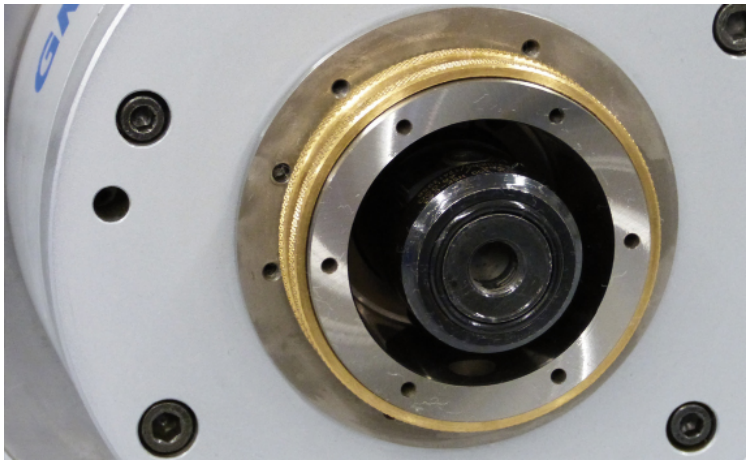
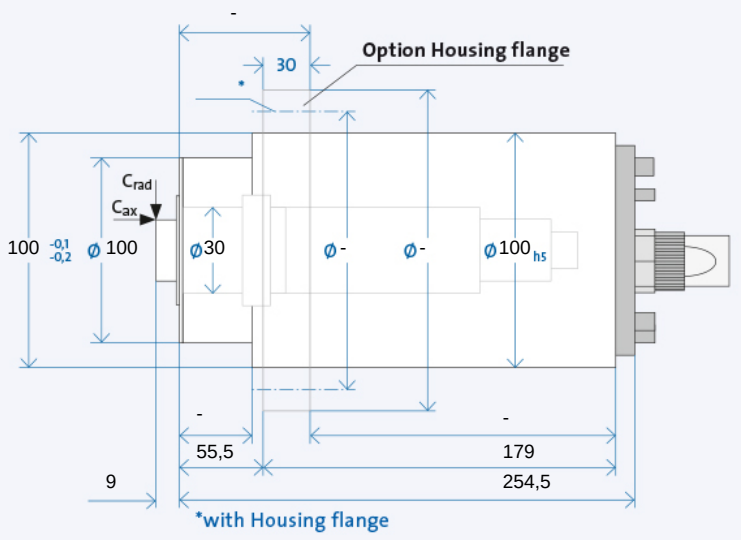
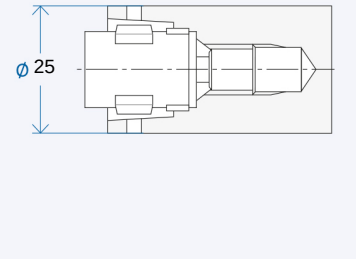
# HSP 100 - 51000/3



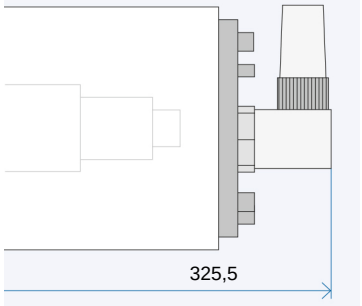
## TECHNICAL DATA




## TAPER HOLLOW SHAFT WITH A FLAT




## ANGLED PLUG OPTION



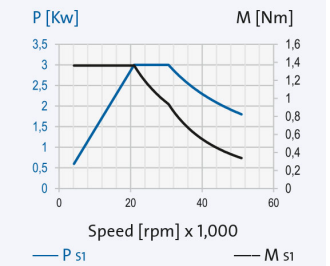

The data currently provided on the internet apply. Further and detailed information is provided in the GMN 2508 catalogue.

| Technical data | | | HSP 100 - 51000/3 | | |
|---|---|---|---|---|---|
| Spindle housing-ø | A | [mm] | 100 | | |
| Speed max. | $n_{max}$ | [$min^{-1}$] | 51000 | | |
| Bearing; front | $W_1$ | [mm] | 30 | | |
| Tool interface | | | HSK-C25 | | |
| Flat layout-ø | W | [mm] | 25 | | |
| Static rigidity | | | | | |
| axial | $C_{ax}$ | [N/µm] | 63 | | |
| radial | $C_{rad}$ | [N/µm] | 77 | | |
| Motor realization | | | 200V | 350V | 460V |
| Frequency max. | $f_{max}$ | [Hz] | 1700 | | |
| Converter voltage[1]) | | [V] | 200V | 350V | 460V |
| Power | $P_{S1}$ | [kW] | 3 | | |
| Torque | $M_{S1}$ | [Nm] | 1,36 | | |
| ... at speed | n | [$min^{-1}$] | 21000 | | |
| Current | $I_{S1}$ | [A] | 18 | 10 | 7,6 |
| Power | $P_{S6-60\%}$ | [kW] | 4 | | |
| Torque | $M_{S6-60\%}$ | [Nm] | 1,59 | | |
| ... at speed | n | [$min^{-1}$] | 24000 | | |
| Current | $I_{S6-60\%}$ | [A] | 21 | 12 | 9,1 |

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

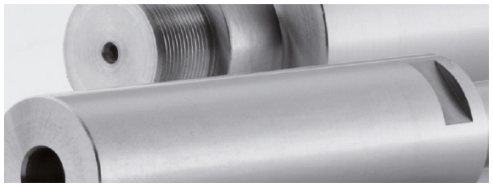
[1]) Minimum required starting voltage for the frequency converter.

+ Standard
o Optional
x Upon request




Ordering information:
+ HSP 100 - 51000/3
R is for clockwise, L for counter-clockwise
+ Desired options

# HSP 100 - 51000/3

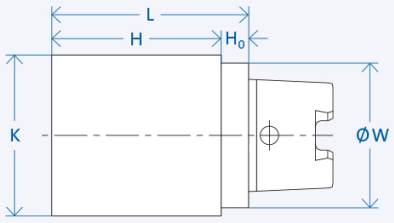


## Grinding quills

### Semi-finished goods

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

SEMI-FINISHED GOODS




No processing is permissible in area $H_0$

| Interface | W [mm] | K [mm] | H [mm] | L [mm] | $H_0$ [mm] | Wgt.[kg] |
|---|---|---|---|---|---|---|
| HSK-C25 | 25 | 30 | 90 | 100 | 10 | 1 |
| HSK-C32 | 32 | 41 | 139 | 150 | 11 | 1,50 |
| HSK-C40 | 40 | 51 | 169 | 180 | 11 | 2,81 |
| HSK-C50 | 50 | 64 | 186 | 200 | 14 | 4,92 |
| HSK-C50 | 50 | 64 | 76 | 90 | 14 | 2,15 |
| HSK-C63 | 63 | 81 | 186 | 200 | 14 | 7,90 |
| HSK-C63 | 63 | 81 | 86 | 100 | 14 | 3,89 |
| HSK-C80 | 80 | 101 | 193 | 210 | 17 | 12,90 |
| HSK-C100 | 100 | 124 | 208 | 225 | 17 | 21,70 |

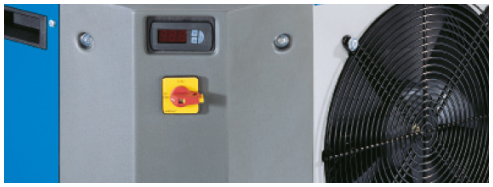
Ordering information"Semi-finished Product"[mandrel Ø K] x [mandrel length H] [interface]

Example: Semi-finished goods 81 x 186 HSK-C63

The various shapes differ with respect to pusher dog recess and collar. Taper hollow shafts (HSK) with flat contact faces are standardized per DIN 69893. Spindles in type series HSP/HV-P can accept tools with taper hollow shafts of form A and C. Form C has been especially developed for use with manual tool change systems. In contrast, form A is equipped with a gripper groove for automatic tool change systems. This means, form A can also be used with manual tool change system provided in the HSP- and HV-P style spindles. As a result, it is often possible to limit the range of tools when there are other automatic tool change systems in use. Tools according to Form B,D,E and F cannot be used in the HSP/HV-P spindles. They are designed for different applications. The HSK interface allows these spindles to be operated in both directions of rotation.

## 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.