

## Drilling-milling machine

### OPTImill MB 4PV

Universal drilling and milling machines with digital position indicator DRO 5 and cast iron machine base. MB 4PV with electronically stepless drive

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY

#### Article number ▼

3338466

#### Brand ▼

Optimum

#### Catalog directory ▼

Metalworking machines » Milling machines  
conventional » OPTImill MB 4P / MB 4PV



#### Shipping informations ▼

Packaging Metrics		Weights		Delivery		Other	
Length	1,240 mm	Gross	500 kg	Delivery	Carrier	DualUse	✘
Width	950 mm	Net	400 kg	Content	1 pc(s).	SCIP	n/a
Height	2,160 mm					SVHC	No



## Description ▼

- Heavy, solid cast iron design
- High running smoothness due to ground gear wheels running in an oil bath
- Right/left hand rotation
- Automatic quill feed with manual fine feed
- Motorized positioning of the Z-axis
- Motorized table feed of the X-axis
- Coolant device
- Machine lamp
- Gear head  $\pm 45^\circ$  tiltable
- Solid dovetail guide of the column, hand-scraped, for highest stability and greatest possible precision
- Height-adjustable, large-dimensioned protective disk with microswitch
- Drilling depth stop
- Digital position indicator DRO 5
- Drilling / tapping function
- Massive and large dimensioned cross table, precisely surface machined with T-slots and adjustable taper bars
- Solid cast iron machine base with chip chute

### MB 4P:

- Two-stage quality industrial electric motor
- Wide speed range from 95 - 3,200 min<sup>-1</sup> due to 12 switchable speeds

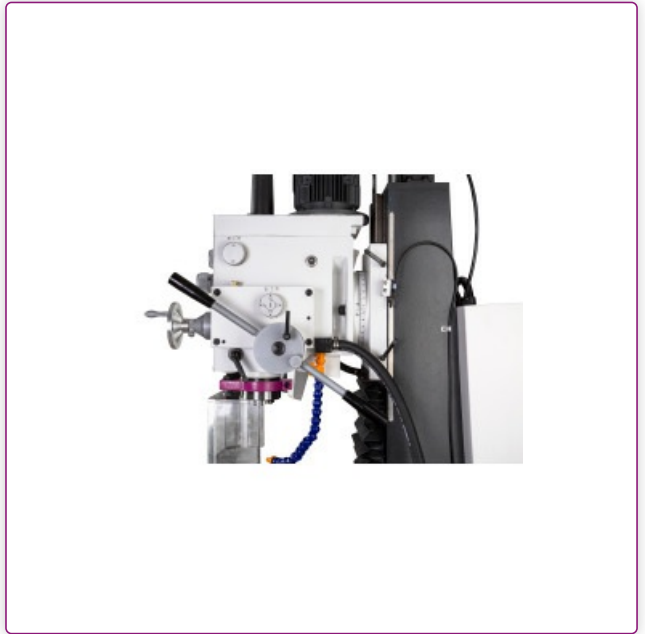
### MB 4PV:

- Single-stage quality industrial electric motor
- Wide speed range from 60 - 2,760 min<sup>-1</sup> due to 2 infinitely variable speeds
- SINAMICS V20 inverter from SIEMENS

## Delivery content ▼

- substructure
- Morse cone MK 3
- Adapter MK 3 - MK 4
- Pulling rod M 16
- operating tool

## Media informations ▼



### Automatic spindle sleeve feed

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



### X-axis

- Motorized positioning of the X-axis with rapid traverse



### Digital position indicator DRO 5

- Four-line LCD display
- User friendly menu navigation



**SIEMENS SINAMICS V20 inverter**

- Energy saving function
- Advanced cooling
- Painted electronic assemblies

**Technical data** ▾

<b>Dimensions and weights</b>			
Length (product) approx.	1600 mm	Width/depth (product) approx.	930 mm
Height (product) approx.	2110 mm	Net weight approx.	495 kg
<b>Drilling/milling head</b>			
Drill-mill head tilt range	± 45 °		
<b>Drilling/milling output</b>			
Max. size milling head	63 mm	Drilling performance steel (S235JR)	24 mm
Max. size shaft milling cutter	26 mm	Continuous drilling performance steel (S235JR)	20 mm
<b>Electrical Data</b>			
Drive motor output	1,5 kW	Supply voltage	400 V
Mains frequency	50 Hz		
<b>Milling table horizontal</b>			
Horizontal milling table length	800 mm	Horizontal milling table width	240 mm
Max. clearance vertical spindle - horizontal milling table	420 mm	Horizontal milling table T-groove size	14 mm
Horizontal milling table T-groove number	3	Horizontal milling table T-groove spacing	80 mm
<b>Cooling lubricant system</b>			
Coolant pump(s) drive power	100 W		
<b>Standards and certifications</b>			
Standard	DIN EN 55011	EMC level	C2
<b>Travel</b>			
Travel X axis manual	560 mm	Travel Y axis manual	195 mm
Travel Z axis manual	350 mm	Travel X axis automatic	480 mm
<b>Vertical spindle</b>			
Vertical spindle reach	258 mm	Vertical spindle spindle chuck	MT 4

Vertical spindle speed range	60 – 2760 min <sup>-1</sup>	Vertical spindle number of gears	2
Vertical spindle speed control	electronic	Vertical spindle quill diameter	75 mm
Vertical spindle quill stroke	120 mm	Vertical spindle tightening bar	M 16

## Accessories ▼



### Parallel spacer kit 20 parts

Article number ▼  
3354001

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### Parallel spacer kit BT 40

Article number ▼  
3536191

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### Horizontal-vertical rotary indexing table RT 150

Quality round table made of high-quality Meehanite cast  
Article number ▼  
3356150

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Horizontal-vertical rotary indexing table with 3-jaw chuck RTE 165

Quality round table made of high-quality Meehanite cast  
Article number ▼  
3356365

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### Clamping tool kit SPW 12

Article number ▼  
3352017

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### End mill set HSS, 12-piece

Article number ▼  
3352250

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



**End mill set**  
HSS, 20-piece

Article number ▼  
3352255

**OPTIMUM®**  
MASCHINEN - GERMANY



**Copy and face cutter head**  
Shank MK 4

Article number ▼  
3350214

**OPTIMUM®**  
MASCHINEN - GERMANY



**Vibration damper machine foot**  
SE 55

Article number ▼  
3352981

**OPTIMUM®**  
MASCHINEN - GERMANY



**Boring head set**  
MT 4

Article number ▼  
3352125

**OPTIMUM®**  
MASCHINEN - GERMANY



**Mandrel for drill chuck**  
Cone outside MK 4 / M16 / B16

Article number ▼  
3350304

**OPTIMUM®**  
MASCHINEN - GERMANY



**Collet chuck set**  
MK 4 / ER 32 - M16

Article number ▼  
3352094

**OPTIMUM®**  
MASCHINEN - GERMANY



**Tapping chuck with inserts**  
MK 4; M3 - M12

Article number ▼  
3050709

**OPTIMUM®**  
MASCHINEN - GERMANY



### Tapping chuck with inserts

MK 4; M8 - M20

Article number ▼

3050710

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### Precision machine vice

FMS 100

Article number ▼

3354100

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### Precision machine vice

FMS 125

Article number ▼

3354125

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### Hydraulic milling machine vice

HMS 100

Robust design for milling, drilling and grinding

Article number ▼

3355100

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### Precision machine vice

FMSN 125

Pull-down mechanism for secure clamping of the workpiece

Article number ▼

3354120

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### Milling machine vise

VMQ 100

Robust design for milling, drilling and grinding

Article number ▼

3354181

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### Three axis vise

**MV3-75**

Horizontal swivel movement up to 90 °

**Article number** ▼

3354175

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### Two axis vise

**ZAS 50**

**Article number** ▼

3354170

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### Three axis vise

**DAS 100**

**Article number** ▼

3355500

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### Horizontal-vertical rotary indexing table

**RT 100**

Quality round table made of high-quality Meehanite cast

**Article number** ▼

3356110

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### Horizontal-vertical rotary indexing table with 3-jaw chuck

**RTU 165**

Quality round table made of high-quality Meehanite cast

**Article number** ▼

3354165

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### Twist Drill Set

**25 pieces, 1 - 13 mm**

**Article number** ▼

3201010

**OPTIMUM®**  
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**Twist Drill Set**  
41-piece, 6 - 10 mm (0.1 mm rising)

**Article number** ▼  
3201021

**OPTIMUM®**  
MASCHINEN - GERMANY



**Milling set**  
carbide, 18-piece

**Article number** ▼  
3352118

**OPTIMUM®**  
MASCHINEN - GERMANY



**Milling set**  
radius, 9-piece

**Article number** ▼  
3352116

**OPTIMUM®**  
MASCHINEN - GERMANY



**Edge finder**  
Diameter 10 mm

**Article number** ▼  
3351171

**OPTIMUM®**  
MASCHINEN - GERMANY



### Precision quick-action drill chuck

1-10 mm, B16

Article number ▼

3050610

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### Keyless drill chuck

DKC13 1-13 mm

Article number ▼

3050632

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### Keyless drill chuck

DKC16 1-16 mm

Article number ▼

3050633

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### Reducing sleeve

MK4-MK3 / M16

Article number ▼

3350314

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### Collet set

ER 32, Ø 1 - 16 mm

Article number ▼

3441122

**OPTIMUM®**  
MASCHINEN - GERMANY



### Leveling plate

SE 1

Article number ▼

3381012

**OPTIMUM®**  
MASCHINEN - GERMANY



### Stop angle

90 degrees

Article number ▼

3385052

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**Prism**  
**WP 30**

**Article number** ▼  
3352195

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**Workpiece support**  
**WPS-1**

Adjustment range 40 - 50 mm  
**Article number** ▼  
3354261

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**Workpiece support**  
**WPS-3**

Adjustment range 90 - 140 mm  
**Article number** ▼  
3354263

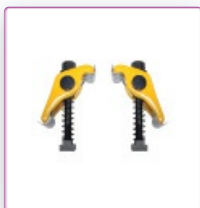
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**T-nut**  
**M 12/14 mm**

**Article number** ▼  
3353025

**OPTIMUM®**  
MASCHINEN - GERMANY



**Down device**  
**Table groove 14 mm / M 12**

**Article number** ▼  
3352031

**OPTIMUM®**  
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