

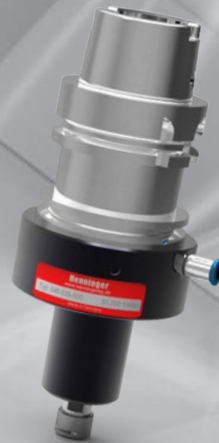
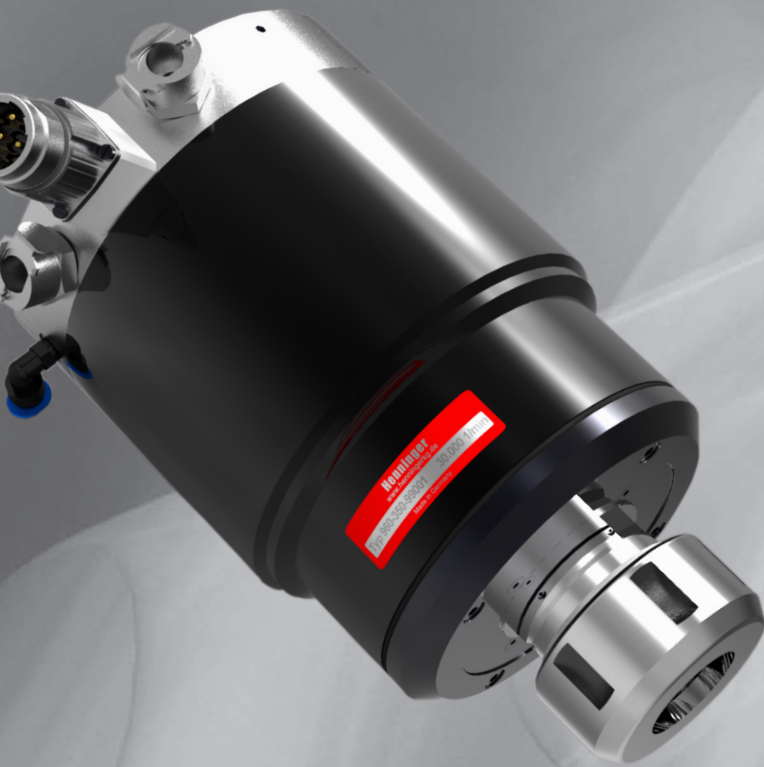
Henninger

P R Ä Z I S I O N S T E C H N I K

Spindles

Type

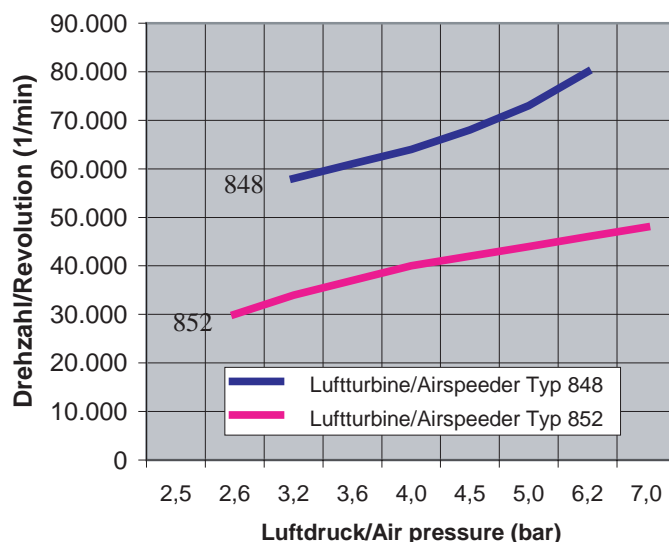
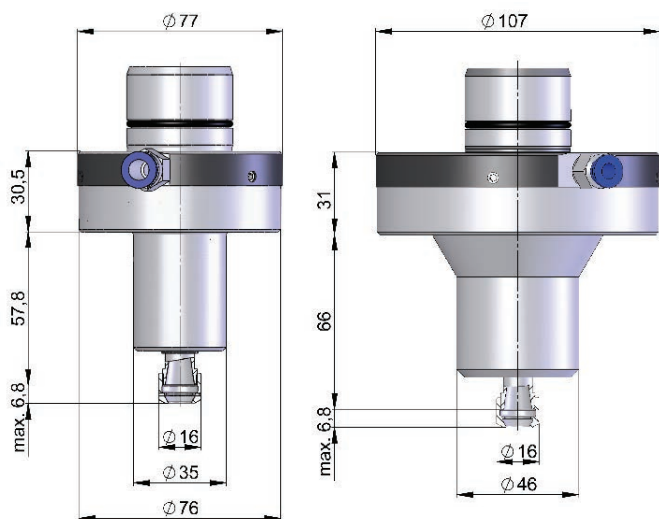
848/852/890/940/960/965



Air-Speeder Type 848 / 852

- Optimum speed for small tools
- High efficiency turbo - motor
- Permanent lubrication
- High precision preloaded bearings
- Interchangeable shanks
- Available for automatic tool change
- Quiet in operation
- Air supply central or lateral

Type	848	852
Input shank modular	all common shanks	all common shanks
Tool holder	Collets DIN 6499	Collets DIN 6499
Clamping range	Ø 1 - 7mm	Ø 1 - 7mm
max. speed min ⁻¹	80.000	48.000
max. power Watt	810	1080
Air consumption L/min	280	440
Power at 5 bar approx. Watt	540	720
Abrasive wheel Ø max.	6	13
Spindle bearings pc.	2	2
Noise level approx. dBA	83	83
Lubrication	permanent grease	permanent grease
Weight with modular shank SK 40 approx.	2,8	3,8



Spindle Units Type 890



Design according to the customer's request

We need following dates:

Application

Dimensions




Speed range




Power

Input

Output

HF-Spindles Type 940

			
Type	940-054-X	940-058-X	940-060-X
rpm (min ⁻¹)	30 000 min ⁻¹ /60 000 min ⁻¹	20 000 min ⁻¹ /30 000 min ⁻¹	20 000 min ⁻¹ /30 000 min ⁻¹
max. power (kW)	0,25 / 0,5	0,2	0,2
max. torque (Nm)	0,095	0,095	0,095
Output	Collet/HSK/Arbor	Collet/HSK/Arbor	Collet/HSK/Arbor
Dimensions	Ø 54 x 210	Ø 58 x 147	Ø 60 x 147
Options	A/S	A/S	A/S

			
Type	940-072-X	940-080-X	940-100-X
rpm (min ⁻¹)	16 000 min ⁻¹ /30 000 min ⁻¹	16 000 min ⁻¹	12 800 min ⁻¹
max. Leistung (kW)	0,7 / 1,0	1,3	1,3
max. torque (Nm)	0,6	1,8	1,2
Output	Collet/HSK/Arbor	Collet/HSK/Arbor	Collet/HSK/Arbor
Dimensions	Ø 72 x 265	Ø 80 x 330	Ø 100 x 320
Options	A/S/D	A/S/D/W	A/S/D

OPTIONS

- Acoustic emission A
- Standstill control S
- Rotary encoders (Sinus) R
- Water coolant W

Motorspindels Type 960/ 965

State-of-the-art milling and tool technology requires high rotational speeds from the machine operators. Tool manufacturers are working at full capacity developing ever-newer coatings for their milling cutters. Which company has not yet experienced the problem of their machine's rotational speeds not being sufficiently fast to make use of the newest technologies.

It is exactly this gap that Henninger high-speed motor spindles, Types 960 / 965, can bridge. Your machine is used to mount the Henninger spindles. With rotational speeds reaching 80.000 rpm and 15 kW power, the extensive Henninger product line guarantees a suitable spindle for every type of application. High-frequency motors guarantee a quiet, vibration-free and constant torque drive of the motor spindle. The frequency converter enables infinitely variable rotational speeds.

The spindle cooling medium is thermostatically held to constant temperatures by means of a refrigeration unit. The cooling medium flow is controlled by a flow monitor which ensures that the spindle remains undamaged if the cooling circuit malfunctions.

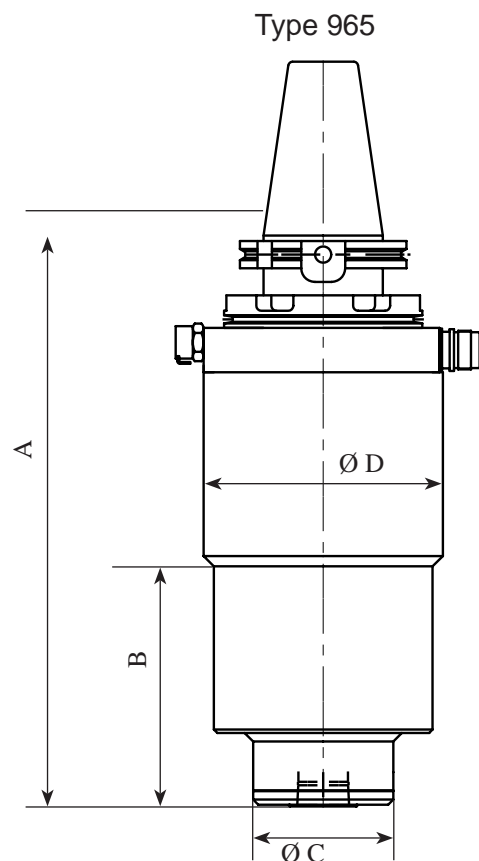
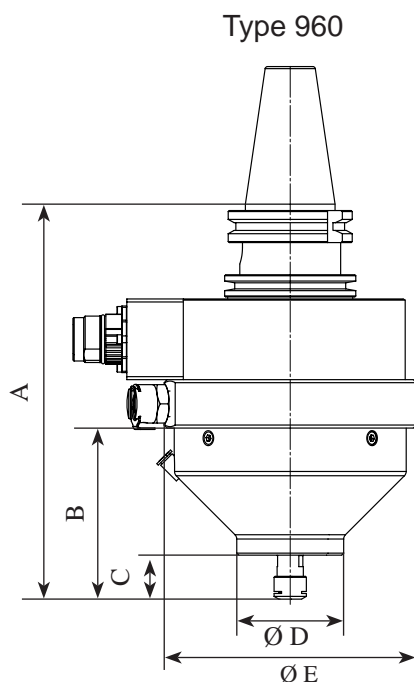
Four-fold, pre-loaded ceramic bearings, as well as grease permanent lubrication ensure a vibration and maintenance free operation of the motor spindle.

The 960-402 /965-402 types are equipped additionally with automatic rotational speed control. These spindle types can also be interlinked with the machine tool controls.

The spindles are equipped with the Henninger-Modular-System allowing them to be easily adapted to various machines. The 965-400/402 spindles are quoted with automatic tool clamping (HSK). Special designs are also possible.

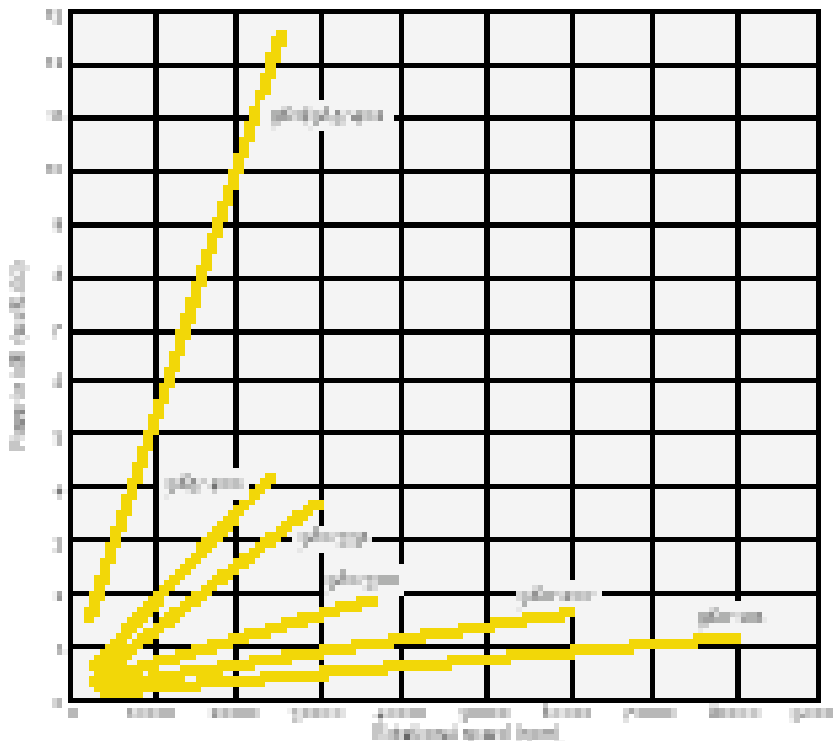
Type	A	B	C	D	E
960 - 101	185	90	18	45	94
960 - 200	188	79	18	53	125
960 - 300	210	102	30	73	147
960 - 351 / 352	228	127	32	80	136
960 - 402 / 422	315	95	42	115	160

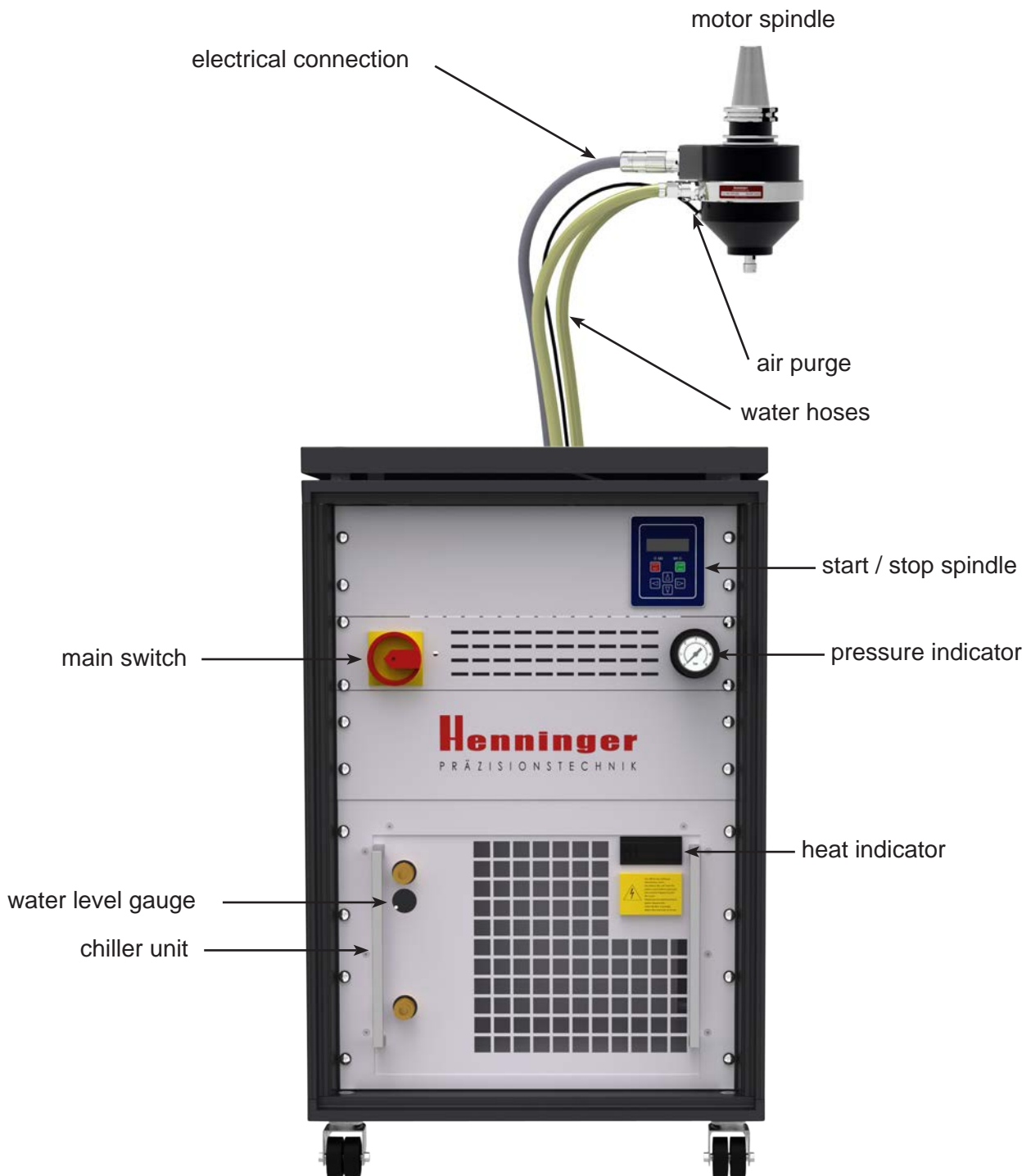
Type	A	B	C	D
965 - 400	312	43	82	140
965 - 402	320	55	115	160



Type	960-101	960-200	960-300	960-352	960-423	965-400	965-402
max.rotationalspeedrpm	80 000 min ⁻¹	60 000 min ⁻¹	36 000 min ⁻¹	30 000 min ⁻¹	25 000 min ⁻¹	25 000 min ⁻¹	25 000 min ⁻¹
at frequency (Hz)	1334	1000	600	1000	834	834	834
nominalpower(100%ED)	1,1 kW	1,6 kW	1,9 kW	3,7 kW	12,5 kW	4,1 kW	12,5 kW
max. power (60% ED)	1,2 kW	1,8 kW	2,2 kW	4,5 kW	15 kW	4,4 kW	15 kW
Voltage	230 V	230 V	230 V	400 V	400 V	300 V	400 V
Clamping Ø	1 - 5 mm	1 - 7 mm	1 - 13 mm	1 - 16 mm	2 - 30 mm	HSK 40 E	HSK 40 E
Standard	DIN 6499	DIN 6499	DIN 6499	DIN 6499	DIN 6499	DIN 69893-5	DIN 69893-5
Input	all common shanks						
Weight without shank	3,5 kg	7,3 kg	10,2 kg	9,4 kg	22,5 kg	17 kg	28,5 kg
connected power	230V/50 Hz	230V/50 Hz	230V/50 Hz	3x400V/50Hz	3x400V/50Hz	3x400V/50Hz	3x400V/50Hz

Performance chart





Henninger

P R Ä Z I S I O N S T E C H N I K

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