

DRILLING MACHINES

GEAR



Drills with gear units

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BELT-DRIVEN



Belt-driven drills

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RADIAL



Radial drills

Page 50 - 51 and Page 54 - 57

Heavy duty gearbox drill for industrial use. With coolant and thread tapping unit, and automatic spindle sleeve feed. DH 55V with continuously adjustable speed control

Facts that impress in terms of quality, performance and price

- ▶ Heavy, solid cast design
- ▶ Dirt/water-resistant, easy-to-clean membrane keyboard
- ▶ 24 V DC electronics
- ▶ Electrical spindle sleeve feed
- ▶ Drilling depth stop
- ▶ Automatic gearwheel lubrication via oil pump
- ▶ Thread tapping device.
- ▶ Machine lamp integrated in drilling head
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Generously dimensioned drilling table, solid, precision workmanship, with parallel T-slots and recirculating coolant duct, reinforcing ribs on rear, rotates through $\pm 90^\circ$ about the column, laterally tilting

- ▶ Motorised drilling table height adjustment
- ▶ Cooling unit and external coolant tank, can be removed for easier and complete emptying
- ▶ Chip filter in line with Machinery Directive
- ▶ Extremely stable, thick-walled cast-iron column for excellent force absorption
- ▶ Solid base plate with parallel T-slots, precision surface finish
- ▶ Optional footswitch available for toggling between clockwise and anticlockwise run and for thread tapping

OPTIdrill DH 55V

- ▶ Continuously adjustable speed control
- ▶ Feed shutdown



- › Easily readable digital display for speed, drilling depth | tapping depth and piece counter
- › Feed deactivation via depth adjustment





Technical specifications, accessories and dimensions

Model	DH 55G	DH 55V
Article no.	3034265	3034267
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor output	2.2 / 2.8 kW	2,8 kW
Coolant pump motor	100 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 55 mm	
Cont. drilling performance steel (S235JR)	Ø 50 mm	
Thread tapping steel (S235JR)	M42	
Spindle		
Spindle sleeve stroke	200 mm	
Spindle seat	MT 4	
Throat	400 mm	
Automatic spindle sleeve feed	3 speeds: 0.1 / 0.15 / 0.2 mm/rev	
Rotational speeds		
Spindle speeds	45 - 2 000 rpm	10 - 3 000rpm 4 speeds, electronically controlled
Number of speeds	16 speeds	
Drilling table		
Drilling table workspace L x W	600 x 600 mm	
T-slot size / spacing / count	18 mm / 160 mm / 3	
Drilling table load bearing capacity	350 kg	
Drill table rotation/lateral tilt	360° / ± 90°	
Clearance spindle - drilling table	130 - 750 mm	
Machine base		
Machine base work area L x W	515 x 570 mm	
T-slot size / spacing / count	18 mm / 150 mm / 2	
Distance spindle - machine base	max. 1 300 mm	
Dimensions		
Column diameter	Ø 200 mm	
Length x width x height	850 x 1 050 x 2 500 mm	
Weight	800 kg	900 kg

Accessories	Article no.
Assortment of clamping tools size 16, 58-parts	3352019
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Direct quick release chuck 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665
Thermdrill MT 2	3060005
Foot switch	3050032

for thread tapping and toggling clockwise/anticlockwise rotation

> More „Accessories for drills“ from page 64

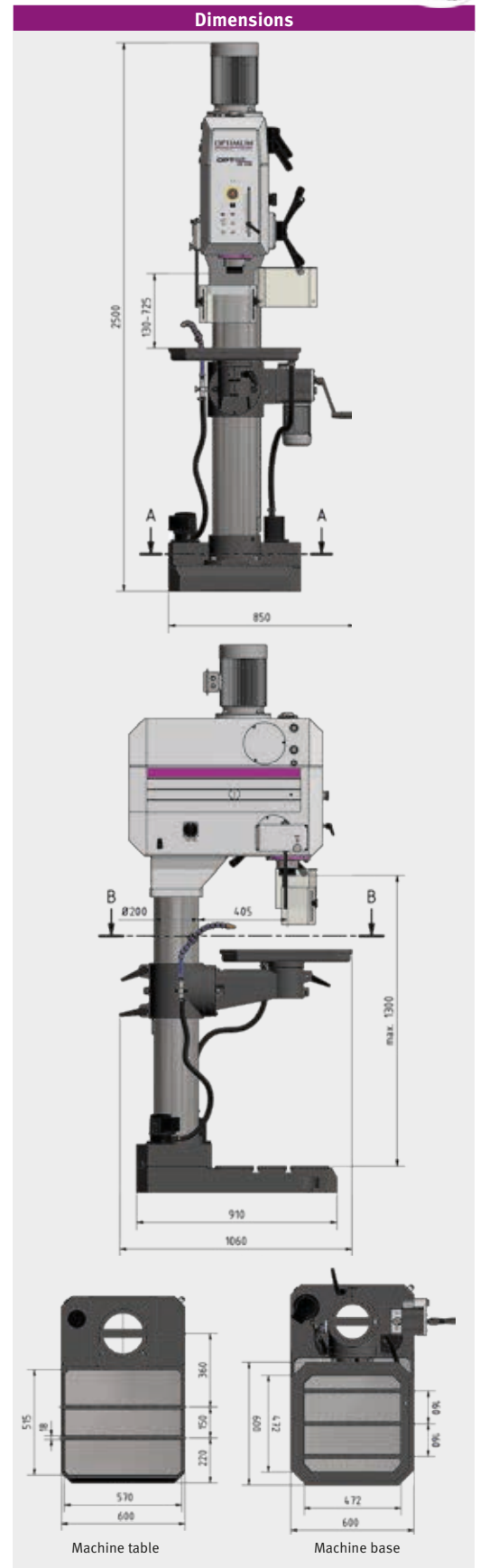


Machine vices	Article no.
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240

> Information on the vises on page 71

* Important information on transport surcharges and „Operation of machines with frequency converters“ on page 253

**The drill (frequency converter) complies with the DIN EN 55011 standard: class C2



Scope of supply

- > Quick-action drill chuck 1 - 16 mm
- > Morse taper MT 4/B16

Heavy duty gearbox drill for industrial use

With coolant and thread tapping unit, and automatic spindle sleeve feed

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
- ▶ Excellent concentricity thanks to tempered and ground main spindle
- ▶ Two-stage drive motor
- ▶ Right-handed/left-handed rotation
- ▶ Automatic gearwheel lubrication via oil pump
- ▶ Thread tapping device.
- ▶ Main switch and motor circuit breaker
- ▶ Motorised table height adjustment
- ▶ Machine lamp integrated into drilling head
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Generously dimensioned drilling table, solid, precision workmanship, with parallel T-slots and recirculating coolant duct, reinforcing ribs on rear, rotates through $\pm 90^\circ$ about the column, laterally tilting
- ▶ Cooling unit and external coolant tank, can be removed for easier and complete emptying
- ▶ Chip filter in line with Machinery Directive
- ▶ Extremely stable, thick-walled cast-iron column – column diameter 200 mm – for excellent force absorption
- ▶ Solid base plate with parallel T-slots, precision surface finish

Heavy, solid
cast design
950 kg
Smooth action, stable

Integrated push-out tool



- › Spindle lock with integrated ejector for easy tool change

Automatic spindle sleeve feed



- › For deep drilling or blind hole drilling, the clutch on the automatic spindle sleeve feed can be released or engaged at any time by pressing the button on the feed handle.

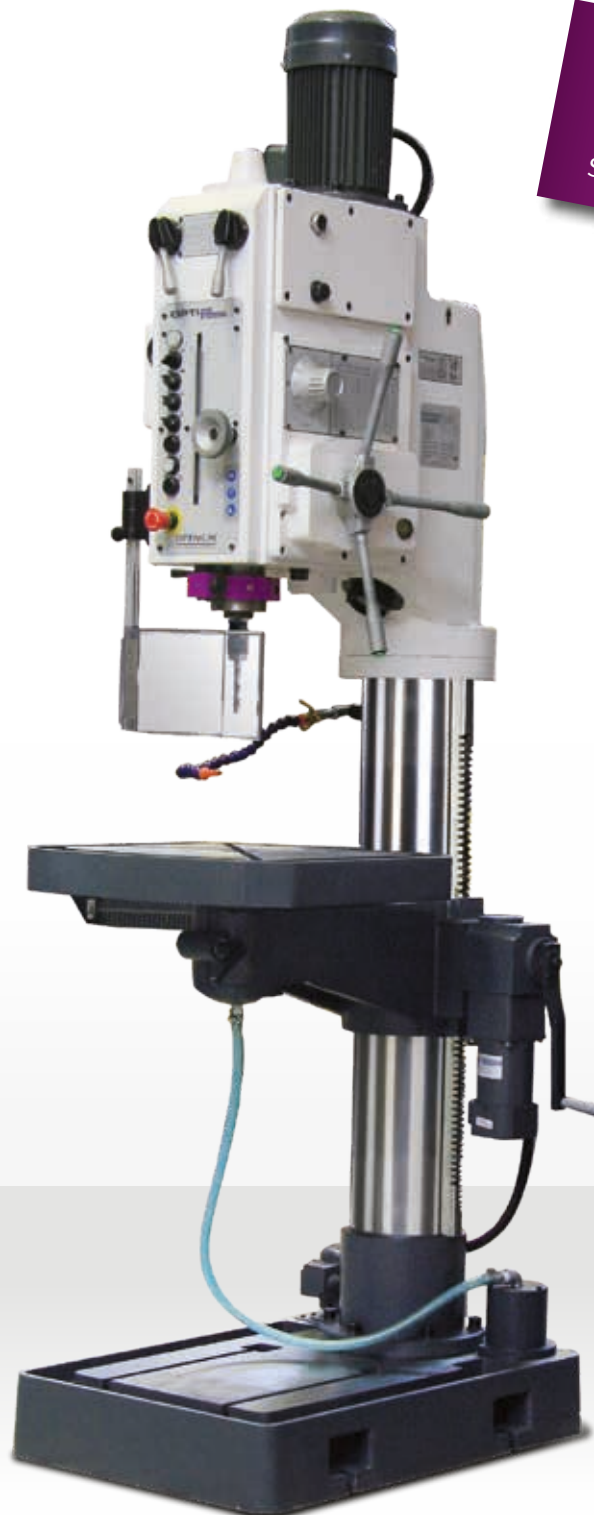


Fig.: B 50GSM



Technical specifications, accessories and dimensions

Model	B 50GSM
Article no.	3034500
Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	2.4/3.0 kW
Coolant pump motor	40 W
Drilling performance	
Drilling performance in steel (S235JR)	Ø 50 mm
Continuous drilling performance in steel (S235JR)	Ø 45 mm
Thread tapping steel (S235JR)	M42
Spindle seat	
Spindle sleeve stroke	230 mm
Spindle seat	MT 4
Throat	375 mm
Autom. spindle sleeve feed	6 speeds: 0.05-0.3 mm/rev
Speeds	
Spindle speeds	54 - 2 090 rpm
Number of speeds	18 speeds
Drilling table	
Workspace drilling table length x width	600 x 600 mm
T-slot size	18 mm, diagonal
Drilling table load bearing capacity	300 kg
Drill table rotation/lateral tilt	360° / ± 90°
Clearance spindle - drilling table	max. 800 mm
Machine base	
Machine base workspace length x width	600 x 520 mm
T-Slot size / no / distance	18 mm / 2 / 280 mm
Distance spindle - machine base	max. 1 300 mm
Dimensions	
Column diameter	Ø 200 mm
Length x width x height	985 x 775 x 2 460 mm
Overall weight	950 kg

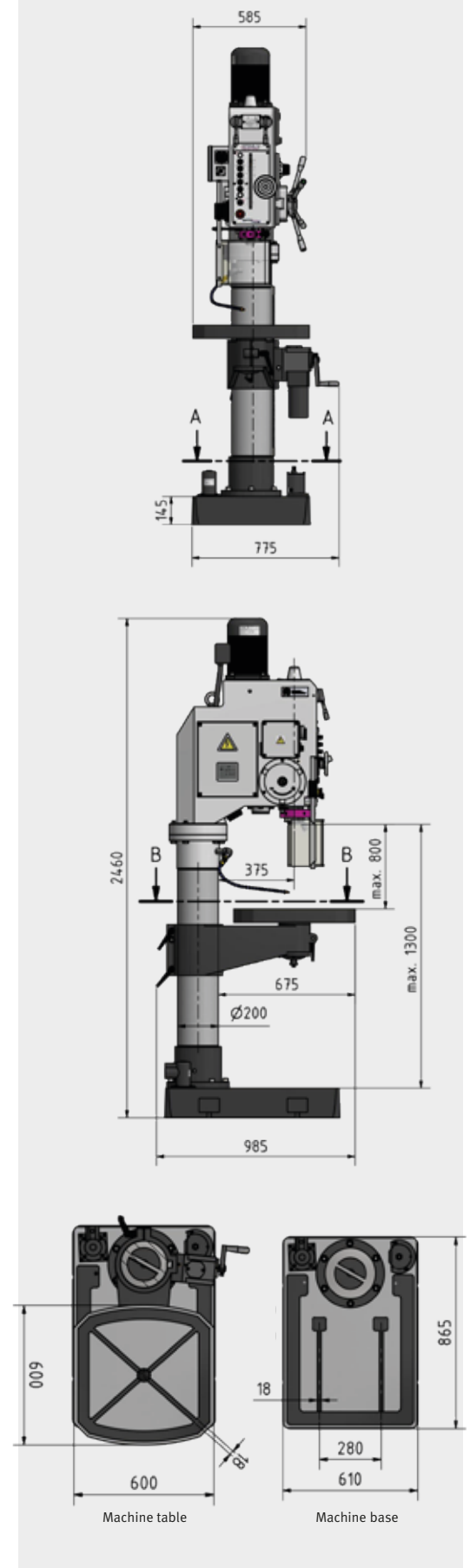
Scope of supply

- > Quick-action drill chuck 1 - 16 mm
- > Morse taper MT 4/B16
- > T-slot nuts

Accessories	Article no.
Assortment of clamping tools size 16, 58-parts	3352019
Hold-down device 18 mm/M16	3352032
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Direct quick release chuck 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665
Thermdrill MT 2	3060005
> More „Accessories for drills“ from page 64	

Machine vices	Article no.
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240
> Information on the vices on page 71	

Dimensions



Heavy-duty gearbox drilling machine with thread tapping device for industrial applications. DH 45V with continuously adjustable speed control

Facts that impress in terms of quality, performance and price

- ▶ Heavy, solid cast design
- ▶ Dirt- and water-resistant, easy-to-clean membrane keyboard
- ▶ 24 V DC electronics
- ▶ Drilling depth stop
- ▶ Automatic gearwheel lubrication via oil pump
- ▶ Thread tapping device.
- ▶ Machine lamp integrated in drilling head
- ▶ Main switch
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Generously dimensioned drilling table, solid, precision workmanship, with parallel T-slots and recirculating coolant duct, reinforcing ribs on rear, rotates through $\pm 90^\circ$ about the column, laterally tilting
- ▶ Cooling unit and external coolant tank, can be removed for easier and complete emptying

- ▶ Extremely stable, thick-walled cast-iron column for excellent force absorption
- ▶ Solid base plate with parallel T-slots, precision surface finish
- ▶ Optional footswitch available for toggling between clockwise/ anticlockwise run and for thread tapping (Article no. 3050032)

OPTIdrill DH 45G

- ▶ Mechanical spindle sleeve feed

OPTIdrill DH 45V

- ▶ Electrical spindle sleeve feed
- ▶ Continuously adjustable speed control
- ▶ Feed shutdown



- › Easily readable digital display for speed, drilling depth | tapping depth and piece counter
- › Feed deactivation via depth adjustment



Fig.: DH 45G

Figure: DH 45V

WITH AND
WITHOUT VARIO



Technical specifications, accessories and dimensions

Model	DH 45G	DH 45V**
Article no.	3034255	3034262
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor output	2.2 kW	
Coolant pump motor	40 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 40 mm	
Cont. drilling performance steel (S235JR)	Ø 35 mm	
Thread tapping steel (S235JR)	M35	
Spindle		
Spindle sleeve stroke	180 mm	
Spindle seat	MT 4	
Throat	350 mm	
Automatic spindle sleeve feed	3 speeds: 0.1 / 0.15 / 0.2 mm/rev	
Speeds		
Spindle speeds	90 - 1 520 rpm	30 - 2 430 rpm
Number of speeds	8 speeds	4 speeds, electronically controlled
Drilling table		
Drilling table workspace L x W	530 x 530 mm	
T-slot size / spacing / count	16 mm / 3 / 125 mm	
Drilling table load bearing capacity	250 kg	
Drill table rotation/lateral tilt	360° / ± 90°	
Clearance spindle - drilling table	100 - 740 mm	
Machine base		
Machine base work area L x W	435 x 445 mm	
T-slot size / spacing / count	18 mm / 150 mm / 2	
Distance spindle - machine base	max. 1 210 mm	
Dimensions		
Column diameter	Ø 150 mm	
Length x width x height	850 x 550 x 2.350 mm	
Weight	530 kg	550 kg

Accessories	Article no.
Assortment of clamping tools size 16, 58-parts	3352019
Assortment of clamping tools size 14, 58-parts	3352018
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Direct quick release chuck 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665
Thermdrill MT 2	3060005
Foot switch	3050032

for thread tapping and toggling clockwise/anticlockwise rotation

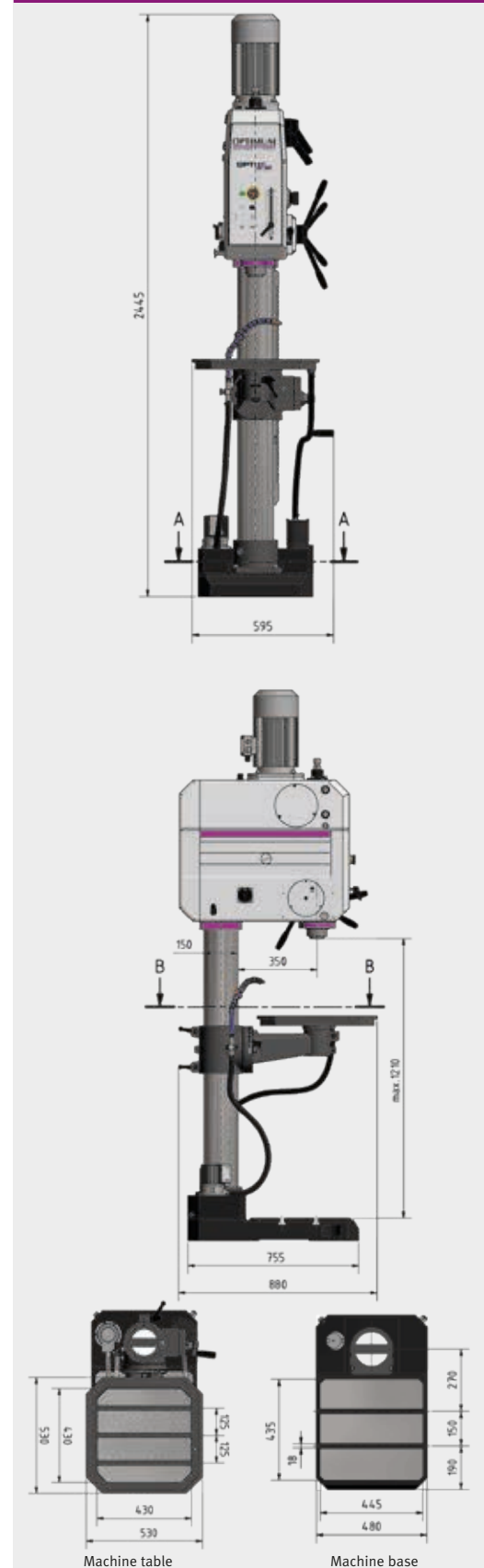
› More „Accessories for drills“ from page 64



Machine vices	Article no.
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240

* Important information on transport surcharges and „Operation of machines with frequency converters“ on page 253
**The drill (frequency converter) complies with the DIN EN 55011 standard: class C2

Dimensions



Scope of supply

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MT 4/B16

Gear drilling machine with thread tapping unit. DH 35V with continuously adjustable speed control.

Facts that impress in terms of quality, performance and price

- ▶ Dirt/water-resistant, easy-to-clean membrane keyboard
- ▶ 24 V DC electronics
- ▶ Drilling depth stop
- ▶ Electrical spindle sleeve feed
- ▶ Low-maintenance gear unit running in a closed oil sump
- ▶ Thread tapping device.
- ▶ Machine lamp integrated in drilling head
- ▶ Main switch
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Generously dimensioned drilling table, solid, precision workmanship, with diagonal T-slots and recirculating coolant duct, reinforcing ribs on rear, rotates through $\pm 90^\circ$ about the column, laterally tilting

- ▶ Coolant unit with coolant tank integrated into base plate
- ▶ Chip filter removes coarse components from the coolant
- ▶ Extremely stable, thick-walled cast-iron column for excellent force absorption
- ▶ Solid base plate with parallel T-slots, precision surface finish
- ▶ Optional footswitch available for toggling between clockwise/ anticlockwise run and for thread tapping (Article no. 3050032)

OPTIdrill DH 45V

- ▶ Continuously adjustable speed control
- ▶ Feed shutdown

DH 45V Siemens SINAMICS G110M



State-of-the-art control solution



- > Easily readable digital display for speed, drilling depth | tapping depth and piece counter
- > Feed deactivation via depth adjustment



Fig.: DH 35G

Fig.: DH 35V



Technical specifications, accessories and dimensions

Model	DH 35G	DH 35V
Article no.	3034250	3034252
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor output	1.5 / 2.2 kW	2.2 kW
Coolant pump motor	40 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 35 mm	
Continuous drilling performance in steel (S235JR)	Ø 26 mm	
Thread tapping steel (S235JR)	M24	
Spindle		
Spindle sleeve stroke	125 mm	
Spindle seat	MT 4	
Throat	285 mm	
Automatic spindle sleeve feed	3 speeds: 0.05-0.15 mm/rev	
Speeds		
Spindle speeds	75 - 2 000 rpm	30 - 2 950 rpm
Number of speeds	8 speeds	4 speeds, electronically controlled
Drilling table		
Drilling table workspace L x W	400 - 420 mm	
T-slot size	14 mm, diagonal	
Drilling table load bearing capacity	200 kg	
Drill table rotation/lateral tilt	360° / ± 90°	
Clearance spindle - drilling table	65 - 800 mm	
Machine base		
Machine base work area L x W	420 x 395 mm	
T-slot size / spacing / count	14 mm / 150 mm / 2	
Distance spindle - machine base	max. 1 217 mm	
Dimensions		
Column diameter	Ø 115 mm	
Length x width x height	860 x 474 x 2 175 mm	
Weight	350 kg	450 kg

Accessories	Article no.
Assortment of clamping tools size 12, 58-parts	3352017
Blank holder 14 mm/M12	3352031
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Direct quick release chuck 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665
Thermdrill MT 2	3060005
Foot switch	3050032

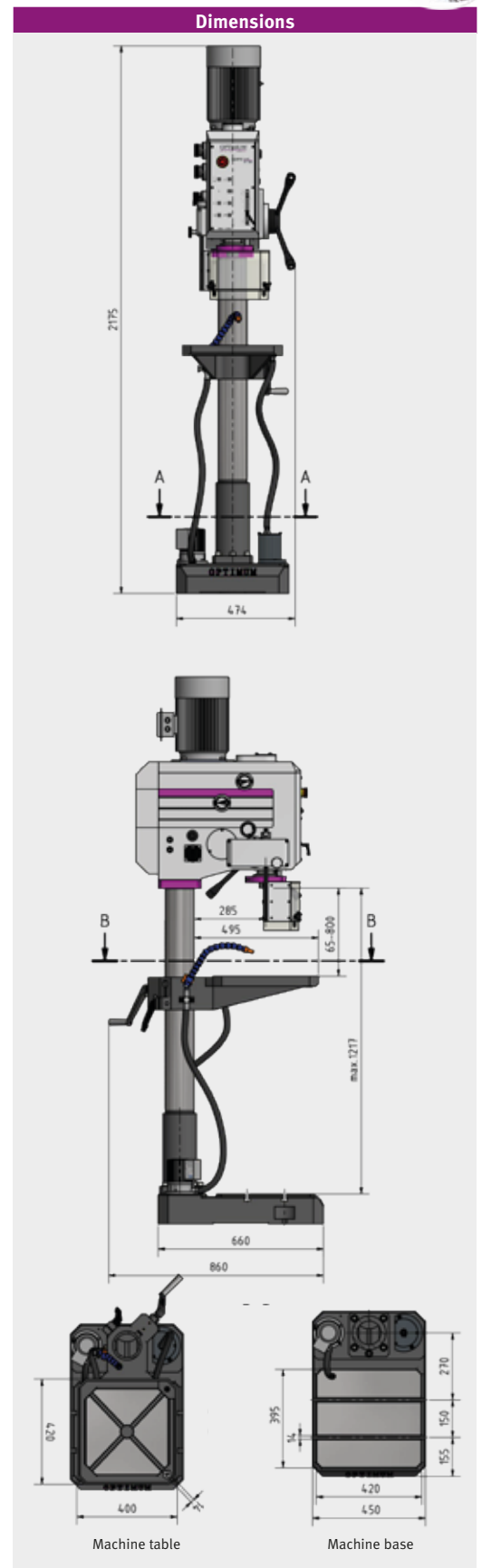
for thread tapping and toggling clockwise/anticlockwise rotation

> More „Accessories for drills“ from page 64



Machine vices	Article no.
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240

> Information on the vises on page 71



Scope of supply

- > Quick-action drill chuck 1 - 16 mm
- > Morse taper MT 4/B16

Heavy-duty gearbox drilling machine with thread tapping device

Facts that impress in terms of quality, performance and price

- ▶ Heavy, solid cast design
- ▶ Automatic gearwheel lubrication via oil pump
- ▶ Excellent concentricity thanks to hardened and polished main spindle
- ▶ Thread tapping device.
- ▶ Main switch and motor circuit breaker
- ▶ Adjustable drilling depth stop with millimetre scale
- ▶ Machine lamp integrated in drilling head
- ▶ Precision, generously dimensioned drilling table, solid workmanship, with diagonal T-slots and recirculating coolant duct, reinforcing ribs on rear

- ▶ Integrated push-out tool for easy tool changes
- ▶ Coolant system and chip filter in line with Machinery Directive
- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate, large dimensions, extremely stable

OPTIdrill B 40 GSM

- ▶ Electrical spindle sleeve feed

OPTIdrill B 40GSP

- ▶ Manual spindle sleeve feed

Spindle sleeve feed 2 speeds 0.1/0.2 mm/rev



B 40GSM - electrical

For deep drilling or blind hole drilling, the clutch on the automatic spindle sleeve feed can be released or engaged at any time by pressing the button on the feed handle



B 40GSP - manual

Control Cabinet



- > Clear-cut layout
- > Generously dimensioned
- > Certified switches by ABB
- > 24V AC
- > Certified components by Siemens or Schneider



Fig.: B 40GSP

Fig.: B 40GSM



Technical specifications, accessories and dimensions

Model	B 40GSP	
Article no.	3034403	
Model	B 40GSM	
Article no.	3034400	
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	0.85 / 1.5 kW	
Coolant pump motor	40 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 35 mm	
Cont. drilling performance in steel (S235JR)	Ø 30 mm	
Thread tapping steel (S235JR)	M24	
Spindle seat		
Spindle sleeve stroke	180 mm	
Spindle seat	MT 4	
Throat	350 mm	
Spindle sleeve feed	2 speeds, 0.1/0.2 mm/rev	
Speeds		
Spindle speeds	50 - 1 450 rpm	
Number of speeds	18 speeds	
Drilling table		
Workspace drilling table length x width	560 x 560 mm	
T-slot size	18 mm, diagonal	
Rotating drilling table	± 90°	
Clearance spindle - drilling table	max. 780 mm	
Drilling table load bearing capacity	250 kg	
Machine base		
Machine base work area L x W	510 x 500 mm	
T-Slot size / no / distance	18 mm / 2 / 150 mm	
Clearance spindle - machine base	max. 1 320 mm	
Dimensions		
Column diameter	Ø 150 mm	
Length x width x height	935 x 530 x 2 280 mm	
Overall weight	465 kg	500 kg

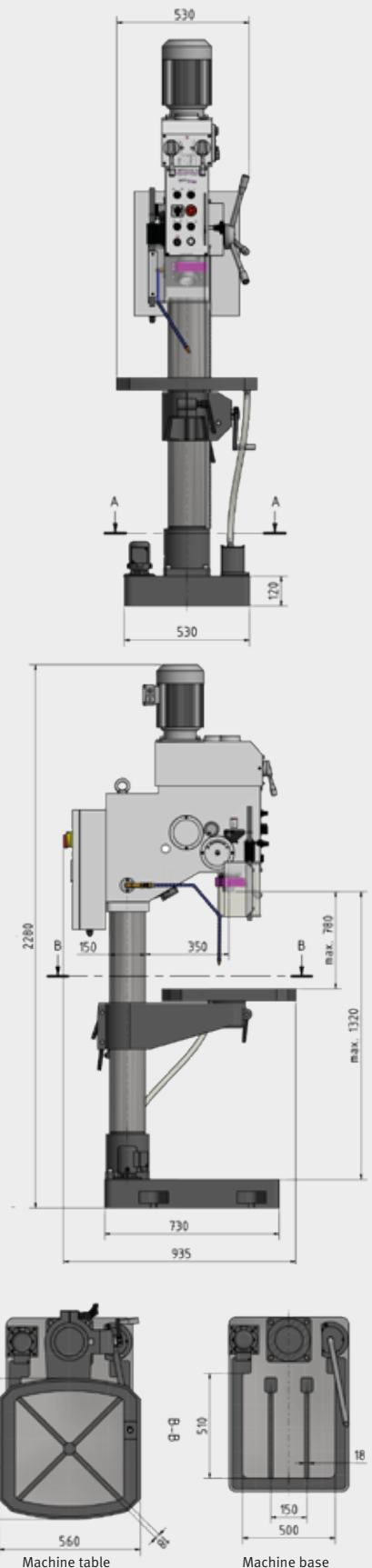
Scope of supply

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MT 4/B16

Accessories	Article no.
Assortment of clamping tools size 16, 58-parts	3352019
Blank holder 14 mm/M12	3352031
Quick release chuck direct MT 4 / 1 - 16 mm	3050574
Twist drill bits HSS-CO 5% , 25 parts	3201010
Twist drill bits HSS-CO 5% , 51 parts	3201020
Twist drill bits HSS-CO 5% , 41 parts	3201021
Reduction sleeve MT 4 - MT 3	3050664
› More „Accessories for drills“ from page 64	

Machine vices	Article no.
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234
› Information on the vices on page 71	

Dimensions



Upright drills with Siemens inverter technology and polyamide gearwheels.

With continuously adjustable speed control. Installation of an optional footswitch possible

Facts that impress in terms of quality, performance and price


- ▶ Frequency converter
- ▶ User-friendly membrane keyboard
- ▶ Digital speed display
- ▶ Thread tapping function
- ▶ Smooth action thanks to polished multi-tooth carrier
- ▶ Excellent concentricity thanks to hardened and polished main spindle
- ▶ Low-maintenance, grease-lubricated gearbox
- ▶ Gearbox with PA6 gearwheels
- ▶ Large speed range
- ▶ User-friendly membrane keyboard
- ▶ Heavy, solid cast design
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Adjustable drilling depth stop with millimetre scale
- ▶ Right-handed/left-handed rotation
- ▶ Thread tapping function

- ▶ Machine lamp integrated in drilling head
- ▶ Integrated push-out tool for easy tool changes
- ▶ Drilling table with precision workmanship, diagonal T-slots, circumferential coolant duct
- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate, large dimensions und pronounced ribbing on rear
- ▶ Optional footswitch available for toggling between clockwise/ anticlockwise run and for thread tapping (Article no. 3050032)

OPTIdrill DH 32GSV


- ▶ Automatic spindle sleeve feed
- ▶ Coolant system and chip filter in line with Machinery Directive
- ▶ Torque in lowest gear up to 200 Nm

DH 32GSV
Automatic spindle sleeve feed



› Activation by pressure switch in spindle sleeve lever. An electromagnetic clutch provides propulsion. The unit is deactivated using the drilling depth stop or by once again pressing the button in the spindle sleeve lever.

Thermdrill



› Information see page 72



Figure: DH 28GSV with optional chuck

Figure: DH 32GSV with optional chuck



WITH AND
WITHOUT VARIO

Technical specifications, accessories and dimensions

Model	DH 28GSV	DH 32GSV
Article no.	3034235	3034245
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	1.5 kW	2.2 kW
Coolant pump motor	-	40 W
Drilling performance		
Drilling performance in steel (S235JR)	Ø 26 mm	Ø 30 mm
Continuous drilling performance steel (S235JR)	Ø 23 mm	Ø 26 mm
Thread tapping steel (S235JR)	M 16 x 2 mm	M 16 x 2 mm
Spindle		
Spindle sleeve stroke	127 mm	125 mm
Spindle seat	MT 3	MT 4
Throat	260 mm	285 mm
Automatic spindle sleeve feed	-	2 speeds: 0.05 / 0.1 mm
Speeds		
Spindle speeds	45 - 3 200 rpm	40 - 3 000 rpm
Number of speeds	4 speeds, electronically controlled	
Drilling table		
Drilling table workspace L x W	376 x 394 mm	400 x 420 mm
T-slot size	14 mm, diagonal	14 mm, diagonal
Drilling table load bearing capacity	150 kg	200 kg
Rotating drilling table	360°	360°
Clearance spindle - drilling table	max. 875 mm	max. 820 mm
Machine base		
Machine base work area L x W	350 x 356 mm	420 x 395 mm
T-slot size / spacing / count	14 mm / 120 mm / 2	14 mm / 150 mm / 2
Distance spindle - machine base	max. 1 285 mm	max. 1 270 mm
Dimensions		
Column diameter	Ø 92 mm	Ø 115 mm
Length x width x height	690 x 375 x 2 080 mm	820 x 450 x 2 230 mm
Overall weight	175 kg	304 kg

Scope of supply

> Morse taper MK

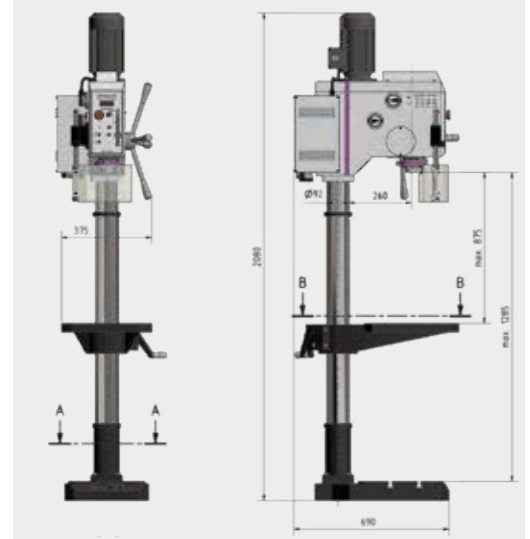
Accessories	Article no.
Assortment of clamping tools size 12, 58-part	3352017
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626
Twist drill bits HSS-CO 5% , 25 parts	3201010
Twist drill bits HSS-CO 5% , 51 parts	3201020
Twist drill bits HSS-CO 5% , 41 parts	3201021
Thermdrill MT 2	3060005
Foot switch	3050032
Functions: Right-handed/left-handed rotation for thread tapping	
> More „Accessories for drills“ from page 64	



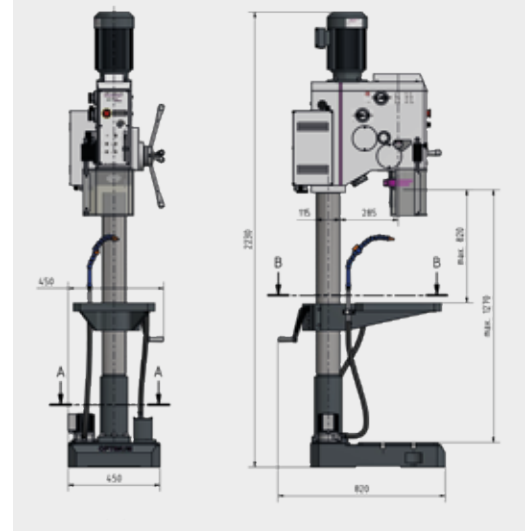
Machine vices	Article no.
BMS 120	3000012
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234
> Information on the vices on page 71	

* Important information on transport surcharges and „Operation of machines with frequency converters“ on page 253
The machines comply with DIN EN 55011: class C2.

Dimensions



Dimensions



Accessories DH 28GSV	Article no.
Direct quick release chuck 1-16 mm	3050573
Morse taper MT 3/B16	3050660
Reduction sleeve MT 3 - MT 2	3050663
Twist drill HSS / MT 3	3051003
Universal coolant unit	3352002

Accessories DH 32GSV	Article no.
Direct quick release chuck 1-16 mm	3050574
Morse taper MT 4/B16	3050661
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665

Preface

Drilling

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Measuring

Bench and Upright drills with polyamide gearwheels.

Installation of an optional footswitch possible with DH 32GS

Facts that impress in terms of quality, performance and price


- ▶ Excellent concentricity thanks to hardened and polished main spindle
- ▶ Low-maintenance, grease-lubricated gearbox
- ▶ Gearbox with PA6 gearwheels
- ▶ Large speed range
- ▶ Heavy, solid cast design
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Adjustable drilling depth stop with millimetre scale
- ▶ Right-handed/left-handed rotation
- ▶ Machine lamp integrated in drilling head
- ▶ Integrated push-out tool for easy tool changes

- ▶ Drilling table with precision workmanship, diagonal T-slots, circumferential coolant duct
- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate, large dimensions und pronounced ribbing on rear

OPTIdrill DH 32GS


- ▶ Thread tapping function
- ▶ Automatic spindle sleeve feed
- ▶ Coolant system and chip filter in line with Machinery Directive
- ▶ Optional footswitch available for toggling between clockwise/anticlockwise run and for thread tapping (Article no. 3050032)

DH 32GS
Automatic spindle sleeve feed



▶ Activation by pressure switch in spindle sleeve lever. An electromagnetic clutch provides propulsion. The unit is deactivated using the drilling depth stop or by once again pressing the button in the spindle sleeve lever.

Therm드릴



▶ Information see page



Figure: DH 26GT with optional chuck

Figure: DH 32GS with optional chuck



Technical data and accessories

Model	DH 26GT	DH 28GS	DH 32GS
Article no.	3034220	3034230	3034240
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	1.1 / 1.5 kW	1.1 / 1.5 kW	1.5 / 2.2 kW
Coolant pump motor	-	-	40 W
Drilling performance			
Drilling performance in steel (S235JR)	Ø 24 mm	Ø 26 mm	Ø 30 mm
Continuous drilling performance steel (S235JR)	Ø 21 mm	Ø 23 mm	Ø 26 mm
Thread tapping steel (S235JR)	-	-	M16 x 2 mm
Spindle			
Spindle sleeve stroke	127 mm	127 mm	125 mm
Spindle seat	MT 3	MT 3	MT 4
Throat	235 mm	260 mm	285 mm
Automatic spindle sleeve feed	-	-	2 speeds: 0.05 mm / 0.1 mm
Speeds			
Spindle speeds	75 - 2 900 rpm	75 - 2 900 rpm	75 - 2 000 rpm
Number of speeds	8 speeds	8 speeds	8 speeds
Drilling table			
Workspace drilling table length x width	380 x 380 mm	376 x 394 mm	400 x 420 mm
T-slot size	14 mm, diagonal	14 mm, diagonal	14 mm, diagonal
Drilling table load bearing capacity	120 kg	150 kg	200 kg
Rotating drilling table	360°	360°	360°
Clearance spindle - drilling table	max. 450 mm	max. 875 mm	max. 820 mm
Machine base			
Machine base work area L x W	350 x 356 mm	350 x 356 mm	450 x 395 mm
T-slot size / spacing / count	14 mm / 120 mm / 2	14 mm / 120 mm / 2	14 mm / 150 mm / 2
Distance spindle - machine base	max. 610 mm	max. 1 285 mm	max. 1 270 mm
Dimensions			
Column diameter	Ø 92 mm	Ø 92 mm	Ø 115 mm
Length x width x height	610 x 380 x 1 430 mm	640 x 376 x 2 080 mm	725 x 450 x 2 200 mm
Overall weight	158 kg	175 kg	312 kg

Scope of supply

> Morse taper MK

Accessories	Article no.
Assortment of clamping tools size 12, 58-parts	3352017
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626
Twist drill bits HSS-CO 5% , 25 parts	3201010
Twist drill bits HSS-CO 5% , 51 parts	3201020
Twist drill bits HSS-CO 5% , 41 parts	3201021
Thermdrill MT 2	3060005

> More „Accessories for drills“ from page 64

Machine vices	Article no.
BMS 120	3000012
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234

> Information on the vises on page 71

Accessories DH 26GT / DH 28GS	Article no.
Direct quick release chuck 1-16 mm	3050573
Morse taper MT 3/B16	3050660
Reduction sleeve MT 3 - MT 2	3050663
Twist drill HSS / MT 3	3051003
Thread tapping chuck M3 - M12	3050705
Thread tapping chuck M8 - M20	3050706
Universal coolant unit	3352002

Accessories DH 32GS	Article no.
Direct quick release chuck 1-16 mm	3050574
Morse taper MT 4/B16	3050661
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 2	3050665
Foot switch	3050032

Functions:

- > Thread tapping
- > Clockwise/anti-clockwise change over switch



Column gear drilling machine with cross table.

The versatile machine for milling and drilling

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
- ▶ Large speed range of 95 - 3 200 rpm
- ▶ Two-stage industrial quality electric motor
- ▶ Generously dimensioned, Solid cross table with precision surface finish, adjustable via 3 hand wheels, includes integrated length scale
- ▶ Adjustable end stops on the cross table
- ▶ Gear head and table are height adjustable
- ▶ Table guideways precisely adjustable via V-ledges
- ▶ Solid baseplate with precision surface finish can be used as a workspace for particularly high workpieces by swivelling out the cross table
- ▶ Right-handed/left-handed rotation
- ▶ Gear head pivots through $\pm 60^\circ$
- ▶ Drilling depth stop
- ▶ Thread tapping function



Fig.: DH 40CT



Technical specifications, accessories and dimensions

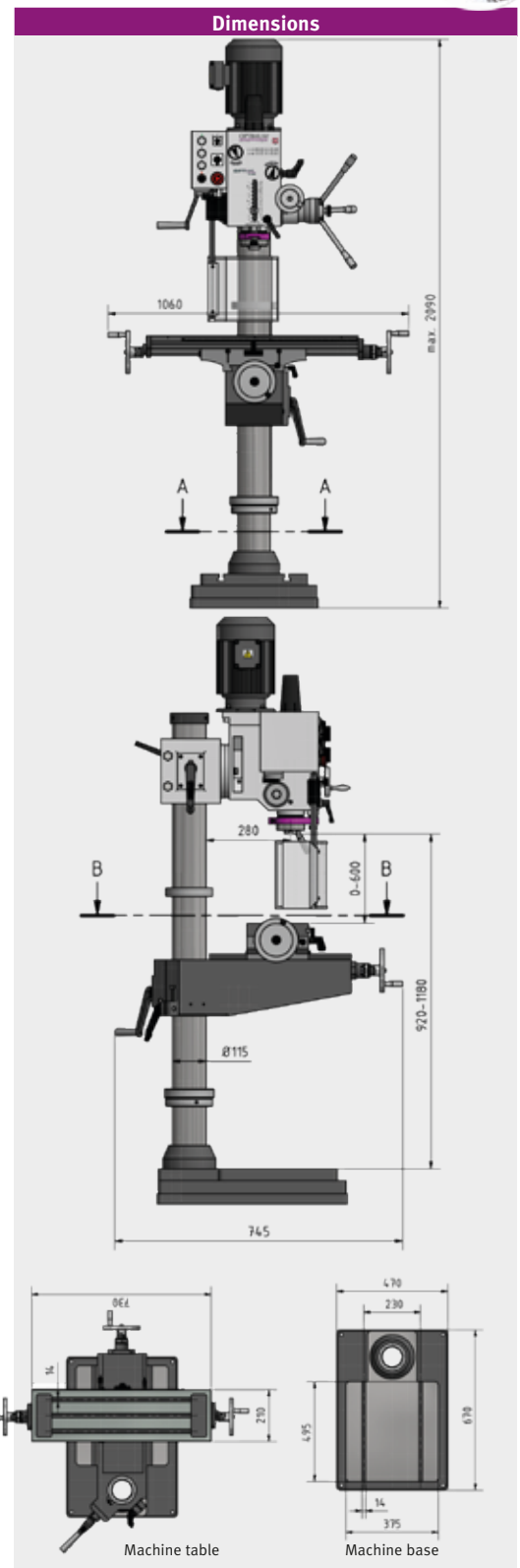
Model	DH 40CT
Article no.	3034350
Technical data	
Electrical connection	400 V / 3 Ph ~ 50 Hz
Motor output, 2 stages	1.1 / 1.5 kW
Drilling/milling output	
Drilling performance in steel (S235JR)	Ø 32 mm
Continuous drilling performance in steel (S235JR)	Ø 25 mm
Max. sensor head size	Ø 76 mm
Max. shaft milling cutter size	Ø 25 mm
Thread tapping steel (S235JR)	M16
Spindle	
Spindle sleeve stroke	120 mm
Spindle seat	MT 4
Throat	280 mm
Spindle sleeve diameter	75 mm
Draw-in rod	M16
Drilling/milling head	
Rotating drilling table / Swivel range	360° / ± 45°
Spindle speeds	95 - 3 200 rpm
Speeds	2 x 6 speeds
Cross table	
Length x width	730 x 210 mm
T-Slot size / no / distance	14 mm / 3 / 63 mm
Load bearing capacity	50 kg
Clearance spindle to cross table	max. 600 mm
X-axis travel stroke manual	480 mm
Y-axis travel stroke manual	180 mm
Z-axis travel stroke manual	560 mm
Machine base	
Machine base work area L x W	495 x 375 mm
T-slot size / spacing / count	14 mm / 230 mm / 2
Distance spindle - machine base	920 - 1 180 mm
Dimensions	
Column diameter	Ø 115 mm
Length x width x height	1 060 x 745 x 2 090 mm
Weight	350 kg

Accessories	Article no.
Assortment of clamping tools size 12, 58-parts	3352017
Hold-down device 14 mm/M12	3352031
Parallel shim set, 20-part	3354001
Height-adjustable tailstock RST 1	3356155
Horizontal-vertical rotary indexing table RT 150	3356150
Universal coolant unit	3352002

› More „Accessories for drills“ from page 64

Machine vices	Article no.
BMS 120	3000012
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234

› Information on the vises on page 71



Scope of supply
› Key type drill chuck 1 - 13 mm / B18
› T-slot nuts
› Push-out tools large and small
› Reduction sleeve MT 4 - MT 3
› Arbor for drill chuck MT 4 / B16
› Operating tool

Universal column gearbox drills with 12 speeds for milling and drilling.

DH 40GP additionally with automatic spindle sleeve feed

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
- ▶ Two-stage industrial electric motor
- ▶ Thread tapping function
- ▶ Gear head and table are height adjustable
- ▶ Large speed range from 95 - 3 200 rpm thanks to 12 switchable speeds
- ▶ Large drilling table, solid, precision workmanship, with diagonal T-slots and recirculating coolant duct, reinforcing ribs on rear side, double clamping
- ▶ Drilling depth stop
- ▶ Height-adjustable chuck protection with micro switch for greatest possible protection of the user

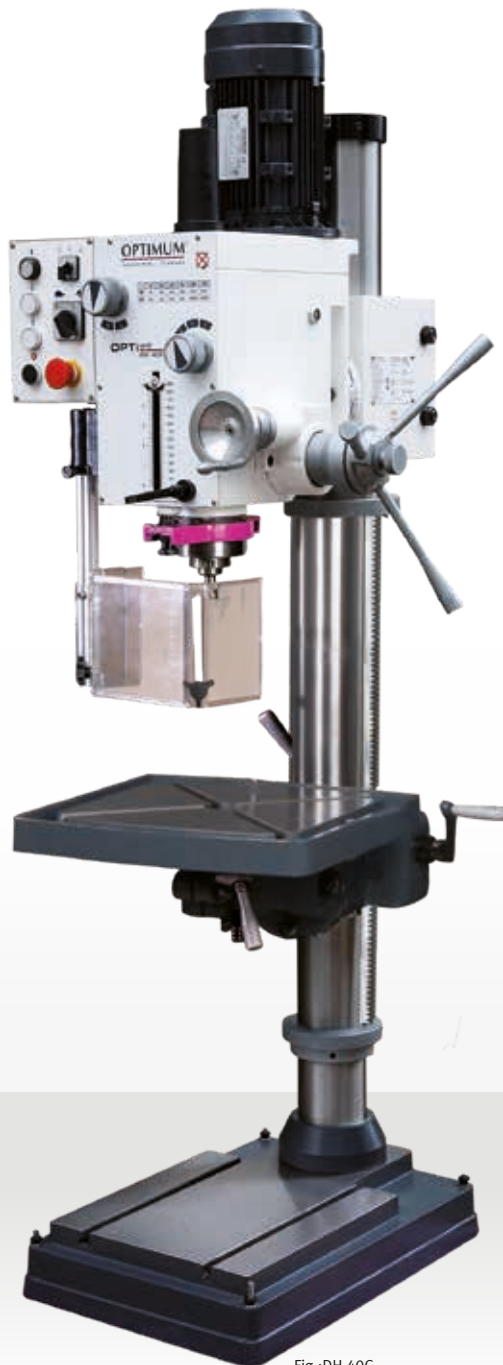
- ▶ Coupling for switching over from manual rough to manual fine feed
- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate with precision surface finish can be used as a workspace for particularly high workpieces by swivelling out the drilling table

OPTIdrill DH 40G

- ▶ Manually spindle sleeve feed

OPTIdrill DH 40GP

- ▶ Automatic or manually spindle sleeve feed





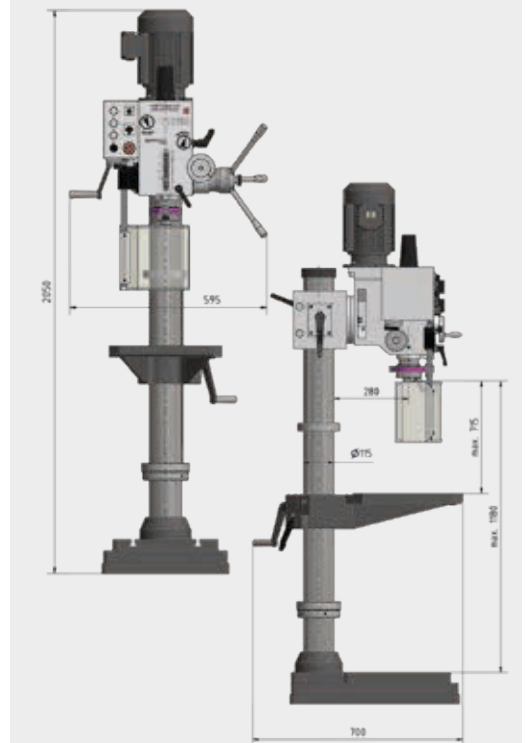
Technical specifications, accessories and dimensions

Model	DH 40G	DH 40GP
Article no.	3034355	3034360
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor output	1.1 / 1.5 kW	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 32 mm	
Continuous drilling performance in steel (S235JR)	Ø 25 mm	
Thread tapping steel (S235JR)	M16	
Spindle		
Spindle sleeve stroke	120 mm	
Spindle sleeve diameter	75 mm	
Spindle seat	MT 4	
Throat	280 mm	
Automatic spindle sleeve feed	-	3 speeds: 0.1 - 0.26 mm/rev
Drilling head pivots/rotates	± 45° / 360°	
Drilling head height adjustment	0 - 265 mm	
Speeds		
Spindle speeds	95 - 3 200 rpm	
Speeds	2 x 6 speeds	
Drilling table		
Length x width	500 x 460 mm	
T-slot size	14 mm, diagonal	
Load bearing capacity	50 kg	
Rotation/lateral tilt	360° / ± 90°	
Clearance spindle - drilling table	max. 715 mm	
Machine base		
Machine base work area L x W	650 x 450 mm	
T-slot size / spacing / count	14 mm / 230 mm / 2	
Distance spindle - machine base	max. 1 180 mm	
Dimensions		
Column diameter	Ø 115 mm	
Length x width x height	595 x 700 x 2 050 mm	
Weight	320 kg	335 kg

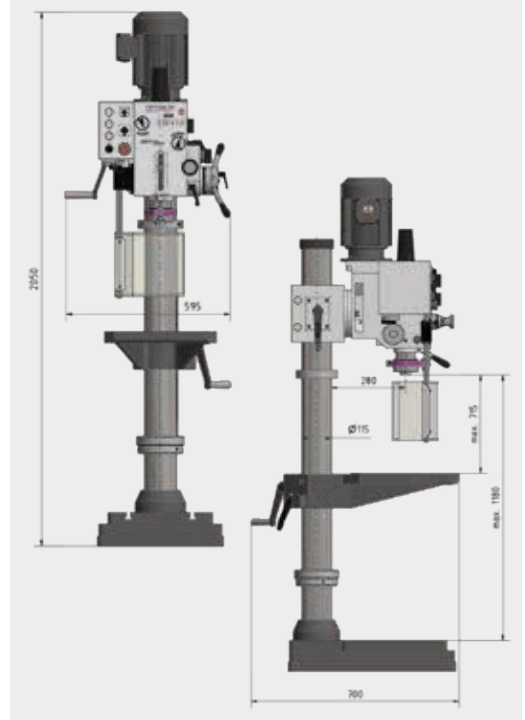
Accessories	Article no.
Assortment of clamping tools size 12, 58-parts	3352017
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Universal coolant unit	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Direct quick release chuck 1 - 16 mm	3050574
Collet chuck set MT 4/ ER 32	3352094
Reduction sleeve MT 4 - MT 3	3050664
Morse taper MT 4/B16	3050661

Machine vises	Article no.
BMS 120	3000012
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240
› Information on the vises on page 71	

Dimensions DH 40G



Dimensions DH 40GP



Scope of supply

- › Quick-action drill chuck 1 - 13 mm
- › Morse taper MT 4/B16
- › Tie rod M16
- › Adapter MT 4 - MT 3
- › Operating tool

Bench and Upright drills with continuous, mechanical belt gear from **BERGES**. Quick speed adjustment using a lever



Facts that impress in terms of quality, performance and price

- ▶ Smooth action powerful electric motor
- ▶ Two speeds
- ▶ Right-handed/left-handed rotation
- ▶ V-belt cover with safety switch
- ▶ Digital speed display integrated in housing
- ▶ Guaranteed concentricity guaranteed to be less than 0.015 mm measured in the drilling spindle sleeve
- ▶ Height adjustable chuck guard with micro switch for greatest possible protection of the user
- ▶ Machine lamp integrated into drilling head
- ▶ Drilling spindle with precision ball bearings
- ▶ Premium quick clamping chuck as standard
- ▶ Precision, generously dimensioned drilling table, solid workmanship, with diagonal T-slots, rotating through 360°, recirculating coolant duct

- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate with with pronounced ribbing on rear
- ▶ The baseplate can be used as a workspace for particularly high workpieces by swivelling out the drilling table

As of DH 28BV

- ▶ Easy tool changes through integrated push-out tool
- ▶ Spindle sleeve lever made of steel

DH 40BV

- ▶ Digital depth sensor
- ▶ Reduction gearbox enables far higher torque

Continuous mechanical gearbox



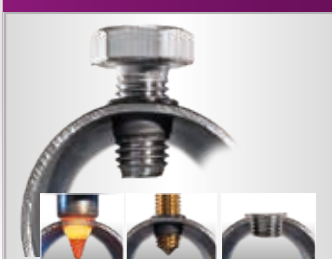
- › Extremely reliable through manual speed control
- › Powerful, smooth action
- › Durable wide groove v-belt
- › Speed change also possible while machine is running
- › Permanent optimal motor efficiency
- › DH 40BV-with reduction gearbox

Speed setting



- › Quicker speed adjustment using a lever

Thermdrill



- › Information see page 72



Figure: DH 24BV

Figure: DH 40BV



Technical data and accessories

Model	DH 24BV	DH 28BV	DH 40BV
Article no.	3020420	3020430	3020450
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	0.85 / 1.5 kW	0.85 / 1.5 kW	1.5 / 2.2 kW
Drilling performance			
Drilling performance in steel (S235JR)	Ø 24 mm	Ø 28 mm	Ø 40 mm
Continuous drilling performance in steel (S235JR)	Ø 20 mm	Ø 24 mm	Ø 32 mm
Spindle			
Spindle sleeve stroke	85 mm	105 mm	160 mm
Spindle seat	MT 2	MT 3	MT 4
Throat	165 mm	200 mm	285 mm
Speeds			
Spindle speeds	300 - 4 000 rpm	300 - 4 000 rpm	150 - 2 000 rpm
Number of speeds	2 speed motor, manual	2 speed motor, manual	2 speed motor, manual
Drilling table			
Drilling table workspace L x W	280 x 300 mm	340 x 360 mm	420 x 400 mm
T-slot size	14 mm, diagonal	14 mm, diagonal	14 mm, diagonal
Clearance spindle - drilling table	max. 515 mm	max. 860 mm	max. 790 mm
Machine base			
Machine base work area L x W	280 x 260 mm	320 x 320 mm	390 x 400 mm
T-slot size / spacing / count	14 mm / 120 mm / 2	14 mm / 120 mm / 2	14 mm / 150 mm / 2
Rotating drilling table	360°	360°	360°
Distance spindle - machine base	max. 681 mm	max. 1 285 mm	max. 1 275 mm
Dimensions			
Column diameter	Ø 80 mm	Ø 92 mm	Ø 115 mm
Length x width x height	675 x 555 x 1 025 mm	755 x 550 x 1 745 mm	920 x 680 x 1 895 mm
Weight	115 kg	152 kg	275 kg

Scope of supply

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MK
- › T-slot nuts

Accessories	Article no.
Assortment of clamping tools size 12	3352017
Hold-down device 14 mm/M12	3352031
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626
Thread tapping chuck M3 - M12	3050705
Thread tapping chuck M8 - M20	3050706
Universal coolant unit	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
› More „Accessories for drills“ from page 64	

Machine vices	Article no.
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230
› Information on the vises on page 71	

DH 24BV accessories	Article no.
Direct quick release chuck 1 - 16 mm	3050571
Direct quick release chuck 1 - 13 mm	3050572
Collet chuck set MT 2/ ER 25	3352052
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002

DH 28BV ACCESSORIES	Article no.
Direct quick release chuck 1 - 16 mm	3050573
Collet chuck set MT 3/ ER 32	3352093
Reduction sleeve MT 3 - MT 2	3050663
Reduction sleeve MT 3 - MT 2	3350313
Morse taper MT 3/B16	3050660
Twist drill bit HSS / MT 3, 9 parts	3051003

DH 40BV accessories	Article no.
Direct quick release chuck 1 - 16 mm	3050574
Collet chuck set MT 4/ ER 32	3352094
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 3	3350314
Morse taper MT 4/B16	3050661

Rugged bench and Upright drills with powerful OPTIMUM Brushless drive, electronic speed control

Facts that impress in terms of quality, performance and price

- ▶ Powerful brushless drive with particularly smooth action and high performance with almost constant torque over the entire speed range
- ▶ Best possible force transmission thanks to aluminium pulleys in combination with GATES quality toothed belts
- ▶ Smooth action thanks to polished multi-tooth carrier
- ▶ Guaranteed concentricity guaranteed to be less than 0.015 mm measured in the drilling spindle sleeve
- ▶ Separate emergency stop button
- ▶ Digital speed display integrated in housing
- ▶ Premium OPTIMUM quick clamping chuck as standard
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Single-piece, pressure cast aluminium spindle sleeve lever (B 24HV with Softgrip handles)
- ▶ Drilling depth stop
- ▶ V-belt cover with safety switch
- ▶ V-belt tensioning device

- ▶ Right-handed/left-handed rotation
- ▶ Machine lamp integrated in drilling head
- ▶ Precision workmanship; rugged drilling table with diagonal T-slots, 360° rotation and all-around cooling water channel
- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate, large dimensions and pronounced ribbing on rear

As of B 28HV

- ▶ Spindle sleeve lever made of steel
- ▶ Coolant system
- ▶ Chip filter in line with Machinery Directive
- ▶ Easy tool changes through integrated push-out tool

B 34HV

- ▶ Spindle sleeve stroke 160 mm
- ▶ Thread tapping function
- ▶ Digital depth sensor



B 34HV
Operating modes

Operating modes „auto“

- › Motor runs automatically after lever movement
- › Stops again in original position
- › Start and stop pushbuttons do not need to be actuated for repetitive drilling tasks

Operating modes „Thread tapping“

- › The motor is activated by moving the handle down
- › The direction of rotation is changed by the limit switch on the adjustable drilling depth stop



Powerful brushless drive

- › Particularly smooth action
- › Extremely powerful
- › Virtually constant torque over the entire speed range



Fig.: B 24HV



Technical data and accessories

Model	B 24HV	B 28HV	B 34HV
Article no.	3020245	3020285	3020335
Technical specifications			
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor output	1.5 kW	1.5 kW	2.2 kW
Coolant pump motor	-	40 W	40 W
Drilling performance			
Drilling performance in steel (S235JR)	Ø 24 mm	Ø 28 mm	Ø 34 mm
Continuous drilling performance in steel (S235JR)	Ø 20 mm	Ø 24 mm	Ø 26 mm
Thread tapping steel (S235JR)	-	-	M 16 x 2 mm
Spindle			
Spindle sleeve stroke	85 mm	105 mm	160 mm
Spindle seat	MT 2	MT 3	MT 4
Throat	165 mm	200 mm	285 mm
Speeds			
Spindle speeds	100 - 5 950 rpm	35 - 5 600 rpm	40 - 5 000 rpm
Number of speeds	4 speeds Electronic speed control	12 speeds Electronic speed control	9 speeds Electronic speed control
Drilling table			
Drilling table workspace L x W	280 x 300 mm	340 x 360 mm	420 x 400 mm
T-slot size	14 mm, diagonal	14 mm, diagonal	14 mm, diagonal
Rotating drilling table	360°	360°	360°
Clearance spindle - drilling table	max. 515 mm	max. 860 mm	max. 790 mm
Machine base			
Machine base work area L x W	280 x 260 mm	320 x 320 mm	390 x 390 mm
T-slot size / spacing / count	14 mm / 120 mm / 2	14 mm / 120 mm / 2	14 mm / 150 mm / 2
Rotating drilling table	360°	360°	360°
Distance spindle - machine base	max. 590 mm	max. 1 285 mm	max. 1 275 mm
Dimensions			
Column diameter	Ø 80 mm	Ø 92 mm	Ø 115 mm
Length x width x height	665 x 434 x 998 mm	701 x 474 x 1 755 mm	918 x 595 x 1 930 mm
Weight	96 kg	166 kg	275 kg

Accessories	Article no.
Assortment of clamping tools size 12	3352017
Hold-down device 14 mm/M12	3352031
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626

› More „Accessories for drills“ from page 64

Machine vices	Article no.
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234

› Information on the vises on page 71

Accessories B 24HV	Article no.
Direct quick release chuck 1 - 16 mm	3050571
Direct quick release chuck 1 - 13 mm	3050572
Collet chuck set MT 2/ ER 25	3352052
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Thread tapping chuck MT 2	3050702
Universal coolant unit	3352002

Accessories B 28HV	Article no.
Direct quick release chuck 1 - 16 mm	3050573
Collet chuck set MT 3/ ER 32	3352093
Reduction sleeve MT 3 - MT 2	3050663
Reduction sleeve MT 3 - MT 2	3350313
Morse taper MT 3/B16	3050660
Twist drill bit HSS / MT 3, 9 parts	3051003
Thread tapping chuck MT 3	3050705

Accessories B 34HV	Article no.
Direct quick release chuck 1 - 16 mm	3050574
Collet chuck set MT 4/ ER 32	3352094
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 3	3350314
Morse taper MT 4/B16	3050661
Thread tapping chuck MT 4	3050709

Rugged table drilling machine with powerful OPTIMUM brushless drive.

Machine highlight - menu-controlled operation of the drilling/thread tapping operation modes

Facts that impress in terms of quality, performance and price

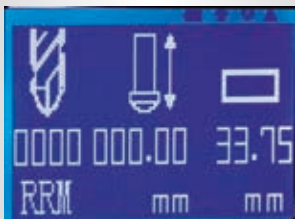
- ▶ Smooth action and powerful brushless drive
- ▶ Best possible force transmission thanks to aluminium pulleys in combination with GATES quality toothed belts
- ▶ Smooth action thanks to polished multi-tooth carrier
- ▶ Guaranteed concentricity guaranteed to be less than 0.015 mm measured in the drilling spindle sleeve
- ▶ Drilling spindle with precision ball bearings
- ▶ Membrane keyboard; soiling and water resistant, easy to clean
- ▶ Premium OPTIMUM quick clamping chuck as standard
- ▶ Separate emergency stop button
- ▶ Precise workmanship; stable drilling table with diagonal T-slots, 360° rotation
- ▶ Circumferential coolant channel surrounding the drilling table
- ▶ Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- ▶ Drilling depth stop
- ▶ V-belt cover with safety switch
- ▶ V-belt tensioning device
- ▶ Solid baseplate with, pronounced ribbing on rear

Powerful brushless drive



- › Particularly smooth action
- › Extremely powerful
- › Virtually constant torque over the entire speed range

Menu-controlled operation Working modes drilling / Threading



OLED-Display

- › Drilling
- › Thread tapping
- › Workpiece thickness selection
- › Spindle speed
- › Depth display (target/actual)

Thermdrill



- › Information see page 72



Figure: DH 18V

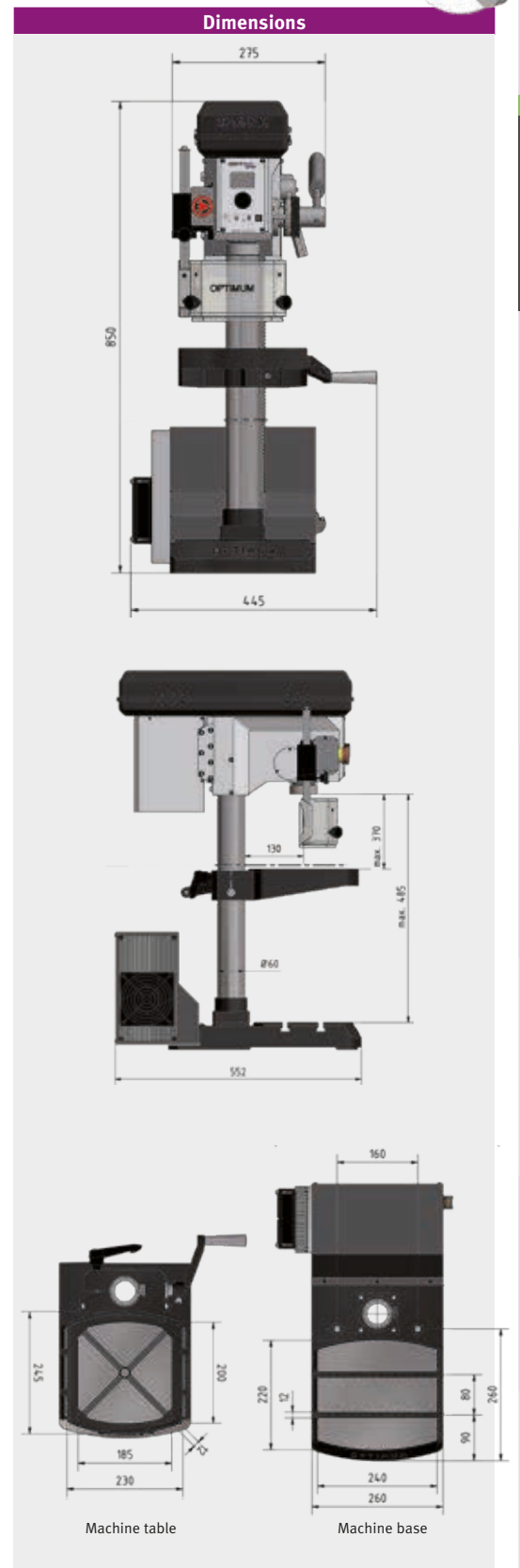


Technical specifications, accessories and dimensions

Model	DH 18V
Article no.	3020220
Technical specifications	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor output	1.5 kW
Drilling performance	
Drilling performance in steel (S235JR)	Ø 18 mm
Continuous drilling performance in steel (S235JR)	Ø 16 mm
Thread tapping steel (S235JR)	M10
Spindle	
Spindle sleeve stroke	65 mm
Spindle seat	MT 2
Throat	132 mm
Speeds	
Spindle speeds	100 - 6 000 rpm
Number of speeds	5 speeds Electronic speed control
Drilling table	
Drilling table workspace L x W	230 x 245 mm
T-slot size	12 mm, diagonal
Rotating drilling table	360°
Clearance spindle - drilling table	max. 370 mm
Machine base	
Machine base work area L x W	220 x 240 mm
T-slot size / spacing / count	12 mm / 80 mm / 2
Distance spindle - machine base	max. 485 mm
Dimensions	
Column diameter	Ø 60 mm
Length x width x height	445 x 552 x 850 mm
Weight	64 kg

Accessories	Article no.
Quick release chuck direct MT 2 / 1 - 16 mm	3050571
Quick release chuck direct MT 2 / 1 - 13 mm	3050572
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Assortment of clamping tools size 10, 58-parts	3352016
Taper drill punch MSP1	3050636
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Thread tapping chuck 6 inserts, sizes M3 - M12	3050702
Thermdrill MT 2	3060005
Machine chassis	3353000
Information „Machine bases“ on page 135	
› More „Accessories for drills“ from page 64	

Machine vices	Article no.
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230
› Information on the vices on page 71	



Scope of supply
› Quick clamping drill chuck 1 - 13 mm
› Morse taper MT 2
› T-slot nuts

Rugged bench/Upright drills with V-belt drive

Facts that impress in terms of quality, performance and price

- ▶ Smooth, powerful industrial electric motor
- ▶ Separate emergency stop button
- ▶ Rugged cast column
- ▶ Drilling depth stop
- ▶ Precision machined drilling table with diagonal T-slots and all-around cooling water channel
- ▶ V-belt cover with safety switch
- ▶ V-belt quick tensioning device
- ▶ Solid, generously dimensioned baseplate with T-slots, pronounced ribbing on rear
- ▶ The baseplate can be used for particularly high workpieces by swivelling out the drilling table
- ▶ Guaranteed concentricity better than 0.015 mm measured in the drilling spindle sleeve
- ▶ Drill spindle with precision ball bearings
- ▶ Premium Optimum quick clamping chuck as standard equipment
- ▶ Generously dimensioned, height adjustable protective screen with safety switch

As of B 24H

- ▶ Machine lamp

As of B 24H/400V

- ▶ Right-handed/left-handed rotation

As of B 28H

- ▶ Easy tool changes through integrated push-out tool
- ▶ Spindle sleeve lever made of steel

B 34H

- ▶ Digital depth sensor
- ▶ Digital speed display

Belt drive



- > Smooth action thanks to polished multi-tooth carrier
- > Best possible force transmission thanks to aluminium pulleys in combination with GATES quality toothed belts



Fig.: B 16H

Fig.: B 24H

Fig.: B 28H

Fig.: B 34H



Technical data and accessories

Model	B 16H	B 24H	B 28H	B 34H
Article no. (230 V)	-	3020241	-	-
Article no. (400 V)	3020217	3020243	3020283	3020333
Technical specifications				
Electrical connection	400 V / 3 Ph ~50 Hz	230 V/1 Ph - 400 V/3 Ph	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	550 W	850 W	850 W	1.5/2.2 kW
Drilling performance				
Drilling performance in steel (S235JR)	Ø 13 mm	Ø 24 mm	Ø 28 mm	Ø 34 mm
Continuous drilling performance in steel (S235JR)	Ø 11 mm	Ø 20 mm	Ø 24 mm	Ø 26 mm
Spindle				
Spindle sleeve stroke	65 mm	85 mm	105 mm	160 mm
Spindle seat	MT 2	MT 2	MT 3	MT 4
Throat	130 mm	165 mm	200 mm	285 mm
Speeds				
Spindle speeds	450 - 3 500 rpm	350 - 4 000 rpm	120 - 4 000 rpm	145 - 4 800 rpm
Number of speeds	5 speeds	7 speeds	16 speeds	2 x 9 speeds
Drilling table				
Drilling table workspace L x W	230 x 245 mm	280 x 300 mm	340 x 360 mm	420 x 400 mm
Diagonal T-slot size	12 mm	14 mm	14 mm	14 mm
Rotating drilling table	360°	360°	360°	360°
Clearance spindle - drilling table	max. 370 mm	max. 515 mm	max. 860 mm	max. 790 mm
Machine base				
Machine base work area L x W	200 x 240 mm	280 x 260 mm	320 x 320 mm	390 x 390 mm
T-slot size / spacing / count	12 mm / 80 mm / 2	14 mm / 120 mm / 2	14 mm / 120 mm / 2	14 mm / 150 mm / 2
Distance spindle - machine base	max. 495 mm	max. 590 mm	max. 1 285 mm	max. 1 275 mm
Dimensions				
Column diameter	Ø 60 mm	Ø 80 mm	Ø 92 mm	Ø 115 mm
Length x width x height	549 x 300 x 848 mm	665 x 434 x 998 mm	698 x 449 x 1 721 mm	918 x 585 x 1 895 mm
Weight	54 kg	92 kg	166 kg	260 kg

Scope of supply

- > Quick clamping drill chuck 1 – 13 mm (B 16H)
- > Quick clamping drill chuck 1 – 16 mm (as of B 24H)
- > Morse cone
- > T-slot nuts

Accessories	Article no.
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Universal coolant unit	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
> More „Accessories for drills“ from page 64	

Machine vices	Article no.
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI 140	3000214
BSI-Q 100	3000230
BSI-Q 140	3000234
> Information on the vises on page 71	

Accessories B 16H / B 24H

Accessories B 16H / B 24H	Article no.
Quick release chuck direct MT 2 1-16 mm	3050571
Quick release chuck direct MT 2 1-13 mm	3050572
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Assortment of clamping tools size 10, 58-parts	3352016
Taper drill punch MSP1	3050636
Collet chuck set MT 2/ ER 25	3352052

Accessories B 28H

Accessories B 28H	Article no.
Quick release chuck direct MT 3	3050573
Reduction sleeve MT 3 - MT 2	3050663
Morse taper MT 3/B16	3050660
Twist drill bit HSS / MT 3, 9 parts	3051003
Assortment of clamping tools size 12, 58-parts	3352017
Thread tapping chuck M3 - M12	3050705
Thread tapping chuck M8 - M20	3050706
Collet chuck set MT 3/ ER 32	3352093

Accessories B 34H

Accessories B 34H	Article no.
Quick release chuck direct MT 4	3050574
Morse taper MT 4/B16	3050661
Reduction sleeve MT 4 - MT 3	3050664
Assortment of clamping tools size 12, 58-parts	3352017
Thread tapping chuck M3 - M12	3050709
Thread tapping chuck M8 - M20	3050710
Collet chuck set MT 4/ ER 32	3352094

Bench-mounted drilling machine with continuously adjustable speed control.

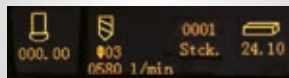
Machine highlight - menu-controlled operation of the drilling/thread tapping operation modes

Facts that impress in terms of quality, performance and price

- ▶ Best possible force transmission thanks to aluminium pulleys
- ▶ Emergency stop button
- ▶ Drill spindle with precision ball bearings
- ▶ Guaranteed concentricity less than 0.03 mm measured at the drilling spindle sleeve
- ▶ Dirt- and water-resistant, easy-to-clean membrane keyboard with high-contrast OLED display
- ▶ Anti-glare LED lighting on the left and right, integrated into the drilling head. No annoying shadows
- ▶ Thread tapping mode
- ▶ Language selection in display field, choice of DE-EN-FR-RU
- ▶ Digital reference point
- ▶ Digital parts counter
- ▶ Audible signal on reaching drilling depth
- ▶ Reduced speed in thread tapping mode
- ▶ Height adjustability chuck guard with microswitch for maximum protection
- ▶ Precision drilling table with parallel T-slots, precision surface finish
- ▶ Swivelling drilling table
- ▶ Solid base plate with parallel T-slots

Menu-controlled operation Working modes drilling / Threading

- › During drill and thread tapping, the machine automatically sets the optimum speed for the tool, after the user enters the drill diameter and material.



OLED display

- › Spindle speed
- › Depth display (target/actual)
- › Counter
- › Selected tool and tool size

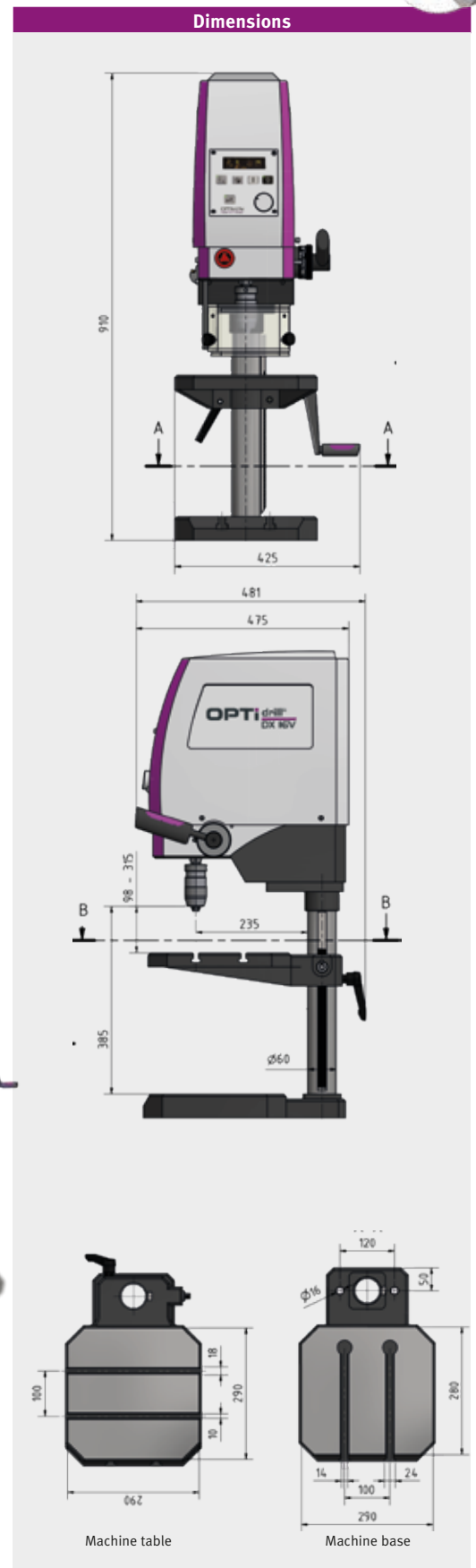




Technical specifications, accessories and dimensions

Model	DX 17V
Article no.	3020170
Electrical connection	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor output	1.0 kW
Drilling performance	
Drilling performance in steel (S235JR)	Ø 16 mm
Continuous drilling performance in steel (S235JR)	Ø 13 mm
Thread tapping steel (S235JR)	M8
Spindle	
Spindle sleeve stroke	60 mm
Spindle seat	B 16
Throat	235 mm
Speeds	
Spindle speeds	50 - 4 000 rpm
Number of speeds	Electronic speed control
Drilling table	
Drilling table workspace L x W	290 x 290 mm
T-slot size / spacing / count	10 mm / 100 mm / 2
Rotating drilling table	360°
Clearance chuck - drilling table	98 - 315 mm
Machine base	
Machine base work area L x W	290 x 280 mm
T-slot size / spacing / count	14 mm / 100 mm / 2
Distance chuck - machine base	max. 385 mm
Dimensions	
Column diameter	Ø 60 mm
Length x width x height	425 x 475 x 980 mm
Weight	73 kg

Accessories	Article no.
Assortment of clamping tools size 8	3352015
Assortment of clamping tools size 12	3352017
T-slot nut 10 mm / M 8	3353020
T-slot nut 14 mm / M12	3353025
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Machine chassis	3353000
Information „Machine bases“ on page 135	
› More „Accessories for drills“ from page 64	



Machine vices	Article no.
BMS 85	3000008
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230
› Information on the vises on page 71	

Scope of supply
› Quick clamping drill chuck 1 - 13 mm

Table drilling machine with continuously adjustable speed control

Facts that impress in terms of quality, performance and price

- ▶ Best possible force transmission thanks to aluminium pulleys
- ▶ Digital speed display integrated in housing, speed control via potentiometer
- ▶ Emergency stop button
- ▶ Drill spindle with precision ball bearings
- ▶ Premium OPTIMUM quick clamping chuck as standard
- ▶ Guaranteed concentricity less than 0.03 mm measured at the drilling spindle sleeve
- ▶ Height adjustability chuck guard with microswitch
- ▶ Membrane keyboard, dirt/water-resistant, easy to clean
- ▶ Precision drilling table with parallel T-slots

- ▶ Thick walled cast column for high force absorption and stability
- ▶ Solid baseplate with, pronounced ribbing on rear
- ▶ EMC filter class C2

DX 13V

- ▶ Drill head height adjustable

DX 15V

- ▶ Drilling table height-adjustable via rack
- ▶ MT Adapter



Fig.: DX 13V



Fig.: DX 15V

Technical specifications, accessories and dimensions



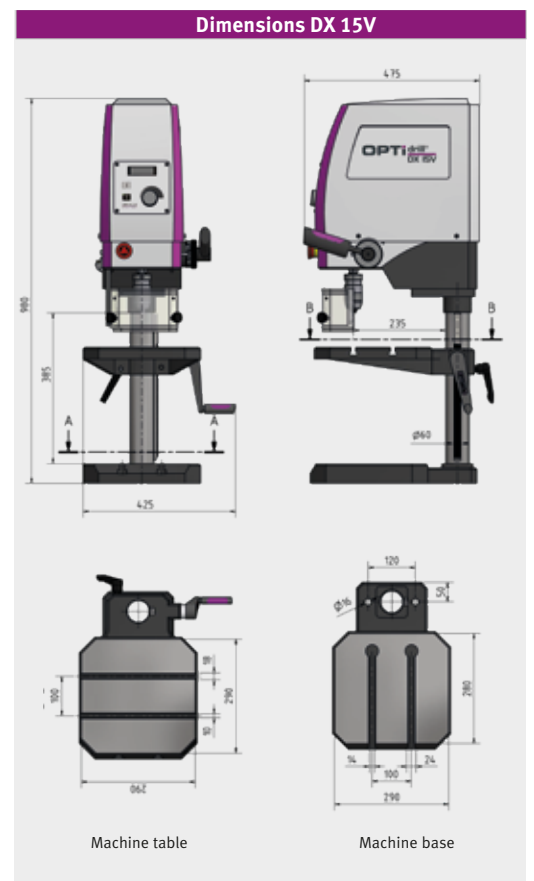
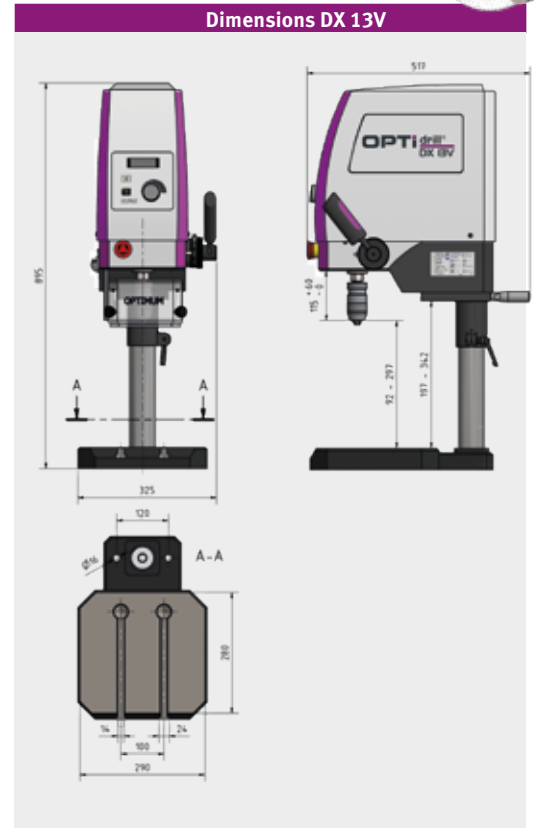
Model	DX 13V	DX 15V
Article no.	3020150	3020155
Technical specifications		
Electrical connection	230 V / 1 Ph ~50 Hz	
Motor output	0.85 kW	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 13 mm	Ø 15 mm
Continuous drilling performance in steel (S235JR)	Ø 11 mm	Ø 12 mm
Spindle		
Spindle sleeve stroke	60 mm	
Spindle seat	B 16	MT 2
Throat	235 mm	
Speeds		
Spindle speeds	100 - 3 000 rpm	
Number of speeds	Electronically controlled	
Drilling table		
Drilling table workspace L x W	-	290 x 290 mm
T-slot size / spacing / count	-	10 mm / 100 mm / 2
Rotating drilling table	-	360°
Clearance chuck - drilling table	-	98 - 375 mm
Machine base		
Machine base work area L x W	280 x 290 mm	290 x 280 mm
T-slot size / spacing / count	14 mm / 100 mm / 2	
Distance chuck - machine base	92 - 297 mm	290 - 355 mm
Dimensions		
Column diameter	Ø 60 mm	
Length x width x height	325 x 517 x 895 mm	425 x 475 x 980 mm
Weight	51 kg	66 kg

Accessories	Article no.
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
T-slot nut (individual) M12 / 14 mm	3353025
Assortment of clamping tools size 12, 58-parts	3352017
Blank holder 14 mm/M12	3352031
Universal coolant unit	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Machine chassis	3353000
Information „Machine bases“ on page 135	

Accessories DX 15V	Article no.
Twist drill HSS MT 2	3051002
Quick release chuck direct MT 2 / 1 - 16 mm	3050571
Quick release chuck direct MT 2 / 1 - 13 mm	3050572
Morse taper MT 2/B16	3050659
T-slot nut (individual) M 8 / 10 mm	3353022
Assortment of clamping tools size 8, 58-parts	3352015
Thread tapping chuck 6 inserts, sizes M3 - M12	3050702
Thermdrill MT 2	3060005

Machine vices	Article no.
BMS 85	3000008
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230

› Information on the vises on page 71



Scope of supply

› Quick-action drill chuck 1 - 13 mm

Bench/Upright drills with V-belt drive

Facts that impress in terms of quality, performance and price

- ▶ Industrial motor
- ▶ User-friendly safety switch with IP 54 degree of protection
- ▶ Digital drilling depth display and spindle speed integrated in housing
- ▶ Separate emergency stop button
- ▶ Precision spindle bore
- ▶ Safety electrical system in 24 V DC
- ▶ Guaranteed concentricity less than 0.02 mm measured in the drilling spindle sleeve
- ▶ Drill spindle with precision ball bearings
- ▶ Premium quick clamping chuck
- ▶ Drilling depth stop
- ▶ Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel
- ▶ V-belt cover with safety switch
- ▶ Single-piece, pressure cast aluminium spindle sleeve lever with Softgrip handles

- ▶ Generously dimensioned, height adjustable protective screen with safety switch
- ▶ Heavy duty design of entire machine

As of D 23 Pro

- ▶ GATES quality belts

As of D 23 Pro / 400 V

- ▶ Right-handed/left-handed rotation

D 33Pro

- ▶ Solid, generously dimensioned baseplate with T-slots, pronounced ribbing on rear



Fig.: D 17Pro



Fig.: D 23Pro



Fig.: D 26Pro



Fig.: D 33Pro



Technical specifications, accessories and dimensions

Model	D 17Pro	D 23Pro	D 26Pro	D 33Pro
Article no. (230 V)	3003010	3003015	-	-
Article no. (400 V)	-	3003020	3003030	3003040
Technical specifications				
Electrical connection	230 V / 1 Ph ~50 Hz	230 V/1 Ph w.o. 400 V/3 Ph	400 V / 3 Ph ~ 50 Hz	400 V / 3 Ph ~ 50 Hz
Motor output	500 W	750 W	750 W	1.1 kW
Drilling performance				
Drilling performance in steel (S235JR)	Ø 16 mm	Ø 25 mm	Ø 25 mm	Ø 30 mm
Continuous drilling performance in steel (S235JR)	Ø 12 mm	Ø 20 mm	Ø 20 mm	Ø 25 mm
Spindle				
Spindle sleeve stroke	65 mm	80 mm	85 mm	120 mm
Spindle seat	MT 2	MT 2	MT 3	MT 4
Throat	152 mm	180 mm	210 mm	254 mm
Speeds				
Spindle speeds	680 - 2 700 rpm	200 - 2 440 rpm	200 - 2 440 rpm	120 - 1 810 rpm
Number of speeds	5 speeds	12 speeds	12 speeds	9 speeds
Drilling table				
Drilling table workspace L x W	235 x 220 mm	280 x 245 mm	330 x 290 mm	475 x 425 mm
T-slot size	12 mm, diagonal	12 mm, diagonal	14 mm, diagonal	14 mm, diagonal
Drill table rotation/lateral tilt	360° / ± 90°	360° / ± 90°	360° / ± 90°	360° / ± 90°
Clearance spindle - drilling table	max. 325 mm	max. 425 mm	max. 720 mm	max. 695 mm
Machine base				
Machine base work area L x W	220 x 230 mm	240 x 250 mm	385 x 260 mm	410 x 325 mm
T-slot size / spacing / count	16 mm / 148 mm / 2	16 mm / 170 mm / 2	16 mm / 170 mm / 2	16 mm / 250 mm / 2
Distance spindle - machine base	max. 530 mm	max. 618 mm	max. 1 230 mm	max. 1 180 mm
Dimensions				
Column diameter	Ø 60 mm	Ø 73 mm	Ø 80 mm	Ø 92 mm
Length x width x height	565 x 275 x 840 mm	615 x 330 x 1 015 mm	670 x 355 x 1 640 mm	755 x 440 x 1 705 mm
Weight	36.5 kg	58 kg / 63.5 kg	85 kg	132 kg

Scope of supply

- › Quick-action drill chuck 1 - 16 mm
- › Morse cone
- › T-slot nuts

Accessories	Article no.
Hold-down device 14 mm/M12	3352031
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magn. holder	3356663
Coolant hose KMS 2	3356660
› More „Accessories for drills“ from page 64	

Machine vices	Article no.
BMS 85	3000008
BMS 100	3000010
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230
› Information on the vices on page 71	

Accessories D 17Pro / D 23Pro

Accessories D 17Pro / D 23Pro	Article no.
Direct quick release chuck 1 - 16 mm	3050571
Direct quick release chuck 1 - 13 mm	3050572
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Thread tapping chuck MT 2	3050702
Assortment of clamping tools size 10	3352016

Accessories D 26Pro

Accessories D 26Pro	Article no.
Direct quick release chuck 1 - 16 mm	3050573
Reduction sleeve MT 3 - MT 2	3050663
Morse taper MT 3/B16	3050660
Twist drill bit HSS / MT 3, 9 parts	3051003
Taper drill punch MSP1	3050636
Assortment of clamping tools size 12	3352017
Assortment of clamping tools size 14	3352018

Accessories B 33Pro

Accessories B 33Pro	Article no.
Direct quick release chuck 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Reduction sleeve MT 4 - MT 3	3350314
Morse taper MT 4/B16	3050661
Taper drill punch MSP2	3050637
Assortment of clamping tools size 12	3352017
Assortment of clamping tools size 14	3352018

Bench drill with V-belt drive

Facts that impress in terms of quality, performance and price

- ▶ User-friendly safety switch with IP 54 degree of protection
- ▶ Separate emergency stop button
- ▶ Guaranteed concentricity less than 0.02 mm measured in the drilling spindle sleeve
- ▶ Drill spindle with precision ball bearings
- ▶ Premium quick clamping chuck
- ▶ Drilling depth stop
- ▶ Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel
- ▶ V-belt cover with safety switch
- ▶ Single-piece, pressure cast aluminium spindle sleeve lever with Softgrip handles





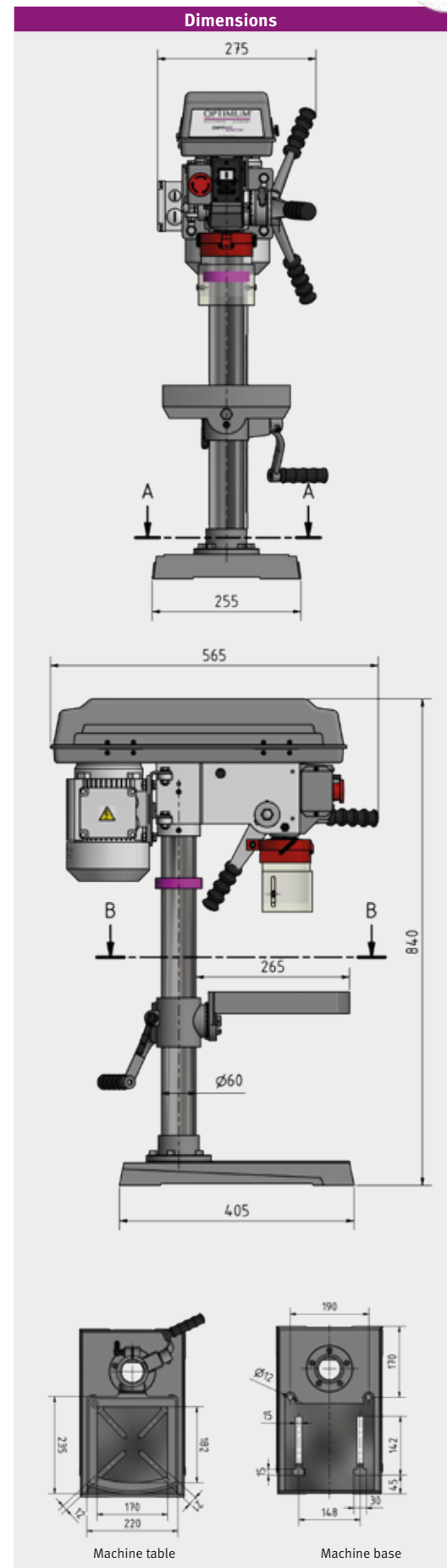
Technical specifications, accessories and dimensions

Model	D 17Pro basic
Article no.	3201010
Technical specifications	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor output	490 W
Drilling performance	
Drilling performance in steel (S235JR)	Ø 15.5 mm
Continuous drilling performance in steel (S235JR)	Ø 12 mm
Spindle	
Spindle sleeve stroke	65 mm
Spindle seat	MT 2
Throat	152 mm
Speeds	
Spindle speeds	680 - 2 700 rpm
Number of speeds	5 speeds
Drilling table	
Drilling table workspace L x W	235 x 220 mm
T-slot size	12 mm, 2 diagonal
Drill table rotation/lateral tilt	360° / ± 45°
Clearance spindle - drilling table	325 mm
Machine base	
Machine base work area L x W	220 x 230 mm
T-slot size / spacing / count	14 mm / 148 mm / 2
Distance spindle - machine base	530 mm
Dimensions	
Column diameter	Ø 60 mm
Length x width x height	565 x 275 x 840 mm
Weight	41.5 kg

Scope of supply

- › Quick-action drill chuck 1 - 15,5 mm
- › Morse cone
- › T-slot nuts

Accessories	Article no.
Hold-down device 14 mm/M12	3352031
Twist drill bits HSS-CO 5% , 25 parts	3201010
Twist drill bits HSS-CO 5% , 51 parts	3201020
Twist drill bits HSS-CO 5% , 41 parts	3201021
Quick clamping drill chuck 1 - 8 mm ; B16	3050608
Quick clamping drill chuck 1 - 10 mm ; B16	3050610
Quick clamping drill chuck 1 - 13 mm ; B16	3050623
Quick clamping drill chuck 1 - 16 mm ; B16	3050626
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magn. holder	3356663
Coolant hose KMS 2	3356660
› More „Accessories for drills“ from page 64	



Lightweight radial drilling machine with long outreach for wood, plastics, aluminium

Facts that impress in terms of quality, performance and price

- ▶ Best possible force transmission thanks to aluminium pulleys in combination with GATES quality toothed belts
- ▶ Guaranteed concentricity of drill spindle better than 0.03 mm measured in the drilling spindle sleeve
- ▶ Height-adjustable chuck protection with micro switch for best possible user protection
- ▶ Drill spindle with precision ball bearings
- ▶ V-belt cover with safety switch
- ▶ Precision drilling table with fastening holes for extended drilling table support
- ▶ Steel column for extremely smooth action and stability
- ▶ Solid and generously dimensioned baseplate with grooves for T slot nuts, rear with pronounced ribbing
- ▶ User-friendly safety switch with IP 54 degree of protection
- ▶ Separate emergency stop button
- ▶ Drilling depth stop
- ▶ OPTIMUM key type drill chuck in standard scope of delivery
- ▶ Optimal price-performance ratio
- ▶ Lasting value

Throat



- › Variable outreach by displacing the drilling head

Drilling head



- › pivots through $\pm 45^\circ$

Drilling table



- › Precise workmanship
- › Diagonal T-slots
- › Circumferential coolant channel
- › The drilling table pivots through $\pm 45^\circ$



Fig.: RB 6T



Fig.: RB 8S

Technical specifications, accessories and dimensions



Model	RB 6T	RB 8S
Article no.	3009161	3009181
Technical specifications		
Electrical connection	230 V / 1 Ph ~50 Hz	
Motor output	750 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 16 mm	
Continuous drilling performance in steel (S235JR)	Ø 12 mm	
Spindle		
Spindle sleeve stroke	80 mm	
Spindle seat	MT 2	
Throat	115 - 430 mm	
Speeds		
Spindle speeds	390 - 3 000 rpm	
Number of speeds	5 speeds	
Drilling table		
Drilling table workspace L x W	225 x 230 mm	262 x 262 mm
T-groove size	-	14 mm, diagonal
Groove size	14 mm	-
Pivoting drilling table	± 45°	
Clearance spindle - drilling table	max. 380 mm	max. 740 mm
Machine base		
Machine base work area L x W	430 x 260 mm	600 x 350 mm
Groove size / spacing / count	14 mm / 130 mm / 2	14 mm / 220 mm / 2
Clearance spindle - machine base	max. 550 mm	max. 1 250 mm
Dimensions		
Column diameter	Ø 60 mm	Ø 70 mm
Length x width x height	820 x 335 x 930 mm	820 x 395 x 1 640 mm
Weight	47 kg	60 kg

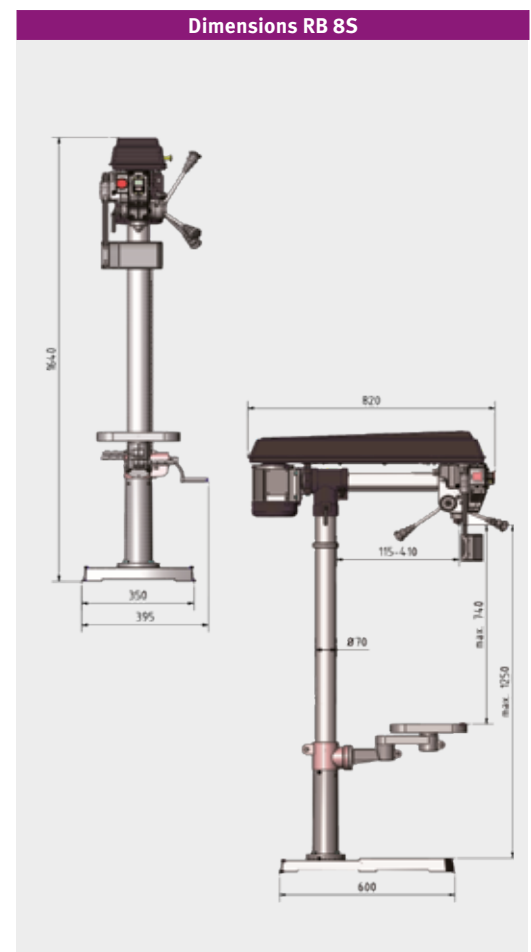
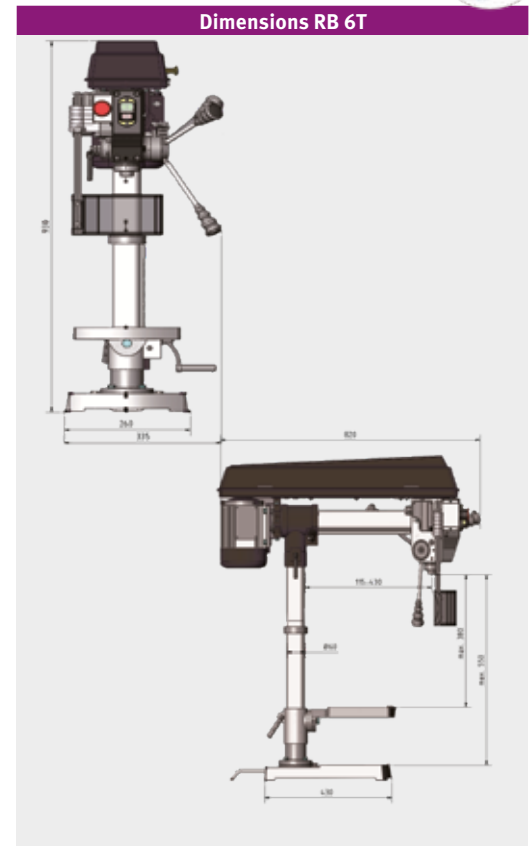
Scope of supply

- > Key type drill chuck 1 - 16 mm B 16
- > Morse taper MT 2/B16

Accessories	Article no.
Quick release chuck direct MT 2 / 1 - 16 mm	3050571
Quick release chuck direct MT 2 / 1 - 13 mm	3050572
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Assortment of clamping tools size 12, 58-parts	3352017
Taper drill punch MSP1	3050636
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
> More „Accessories for drills“ from page 64	

Machine vices	Article no.
MSO 125	3000125
BMS 120	3000012
BSI 100	3000210
BSI-Q 100	3000230

- > Information on the vices on page 71



Inexpensive bench/Upright drills with V-belt drive

Facts that impress in terms of quality, performance and price

- ▶ Precision drilling table, pivots through $\pm 45^\circ$
- ▶ Solid, generously dimensioned baseplate with grooves, rear with pronounced ribbing
- ▶ Quality proven in millions of applications

As of B 14

- ▶ T-slot nut for fastening vice

As of B 20

- ▶ Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel

As of B 20 / 400 V

- ▶ Right-handed/left-handed rotation



Fig.: B 13

Fig.: B 14

Fig.: B 16

Fig.: B 20

Model	B 13		B 14		B 16		B 20	
Article no.	3008131		3008141		3008161		3008201	3008203
Technical specifications								
Electrical connection	230 V / 1 Ph ~50 Hz		230 V / 1 Ph ~50 Hz		230 V / 1 Ph ~50 Hz		230 V / 1 Ph	400 V / 3 Ph
Motor output	300 W		350 W		450 W		0.55 kW	
Drilling performance								
Drilling performance in steel (S235JR)	\varnothing 13 mm		\varnothing 14 mm		\varnothing 16 mm		\varnothing 20 mm	
Continuous drilling performance in steel (S235JR)	\varnothing 12 mm		\varnothing 12 mm		\varnothing 15 mm		\varnothing 18 mm	
Spindle								
Spindle sleeve stroke	50 mm		50 mm		65 mm		80 mm	
Throat	104 mm		104 mm		125 mm		170 mm	
Spindle seat	fixed/B16		fixed/B16		MT 2		MT 2	
Speeds								
Spindle speeds	520 - 2 620 rpm		520 - 2 620 rpm		660 - 2 500 rpm		210 - 2 220 rpm	
Number of speeds	5 speeds		5 speeds		5 speeds		12 speeds	
Drilling table								
Drilling table workspace L x W	160 x 160 mm		160 x 160 mm		200 x 200 mm		275 x 275 mm	
T-slot width	14 mm, diagonal		14 mm, diagonal		14 mm, diagonal		14 mm, diagonal	
Drill table rotation/lateral tilt	$360^\circ / \pm 45^\circ$		$360^\circ / \pm 45^\circ$		$360^\circ / \pm 45^\circ$		$360^\circ / \pm 45^\circ$	
Clearance spindle - drilling table	max. 240 mm		max. 330 mm		max. 390 mm		max. 465 mm	
Machine base								
Machine base work area L x W	135 x 175 mm		140 x 180 mm		160 x 170 mm		205 x 200 mm	
Distance spindle - machine base	max. 325 mm		max. 440 mm		max. 525 mm		max. 645 mm	
Dimensions								
Column diameter	46 mm		46 mm		60 mm		70 mm	
Length x width x height	420 x 220 x 580 mm		420 x 230 x 700 mm		510 x 270 x 820 mm		600 x 350 x 990 mm	
Weight	18 kg		20 kg		34 kg		51 kg	



Fig.: B 25

Fig.: B 32

Model	B 25	B 32
Article no.	3008253	3008323
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor output	0.55 kW	1.1 kW
Drilling performance		
Drilling performance in steel (S235JR)	Ø 20 mm	Ø 32 mm
Continuous drilling performance steel (S235JR)	Ø 18 mm	Ø 28 mm
Spindle		
Spindle sleeve stroke	80 mm	125 mm
Throat	170 mm	225 mm
Spindle seat	MT 3	MT 4
Speeds		
Spindle speeds	210 - 2 220 rpm	140 - 2 020 rpm
Number of speeds	12 speeds	9 speeds
Drilling table		
Drilling table workspace L x W	275 x 275 mm	360 x 360 mm
T-slot size	14 mm, diagonal	14 mm, diagonal
Drill table rotation/lateral tilt	360° / ± 45°	360° / ± 45°
Clearance spindle - drilling table	max. 760 mm	max. 600 mm
Machine base		
Machine base work area L x W	235 x 220 mm	260 x 270 mm
Distance spindle - machine base	max. 1 210 mm	max. 1 170 mm
Dimensions		
Column diameter	Ø 70 mm	Ø 92 mm
Length x width x height	690 x 390 x 1 570 mm	790 x 400 x 1 730 mm
Weight	57 kg	137 kg



- › Ground multi-tooth carrier
- › Best possible force transmission thanks to aluminium pulleys in combination with GATES quality toothed belts
- › V-belt cover with safety switch



- › Guaranteed concentricity better than 0.03 mm measured in the drilling spindle sleeve
- › Drilling spindle with precision ball bearings
- › OPTIMUM quick clamping drill chuck included in standard scope of delivery (B13 with key type drill chuck)



- › User-friendly switch as per IP 54
- › Separate emergency stop button

Scope of supply

B 13

- › Key type drill chuck 1.5 - 13 mm

B 14

- › Quick-action drill chuck 1 - 13 mm
- › T-slot nuts

B 16 / B 20

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MT 2/B16
- › T-slot nuts

B 25

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MT 3/B16
- › T-slot nuts

B 32

- › Quick-action drill chuck 1 - 16 mm
- › Morse taper MT 4/B16
- › T-slot nuts

- › „Accessories for drills“ from page 64

Inexpensive bench drills with V-belt drive

Facts that impress in terms of quality, performance and price

- ▶ Precision drilling table, pivots through $\pm 45^\circ$
- ▶ Solid, generously dimensioned baseplate with grooves, rear with pronounced ribbing
- ▶ Geschliffener Vielzahn-Mitnehmer
- ▶ Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel
- ▶ Guaranteed concentricity less than 0.02 mm measured in the drilling spindle sleeve
- ▶ Drill spindle with precision ball bearings
- ▶ User-friendly safety switch with IP 54 degree of protection
- ▶ Separate emergency stop butto

B 14basic/ B 16basic

- ▶ T-slot nut for fastening vice



Fig.: B 13basic



Fig.: B 14basic



Fig.: B 16basic



Technical specifications and accessories

Model	B 13basic	B 14basic	B 16basic
Article no.	3008013	3008014	3008016
Technical specifications			
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor output	300 W	350 W	450 W
Drilling performance			
Drilling performance in steel (S235JR)	Ø 13 mm	Ø 14 mm	Ø 15,5 mm
Continuous drilling performance steel (S235JR)	Ø 12 mm	Ø 12 mm	Ø 14 mm
Spindle			
Spindle sleeve stroke	50 mm	50 mm	65 mm
Throat	104 mm	104 mm	125 mm
Spindle seat	fixed/B16	fixed/B16	MT 2
Speeds			
Spindle speeds	520 - 2 620 rpm	520 - 2 620 rpm	660 - 2 500 rpm
Number of speeds	5 speed	5 speed	5 speed
Drilling table			
Drilling table workspace L x W	160 x 160 mm	160 x 160 mm	200 x 200 mm
T-slot size	14 mm, 2 diagonal	14 mm, 2 diagonal	14 mm, 2 diagonal
Drill table rotation/lateral tilt	360° / ± 45°	360° / ± 45°	360° / ± 45°
Clearance spindle - drilling table	240 mm	330 mm	390 mm
Machine base			
Machine base work area L x W	135 x 175 mm	140 x 180 mm	160 x 170 mm
Distance spindle - machine base	325 mm	440 mm	525 mm
Dimensions			
Column diameter	46 mm	46 mm	60 mm
Length x width x height	420 x 220 x 580 mm	420 x 230 x 700 mm	510 x 270 x 820 mm
Weight	18 kg	20 kg	34 kg

Accessories	Article no.
Hold-down device 14 mm/M12	3352031
Twist drill bits HSS-CO 5% , 25 parts	3201010
Twist drill bits HSS-CO 5% , 51 parts	3201020
Twist drill bits HSS-CO 5% , 41 parts	3201021
Quick clamping drill chuck 1 - 8 mm; B16	3050608
Quick clamping drill chuck 1 - 10 mm; B16	3050610
Quick clamping drill chuck 1 - 13 mm; B16	3050623
Quick clamping drill chuck 1 - 16 mm; B16	3050626
Universal coolant unit 230 V	3352002
Coolant mist lubricator MMC 1 with magn. holder	3356663
Coolant hose KMS 2	3356660
Assortment of clamping tools size 12, 58-parts	3352017
› More „Accessories for drills“ from page 64	

Accessories B16basic	Article no.
Direct quick release chuck 1 - 16 mm	3050571
Direct quick release chuck 1 - 13 mm	3050572
Morse taper MT 2/B16	3050659
Twist drill bit HSS / MT 2, 9 parts	3051002
Thread tapping chuck MT 2	3050702

Scope of supply
B 13basic
› Key type drill chuck 1,5 - 13 mm
B 14basic
› Quick-action drill chuck 1 - 13 mm
› T-slot nuts
B 16basic
› Quick-action drill chuck 1 - 16 mm
› Morse taper MT 2/B16
› T-slot nuts

Precision, solid radial drilling machines, premium quality

Ideal for versatile deployment in one-off and serial production

Facts that impress in terms of quality, performance and price

- ▶ Versatile range of applications, such as drilling, reaming, thread tapping
- ▶ Electrically braked motor
- ▶ Control elements with 24 V DC electronics
- ▶ Heavy, solid, premium quality casting
- ▶ Long reach thanks to horizontally adjustable machine head
- ▶ Clear-cut control panel layout
- ▶ Smooth action pivoting and travel axes
- ▶ Swivelling column with sophisticated workmanship and optimised clamping for maximum stability and minimum clamping offset
- ▶ Torsionally stiff boom design, capable of supporting heavy loads
- ▶ Height-adjustment of boom via powerful motorised drive and lifting spindle
- ▶ Drilling head gear box runs in oil sump
- ▶ Boom guideways tempered and precision ground
- ▶ Gear wheels made of chrome-nickel steel, tempered and precision ground for lower noise and smooth action

- ▶ Drilling head and column can be clamped or released separately
- ▶ Right-handed/left-handed rotation
- ▶ Solid, generously dimensioned precision drilling table
- ▶ Hardened and ground clamping table with parallel T-slots
- ▶ Machine lamp
- ▶ Overload protection
- ▶ Thick-walled cast column ensures very smooth action and stability
- ▶ LED lamp
- ▶ Coolant unit with coolant tank in machine base

RD 4 / RD 5

- ▶ All axes are clamped manually

RD 6

- ▶ Column is clamped hydraulically

DC control cabinet



› Complet and clear-cut

Pull-out shift rod



› Standards-compliant as per DIN 12717



Fig. RD 5 with optional accessories



Technical data and accessories

Model	RD 4	RD 5	RD 6
Article no.	3049040	3049050	3049070
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Total rated value	3 kW	4 kW	6.5 kW
Spindle motor drive output	1.5 kW	2.25 kW	4 kW
Boom lift motor drive output	0.75 kW	0.75 kW	1.5 kW
Hydraulic clamping drive	-	-	0.75 kW
Coolant pump motor	90 W	90 W	90 W
Drilling performance			
Drilling performance in steel (S235JR)	Ø 32 mm	Ø 42 mm	Ø 50 mm
Continuous drilling performance in steel (S235JR)	Ø 28 mm	Ø 40 mm	Ø 45 mm
Thread tapping steel (S235JR)			
Spindle			
Spindle sleeve stroke	220 mm	230 mm	270 mm
Spindle seat	MT 4	MT 4	MT 5
Automatic spindle sleeve feed	3 speeds: 0.05-0.15 mm/rev	3 speeds: 0.05-0.15 mm/rev	3 speeds: 0.06-0.2 mm/rev
Boom			
Angle of rotation	± 180°	± 180°	± 180°
Drilling head travel (horizontal)	530 mm	820 mm	1 250 mm
Boom lift stroke (vertical)	580 mm	570 mm	680 mm
Speeds			
Spindle speeds	73 - 1 247 rpm	37 - 1 253 rpm	44 - 1 206 rpm
Number of speeds	6	12	12
Drilling table			
Large base L x W	1 260 x 700 mm	1 608 x 745 mm	2 550 x 970 mm
Base work area L x W x H	828 x 522 mm	1 147 x 589 mm	1 800 x 830 mm
T-slot size / spacing / count	19 mm / 171 mm / 3	19 mm / 171 mm / 3	14 mm / 180 mm / 4
Clearance spindle to base	260 - 1 060 mm	470 - 1 270 mm	465 - 1 420 mm
Distance spindle to column	220 - 750 mm	280 - 1 100 mm	350 - 1 600 mm
Clamping table			
Clamping table work area L x W	600 x 445 x 380 mm	635 x 520 x 415 mm	630 x 500 x 500 mm
T-Slot size / no / distance	19 mm / 100 mm / 3	19 mm / 121 mm / 3	22 mm / 150 mm / 3
Distance spindle to clamping table	0 - 675 mm	50 - 850 mm	0 - 910 mm
Dimensions			
Column diameter	210 mm	260 mm	320 mm
Length x width x height (max.)	1 260 x 700 x 2 180 mm	1 725 x 745 x 2 550 mm	2 670 x 1 120 x 2 760 mm
Weight	1 120 kg	1 800 kg	3 200 kg

Accessories	Article no.
Precision quick release chucks 1 - 8 mm; B16	3050608
Precision quick release chucks 1 - 10 mm; B16	3050610
Precision quick release chucks 1 - 13 mm; B16	3050623
Precision quick release chucks 1 - 16 mm; B16	3050626
› More „Accessories for drills“ from page 64	

Accessories RD 4 / RD 5	Article no.
Quick release chuck direct MT 4 / 1 - 16 mm	3050574
Reduction sleeve MT 4 - MT 3	3050664
Twist drill HSS / MT 3	3051003
Morse taper MT 4/B16	3050661
Blank holder 18 mm/M16	3352032
Assortment of clamping tools size 16, 58 parts	3352019

Accessories RD 6	Article no.
Morse taper MT 5/B16	3050675
Assortment of clamping tools size 12, 58 parts	3352017

Scope of supply
› Clamping table

Precision radial drilling machine with standard chassis and clamping table.

Suitable for machining bulky workpieces

Facts that impress in terms of quality, performance and price

- ▶ Versatile range of applications
- ▶ Powerful premium motor
- ▶ Electrically braked motor
- ▶ Long reach thanks to horizontally adjustable machine head
- ▶ Mechanical head, column and boom clamping
- ▶ Solid grey cast iron ensures stability, smooth action and precision
- ▶ Spindle with precision taper roller bearings
- ▶ Guaranteed concentricity better than 0.015 mm measured in the drilling spindle sleeve
- ▶ Large speed range from 155 - 2 250 rpm thanks to two-speed motor
- ▶ Solid, precision drilling table, generously dimensioned with precision surface finish and parallel T grooves
- ▶ Thick-walled steel column (Ø 115 mm) ensures smooth action and stability

DC control cabinet



› Complet and clear-cut

Pull-out shift rod



› Standards-compliant as per DIN 12717

Controls



› 24 V DC electrical system



Figure shows optional chuck



Technical specifications, accessories and dimensions

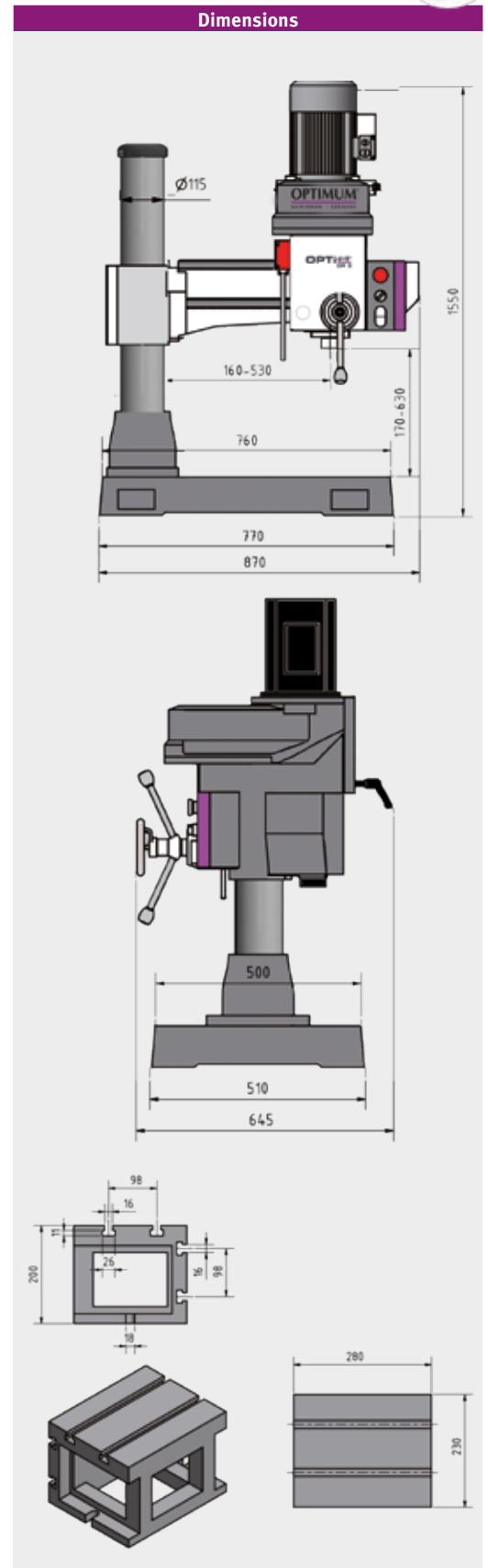
Model	RD 3
Article no.	3049030
Technical specifications	
Electrical connection	400 V / 3 Ph ~ 50 Hz
Motor output	0.55 / 1.1 kW
Drilling performance	
Drilling performance in steel (S235JR)	Ø 28 mm
Continuous drilling performance in steel (S235JR)	Ø 24 mm
Thread tapping steel (S235JR)	M12
Spindle	
Spindle sleeve stroke	130 mm
Spindle seat	MT 3
Throat	160 - 530 mm
Speeds	
Spindle speeds	155 - 2 250 rpm
Number of speeds	2 x 5 speeds
Drilling table	
Drilling table workspace L x W	780 x 520 mm
Usable workpiece mounting surface	500 x 550 mm
T-slot size / spacing / count	16 mm / 100 mm / 3
Drilling table load bearing capacity	200 kg
Clearance spindle - drilling table	170 - 630 mm
Clamping table	
Length x width x height	280 x 230 x 200 mm
T-slot size / spacing / count	16 mm / 98 mm / 2
Distance spindle to clamping table	max. 430 mm
Dimensions	
Column diameter	Ø 115 mm
Length x width x height	870 x 645 x 1 550 mm (chassis 2 150 mm)
Weight	288 kg

Accessories	Article no.
Quick release chuck direct MT 3/ 1 - 16 mm	3050573
Precision quick release chucks 1 - 8 mm; B16	3050608
Precision quick release chucks 1 - 10 mm; B16	3050610
Precision quick release chucks 1 - 13 mm; B16	3050623
Precision quick release chucks 1 - 16 mm; B16	3050626
Reduction sleeve MT 3 - MT 2	3050663
Morse taper MT 3/B16	3050660
Extension sleeve MT 3 - MT 4	3050668
Twist drill bit HSS / MT 3, 9 parts	3051003
Twist drill bits HSS-CO 5%, 25 parts	3201010
Twist drill bits HSS-CO 5%, 51 parts	3201020
Twist drill bits HSS-CO 5%, 41 parts	3201021
Assortment of clamping tools size 14, 58 parts	3352018
Universal coolant unit	3352002
Thread tapping chuck MT 3 with 6 inserts	3050705
Collet chuck set MT 3/ ER 32 - M12	3352093

> More „Accessories for drills“ from page 64

Machine vices	Article no.
BSI 140	3000214
BSI 200	3000220
BSI-Q 140	3000234
BSI-Q 200	3000240

> Information on the vices on page 71



Scope of supply

- > Machine chassis
- > Clamping table

			Belt-driven drills																Drills with gear units						Radial drills												
			B13	B14	B16	B20	B25	B32	D 17P10	D 23P10	D 26P10	D 33P10	B 16 H	B 24H / B 24HV	B 28H / B 28HV	B 34H / B 34HV	DH 18V	DX 13V	DX 15V	DX 17V	DH 248V	DH 288V	DH 408V	DH 26GT	DH 28GS / DH 28GSV	DH 32GS / GSV	DH 40CT	B 40GSP / GSM	DH 35G / DH 35V	DH 45G / DH 45V	B 50GSM	DH 55G	RB 6T	RB 8S	RD 3	RD 4 / RD 5	RD 6
			B16	B16	MK2	MK2	MT3	MT4	MK2	MT3	MT4	MK2	MT3	MT4	MT2	B 16	MT2	B 16	MK2	MT3	MT4	MT3	MT3	MT4	MT4	MT4	MT4	MT4	MT4	MT4	MT2	MT2	MT3	MT4	MT5		
Twist drill bit set	25-part	3201010	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	51-part	3201020	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	41-part	3201021	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Conical counterbore set		3201050	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Spot facer set		3201051			●	●	●		●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Step drill bit set		3201055							●	●		●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Step drill bit set		3201056							●	●		●	●	●	●				●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Thread repair assortment		3202010	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Reducing sleeve	MT 3-MT 2	3050663				●			●			●									●		●	●											●		
	MT 4-MT 3	3050664					●			●				●								●			●			●	●	●	●					●	
	MT 4-MT 2	3050665						●			●				●								●			●			●	●	●	●					●
Reducing sleeve	MT 3 - MT 2	3350313				●			●				●								●		●	●												●	
	MT 4 - MT 3	3350314					●			●					●								●			●			●	●	●	●					●
Morse cone B16	MT 2	3050659			●	●			●	●			●	●		●	●	●																		●	●
	MT 3	3050660					●			●					●						●		●	●												●	
	MT 4	3050661						●			●					●						●			●			●	●	●	●	●					●
Morse cone	MT 5	3050675																																			●
Extension sleeve	MT 2 - MT 3	3050667													●						●																
	MT 3 - MT 4	3050668														●						●															●
Taper drill punch	MSP 1	3050636				●	●	●	●	●	●			●				●																		●	●
	MSP 2	3050637									●				●							●				●											●
Hold-down device	14 mm	3352031	●	●	●	●	●	●		●	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	18 mm	3352032																																			●
Arbor for drill chuck	MT 4 / M16	3350304																								●	●										
Therm드릴	MT 2	3060005													●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Machine chassis		3353000	○	○	○	○			○	○		○			●	●	●	●																			

● Recommended

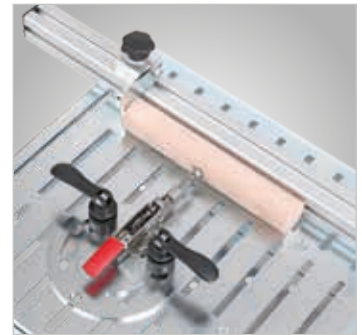
○ Recommended - restrictions apply

This equipment table covers all recommended equipment options. Depending on the individual case, use of accessories can be meaningful beyond this.

Clamping plate with 720 mm stop rail, ideal for any drilling table

Facts that impress in terms of quality, performance and price

- ▶ Quickly and easily fitted on the machine tables of drilling or milling machines
- ▶ Clamping elements and stop modules can be freely positioned and clamped without tools
- ▶ The table extension is attached to the side mounting rails and extends the clamping plate to the left, right or front



Adapter plate with clamp, horizontal



Machine vise clamped

Accessories	Clamping plate	Scope of supply
Article no.	5190015	> Clamping plate
Dimensions (L x W x H)	450 x 400 x 50 mm	> Mounting bracket
Overall weight	8.9 kg	> Stop rail 720 mm
		> Two clamping element

Accessories



Clamping plate for drilling machines incl. assembly carrier 450 x 400 mm

Art no. 5198110



Stop rail 720 mm incl. 2 clamping elements

Art no. 5198121



Machine vise incl. 2 clamping elements

Art no. 5198135



Stop and clamping element Ø30 mm

Art no. 5198150



Position bracket incl. 1 clamping element

Art no. 5198151



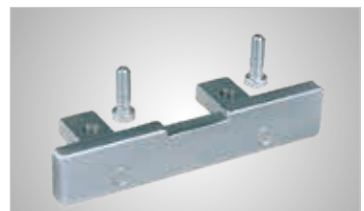
Adapter platen round with horizontal clamp length 180 mm

Art no. 5198161



Adapter platen round with upright clamp length 180 mm

Art no. 5198163



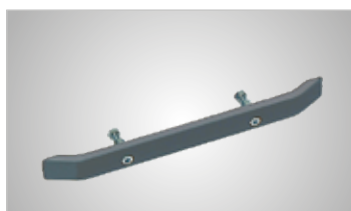
Connecting web

Art no. 5850126



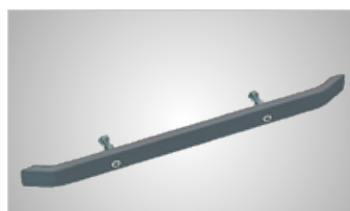
Table extension 1 100 x 172 mm

Art no. 5850112



Mounting rail Length 330 mm left and right

Art no. 5850103



Mounting rail Length 430 mm front

Art no. 5850104

Collet chuck set

MT 2/ ER 25 - M10 3352052

- › Collet chuck
- › 15 spring collets; sizes Ø 1.5 - Ø 16 mm/DIN ISO 15488
- › Hook wrench
- › Aluminium case

MT 2/ ER 32 - M10 3352053

- › Collet chuck
- › 18 spring collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488
- › Hook wrench
- › Aluminium case

MT 3/ ER 32 - M12 3352093

- › Collet chuck
- › 18 spring collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488
- › Hook wrench
- › Aluminium case

MT 4/ ER 32 - M16 3352094

- › Collet chuck
- › 18 spring collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488
- › Hook wrench
- › Aluminium case



Quick-change adapter with B16 adapter

Tapping chucks small (M3-M12) 3050715

Tapping chucks large (M8-M20) 3050716



Thread tapping chuck M5 - M12

3352042

- › Quick reverse built-in, immediately effective on changing the feed direction
- › Slip clutch 4-stage adjustable
- › With collet B16

Scope of delivery:

- › 2 pcs. flexible spring collet
- › 2 pcs. flat spanner
- › * Allen key



Thread tapping chuck with 6 quick-change inserts

Note: The square size depends on the shank diameter of the manual thread tapping bit (ISO standard)

MT 2; sizes M3 - M12 3050702

MT 3; sizes M3 - M12 3050705

MT 4; sizes M3 - M12 3050709

M3, M4, M5, M6-8, M10, M12

MT 3; sizes M8 - M20 3050706

MT 4; sizes M8 - M20 3050710

M8, M10, M12, M14, M16, M18-M20



OPTIMUM Precision quick release chuck

Concentricity better than 0.06 mm

1 - 8 mm; B16 3050608

1 - 10 mm; B16 3050610

1 - 13 mm; B16 3050623

1 - 16 mm; B16 3050626



OPTIMUM Direct quick release chuck

MT 2 1 - 16 mm; up to 6 000 rpm 3050571

MT 2 1 - 13 mm; up to 8 000 rpm 3050572

MT 3 1 - 16 mm; up to 6 000 rpm 3050573

MT 4 1 - 16 mm; up to 6 000 rpm 3050574



Accessories for drills

Assortment of clamping tools size

- › Metric thread
- › 58-part: 24 pull studs, 6 T-slot nuts, 6 nuts, 4 extension nuts, 6 step blocks, 12 clamping blocks

Size 8 3352015

- › T-slot nuts 10 mm; locking thread M 8

Size 10 3352016

- › T-slot nuts 12 mm; locking thread M10

Size 12 3352017

- › T-slot nuts 14 mm; locking thread M12

Size 14 3352018

- › T-slot nuts 16 mm; locking thread M 14

Size 16 3352019

- › T-slot nuts 18 mm; locking thread M16



Twist drill set

- › As per DIN 338 HSS-CO 5%
 - › Tetrahedral 135° split point allows for excellent self-centring
 - › Improved tool service life thanks to alloyed components
 - › High speed/feed properties
 - › Strong core design optimises the structural strength of the bit and minimises the risk of bit breakage
 - › Practical OPTIMUM plastic case
- | | |
|------------------------------------|---------|
| 25-part | 3201010 |
| › 1- 13 mm | |
| 51-part | 3201020 |
| › 1 - 6 mm (in 0.1 mm increments) | |
| 41-part | 3201021 |
| › 6 - 10 mm (in 0.1 mm increments) | |



Fig. Spiral drill bit set 51-part

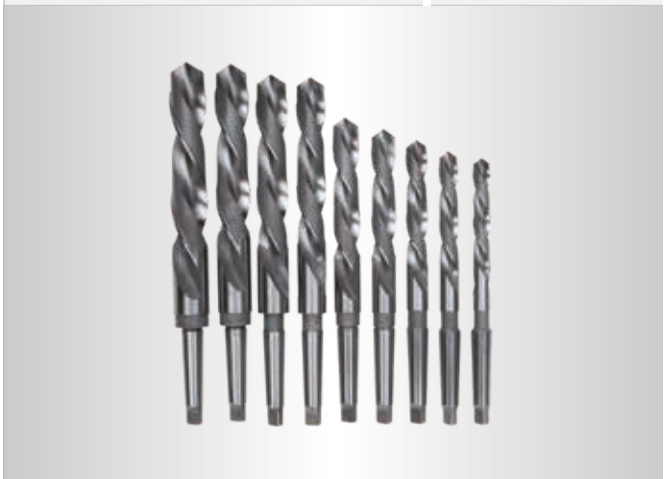
T-slot nut (individual)

10 mm; locking thread M 8	3353020
12 mm; locking thread M10	3353022
14 mm; locking thread M12	3353025
15.7 mm; locking thread M12	3353024
16 mm; locking thread M 14	3353026
18 mm; locking thread M16	3353028

Twist drill HSS with Morse taper

- › 9-part; 14,5/16/18/20/22/24/26/28/30 mm
- › Long service life.
- › Good chip removal
- › Right handed

MT 2	3051002
MT 3	3051003



Conical counterbore set

3201050

- › As per standard DIN 335C
- › 6-part: 6/8/10/11.5/15/19 mm
- › Premium conical counterbores Burrs are nicely chamfered and removed without causing scratches
- › Compatible with popular battery-powered screwdrivers and drills, including Upright drills
- › Practical OPTIMUM plastic case



Spot facer set

3201051

- › As per standard 373
- › 6-part: for M3 / M4 / M5 / M6 / M8 / M10 mm screws
- › HSS
- › Piloted counterbore size 6.5 x 3.2 mm / 8 x 4.3 mm / 10 x 5.3 mm / 11 x 6.4 mm / 15 x 8.54 mm / 18 x 10.5 mm
- › Fine grade for countersinking screws and nuts as per DIN 74
- › Practical OPTIMUM plastic case



Step drill bit set

3201055

- › 3-part: 3 - 14 mm / 8 - 20 mm / 16 - 30.5 mm
- › With sharp tip, no pre-drilling required
- › Conically rising blades and radially undercut circumference for peeling action
- › Drilling without burr and chatter marks
- › Uses: Steel sheet 0.1 - 2 mm, stainless steel (V2A) 0.1 - 1 mm, non-ferrous metals 0.1 - 5 mm, plastics - 10 mm
- › Practical OPTIMUM plastic case



Step drill bit set

3201056

- › 3-part: 4 - 12 mm / 12 - 20 mm / 20 - 30 mm
- › Drilling and deburring cylindrical holes in materials up to 4 or 6 mm thickness.
- › Shank with three clamping surfaces
- › Drill step increment 1 mm
- › Practical OPTIMUM plastic case



Thread repair assortment

3202010

- › 5 pcs. twist drill bit (5.2 mm/6.3 mm/8.3 mm/10.4 mm/12.4 mm)
- › 5 pcs. thread tap: (M5 / M6 / M8 / M10 / M12)
- › 5 pcs. inserter for threaded inserts
- › 5 pcs. tang breaker
- › 100 pcs. threaded inserts: 25 pcs. each M5x0.8 mm / M6x1.0 / M8x1.25 / M10x1.5
- › 10 pcs. threaded insert: M12x1.75 mm
- › For repairing defective threads
- › For reinforcing the thread on materials with a low shear strength
- › Practical OPTIMUM metal case



Drilling and thread tapping set

3202015

- › Through bore
- › 15-part
- › 7 pcs. thread tap: M3 / M4 / M5 / M6 / M8 / M10 / M12
- › 7 pcs. spiral bit DIN 338; Ø2.5 mm / Ø3.3 mm / Ø4.2 mm / Ø5.0 mm / Ø6.8 mm / Ø8.5 mm / Ø10.2 mm
- › Tap wrench DIN 1814 size 1½
- › Practical OPTIMUM plastic case



7 units
2.5 mm-
10.2 mm

7 units
M3-M12

Accessories for drills

Reducing sleeve

MT 3 - MT 2	3050663
MT 4 - MT 3	3050664
MT 4 - MT 2	3050665



Morse cone

MT 2 / B16	3050659
MT 3 / B16	3050660
MT 4 / B16	3050661
MT 5 - B16	3050675
MT 6 - B16	3050676



Extension sleeves

MT 2 - MT 3	3050667
MT 3 - MT 4	3050668



Taper drill punch

MSP 1 for MT 1 to MT 3	3050636
MSP 2 for MT 4 to MT 6	3050637



Arbor for drill chuck

External taper MT 3 / M12 / B16	3350303
External taper MT 4 / M16 / B16	3350304



Reducing sleeve

MT 3 - MT 2 / M12	3350313
MT 4 - MT 3 / M16	3350314



Hold-down unit set of 2

- > Clamping height adjustable
- > Brass plate below clamping arm protects material against damage

Table groove 14 mm/M12	3352031
------------------------	---------

- > L x W x H: 115 x 42 x 39 mm
- > Height adjustment: 0 - 89 mm

Table groove 18 mm/M16	3352032
------------------------	---------

- > L x W x H: 133 x 50 x 49 mm
- > Height adjustment: 0 - 101 mm



NEW

AQUACUT C1

3530030

- 10 litre cannister
- For mixing emulsions
- Drilling and cooling emulsion
- High-pressure resistant and containing mineral oil, for long tool life and clean surfaces
- Emulsifiable with water, microbe-resistant and kind to the skin



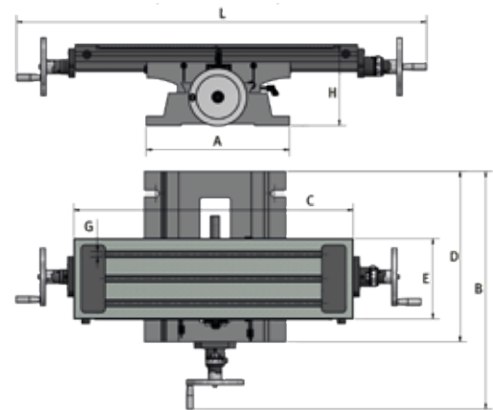
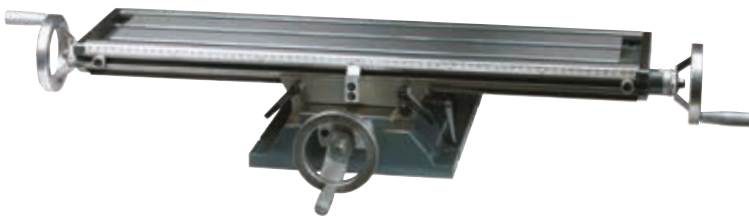
You will find more coolant accessories from page 246

Cross tables KT

Facts that impress in terms of quality, performance and price

- ▶ Coolant channel
- ▶ Dovetail guide adjustable
- ▶ Handwheels right, front and left - for model KT 120 only right and front
- ▶ Adjustable handwheel scaling with 0.05 mm scale

Technical specifications	KT 120	KT 179	KT 180	KT 210
A (Base width)	222 mm	274 mm	274 mm	280 mm
D (base length)	280 mm	340 mm	340 mm	362 mm
C (table length)	400 mm	500 mm	700 mm	730 mm
E (table width)	120 mm	180 mm	180 mm	210 mm
G (T-slot size)	10 mm	12 mm	12 mm	14 mm
Length x width x height	506 x 400 x 140 mm	748 x 483 x 155 mm	948 x 483 x 155 mm	1 060 x 538 x 185 mm
Weight	22 kg	40 kg	52 kg	84 kg
Travel				
X axis	220 mm	287 mm	480 mm	480 mm
Y axis	165 mm	167 mm	170 mm	210 mm
Max. load	40 kg	55 kg	55 kg	80 kg



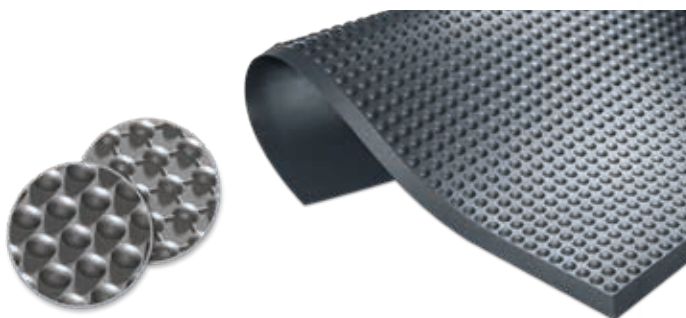
Cross tables KT

KT 120	3356595
KT 179	3356596
KT 180	3356591
KT 210	3356600

Workplace mats – for dry and wet areas

Facts that impress in terms of quality, performance and price

- ▶ Fire-resistant
- ▶ Made of polyurethane on polyether basis
- ▶ Surface: nubbed
- ▶ Underside: nubbed for maximum standing comfort and slip resistance
- ▶ 5-year warranty



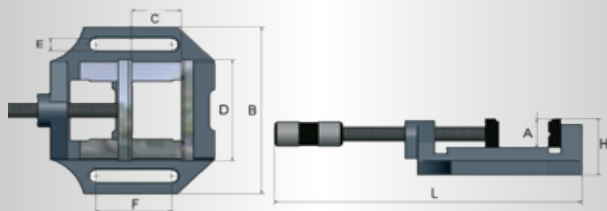
Technical specifications	Work mat 1 840 x 640 mm	Work mat 1 840 x 940 mm	Work mat 3 040 x 640 mm	Work mat 3 040 x 940 mm
Article no.	6800000	6800005	6800001	6800006
Thickness	14 mm	14 mm	14 mm	14 mm
Colour	anthracite	anthracite	anthracite	anthracite
Temperature resistant	-35 °C to +95 °C	-35 °C to +95 °C	-35 °C to +95 °C	-35 °C to +95 °C
Fire classification	B1 as per DIN 4102	B1 as per DIN 4102	B1 as per DIN 4102	B1 as per DIN 4102
Dimensions	1 840 x 640 mm	1 840 x 940 mm	3 040 x 640 mm	3 040 x 940 mm
Weight	6 kg	9 kg	10.5 kg	15 kg

Machine vices

Machine vices MSO with prisms

- › Easy action
- › Spindle with rolled trapezoid thread
- › Many assembly options on drill table thanks to slots

MSO 75	3000075
MSO 100	3000100
MSO 125	3000125
MSO 150	3000150



Tech. data	A	C	D	E	F	L	B	H	kg
MSO 75 mm	28	55	75	12.5	55	270	130	52	2.3
MSO 100 mm	28	90	100	12.5	74	350	165	55	3.2
MSO 125 mm	30	110	125	12.5	80	400	182	65	4.5
MSO 150 mm	35	130	150	14.5	110	455	208	67	6.2

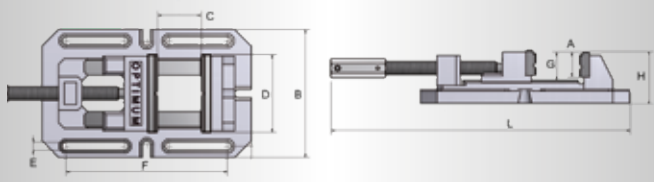


MSO 100

Machine vices BSI

- › Drill vices in industrial quality
- › Replaceable prism jaws
- › Long guides on moving jaw prevent tilting
- › Precision ground prism jaws
- › Many assembly options on drill table thanks to slots
- › Premium grey cast
- › Scraped guide surfaces

BSI 100	3000210
BSI 140	3000214
BSI 200	3000220



Tech. data	A	C	D	E	F	G	L	B	H	kg
BSI 100 mm	35	110	100	12	216	40	max. 460	170	74	8.7
BSI 140 mm	45	150	140	14	290	50	max. 610	230	93	18
BSI 200 mm	58	200	200	16	406	64	max. 788	290	118	37

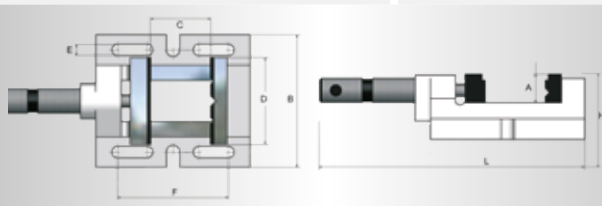


BSI 140

Machine vices BMS with prisms

- › Rugged design with prism jaws
- › Easy action
- › Precise jaw guidance
- › Spindle with rolled trapezoid thread
- › Many assembly options on drill table thanks to slots

BMS 85	3000008
BMS 100	3000010
BMS 120	3000012
BMS 150	3000015
BMS 200	3000020



Tech. data	A	C	D	E	F	L	B	H	kg
BMS 85 mm	27	70	85	11	109	260	130	60	3.2
BMS 100 mm	30	90	100	12.5	125	280	150	66	4.6
BMS 120 mm	35	110	120	12.5	146	330	170	70	5.6
BMS 150 mm	45	130	150	12.5	180	375	200	78	7.6
BMS 200 mm	60	160	200	12.5	210	445	252	95	16

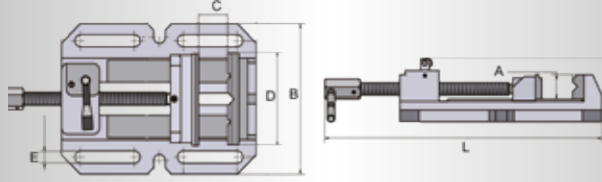


BMS 85

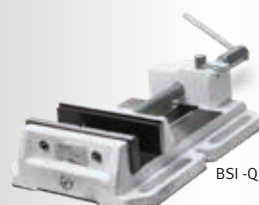
Machine vices BSI-Q

- › Drill vices in industrial quality
- › Quick clamping thanks to quick release
- › Replaceable prism jaws
- › Long guides on moving jaw prevent tilting
- › Precision ground prism jaws
- › Many assembly options on drill table thanks to slots
- › Premium grey cast . Scraped guide surfaces

BSI-Q 100	3000230
BSI-Q 140	3000234
BSI-Q 200	3000240



Tech. data	A	C	D	E	L	B	H	kg
BSI-Q 100 mm	30	105	100	12	max. 335	150	95	5-5
BSI-Q 140 mm	40	155	140	14	max. 415	200	100	10.7
BSI-Q 200 mm	55	220	200	16	max. 525	275	125	20.2



BSI-Q 100



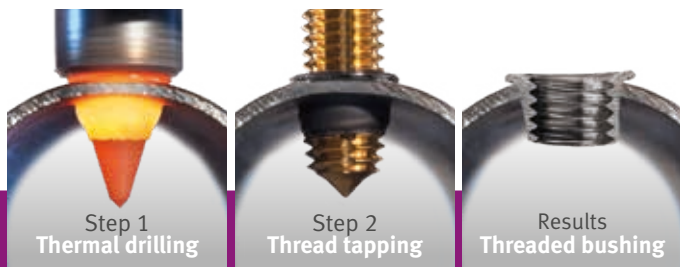
The solution for loose rivet nuts

Secure threaded connections for thin wall thicknesses

THERMDRILL®

Verbindungstechnik – Made in Germany

The Thermdrill® method



When thermal drilling a twist-free bushing is formed by friction heat from the exiting material without chips and then the bushing is threaded.

- Suitable for alu, non-ferrous, mild steel and stainless steel
- Can be used on milling machines, CNC-centers and pillar drill presses

Power data for your drilling machine can be found at: www.thermdrill.com

- ✓ Cost savings
- ✓ Time savings
- ✓ Maximum safety

You need

1 Thermal drill



Please notice: important!

- Made of solid carbide with a special polygon grind

Size	Type	Max. material thickness [mm]	Art. no.	Max. material thickness [mm]	Art. no.
M4	short	1.5	3060104	2.0	3060164
	long	2.5	3060124	4.0	3060144
M5	short	2.0	3060105	3.0	3060165
	long	3.0	3060125	4.5	3060145
M6	short	2.0	3060106	3.0	3060166
	long	3.5	3060126	5.0	3060146
8M	short	2.5	3060108	4.0	3060168
	long	4.0	3060128	6.0	3060148
M10	short	2.5	3060110	4.0	3060170
	long	4.5	3060130	6.5	3060150
M12	short	2.5	3060112	4.0	3060172
	long	4.5	3060132	6.5	3060152

Other thread sizes available (also in metric fine and pipe threads)

Tool set = Thermal drill + thread tapper

Type FORM			Type CUT		
Size	Type	Max. material thickness [mm]	Art. no.	Max. material thickness [mm]	Art. no.
M4	short	1.5	3060024	2.0	3060044
	long	2.5	3060034	4.0	3060054
M5	short	2.0	3060025	3.0	3060045
	long	3.0	3060035	4.5	3060055
M6	short	2.0	3060026	3.0	3060046
	long	3.5	3060036	5.0	3060056
8M	short	2.5	3060028	4.0	3060048
	long	4.0	3060038	6.0	3060058
M10	short	2.5	3060030	4.0	3060050
	long	4.5	3060040	6.5	3060060
M12	short	2.5	3060032	4.0	3060052
	long	4.5	3060042	6.5	3060062

2 Thread tapper



TiN coated and with lubrication grooves
Tolerance 6HX
Form C

- For precise threads
- Suitable for standard holders

Size	Art. no.
M4 x 0.7	3060184
M5 x 0.8	3060185
M6 x 1.0	3060186
M8 x 1.25	3060188
M10 x 1.25	3060190
M12 x 1.25	3060192

3 Basic equipment



Contains everything you need to get started with the THERMDRILL right away

Art. no.	
MT 2	3060005
Contents:	
▶ THERMDRILL Paste 100 g	
▶ Thread tapping oil 100 ml	
▶ Open-end wrench	
▶ Hook wrench	
▶ Tool holder with cooling ring MT 3	
▶ Case	
▶ Reduction sleeve MT 3 - MT 2	
▶ Spring collets (Ø 6/8/10/12 mm)	

THERMDRILL Paste

Package	Art. no.
For friction drilling including brush	
1 kg	3060090
Protects the thermal drill against excessive wear.	

Thread tapping oil

Package	Art. no.
Including brush	
1 litre	3060092
High-performance oil, specially suited for thread tapping in aluminium, copper, brass, steel, stainless steel	