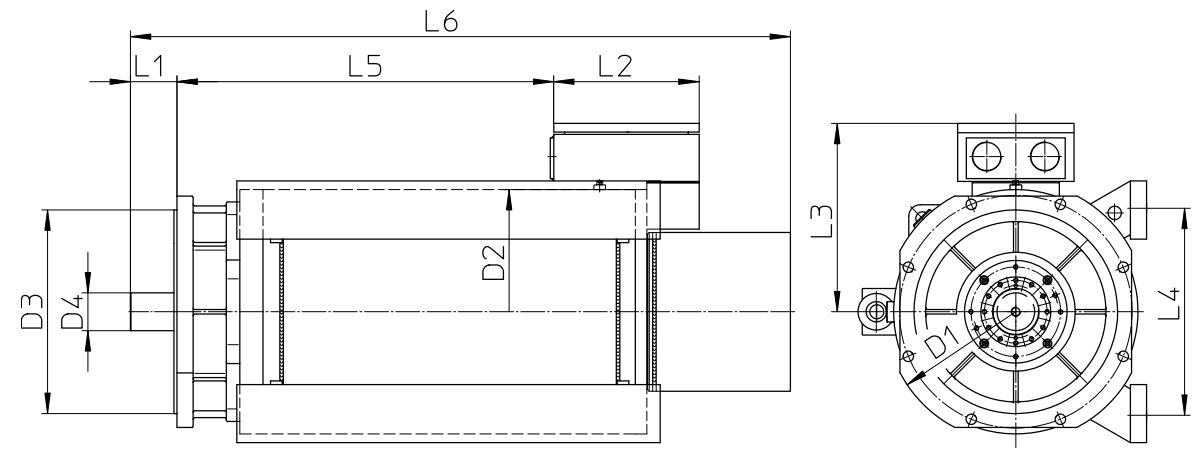
[Release unit]

[Cooling jacket]

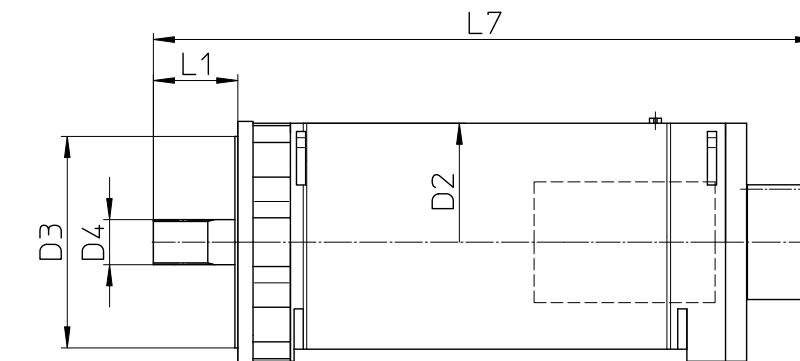


Liquid-cooled motors

Size 200 - 250

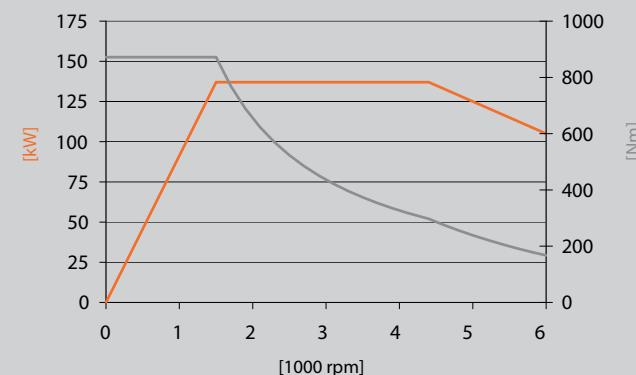


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
450	420	350	65	—	—	80	250	324	356	648	1135	—

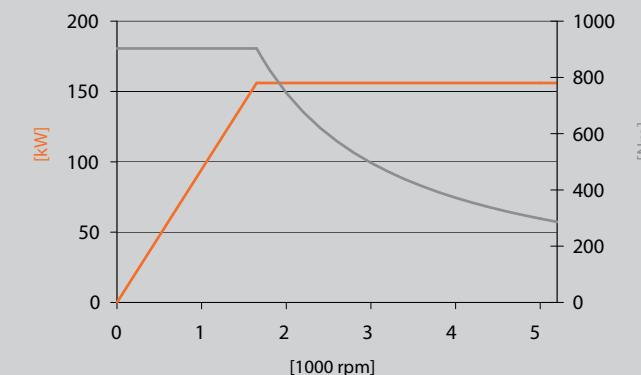


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
450	394	350	74,4	—	—	140	200	200	310	318	400	1098

Model	DMR 225-627.645
Torque S1	[Nm] 668.0
Torque S6 (40%)	[Nm] 870.0
Power S1	[kW] 105.0
Power S6 (40%)	[kW] 137.0
Speed	[rpm] 6,000
Weight	[kg] 650
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMR 200-629.916
Torque S1	[Nm] 723.0
Torque S6 (40%)	[Nm] 903.0
Power S1	[kW] 125.0
Power S6 (40%)	[kW] 156.0
Speed	[rpm] 5,000
Weight	[kg] 600
Motor type	asynchronous
Interface	Gearing
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]

[Temperature sensor PT-100]

[Leakage monitoring]

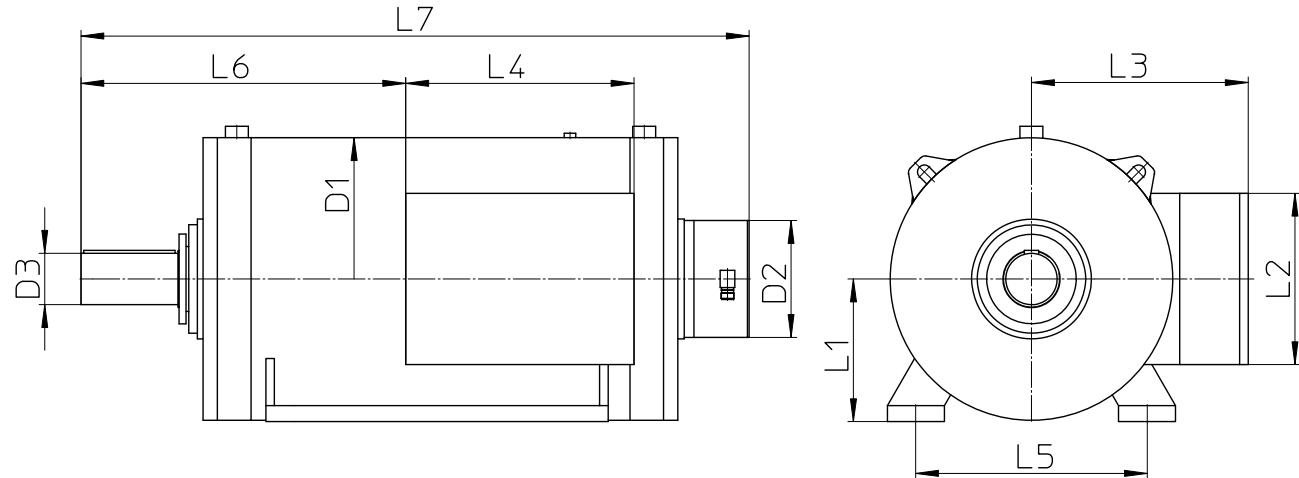
[Rotary union]

[Release unit]

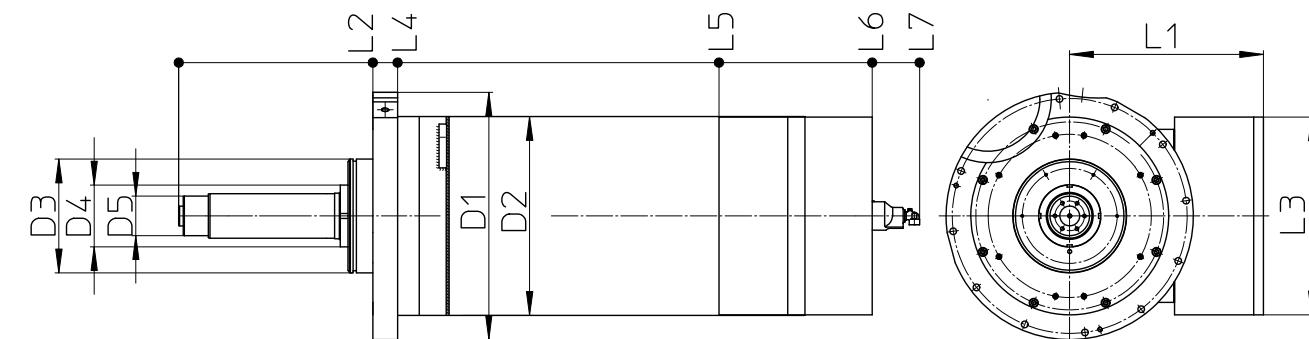
[Cooling jacket]

Liquid-cooled motors

Size 200 - 250

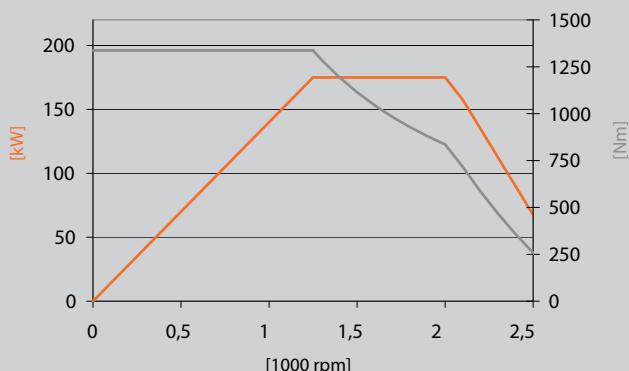


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
495	205	90	—	—	—	250	300	380	400	406	569	1171

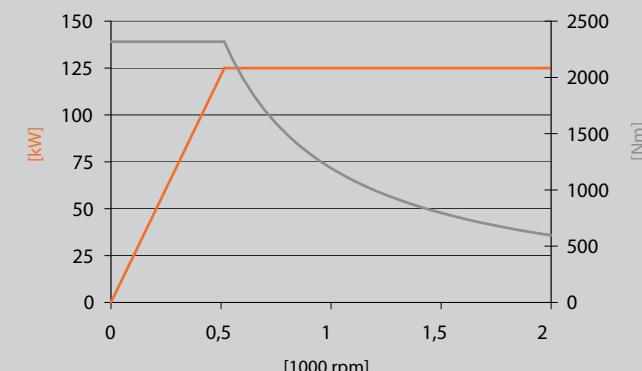


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
500	402	230	125	40	—	392	392,5	400	442,5	1093	1403	1498

Model	DMR 250-606.155
Torque S1	[Nm] 1,046.0
Torque S6 (40%)	[Nm] 1,330.0
Power S1	[kW] 137.0
Power S6 (40%)	[kW] 175.0
Speed	[rpm] 6,000
Weight	[kg] 900
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	SMR 225-629.684
Torque S1	[Nm] 1,850.0
Torque S6 (40%)	[Nm] 2,318.0
Power S1	[kW] 100.0
Power S6 (40%)	[kW] 125.0
Speed	[rpm] 2,000
Weight	[kg] 710
Motor type	synchronous
Interface	Cylinder shaft
Cooling	liquid cooled
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]



[Temperature sensor PT-100]

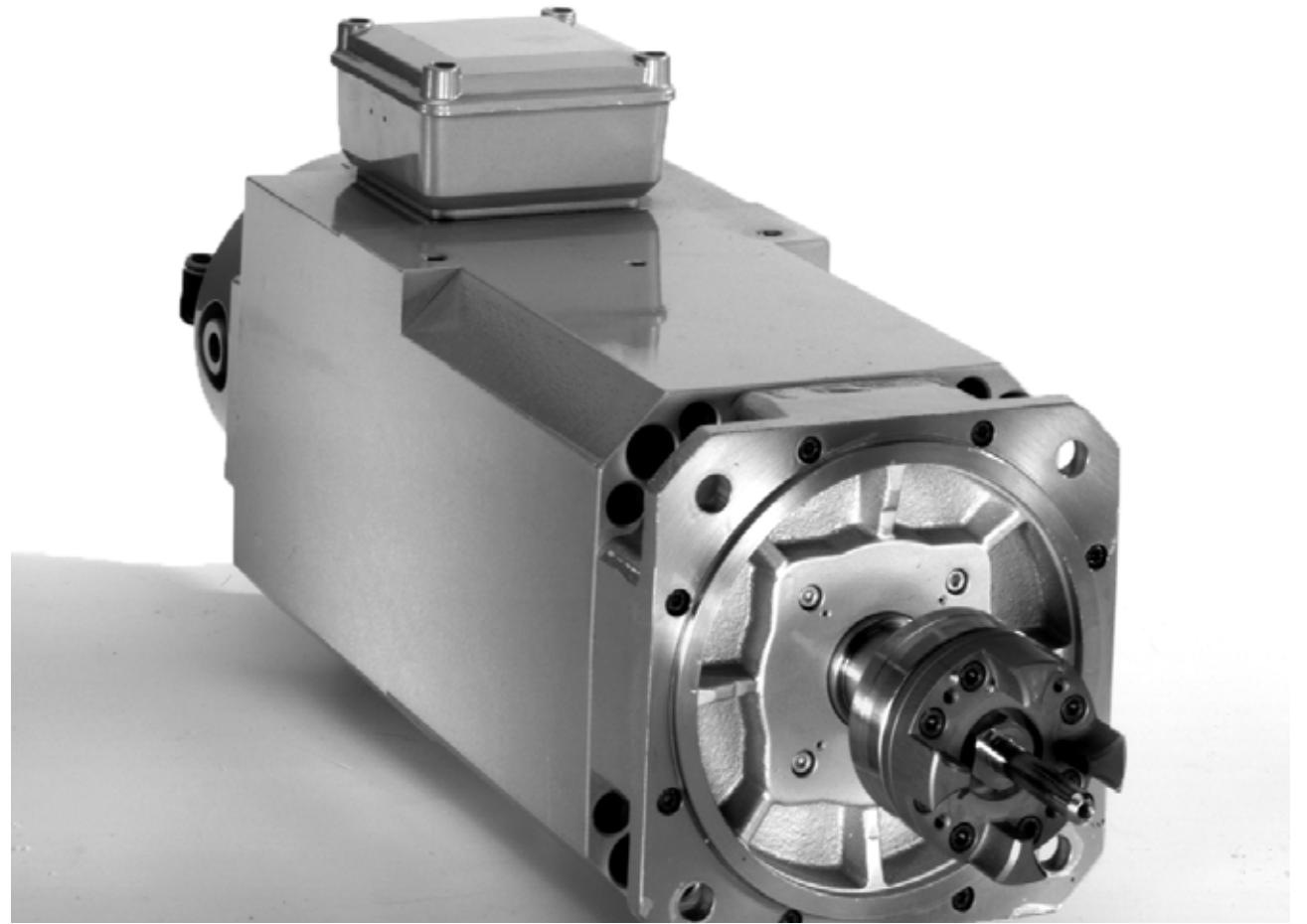
[Leakage monitoring]

[Rotary union]

[Release unit]

[Cooling jacket]

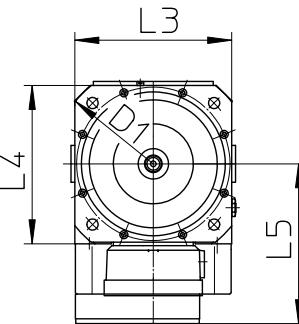
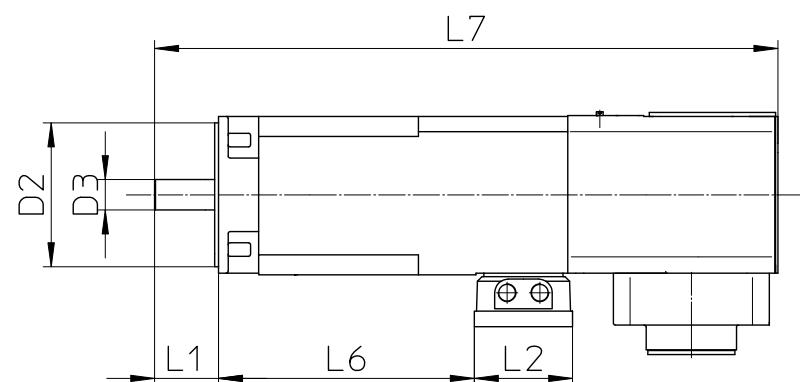
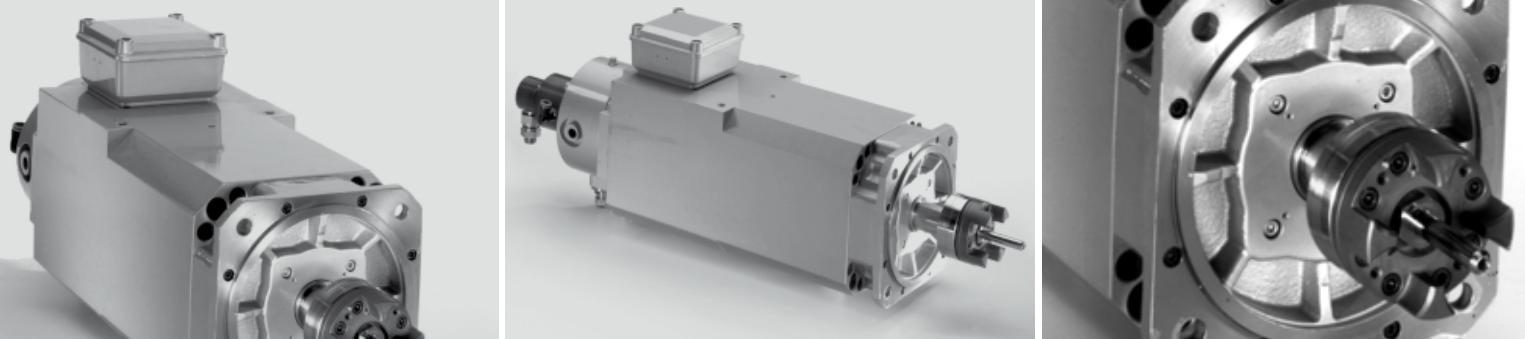




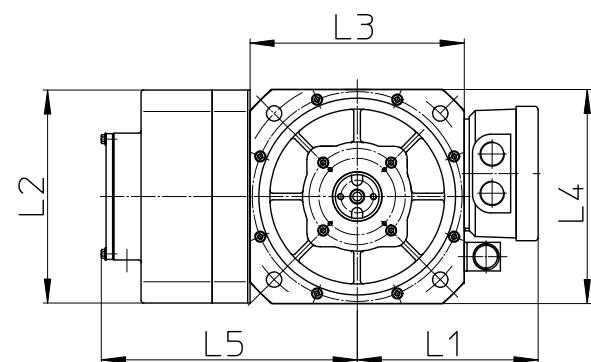
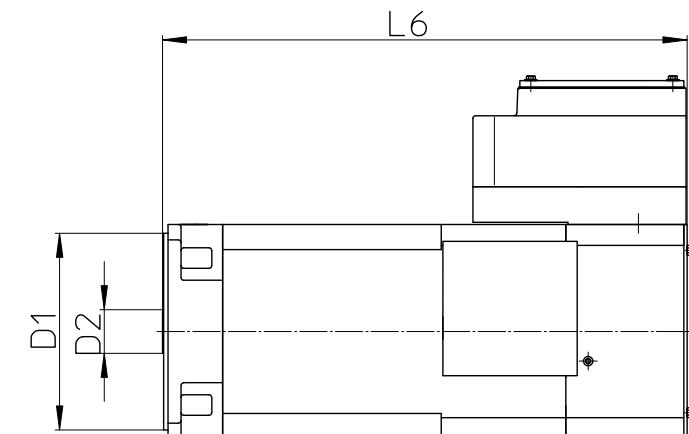
Air-cooled motors from KESSLER have been very successful in the industry for decades. As an asynchronous design, they are the robust and cost-effective solution for the main spindle drive. Due to the high field weakening, the compact design enables maximum speeds. It can be operated with small power units and does not require a surge protector. Especially for universal machines, the air-cooled asynchronous motor offers the matching solution with an optimum cost-benefit ratio.

Air-cooled motors

Size 80 - 112

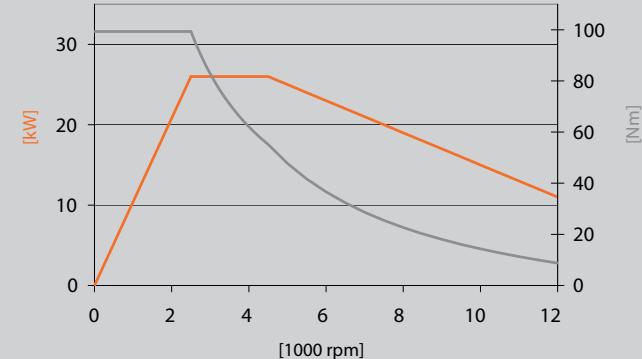


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
250	180	38	—	—	—	80	123	196	198	200	320	779,9

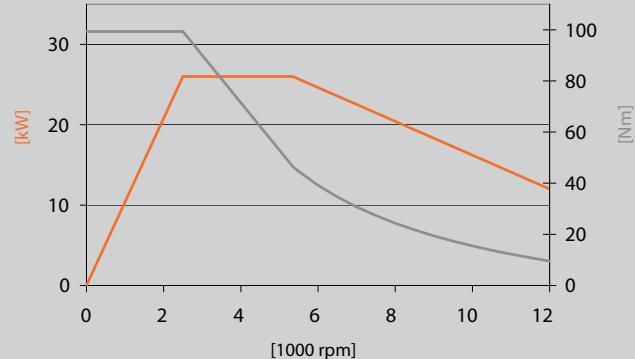


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
180	40	—	—	—	—	165,5	195	196	196	234	480	—

Model	DMQ 100-616.399
Torque S1	[Nm] 65.0
Torque S6 (40%)	[Nm] 99.0
Power S1	[kW] 17.0
Power S6 (40%)	[kW] 26.0
Speed	[rpm] 12,000
Weight	[kg] 68
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMQ 100-607.857
Torque S1	[Nm] 65.0
Torque S6 (40%)	[Nm] 99.0
Power S1	[kW] 17.0
Power S6 (40%)	[kW] 26.0
Speed	[rpm] 12,000
Weight	[kg] 68
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]



[Release unit]

[Temperature sensor PT-100]

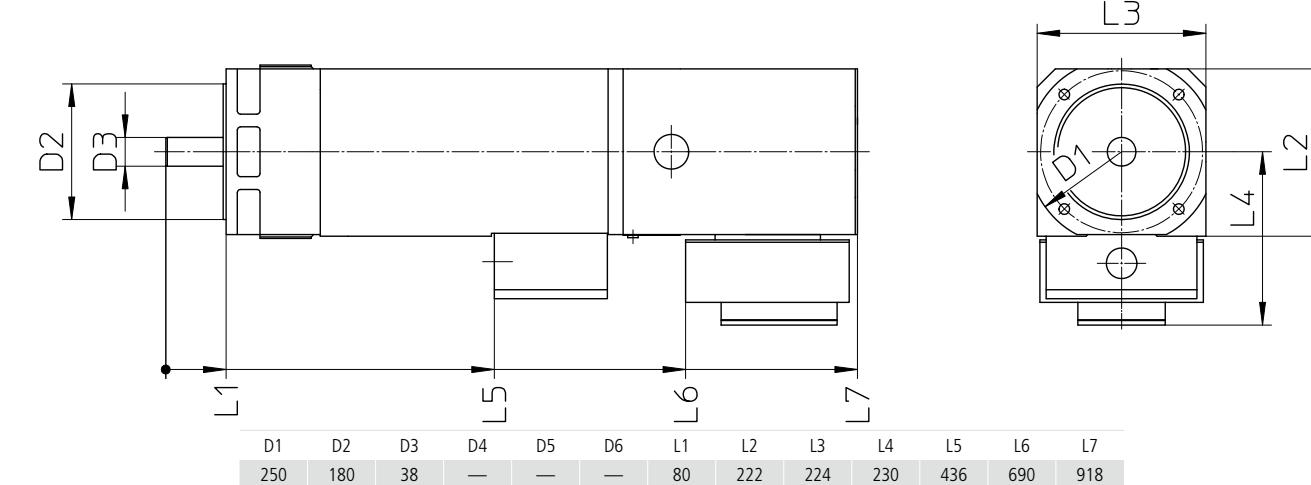
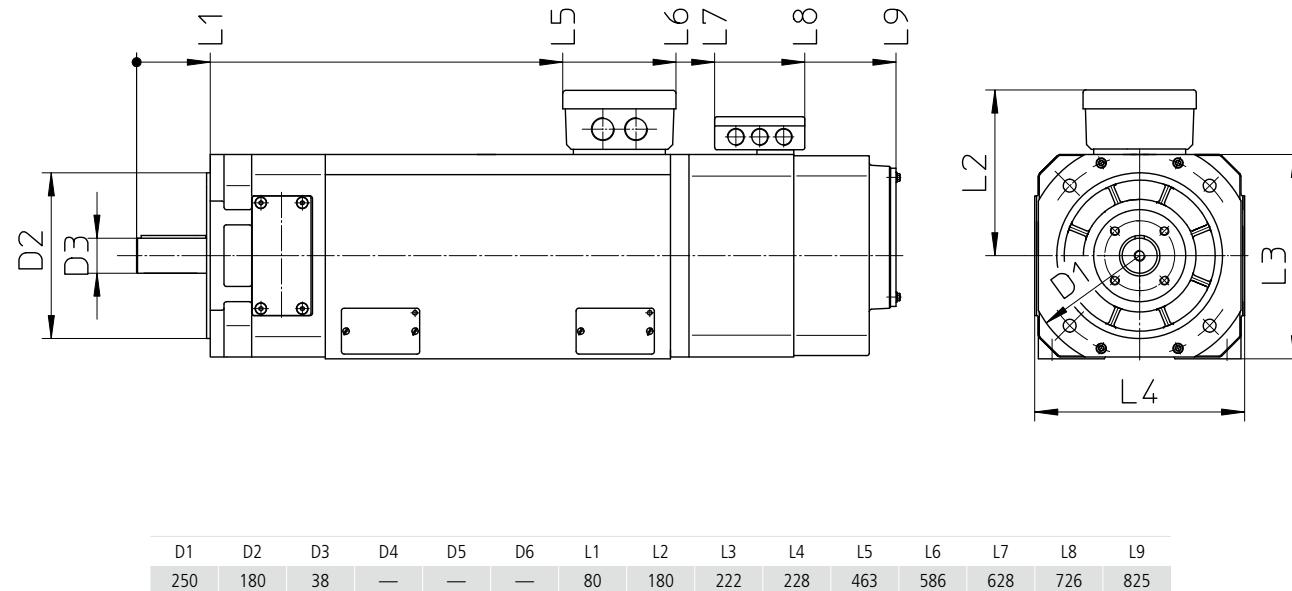
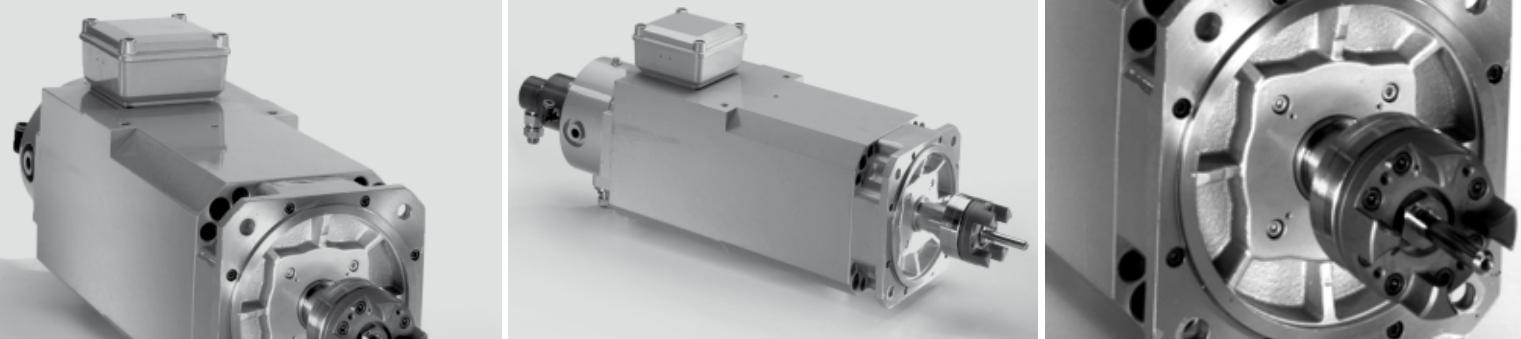
[Leakage monitoring]

[Rotary union]

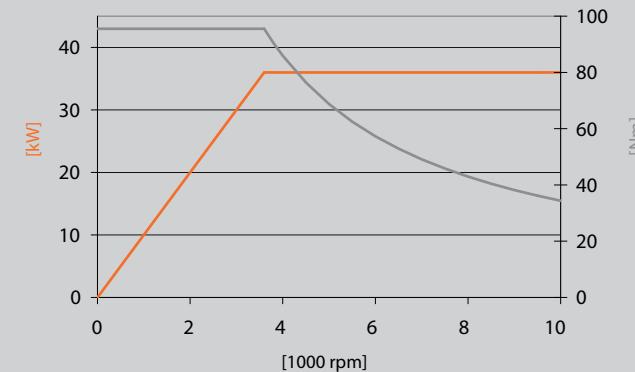
[Release unit]

Air-cooled motors

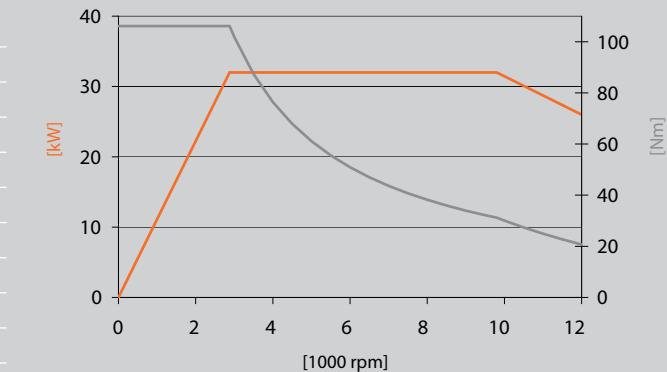
Size 80 - 112



Model	DMQ 112-619.101
Torque S1	[Nm] 66.0
Torque S6 (40%)	[Nm] 94.0
Power S1	[kW] 25.0
Power S6 (40%)	[kW] 36.0
Speed	[rpm] 10,000
Weight	[kg] 112
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMQ 112-621.491
Torque S1	[Nm] 73.0
Torque S6 (40%)	[Nm] 106.0
Power S1	[kW] 22.0
Power S6 (40%)	[kW] 32.0
Speed	[rpm] 12,000
Weight	[kg] 122
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain

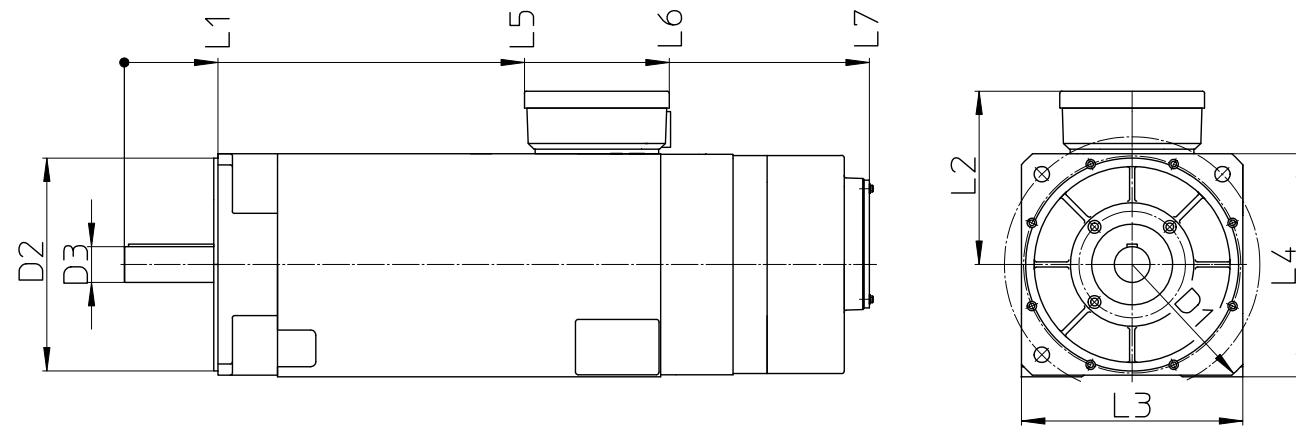
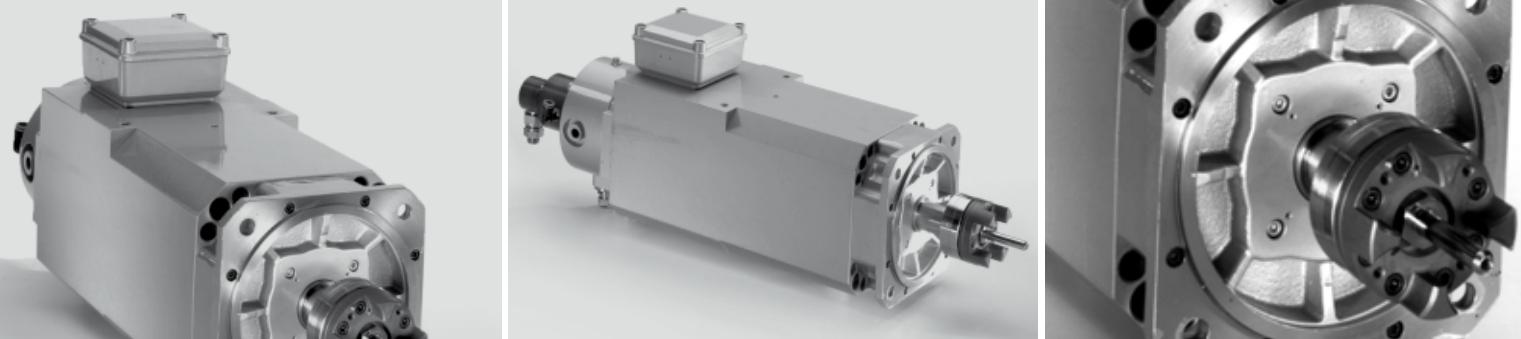


- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]

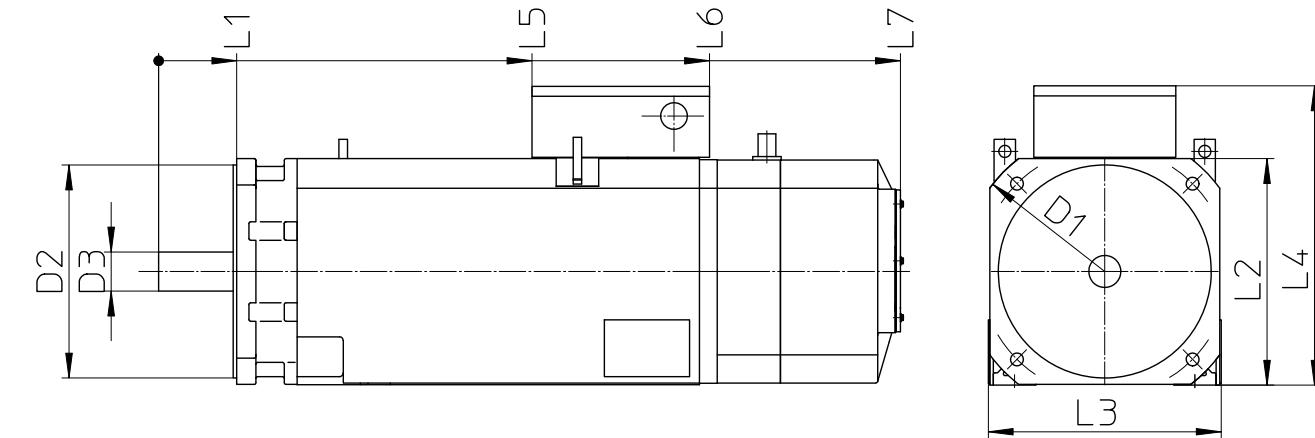
- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]

Air-cooled motors

Size 132 - 180

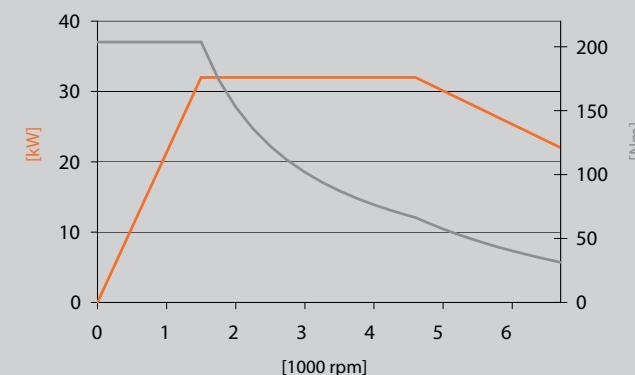


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
350	250	42	—	—	—	110	203,5	260	262	470	640	875

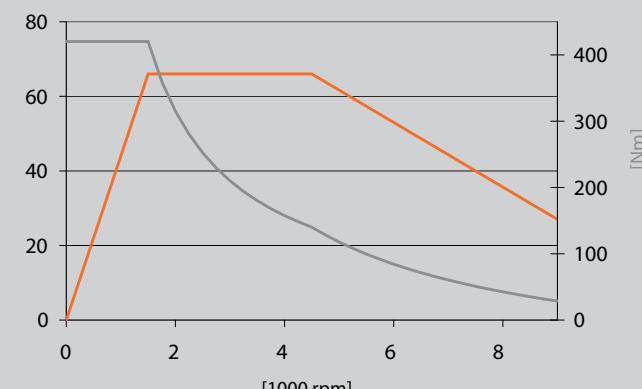


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
400	300	55	—	—	—	110	319	328	421,5	526	776	1045

Model	DMQ 132-632.413
Torque S1	[Nm] 140.0
Torque S6 (40%)	[Nm] 200.0
Power S1	[kW] 22.0
Power S6 (40%)	[kW] 32.0
Speed	[rpm] 6,700
Weight	[kg] 200
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMQ 160-607.373
Torque S1	[Nm] 280.0
Torque S6 (40%)	[Nm] 420.0
Power S1	[kW] 44.0
Power S6 (40%)	[kW] 66.0
Speed	[rpm] 9,000
Weight	[kg] 320
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Temperature sensor PT-100]

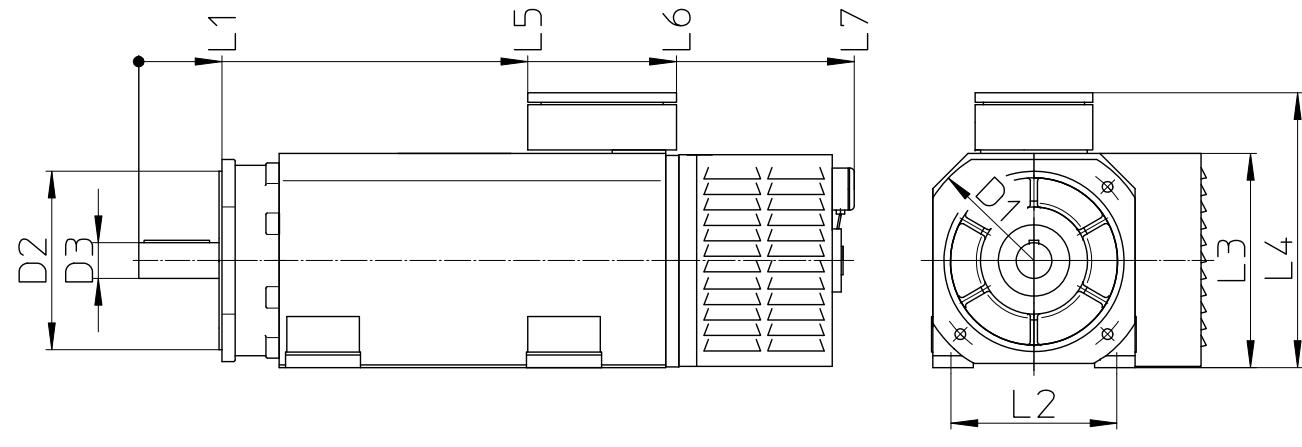
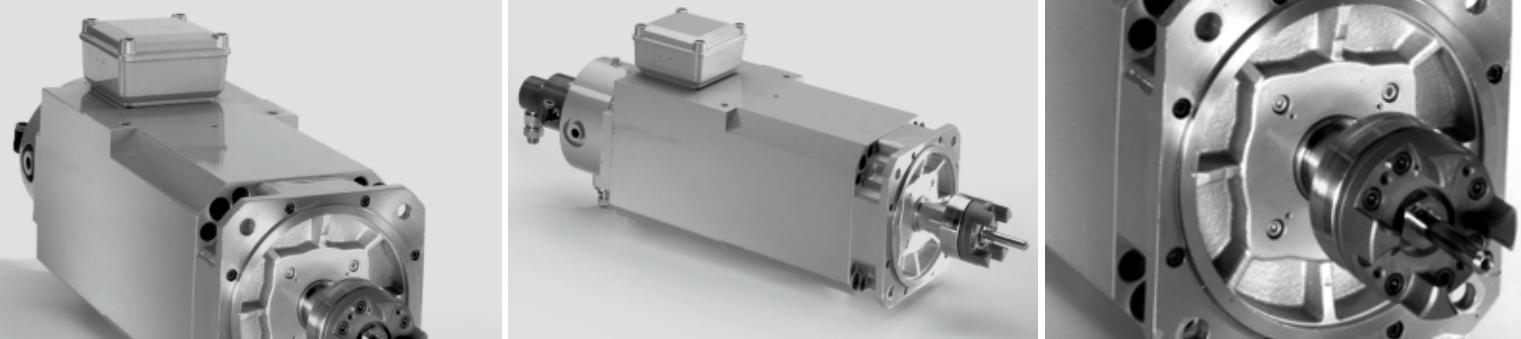
[Leakage monitoring]

[Rotary union]

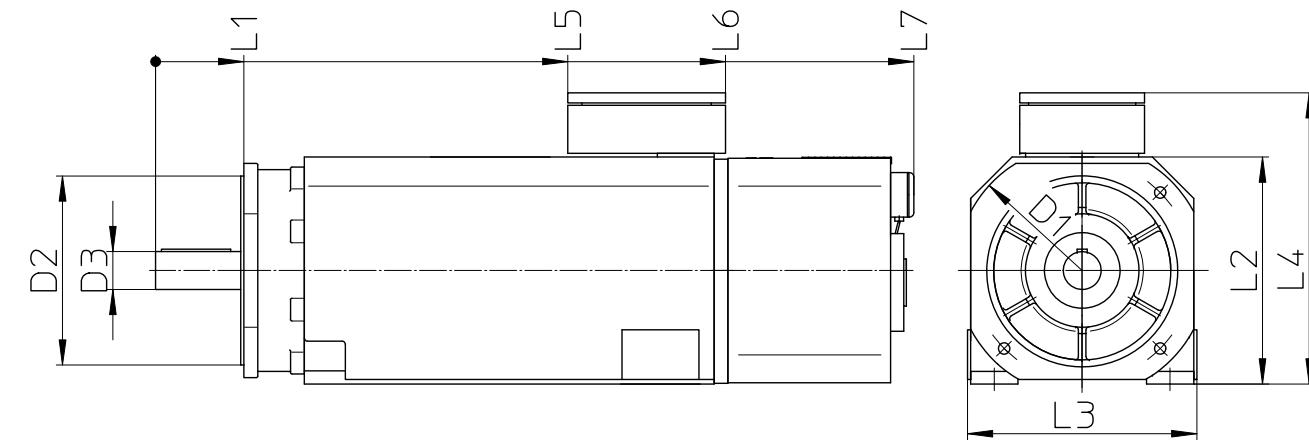
[Release unit]

Air-cooled motors

Size 132 - 180

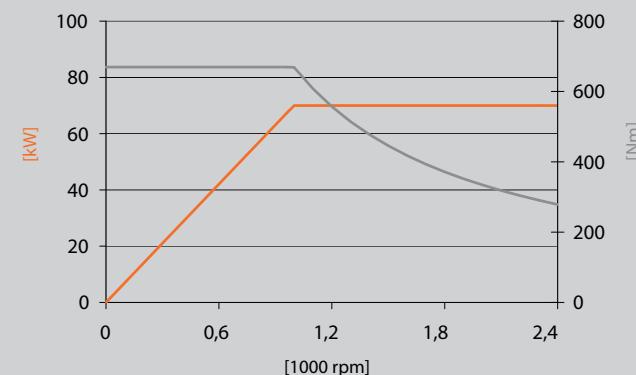


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
400	300	60	—	—	—	140	279	360	462	654	904	1203

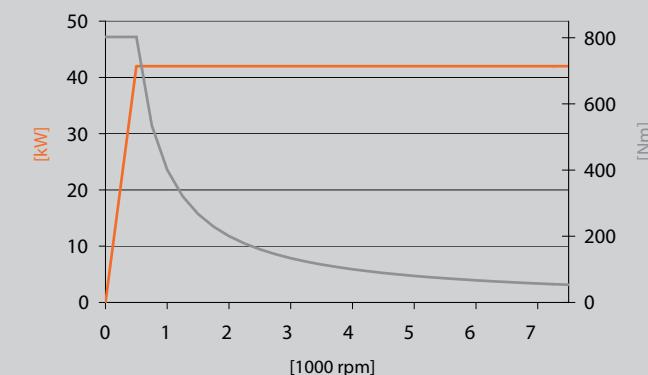


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7
400	300	60	—	—	—	140	360	364	462	654	904	1203

Model	DMQ 180-601.841
Torque S1	[Nm] 477.0
Torque S6 (40%)	[Nm] 668.0
Power S1	[kW] 48.0
Power S6 (40%)	[kW] 70.0
Speed	[rpm] 2,400
Weight	[kg] 530
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMQ 180-608.166
Torque S1	[Nm] 534.0
Torque S6 (40%)	[Nm] 802.0
Power S1	[kW] 28.0
Power S6 (40%)	[kW] 42.0
Speed	[rpm] 7,500
Weight	[kg] 530
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



[Temperature sensor PT-100]

[Leakage monitoring]

[Rotary union]

[Release unit]

[Temperature sensor PT-100]

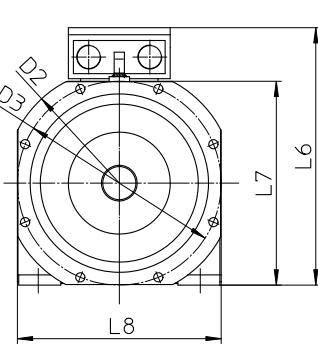
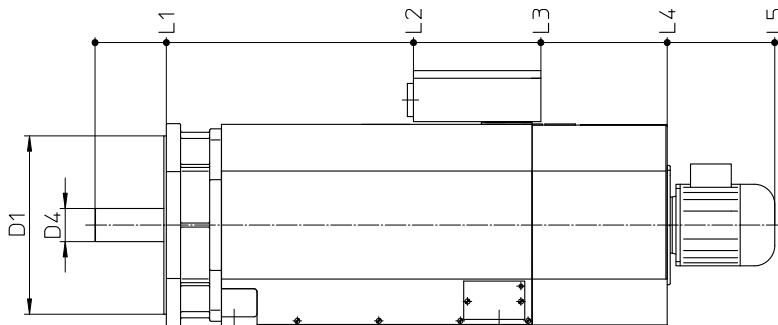
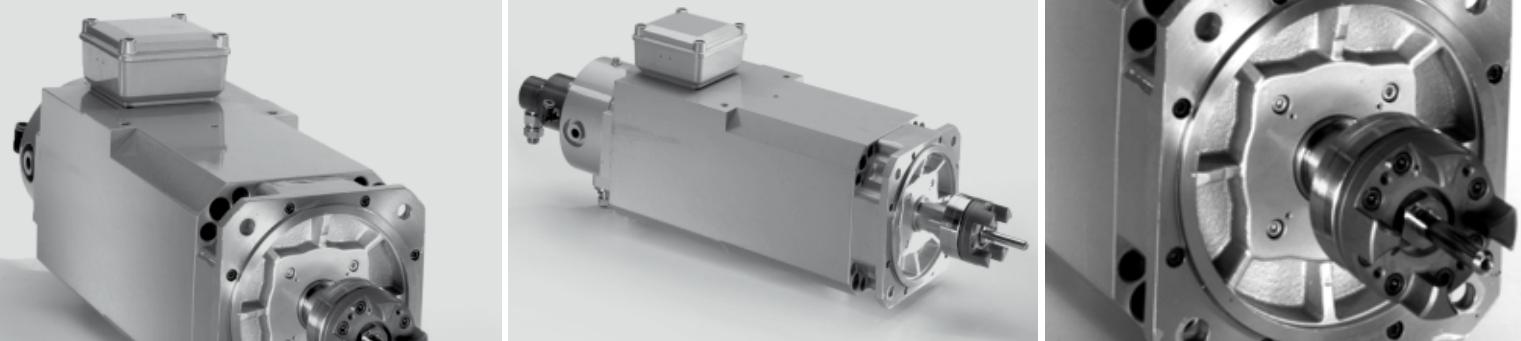
[Leakage monitoring]

[Rotary union]

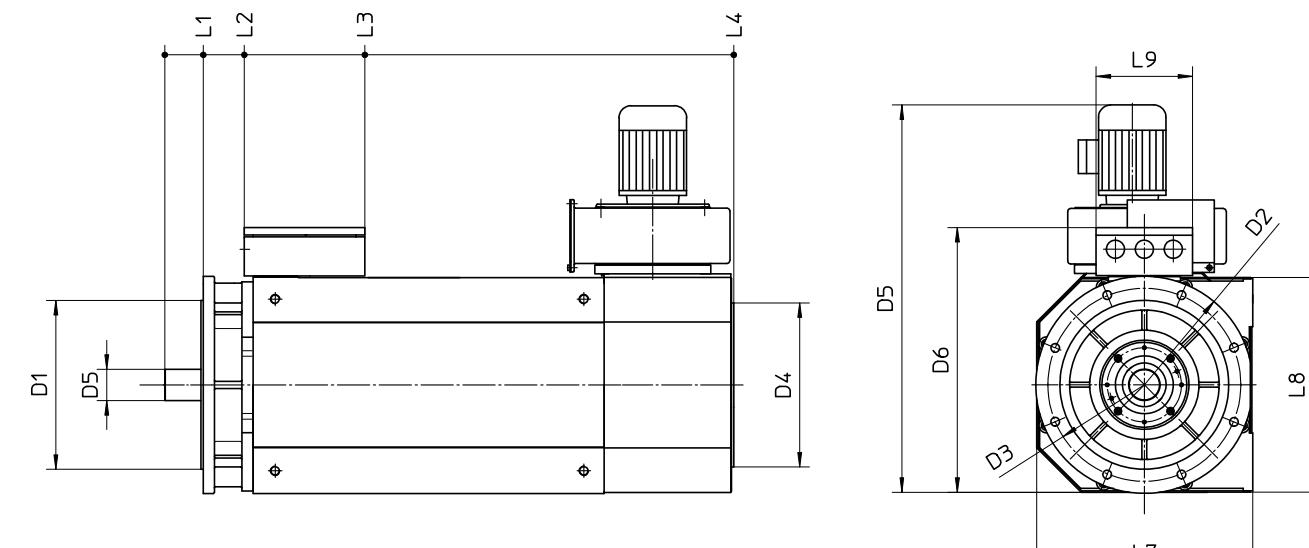
[Release unit]

Air-cooled motors

Size 200 - 250

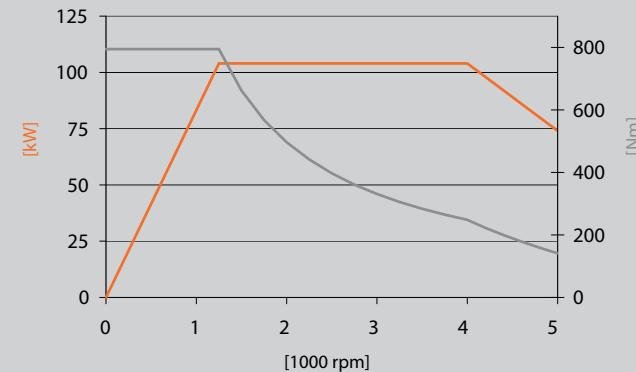


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8
350	450	400	64	—	—	140	625	875	1123	1334	505	400	400

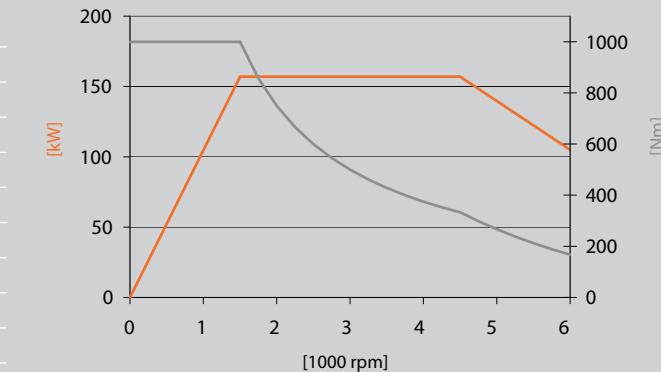


D1	D2	D3	D4	D5	D6	L1	L2	L3	L4	L5	L6	L7	L8	L9
350	450	400	340	65	—	80	165	415	1180	803	549	448	445	200

Model	DMQ 200-604.475
Torque S1	[Nm] 565.0
Torque S6 (40%)	[Nm] 792.0
Power S1	[kW] 74.0
Power S6 (40%)	[kW] 104.0
Speed	[rpm] 5,000
Weight	[kg] 600
Motor type	asynchronous
Interface	Cylinder with feather key
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



Model	DMQ 225-608.448
Torque S1	[Nm] 668.0
Torque S6 (40%)	[Nm] 1,000.0
Power S1	[kW] 105.0
Power S6 (40%)	[kW] 157.0
Speed	[rpm] 6,000
Weight	[kg] 800
Motor type	asynchronous
Interface	Cylinder shaft
Cooling	air
Bearing lubrication	lubricated with grease
Control	Siemens/Fanuc/Heidenhain



- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]

- [Temperature sensor PT-100]
- [Leakage monitoring]
- [Rotary union]
- [Release unit]



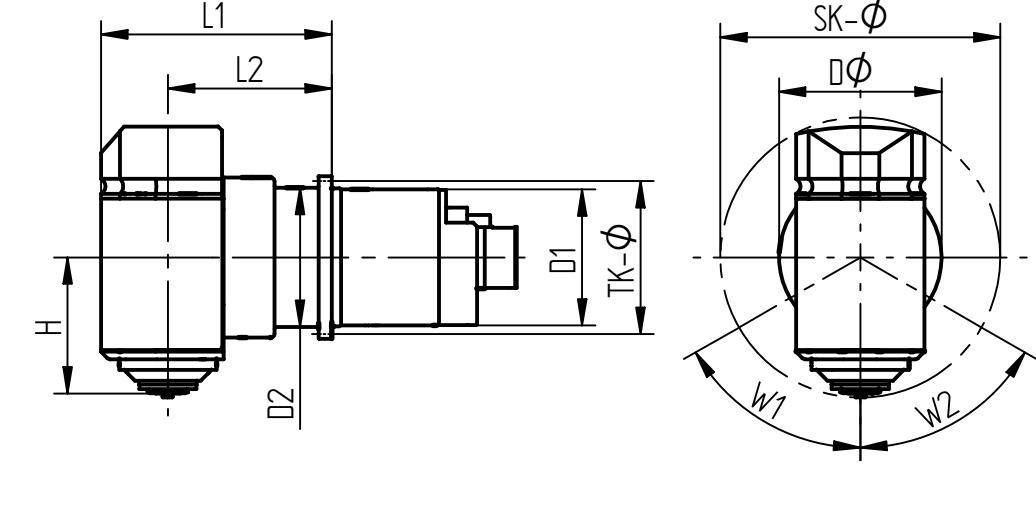
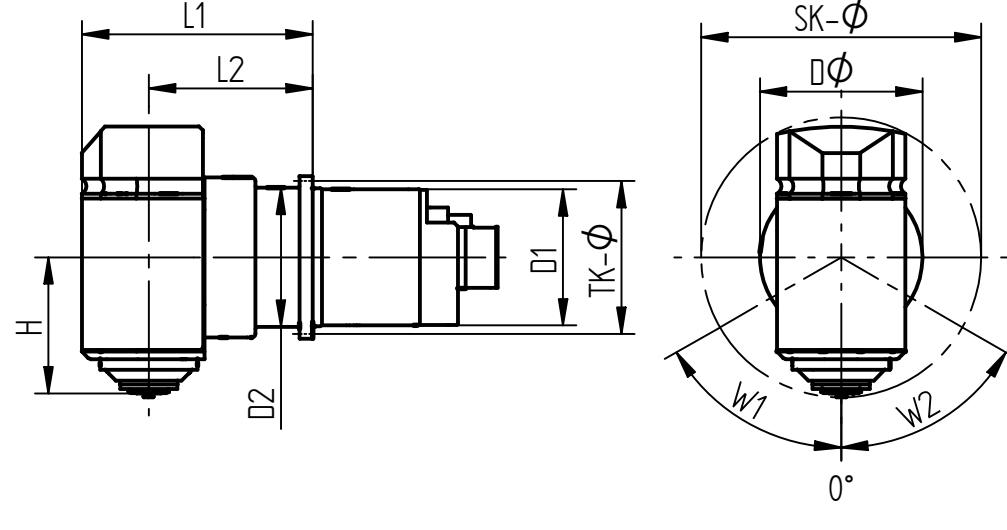
Swivelling spindle heads represent a compact, rigid solution for machining medium-sized and large workpieces on portal and gantry machines. 5-axis machining enables very efficient, precise machining of workpieces and therefore also reduces possible reductions in accuracy due to reclamping processes. Driven by torque motor technology from KESSLER, a dynamic is achieved which is required especially when milling very filigree and narrow workpiece contours.

High positioning accuracy of up to $\pm 2''$, hydraulic clamping, rotary union, large swivelling angle and absolute encoders are a guarantor for exact machining results.

KESSLER offers the appropriate standardised swivelling spindles for the swivelling spindle heads.

Swivelling spindle heads

1-axis

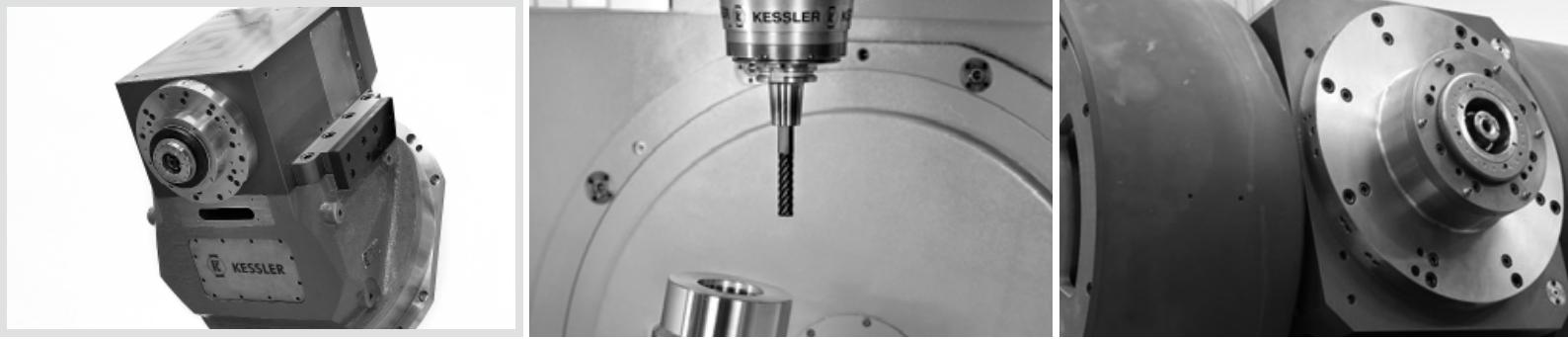


Model	SWS 029-642.090
Rated torque	[Nm] 730.0
Rated torque max.	[Nm] 1,000.0
Clamping torque Pmax	[Nm] 4,000.0
Clamping torque Po	[Nm] —
Swivelling angle	[°] ±110°
Clamp	hydraulic
Positioning accuracy	[°] ±5°
Weight	[kg] 650
Rotary union	●
Suitable motor spindles	DMS 642.089 others on request

Model	SWS 036-625.985*
Rated torque	[Nm] 2,000.0
Rated torque max.	[Nm] 2,720.0
Clamping torque Pmax	[Nm] 4,000.0
Clamping torque Po	[Nm] 2,000.0
Swivelling angle	[°] ±120°
Clamp	pneumatic
Positioning accuracy	[kg] ±5°
Weight	[kg] 600
Rotary union	—
Suitable motor spindles	Swivelling spindles for SMALL 2 AK on page 82 ff

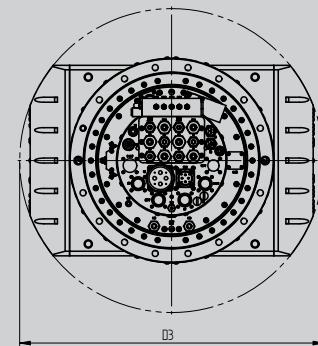
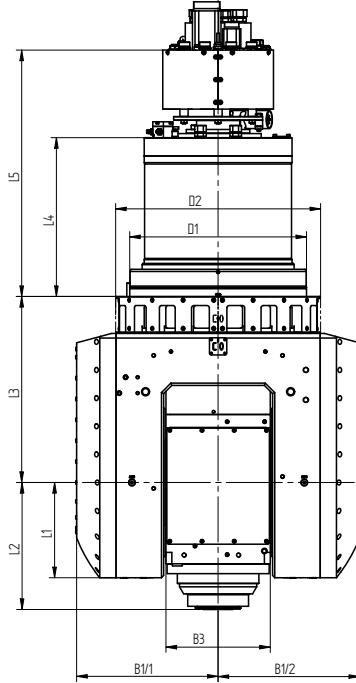
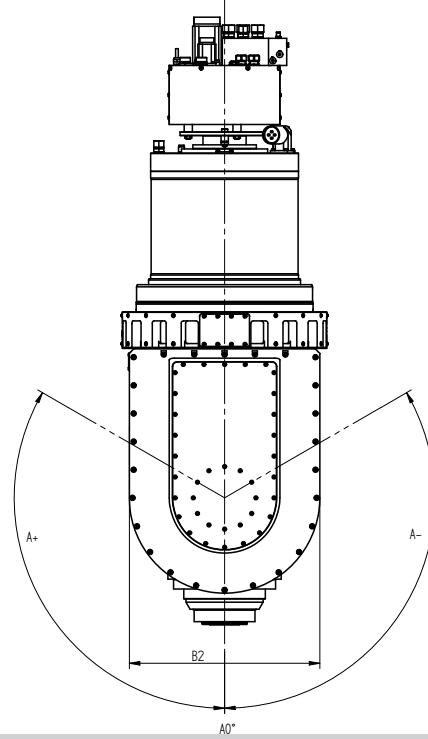
*Concept phase of the standard series, subject to technical and dimensional modifications.

Swivelling spindle heads 2-axis



Head size	MINI-2 AK*	SMALL-2 AK	MEDIUM-2 AK*	LARGE-2 AK*
A-axis	SWE 021-641.854	SWE 036-648.835	SWE 042-634.949	SWE 053-624.148
Rated torque [Nm]	200	382	1,060	2,500
Maximum torque [Nm]	370	575	1,600	3,400
Clamping torque at P max [Nm]	1,200	2,160	6,000	8,000
Clamping torque at P 0 [Nm]	670	1,200	600	1,000
Clamp	pneumatic	pneumatic	hydraulic	hydraulic
Swivelling angle [°]	±105	±105	±105	±105
Positioning accuracy ["]	±5	±5	±5	±5
C-axis	SWE 019-641.984	SWE 029-648.836	SWE 036-634.950	SWE 053-624.149
Rated torque [Nm]	240	810	2,100	3,600
Maximum torque [Nm]	550	1,100	3,200	4,000
Clamping torque at P max [Nm]	1,200	1,680	4,000	8,000
Clamping torque at P 0 [Nm]	670	930	300	1,000
Clamp	pneumatic	pneumatic	hydraulic	hydraulic
Swivelling angle [°]	±200	±200	±200	±200
Positioning accuracy ["]	±2	±3	±2	±2
Options				
Second motor in A-axis	●			
Extended swivelling range	●	●	●	●
Hydraulic clamping	●	●		
Second clamp C-axis	●			
Clamping pressure monitoring	●			
Absolute encoder C-axis	●			
Shortened C-axis (L3)	●			
Rotary union C-axis	●	●	●	●
Pressure monitoring bearing	●			
Extended swivelling angle C-axis	●	●	●	●
Horizontal installation position	●			
Additional information				
Gross weight [kg]	400	580	1,500	2,400
Suitable swivelling spindles	see product range swivelling spindles - on catalogue page 82 ff			

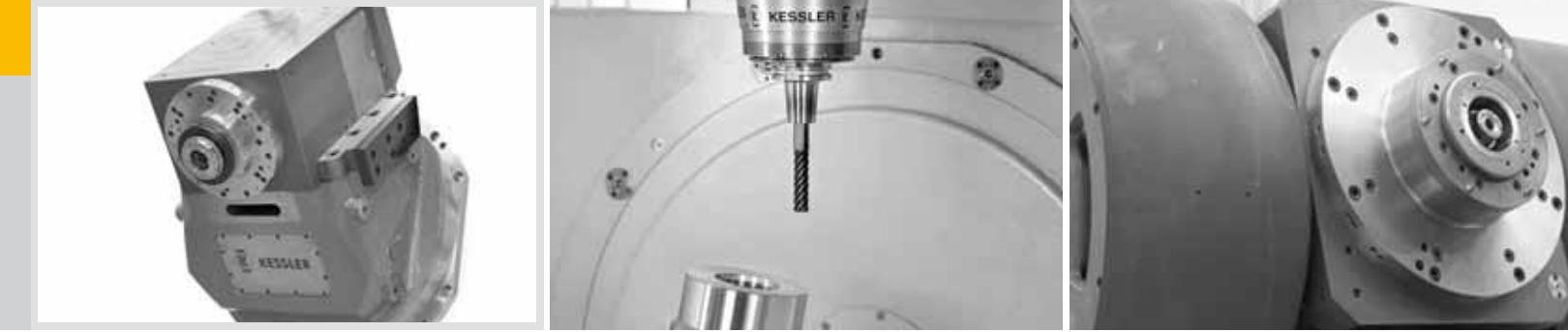
*Concept phase of the standard series, subject to technical and dimensional modifications.



Dimension [mm]	MINI*	SMALL	MEDIUM*	LARGE*
D1	310	335	420	605
D2	380	406	530	710
B1/1	182	312	372.5	500
B1/2	239	312	372.5	500
B2	270	420	540	680
B3	150	240	312	440
L1	915	1297	1675	1860
L2	300	470	615	763.5
L3	135	190	270	335
L4	150	90	139	95
L5	150	197	330	433.5
D3	508	670	920	1210

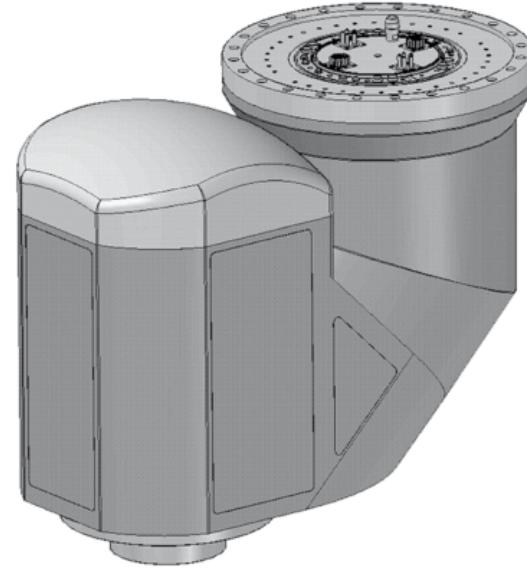
*Concept phase of the standard series, subject to technical and dimensional modifications.

Swivelling spindle heads Project business



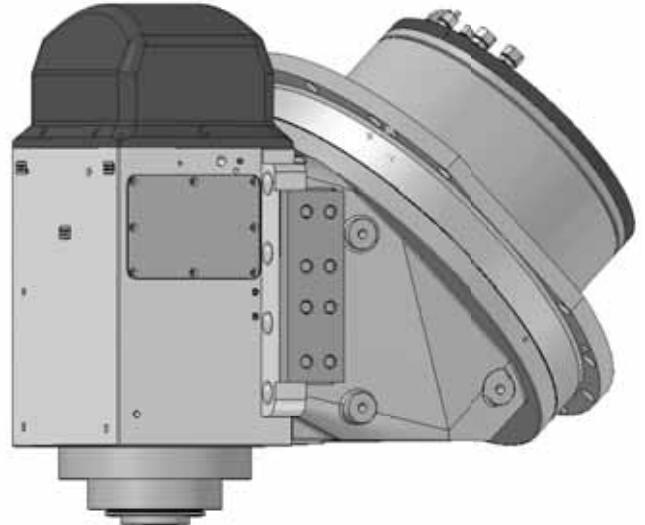
SWS - 45° head SMALL and MEDIUM

The illustrated 45° head can either be installed on the C-axis of the KESSLER 2-axis heads SMALL and MEDIUM or alternatively integrated in the machine as a 1-axis unit.



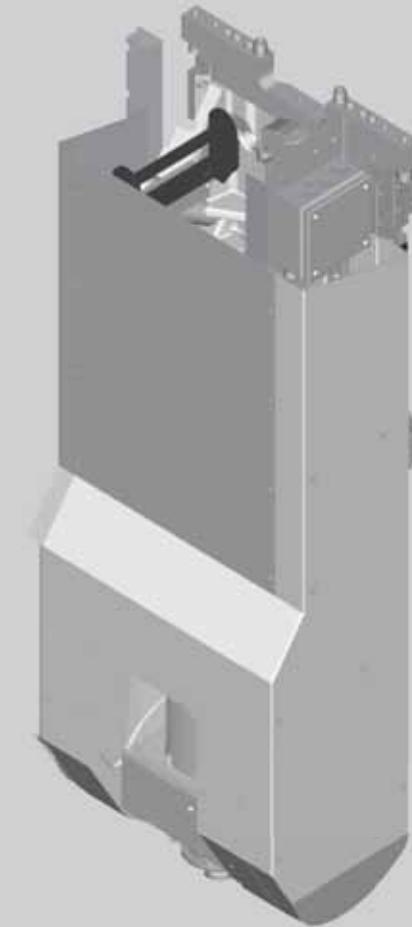
SWS - 45° head

The 45° head is suitable for direct installation in the machine structure. The angular structure enables horizontal and vertical movement with simultaneous milling. The head has the proven KESSLER torque motor drive.



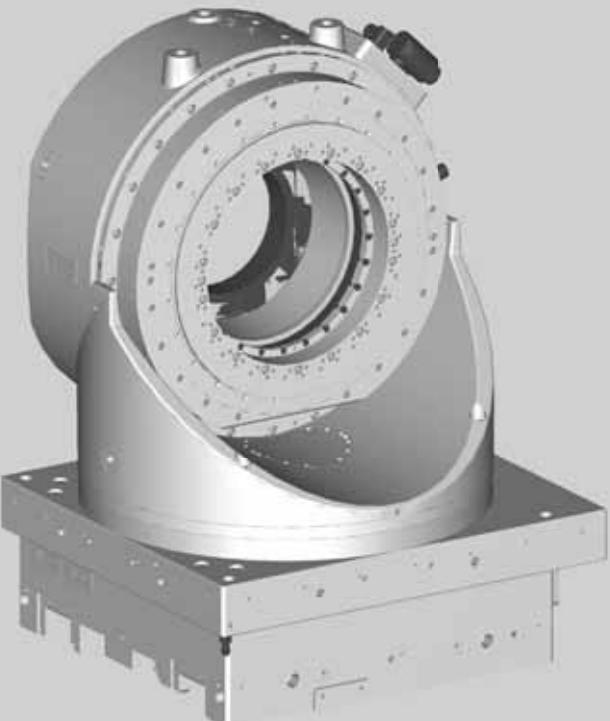
SWS - Swivelling head with Z-slide

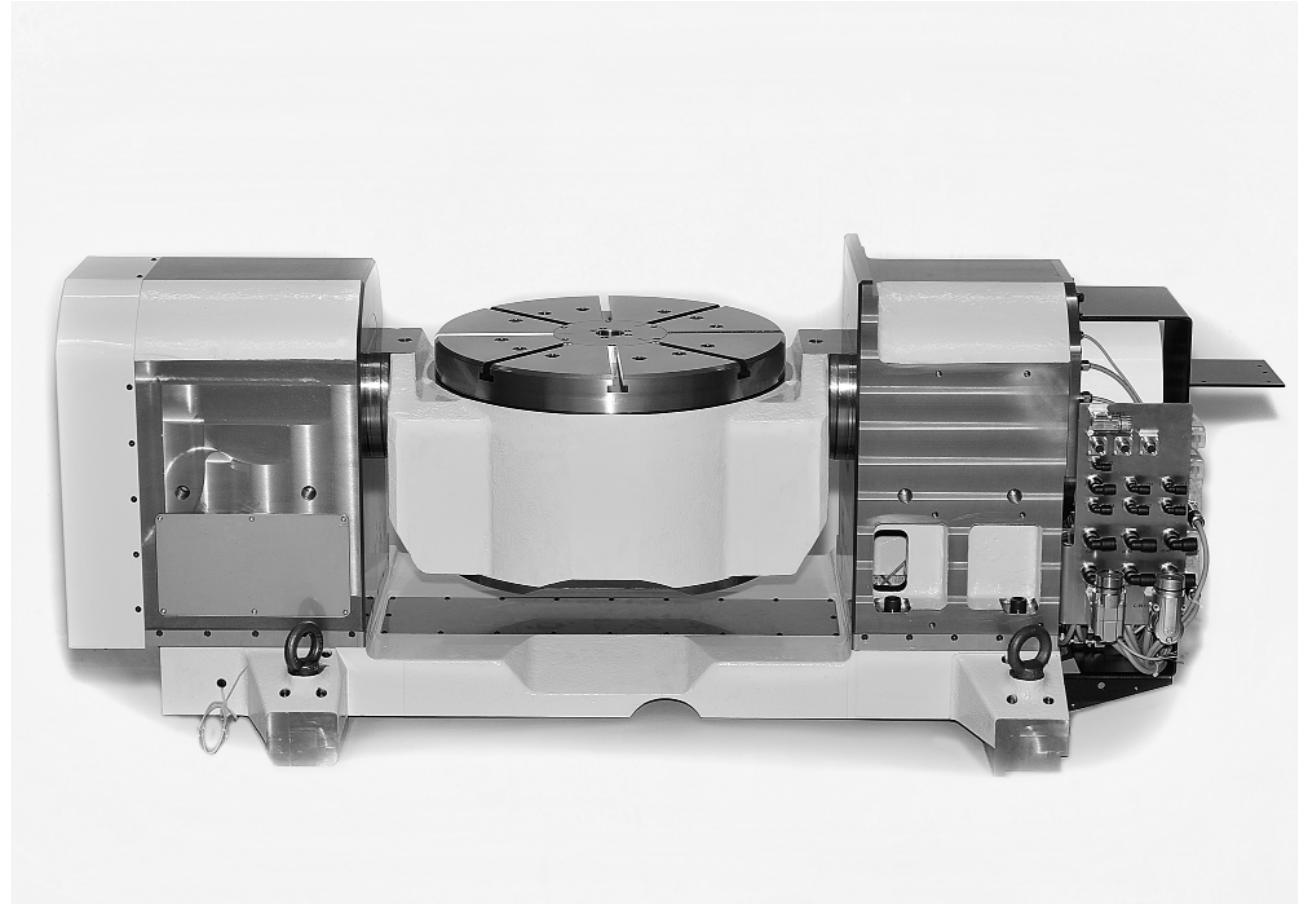
The swivelling head with Z-slide, consisting of the swivelling unit and the swivelling spindle, represents a "plug and play"-compatible product. The swivelling head is installed complete with all connections and guide shoes. The head can be installed and connected immediately after delivery. All necessary media connections are already present. Thanks to such a solution, installation work on assembly is considerably reduced.



SWS - honing head

The honing head shown is used for machining toothed wheels. Due to the opposing movement of the workpiece counter-spindle and of the head, the workpiece is consistently honed on the tooth surfaces. The direct drive enables precise control. This is reflected in an optimum machining result.





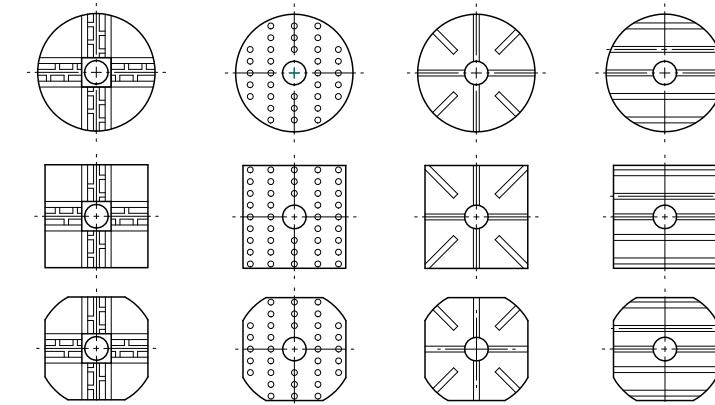
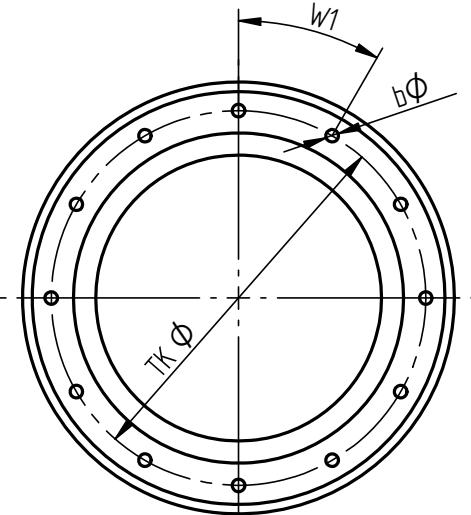
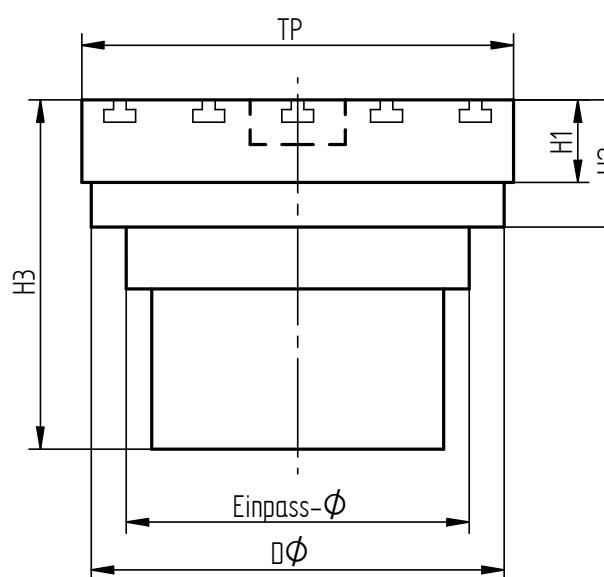
Workpiece axes from KESSLER have established themselves on the market. A distinction is made here between 1-axis rotating tables, rotary table inserts and 2-axis rotary-swivel tables. With all drives, the successful KESSLER torque motor forms the basis with high dynamics, high torque and compact dimensions. The direct drive on all axes allows a surface finish, which can not be reached with mechanical drives. Various options such as table clamping, rotary union, high-precision positioning and large table payload enable maximum flexibility for modern, multi-axis machining centres.

In addition to the basic version, KESSLER also offers the ability to extend the range of applications with fast rotating tables.

Workpiece axes

1-axis

Entry series



Dimension [mm]	400*	500*	630*	800*	1.000*	1.250*
TP	400	500	630	800	1.000	1.250
H1	50	75	75	95	105	130
H2	120	150	150	180	190	200
H3	340	395	450	490	500	510
EPØ	350	425	520	660	750	860
DØ	380	480	610	780	980	1230
W1	30°	30°	30°	30°	30°	30°
TKØ	365	450	565	720	865	1045
bØ	9	9	11	11	13,5	13,5

DTE - table top	400*	500*	630*
Entry			
DTE 040-655.022	DTE 050-655.023	DTE 063-655.024	
Maximum table loading [kg]	800	1,200	1,200
Maximum speed [rpm]	100	100	100
Torque S1/Smax [Nm]	400/600	700/1,050	1,580/2,370
Breakdown torque (depending on the load) [Nm]	5,000	7,000	7,500
Further specifications			
Type of clamping	hydraulic	hydraulic	hydraulic
Clamping torque [Nm]	2,000	2,500	3,500
Positioning accuracy ["]	±10	±10	±10
Radial runout [µm]	30	40	40
Concentricity [µm]	20	30	30
Options			
Positioning accuracy 2.5"			
Media rotary union	●	●	●
Integrated safety clamping system	●	●	●
Pneumatic clamping system			
Table in horizontal position	●	●	●

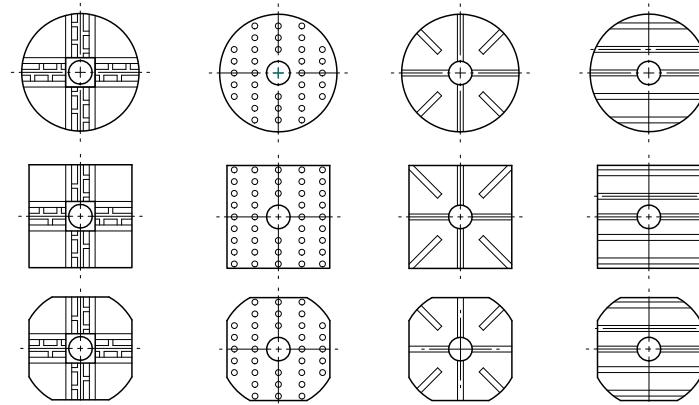
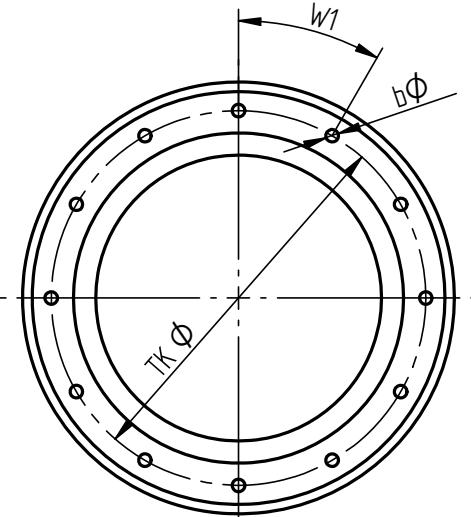
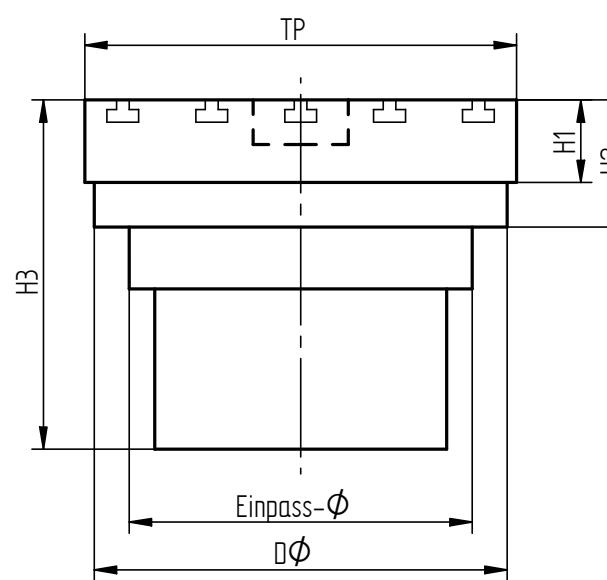
DTE - table top	800*	1,000*	1,250*	Entry
DTE 080-655.025	DTE 100-655.026	DTE 125-655.027		
2,000	3,000	4,500	[kg]	Maximum table loading
75	75	50	[rpm]	Maximum speed
2,250/3,830	4,500/6,750	5,780/8,100	[Nm]	Torque
19,000	26,000	34,000	[Nm]	Breakdown torque (depending on the load)
Further specifications				
hydraulic	hydraulic	hydraulic		Type of clamping
5,000	6,000	8,000		Clamping torque
±10	±10	±10	["]	Positioning accuracy
40	40	40		Radial runout
30	30	30		Concentricity
Options				
Positioning accuracy 2.5"				Positioning accuracy 2.5"
Media rotary union	●	●	●	Media rotary union
Integrated safety clamping system	●	●	●	Integrated safety clamping system
Pneumatic clamping system				Pneumatic clamping system
Table in horizontal position	●	●	●	Table in horizontal position

*Concept phase of the standard series, subject to technical and dimensional modifications.

Workpiece axes

1-axis

Standard series



Dimension [mm]	400*	500*	630*	800*	1.000*	1.250*
TP	400	500	630	800	1.000	1.250
H1	50	75	75	95	105	130
H2	120	150	150	180	190	200
H3	340	395	450	490	500	510
EPØ	350	425	520	660	750	860
DØ	380	480	610	780	980	1230
W1	30°	30°	30°	30°	30°	30°
TKØ	365	450	565	720	865	1045
bØ	9	9	11	11	13,5	13,5

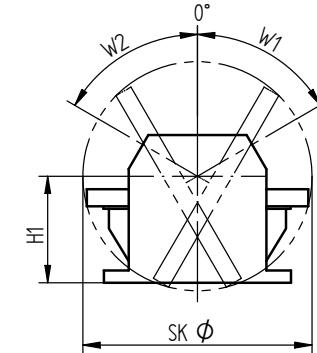
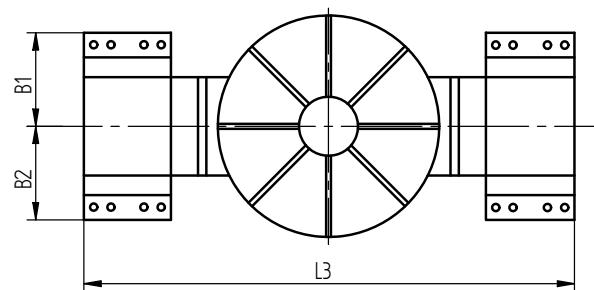
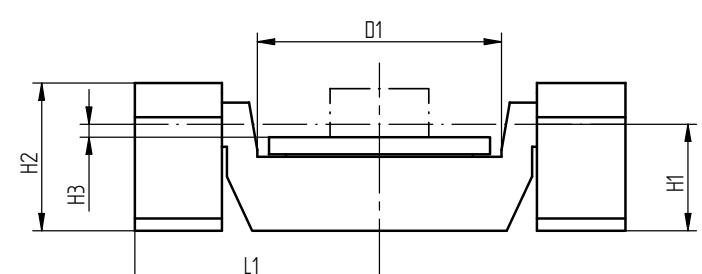
DTE - table top	400*	500*	630*
Standard	DTE 040-654.920	DTE 050-654.921	DTE 063-654.922
Maximum table loading [kg]	800	1,200	1,200
Maximum speed [rpm]	100	100	100
Torque S1/Smax [Nm]	500/1,000	790/1,580	1,700/3,400
Breakdown torque (depending on the load) [Nm]	5,000	7,000	7,500
Option fast rotating	DTE 040-654.926	DTE 050-654.927	DTE 063-654.928
Maximum table loading [kg]	300	600	800
Maximum speed [rpm]	1,300	1,000	1,000
Torque S1/Smax [Nm]	620/870	960/1,340	1,950/2,730
Breakdown torque (depending on the load) [Nm]	2,500	4,500	4,400
Further specifications			
Type of clamping	hydraulic	hydraulic	hydraulic
Clamping torque [Nm]	3,000	3,500	4,500
Positioning accuracy ["]	±5	±5	±5
Radial runout [µm]	15	20	20
Concentricity [µm]	10	10	15
Options			
Positioning accuracy 2.5"	●	●	●
Media rotary union	●	●	●
Integrated safety clamping system	●	●	●
Pneumatic clamping system	●	●	●
Table in horizontal position	●	●	●

DTE - table top	800*	1,000*	1,250*	DTE - table top
Standard	DTE 080-654.923	DTE 100-654.924	DTE 125-654.925	Standard
Maximum table loading [kg]	2,000	3,000	4,500	Maximum table loading
Maximum speed [rpm]	75	75	50	Maximum speed
Torque [Nm]	2,860/5,720	5,000/9,000	6,740/12,130	Torque
Breakdown torque (depending on the load) [Nm]	19,000	26,000	34,000	Breakdown torque (depending on the load)
Option fast rotating	DTE 080-654.929	DTE 100-654.930	DTE 125-654.931	Option fast rotating
Maximum table loading [kg]	1,000	1,500	2,500	Maximum table loading
Maximum speed [rpm]	800	600	400	Maximum speed
Torque [Nm]	3,150/4,410	5,100/7,140	6,300/8,820	Torque
Breakdown torque (depending on the load) [Nm]	7,500	12,500	18,000	Breakdown torque (depending on the load)
Further specifications				Further specifications
Type of clamping	hydraulic	hydraulic	hydraulic	Type of clamping
Clamping torque [Nm]	5,000	7,500	10,000	Clamping torque
Positioning accuracy ["]	±5	±5	±5	Positioning accuracy
Radial runout [µm]	20	25	25	Radial runout
Concentricity [µm]	5	20	20	Concentricity
Options				Options
Positioning accuracy 2.5"	●	●	●	Positioning accuracy 2.5"
Media rotary union	●	●	●	Media rotary union
Integrated safety clamping system	●	●	●	Integrated safety clamping system
Pneumatic clamping system	on request	on request	on request	Pneumatic clamping system
Table in horizontal position	●	●	●	Table in horizontal position

*Concept phase of the standard series, subject to technical and dimensional modifications.

Workpiece axes

2-axis



Dimension [mm]	300°/400°	400°/500°	500°/630°	630°/800°	800°/1,000°	1,000°/1,250°
H1	.	.	.	267°	.	.
H2	.	.	.	430°	.	.
H3
D1	.	.	.	803°	.	.
L1	.	.	.	997°	.	.
L3	.	.	.	1884°	.	.
B1	.	.	.	250/330°	.	.
B2	.	.	.	250/330°	.	.
W1	.	.	.	+125°	.	.
W2	.	.	.	-100°	.	.
SKØ	.	.	.	1100°	.	.

DTS - table top Ø	300°/400°	400°/500°	500°/630°	
B-axis - rotary table				
Maximum table loading	[kg]	350	500	850
Maximum speed	[rpm]	100	100	100
Torque S1/Smax	[Nm]	160/300	540/700	800/1,200
Clamping torque	[Nm]	1,500	2,000	2,500
A-axis - swivel blocks				
Swivelling range	[°]	+125/-100	+125/-100	+125/-100
Maximum speed	[rpm]	100	100	100
Torque S1/Smax	[Nm]	200/300	1,050/1,300	1,600/2,400
Clamping torque 0 bar / max. bar	[Nm]	500/2,000	400/3,000	800/4,000
Further specifications				
Clamping system	hydraulic	hydraulic	hydraulic	
Positioning accuracy	["]	±5	±5	±5
Radial runout	[µm]	8	15	20
Concentricity	[µm]	10	10	10
Options				
Positioning accuracy 2.5"	●	●	●	
Rotary union for pallet change	●	●	●	
Integrated safety clamping system	●	●	●	
Pneumatic clamping system	●	●	●	

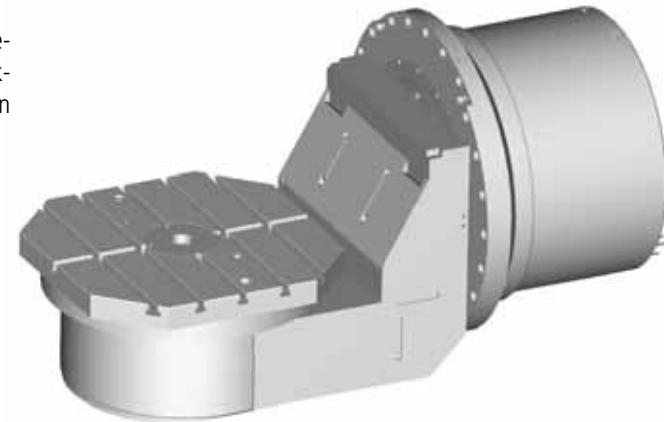
630°/800°	800°/1,000°	1,000°/1,250°	DTS - table top Ø
DTE 080-900.013	DTE 100-900.014	DTE 125-900.015	B-axis - rotary table
1,200	2,000	3,000	Maximum table loading
75	75	50	[kg]
1,250/1,700	2,600/4,150	4,500/6,500	Maximum speed
3,500	4,000	6,500	[Nm]
SWE 053-900.019	SWE 068-900.020	SWE 076-900.021	Torque S1/Smax
+125/-100	+125/-100	+125/-100	Clamping torque
100	100	100	[°]
2,500/3,400	5,300/9,000	7,725/11,000	Maximum speed
1,500/5,000	2,000/6,500	3,000/9,000	[Nm]
A-axis - swivelling axis			
+125/-100	+125/-100	+125/-100	Swivelling range
100	100	100	[rpm]
2,500/3,400	5,300/9,000	7,725/11,000	Maximum speed
1,500/5,000	2,000/6,500	3,000/9,000	[Nm]
Further specifications			
hydraulic	hydraulic	hydraulic	Clamping system
±5	±5	±5	Positioning accuracy
20	20	25	[µm]
15	15	20	Radial runout
10	10	10	Concentricity
Options			
●	●	●	Positioning accuracy 2.5"
●	●	●	Rotary union for pallet change
●	●	●	Integrated safety clamping system
●	●	●	Pneumatic clamping system

*Concept phase of the standard series, subject to technical and dimensional modifications.



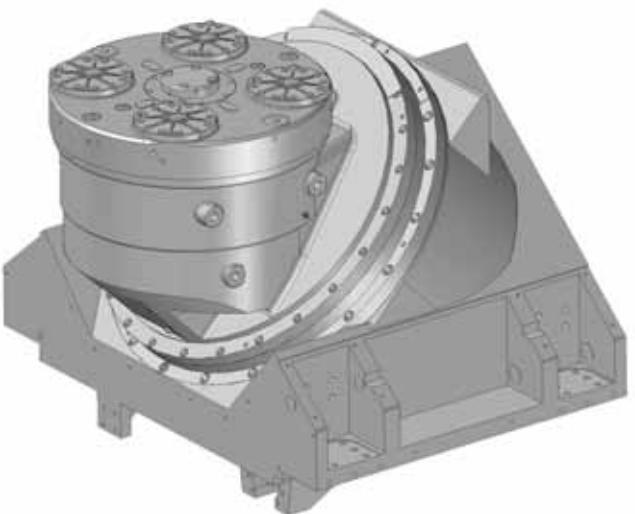
1-arm rotary swivel table

Version of a rotary swivel table with simplified table loading. Because the bridge shoulder is only required on one side, the workpiece is more easily accessible for machining. The main use is in highly productive machines for automotive applications.



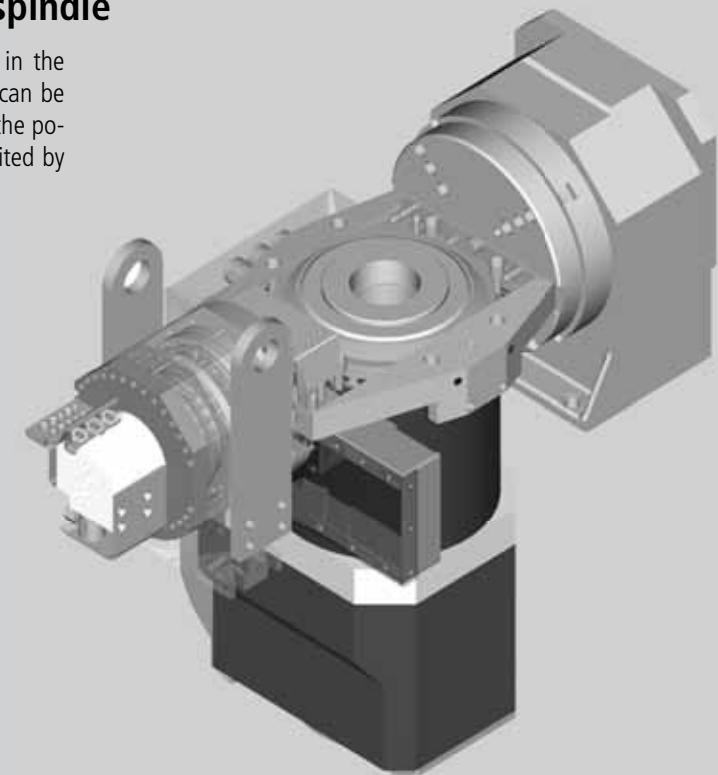
45° rotary swivelling table

The 45° rotary swivelling table enables vertical and horizontal machining in very confined spaces. By inserting the table into the cast housing as a cartridge, the complete component can be adjusted to the individual machine structure. Additional components such as the illustrated zero point mounting system ensure high-precision machining results.



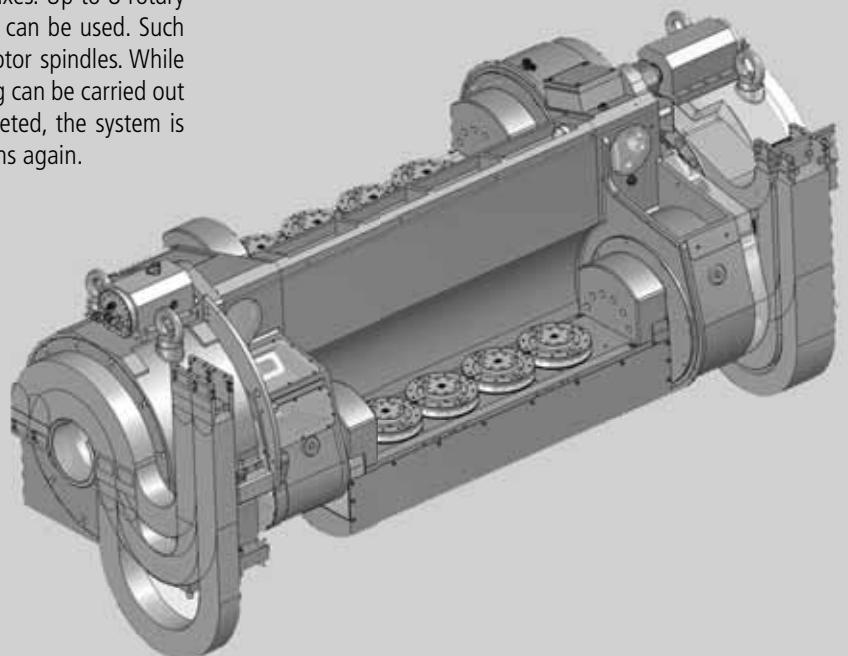
Swivelling table with workpiece spindle

The workpiece spindle for turning is directly integrated in the swivelling bridge. The advantage is obvious. Workpieces can be machined from different sides without having to change the position of the machining spindle. The workpiece size is limited by the very compact design.



Multi-axis swivelling system

The system has a total of 11 directly driven axes. Up to 8 rotary tables with a table top diameter of 200 mm can be used. Such a system is installed in a machine with 4 motor spindles. While machining is carried out on one side, retooling can be carried out on the other side. When machining is completed, the system is swivelled through 180° and the process begins again.



KESSLER Service offers you fast, comprehensive help for service and maintenance. In the case of repairs, a detailed incoming inspection is carried out. The product is dismantled. The results are analysed and summarised in the repair quote and forwarded to the customer. After cost authorisation, the repair is carried out by experienced service engineers.

Service network

KESSLER provides you with an international network of service offices and service partners. With our own branches in the USA and China, spindles can be inspected locally and many repairs carried out directly so that the spindle is readily available to you again.

Expertise

The many years of experience as a manufacturer of directly driven motor spindles, motors and multi-axis components ensure maximum quality and accuracy. We guarantee it.

Service centre

Our team of experts currently with 68 employees in the service team will be pleased to answer your questions at any time regarding service, repair and maintenance.



Our range of services

- » Repair centre in Bad Buchau
- » Spindle service world-wide
- » Reliable on-the-spot service

- » Spindle repair
- » General spindle overhaul
- » Technical fault analysis
- » Technical telephone helpline
- » On site service
- » Individual service agreements
- » Training
- » Replacement parts service

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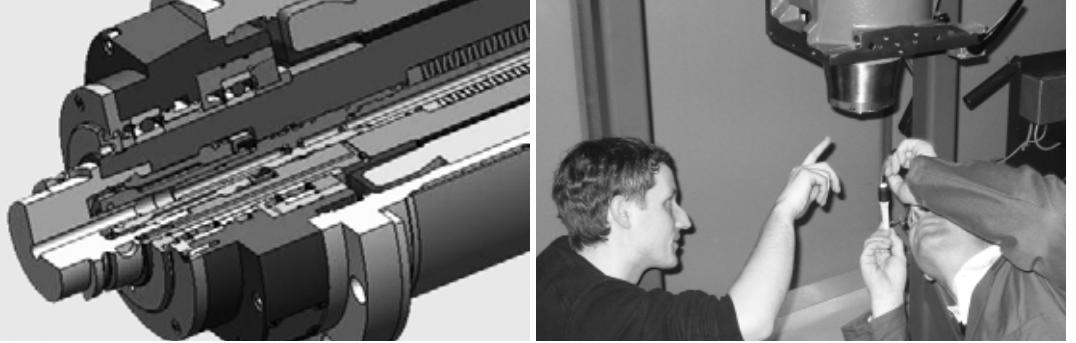


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The KESSLER Akademie was founded in 2009 and focuses mainly on the machine tool industry.

The seminars are aimed at people who have to meet technical requirements when handling state-of-the-art machine tools. Based on many years of experience in the development and production of high-precision, directly-driven components for the machine tool industry, the participants can rely on KESSLER's experience to gain a deeper understanding of motor spindles.

The KESSLER Akademie seminars offer training in the basic theory principles. The training includes putting that which has been learnt into practice by means of detailed hands-on exercises.

The practical course content is demonstrated on KESSLER products to give participants confidence in carrying out preventative maintenance. Future courses are to be developed for the KESSLER Akademie which will include seminars on how to meet increasing requirements for efficiency in regards to production and preventative maintenance.

The Academy's aim is to impart knowledge of motor spindles so



that problems can be detected quickly; preventative maintenance can be carried out in a timely manner; and costs and unplanned machine down-times can be reduced.

Seminars on motor spindles - Design, function and maintenance

Individual
training

Special training tailored to your service requirements. In-depth disassembly of products under the instruction of experienced KESSLER trainers.

Practical
training

1-day on-site practical training on the machines based on the basic theory principles, e.g. tool change, collet chuck change, fault diagnosis, trouble shooting and maintenance.

Basic theory

1-day seminar on design of the motor spindle, core components used, mode of operation as well as training on the technical background make up the first part of the course.

SUMMARY

The problems:

High downtimes, resulting machine standstill times, reduced product quality, reduced customer satisfaction, damage to reputation with customers and on the market.

The solution:

The KESSLER Akademie provides specialist knowledge for handling, operating and maintaining motor spindles. Specific development of knowledge with regard to handling motor spindles

The target group:

Machine operators, service personnel, machine tool manufacturers, purchasers and designers, who come into contact with components of the motor spindle in connection with design or procurement.

Certification

The KESSLER Akademie was certified by TÜV Süd as a institution of education.



Further information and support concerning
the KESSLER Akademie

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mail: akademie@franz-kessler.de

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