

## Milling spindle with tool holder SK40



Milling spindle in the standard version



Version with quick-change tooling system

Our milling spindle finds versatile applications in mechanical engineering and is suitable for the machining of materials of all kinds.

### Standard equipment:

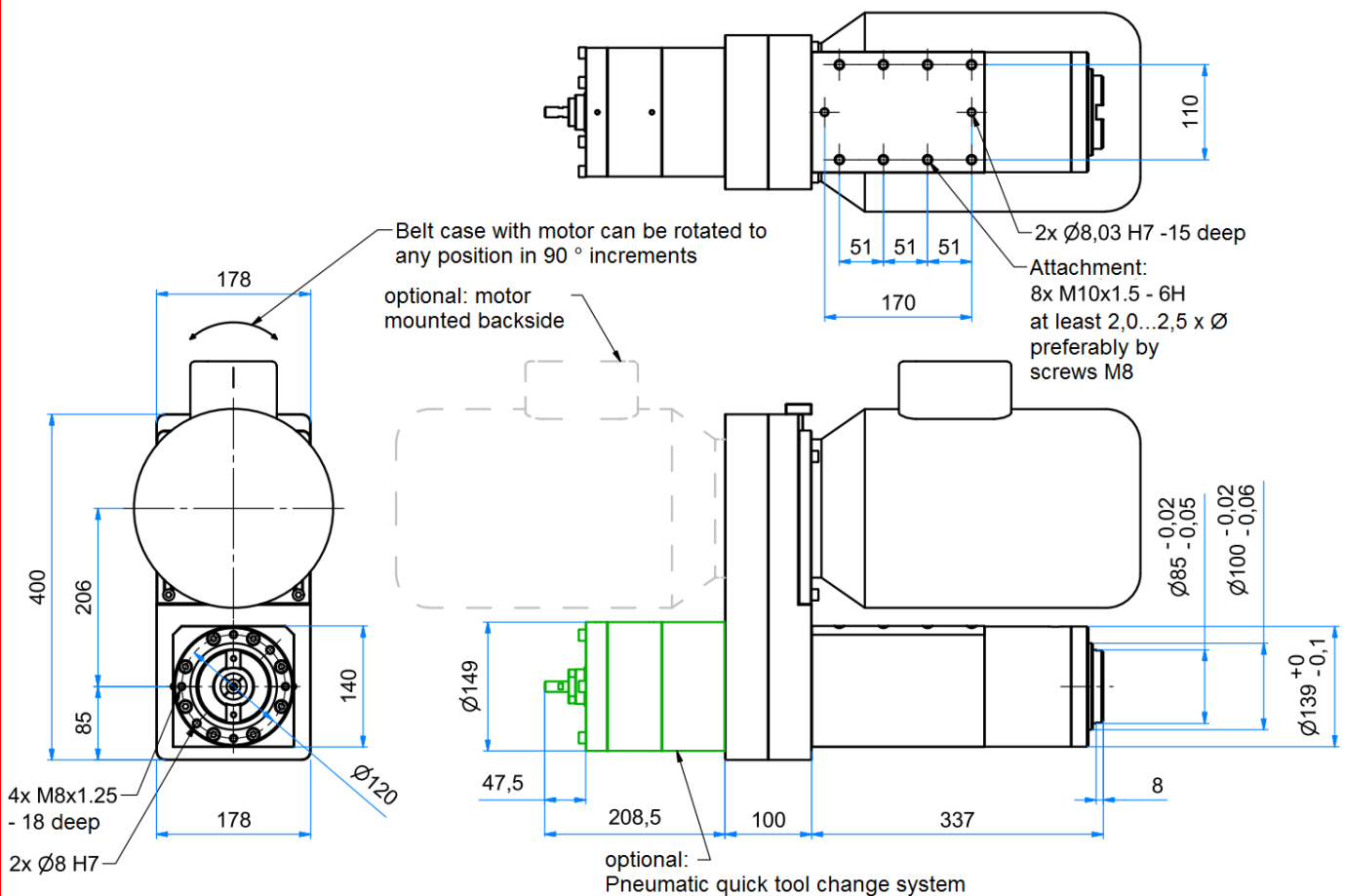
- Execution spindle bearing with angular contact ball bearings
- Motor on the tool side mounted above the spindle (see figure: standard version)
- The mounting flange on the spindle, with integrated pin holes, allowing the cultivation of angular and multi-spindle drill heads of all kinds.
- The tool is clamped by a threaded pull bar.
- Air purge connection

### Designs selectable

- The motor can be mounted backside according to customer specification. However, a modification is possible without any problems at any time.
- The belt case can be rotated to any position in 90 ° increments as needed.
- Replaceable poly-V-belt pulleys: max. Ratio  $i = 0.6$ ; max. Reduction  $i = 2,1$

### Optional at surcharge:

- Execution with spindle bearing spindle bearings
- Internal cooling of tools
- Pneumatic quick tool change system:
  - Tool fixing through a clamping system with disc springs. Insertion force: 10 KN.
  - The tool change carried out via a pneumatic cylinder with 13 KN.



### Torque on the spindle during respective power of the engine:

The max. Rotational speed, however, is dependent on the spindle bearing

Motor 2-pole: 2.800 1/min 1,5 - 5,5 kW			
Rotational speed Spindle	1,5 kW	5,5 kW	
Min.	1.330 1/min	10,8 Nm	39,5 Nm
Max.	4.700 1/min	3,0 Nm	11,2 Nm

Motor 6-pole: 950 1/min 1,1 - 2,2 kW			
Rotational speed Spindle	1,1 kW	2,2 kW	
Min.	450 1/min	23,3 Nm	46,7 Nm
Max.	1.600 1/min	6,6 Nm	13,1 Nm

Motor 4-pole: 1.400 1/min 1,5 - 5,5 kW			
Rotational speed Spindle	1,5 kW	5,5 kW	
Min.	660 1/min	21,7 Nm	79,6 Nm
Max.	2.380 1/min	6,0 Nm	22,1 Nm

Motor 8-pole: 700 1/min 0,75 - 1,5 kW			
Rotational speed Spindle	0,75 kW	1,5 kW	
Min.	330 1/min	21,7 Nm	43,4 Nm
Max.	1.190 1/min	6,0 Nm	12,0 Nm

For others min. Speeds (than that shown in the table) is a frequency required or on request, if available, a geared motor.

<b>Max. Drilling capacity:</b>	$\varnothing 40$ mm in St. 50
<b>Spindle speed:</b>	with angular contact ball bearings 4.000 1/min
<b>(depending on the engine power)</b>	with spindle bearings 7.000 1/min
<b>Drive:</b>	ISO standard motors IP55 / 0,75 - 5,5 kW / 230 - 460V available in size 90, 100 and 112 (pole numbers 2 - 8)
<b>Tool holder:</b>	SK40
<b>Rotational accuracy:</b>	with angular contact ball bearings 0,01 mm with spindle bearings 0,005 mm
<b>Weight:</b>	approx. 79 kg (including motor BG112/ 5,5 kW)