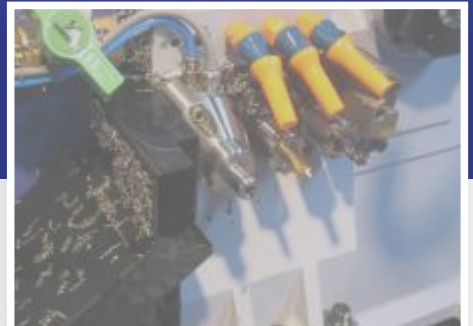


# SMALL HT MOTOR SPINDLES

Ø 16mm - 30mm

For CNC Swiss Types, Short- and Long-Turning Machines,  
Multi-Spindle Machines



# Spindle Design

Various housing design for versatile use.

## HF/HT motor spindles for micro-milling application with synchronous motor technology.

IBAG small motor spindles have been developed for use on turning centers and CNC automatic lathes. Resulting with dramatically improve cutting efficiency in medical and micro-manufacturing technologies.

IBAG spindles deliver the highest productivity and quality for all manufacturing processes, including finishing, grinding, micro-drilling, engraving and high speed cutting. Typical applications include tool and die production, mold making, optical components and nanotechnology parts. Models are available with maximum speeds to 120'000 RPM and power up to 300 W.

IBAG Small Spindle Systems are supplied as a complete package insuring the best high speed performance, installed on a new machine by the OEM, or as a retrofit on existing equipment. The complete system includes the HT motor spindle, supply unit, frequency converter, and all necessary cables, tubes and connectors. All components have a two year warranty.



①  
standard



④  
angle adjustable



⑦  
housing extension



②  
90° media connection



⑤  
short housing



⑧  
off-center housing



③  
right angle



⑥  
with gear wheel



⑨  
in tool holder

# SPINDLE TABLE

## Technical Data

Type	Speed	Lubrication	Power	Torque	Tooling Shaft Ø	Standard ①	Weight	Optional Housings
	[min <sup>-1</sup> ]		S1 / S6-40% [W]	S1 / S6-40% [Ncm]		Ø / L [mm]		
HT 16 D/S 100 P	60'000	Grease	120 / 156	1.9 / 2.5	D6-UP 0.5 - 3.175	15.875 (16) / 116	0.160	② ⑥ ⑧
HT 16 D/S 100	80'000	Oil Air	160 / 208	1.9 / 2.5	D6-UP 0.5 - 3.175	15.875 (16) / 116	0.160	② ⑥ ⑧
HT 16 D/S 100*	100'000	Oil Air	160 / 208	1.9 / 2.5	D6-UP 0.5 - 3.175	15.875 (16) / 116	0.160	on request
HT 19 D/S 100 P	60'000	Grease	126 / 164	2.4 / 3.1	D6-UP 0.5 - 3.175	19 (19.05) / 108	0.172	② ⑤
HT 19 D/S 100	80'000	Oil Air	168 / 218	2.4 / 3.1	D6-UP 0.5 - 3.175	19 (19.05) / 108	0.172	②
HT 19 D/S 100*	100'000	Oil Air	210 / 273	2.4 / 3.1	D6-UP 0.5 - 3.175	19 (19.05) / 108	0.172	②
HT 20 D/S 100 P	60'000	Grease	126 / 164	2.4 / 3.1	D6-UP 0.5 - 3.175	20 / 108	0.187	② ⑤
HT 20 D/S 100	80'000	Oil Air	168 / 218	2.4 / 3.1	D6-UP 0.5 - 3.175	20 / 108	0.187	②
HT 20 D/S 100*	100'000	Oil Air	210 / 273	2.4 / 3.1	D6-UP 0.5 - 3.175	20 / 108	0.187	②
HT 22 D/S 100 P	60'000	Grease	180 / 234	3.5 / 4.7	ER8-UP 0.5 - 5.0	22 / 117	0.215	② ⑤ ⑦ ⑨
HT 22 D/S 100	80'000	Oil Air	240 / 312	3.5 / 4.7	ER8-UP 0.5 - 5.0	22 / 117	0.215	② ⑦
HT 25 D/S 60 P	60'000	Grease	88 / 114	1.6 / 2.0	ER8-UP 0.5 - 5.0	25 / 81	0.178	② ③ ④ ⑤ ⑨
HT 25 D/S 60	80'000	Oil Air	112 / 145	1.6 / 2.0	ER8-UP 0.5 - 5.0	25 / 81	0.178	② ③ ⑤ ⑨
HT 25 D/S 60*	100'000	Oil Air	140 / 182	1.6 / 2.0	ER8-UP 0.5 - 5.0	25 / 81	0.178	on request
HT 25 D/S 100 P	60'000	Grease	188 / 245	3.8 / 4.9	ER8-UP 0.5 - 5.0	25 (25.4) / 118	0.262	② ③ ⑤ ⑦ ⑨
HT 25 D/S 100	80'000	Oil Air	243 / 316	3.8 / 4.9	ER8-UP 0.5 - 5.0	25 (25.4) / 118	0.262	② ③ ⑤ ⑦ ⑨
HT 25 D/S 100*	90'000	Oil Air	270 / 351	3.8 / 4.9	ER8-UP 0.5 - 5.0	25 (25.4) / 118	0.262	on request
HT 30.1 S 80 P	60'000	Grease	280 / 364	5.0 / 6.5	ER11-UP 0.5 - 7.0	30 (36) / 143	0.454	② ⑨
HT 30.1 S 80	60'000	Oil Air	280 / 364	5.0 / 6.5	ER11-UP 0.5 - 7.0	30 (36) / 143	0.454	② ⑨
HT 30.3 S 80 P	40'000	Grease	300 / 390	7.2 / 9.3	ER11-UP 0.5 - 7.0	30 (36) / 143	0.454	② ⑨
HT 30.3 S 80	40'000	Oil Air	300 / 390	7.2 / 9.3	ER11-UP 0.5 - 7.0	30 (36) / 143	0.454	② ⑨
HT 30.2 S 120	120'000	Oil Air	270 / 350	2.4 / 3.1	ER8-UP 0.5 - 5.0	30 / 110	0.441	② ⑤ ⑨

\*Heat dissipation must be via the spindle holder. The maximum housing temperature must not exceed 60°C.





# SMALL HT MOTOR SPINDLES EQUIPMENT



## Controller

Front panel or CNC control

Operation for speed preselection, start, stop and reset. Display for speed and monitoring display. Status messages in plain text. Optional also available for multi-spindle operations or to build into a control cabinet.



## Safe Media Supply

Maintenance unit, lubrication system and cable set

Dry sealing air with 5µm filter and a defined minimum quantity lubrication for oil-air lubricated spindles ensure safe and long operation. A ready-to-plug-in cable set simplifies commissioning.



## Slip-Ring for Turret Application

2-fold or 4-fold

Media connection manifold 360°, for 1-4 grease lubricated HT Motor Spindles to be operated on a tool turret.



Standard Full Package from IBAG:

HT Motor Spindle › Controller › Media Supply

