

# SMALL HT MOTOR SPINDLES

Ø 16mm - 30mm

北京助工精密机械有限公司

电话: 010-51920199 13581835480

网址: [www.engineeringplus.cn](http://www.engineeringplus.cn)

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

②



90° media connection

③



right angle

④



angle adjustable

⑤



short housing

⑥



with gear wheel

⑦



housing extension

⑧



off-center housing

⑨



in tool holder

# SPINDLE TABLE

## Technical Data

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



中国区总代理  
北京助工精密机械有限公司  
北京市宣武区广安门外南滨河路25号B座 421室 邮编: 100055  
TEL: 010-51920199 FAX: 010-51920200  
手机: 13581835480  
邮箱: bjzgjm@126.com  
www.engineeringplus.cn