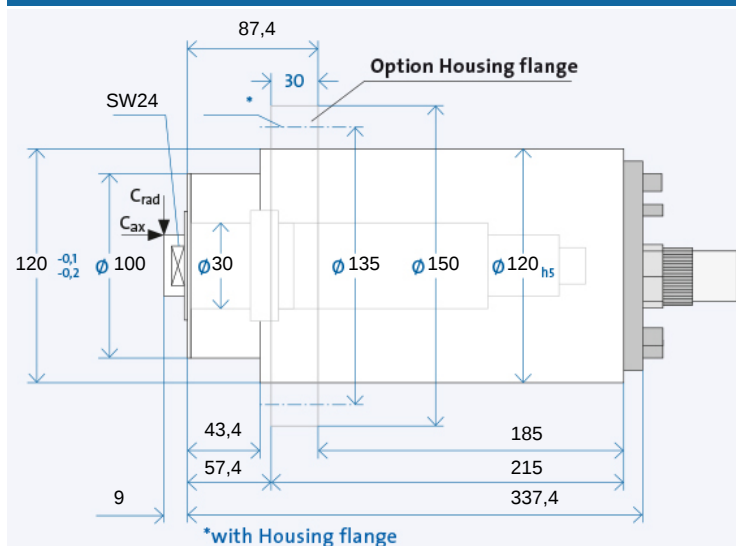


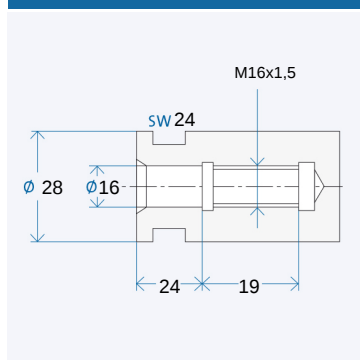
# HV-X 120 - 60000/13



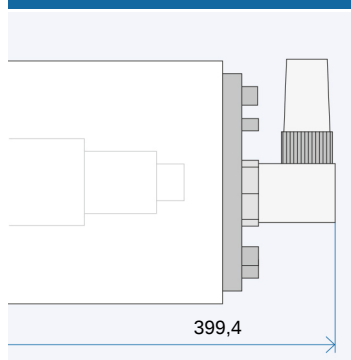
## TECHNICAL DATA



### FIT HOLES WITH FLAT LAYOUT



### ANGLED PLUG OPTION



The data currently provided on the internet apply. Further and detailed information is provided in the GMN 2508 catalogue.

## Technical data

|                                 |                     |                      |
|---------------------------------|---------------------|----------------------|
| Ø Spindle housing               | A                   | [mm]                 |
| Speed max.                      | $n_{max}$           | [min <sup>-1</sup> ] |
| Bearing; front                  | W <sub>1</sub>      | [mm]                 |
| Tool interface                  |                     |                      |
| Ø Flat layout                   | W                   | [mm]                 |
| Static rigidity                 |                     |                      |
| axial                           | C <sub>ax</sub>     | [N/μm]               |
| radial                          | C <sub>rad</sub>    | [N/μm]               |
| Motor realization               |                     |                      |
| Frequency max.                  | f <sub>max</sub>    | [Hz]                 |
| Converter voltage <sup>1)</sup> |                     | [V]                  |
| Power                           | P <sub>S1</sub>     | [kW]                 |
| Torque                          | M <sub>S1</sub>     | [Nm]                 |
| ... at speed                    | n                   | [min <sup>-1</sup> ] |
| Current                         | I <sub>S1</sub>     | [A]                  |
| Power                           | P <sub>S6-60%</sub> | [kW]                 |
| Torque                          | M <sub>S6-60%</sub> | [Nm]                 |
| ... at speed                    | n                   | [min <sup>-1</sup> ] |
| Current                         | I <sub>S6-60%</sub> | [A]                  |

## Electrical connection

|                                 |
|---------------------------------|
| Plug type                       |
| Straight plug connection        |
| Coil plug connector             |
| Fixed cable XXm                 |
| Coolant feed through the shaft  |
| Low pressure (du)               |
| High-pressure (dh)              |
| Sensors                         |
| Rotary encoder                  |
| Speed sensor                    |
| Housing                         |
| Cylindrical housing             |
| Cylindrical housing with flange |
| Block housing                   |
| Air-tight seal                  |

<sup>1)</sup> Minimum required starting voltage for the frequency converter.

+ Standard  
o Optional  
x Upon request

## Ordering information:

HV-X 120 - 60000/13

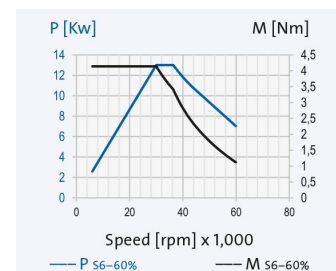
R is for clockwise, L for counter-clockwise

+ Desired options

## HV-X 120 - 60000/13

|         |       |       |
|---------|-------|-------|
| 120     |       |       |
| 60000   |       |       |
| 30      |       |       |
| D 16/28 |       |       |
| 28      |       |       |
|         |       |       |
| 69      |       |       |
| 97      |       |       |
| 200 V   | 350 V | 460 V |
| 2000    |       |       |
| 200     | 350   | 460   |
| 11      |       |       |
| 3,5     |       |       |
| 30000   |       |       |
| 58      | 33    | 25    |
| 13      |       |       |
| 4,14    |       |       |
| 30000   |       |       |
| 65      | 37    | 28    |

|                                 |    |    |
|---------------------------------|----|----|
| MAC                             | GA | GA |
| +                               | +  | +  |
| o                               | o  | o  |
| o                               | o  | o  |
| Coolant feed through the shaft  |    |    |
| Low pressure (du)               | o  |    |
| High-pressure (dh)              | o  |    |
| Sensors                         |    |    |
| Rotary encoder                  | o  |    |
| Speed sensor                    | +  |    |
| Housing                         |    |    |
| Cylindrical housing             | +  |    |
| Cylindrical housing with flange | o  |    |
| Block housing                   | x  |    |
| Air-tight seal                  | o  |    |



# HV-X 120 - 60000/13

## Grinding quills

GMN produces grinding quills with high round and flat face accuracy for all available GMN grinding mandrel receivers.

FIG. 1: CEMENTED (KI)

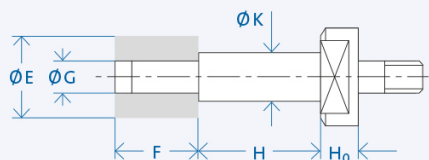


FIG. 2: WITH ADJUSTMENT SCREW (PS)

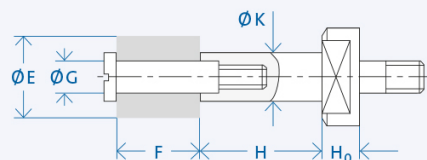
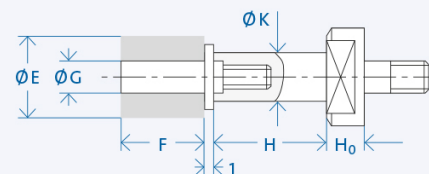
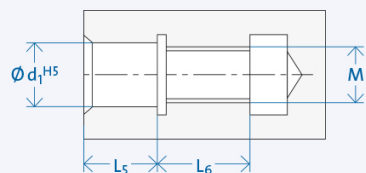


FIG. 3: FOR GRINDING WHEELS ON THREADED PIN (PL)\*



FITTING HOLE FOR FIG. 2 AND 3



| d <sub>1</sub> | M   | L <sub>5</sub> | L <sub>6</sub> |
|----------------|-----|----------------|----------------|
| 4              | M3  | 5              | 8              |
| 6              | M5  | 7              | 11             |
| 8              | M6  | 9              | 12             |
| 10             | M8  | 12             | 14             |
| 13             | M12 | 13             | 17             |

| Interface | K [mm] | H [mm] | Wheel<br>E x F [mm] | G [mm] | Grinding wheel<br>attachment | H <sub>0</sub> [mm] |
|-----------|--------|--------|---------------------|--------|------------------------------|---------------------|
| D 16/28   | 10     | 25     | 16 x 16             | 6      | PS/PL                        | 10                  |
|           | 13     | 32     | 20 x 20             | 8      | PS/PL                        |                     |
|           | 16     | 40     | 25 x 25             | 10     | PS/PL                        |                     |

### Ordering information:

[Mandrel Ø K] x [Mandrel length H] - [Grinding wheels Ø G] x [Grinding wheel width F] [Interface] [Mandrel fixation]

Example: Grinding quill 16 x 40 - 10 x 25 D16/28 PS

## Semi-finished goods

GMN semi-finished products allow the individual adaptation of the tool interface for any connections.

| d <sub>1</sub> | K [mm] | H [mm] |
|----------------|--------|--------|
| D 16/28        | 28     | 229    |

Ordering information: »Semi-finished goods« [Shaft Ø K] x [Shaft length H] [Interface]

Example: Semi-finished goods 34 x 180 D16/33

## Lubrication system

The electronically controlled PRELUB lubrication unit is optimally adapted to the oil-air lubricated GMN spindles and guarantees a long service life.

## Cooling system

GMN cooling units ensure precisely adjustable temperature and quantity delivery of the coolant and achieve consistently low operating temperatures.

## Cable and plug

Ready-made cables with B048, B049, GA, MAC, D500 and STK plugs are available on request. For the spindle/converter connection, GMN supplies UL/CSA approved electrical cables suitable for use in drag chains.

