Multifunctional drilling/milling machines for professional deployment. Electronic continuously variable drive with frequency inverter "made in EU" and digital 3-axis position display DPA 21

Facts that impress in terms of quality, performance and price

- Heavy, solid design using premium cast meehanite
- Tilting drilling/milling head ± 45°
- Excellent concentricity thanks to tapered roller bearings, better than 0.01 mm measured in the spindle sleeve
- Automatic spindle sleeve feed
- Adjustable drilling depth stop with millimetre scale, can be read off on front
- Right-handed/left-handed rotation for thread tapping
- X and Z axis with adjustable dovetail guide
- Coolant system
- Height-adjustable protective screen with microswitch for best possible user protection against chips and parts being flung out
- Solid and generously dimensioned cross table with precision surface finish and T-slots

MF 2V:
- Y axis with adjustable dovetail guide

MF 4V:
- Y axis with flat guide
- Large Y axis stroke of 400 mm
- Motorised table height adjustment (Z axis)

Siemens inverter SINAMICS G110M
› Especially EMC compatible due to compact design
› Internal safety function

Made in EU

Optional tool clamping system
(Article no.: 3352394)

OPTI Control panel
Integrated switch panel
› Integrated **digital position display DPA 21** with speed display

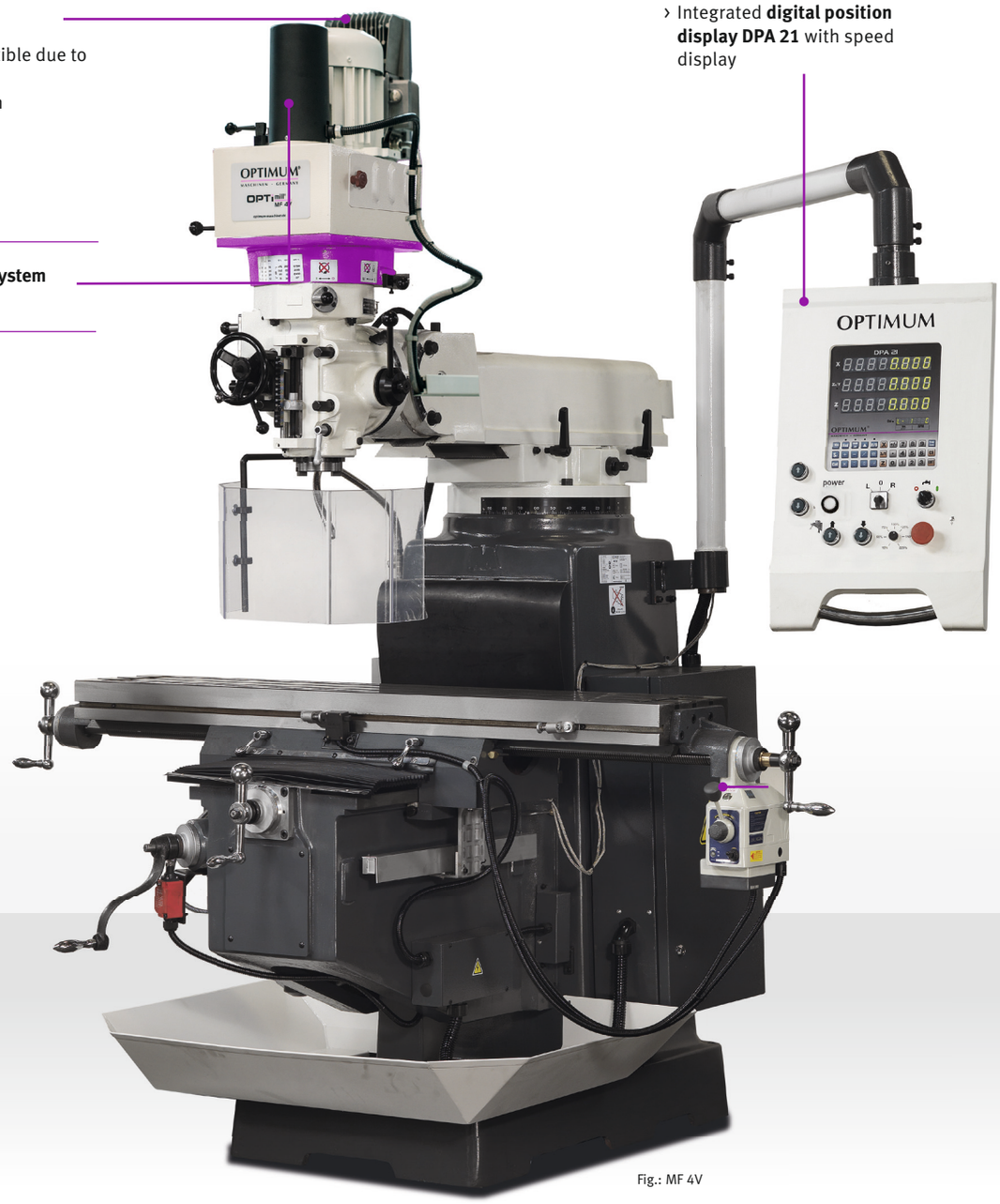


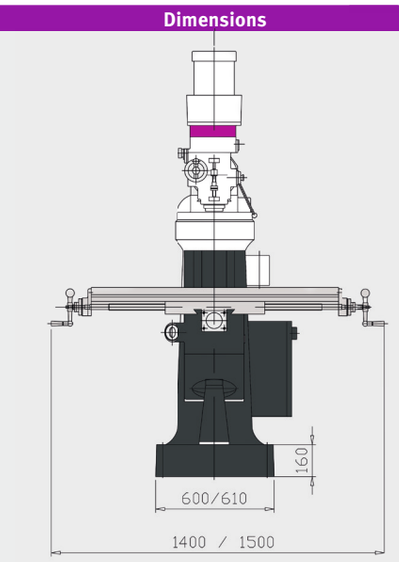
Fig.: MF 4V

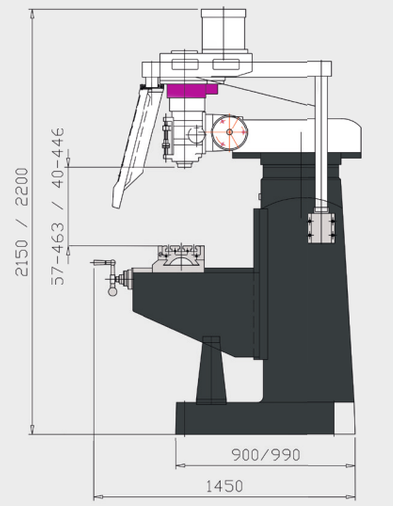
*OPTImill® is a registered brand of Optimum Maschinen Germany GmbH and exclusively used for milling machines

Technical specifications, accessories and dimensions

Model	MF 2V	MF 4V
Article no.	3336030	3336050
Technical data		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	2.2 kW	4 kW
Drive motor	1.5 kW	3 kW
Coolant pump motor	100 Watts	
Drilling/milling output		
Drilling performance in steel (S235JR)	Ø 24 mm	Ø 32 mm
Continuous drilling performance in steel (S235JR)	Ø 20 mm	Ø 28 mm
Max. sensor head size	Ø 76 mm	Ø 100 mm
Max. shaft milling cutter size	Ø 18 mm	Ø 20 mm
Spindle		
Spindle sleeve stroke	127 mm	
Spindle seat	ISO 40 DIN 2080	
Throat	213 - 533 mm	200 - 680 mm
Drilling/milling head		
Spindle speeds	10 - 5 100 rpm	9 - 6 750 rpm
Speeds	6 speeds, electronically controlled	8 speeds, electronically controlled
Pivoting spindle head	± 45°	
Automatic spindle sleeve feed	3 speeds: 0.038 / 0.076 / 0.152 mm/rev	
Cross table		
Length x width	1 245 x 230 mm	1 370 x 254 mm
Max. load bearing capacity	230 kg	275 kg
T-slot size / spacing / count	16 mm / 63 mm / 3	
Clearance spindle to cross table	57 - 463 mm	40 - 446 mm
Travel		
X axis	manual 800 mm / automatic 730 mm	manual 930 mm / automatic 850 mm
Y axis	manual 305 mm	manual 400 mm
Z axis	manual 406 mm	manual 406 mm / automatic 350 mm
Dimensions		
Length x width x height	1 400 x 1 450 x 2 150 mm	1 500 x 1 450 x 2 200 mm
Weight	950 kg	1 150 kg

Dimensions





Accessories	Article no.
Parallel shim set, 20-part	3354001
Horizontal-vertical rotary indexing table RT 150	3356150
Horizontal-vertical rotary indexing table RT 200	3356200
Horizontal-vertical rotary indexing table RTE 165	3356365
Horizontal-vertical rotary indexing table RTU 165	3354165
Assortment of clamping tools size 14, 58-parts	3352018
End mill set HSS TiN-coated 12-part	3352250
End mill set HSS TiN-coated 20-part	3352255
Precision machine shoe SEU1 (4 pcs. required) see page 128	3352985
Levelling platen SE 85 (4 pcs. required)	3352982
Arbor for drill chuck ISO 40/B16	3352070
Collet chuck set 18-part ISO40	3352056
Copying and facing blade head ISO 40 DIN 2080	3350216
Precision bore head set ISO 40	3352128
Universal table feed V 250	3352025
Assembly table feed V250	9000489
Tool clamping system ISO 40	3352394
(Orders without assembly: Some adjustment work may be necessary.)	
› More accessories for milling machines from page 122	

Scope of supply
› Chip tray
› Operating tool

Machine vices	Article no.
ZAS 50	3354170
HMS 125	3355127
FMS 125	3354125
FMS 150	3354150
FMSN 125	3354120
FMSN 150	3354130
VMQ 125	3354182
VMQ 150	3354183
MV3-75	3354175
MV3-125	3354178
DAS 100	3355500
HCV 105	3536210
Infomation about vices from page 116	

* Important information on transport surcharge and lump sum and „Operation of machines with frequency converters“ on page 249
The milling machines (frequency inverters) comply with standard DIN EN 55011:2011-04 class C2