



## Universal drilling/milling machine with digital position display DRO 5 and cast machine chassis. MB 4PV with continuously variable electronically controlled drive

### Facts that impress in terms of quality, performance and price

- ▶ Heavy, solid cast design
- ▶ Smooth action due to polished gearwheels running in an oil sump
- ▶ Solid and generously dimensioned cross table with precision surface finish and T-slots
- ▶ Gear head pivots through  $\pm 45^\circ$
- ▶ Adjustable cleats
- ▶ Drilling depth stop
- ▶ Right-handed/left-handed rotation
- ▶ Drilling/Thread tapping function
- ▶ Automatic spindle sleeve feed with manual fine feed
- ▶ Motorised positioning of the Z axis
- ▶ Coolant system
- ▶ Solid column with hand-honed dovetail guide for maximum stability and best possible precision
- ▶ Feed spindle play adjustable and re-adjustable

- ▶ Height-adjustable, large protective screen with micro switch
- ▶ Machine lamp
- ▶ Solid cast machine chassis with chip channel

### MB 4P:

- ▶ Two-stage industrial quality electric motor
- ▶ Large speed range from 95 - 3 200 rpm thanks to 12 switchable speeds

### MB 4PV:

- ▶ Single-speed, premium, industrial electric motor
- ▶ Large speed range from 60 - 2 760 rpm thanks to 2 continuously variable speeds
- ▶ SINAMICS V20 inverter by **SIEMENS**

### Automatic spindle sleeve feed



- › The spindle sleeve moves downwards at the set feed speed and switches off again at the set drilling depth on the scale ring. The spindle sleeve then moves back to its starting position.

### Digital position display DRO 5



- › Four-line LCD display
- › User-friendly menu navigation

### SIEMENS inverter



### SINAMICS V20

- › Energy-saving features
- › Advanced cooling
- › Painted electronics assemblies



Fig.: MB 4PV



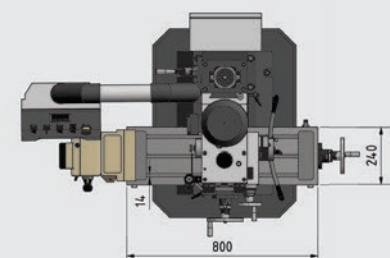
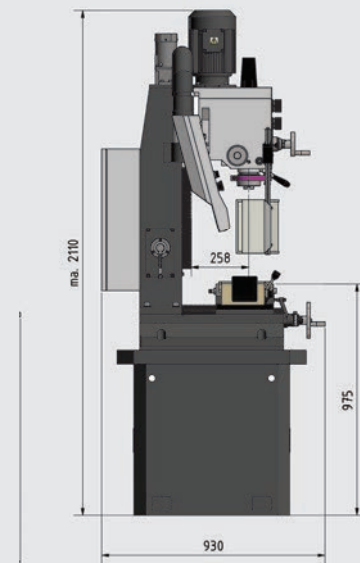
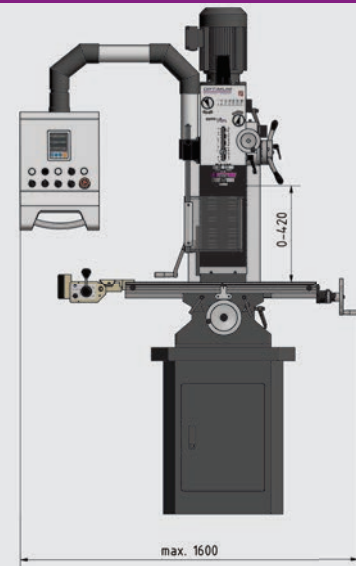
## Technical specifications, accessories and dimensions

Model	MB 4P	MB 4PV**
Article no.	3338460	3338466
<b>Output</b>		
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor Power	1.1 / 1.5 kW	1.5 kW
Coolant pump motor	100 W	
<b>Drilling/milling output</b>		
Drilling performance in steel (S235JR)	Ø 32 mm	Ø 24 mm
Continuous drilling performance steel (S235JR)	Ø 28 mm	Ø 20 mm
Max. sensor head size	Ø 63 mm	Ø 63 mm
Max. shaft milling cutter size	Ø 28 mm	Ø 26 mm
<b>Spindle</b>		
Spindle sleeve stroke	120 mm	
Spindle sleeve diameter	75 mm	
Spindle seat	MT 4	
Throat	258 mm	
Drawbar	M16	
<b>Drilling/milling head</b>		
Spindle speeds	95 - 3 200 rpm	60 - 2 760 rpm
Speeds	2 x 6 speeds	2 speeds, electronically controlled
Pivot range	± 45°	
<b>Cross table</b>		
Clearance spindle to table max.	420 mm	
Length x width	800 x 240 mm	
T-slot size / distance / amount	14 mm / 80 mm / 3	
Automatic spindle sleeve feed	0.1 / 0.18 / 0.26 mm/rev	
<b>Travel</b>		
X axis	manual 560 mm / automatic ~480 mm	
Y axis manual	195 mm	
Z axis manual	350 mm	
<b>Dimensions and weight</b>		
Length x width x height	1 600 x 930 x 2 110 mm	
Net weight	495 kg	

Accessories	Article no.
Parallel shim set, 20-part	3354001
Horizontal-vertical rotary indexing table RT 150	3356150
Horizontal-vertical rotary indexing table RTE 165	3356365
Assortment of clamping tools size 12, 58-part size	3352017
End mill set HSS TiN-coated 12-part	3352250
End mill set HSS TiN-coated 20-part	3352255
Copying and facing blade MT 4	3350214
Vibration damping machine base SE 55 (4 units required)	3352981
Bore head set MT 4	3352125
Arbour for drill chuck MT 4	3350304
Collet chuck MT 4/M16	3352094
Thread tapping chuck M3 - M12	3050705
Thread tapping chuck M8 - M20	3050706
> More accessories for milling machines from page 139 > Extension/accessories for coolant system page 320	

Note: The milling machines (frequency inverters) comply with standard DIN EN 55011: class C2. Important information on operation of machines with frequency converters on page 323.

### Dimensions



### Scope of delivery

- > Machine mobile base
- > Morse taper MT 3/B16
- > Reduction sleeve MT 4 - MT 3
- > Drawbar M16
- > Operating tool