BENCH DRILLS

V-BELT



DRILLING MACHINES

COLUMN DRILLING MACHINES



NEW

DIY

Entry level bench-top drilling machines with V-belt drive

Facts that impress in terms of quality, performance and price

- Safety electrics in 24 V DC
- Guaranteed run-out accuracy ≤ 0.03 mm measured in the drilling spindle sleeve
- Drill spindle with precision ball bearings
- GATES quality belts
- Separate emergency stop pushbutton
- Drill depth stop
- Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel (DQ 18/DQ 22)
- ± 45° inclinable and 360° rotatable drilling table
- One-piece cast aluminium die-cast quill lever with soft-grip handles
- Premium quick-action drill chuck
- Generously dimensioned baseplate with T-slots, heavily ribbed on rear

DQ 22

- Generously dimensioned, height adjustable protective screen with safety switch

DQ 22 with 400V

- Right-/left-hand rotation

V-belt drive

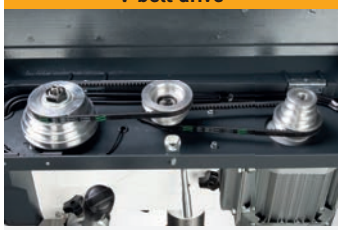


Fig. Belt drive DQ 22.
Two belt pulleys for DQ 14/18

› Best power transmission due to aluminium pulleys in combination with toothed GATES quality V-belt
› V-belt cover with safety switch

LED machine lamp



› Anti-glare LED lighting integrated into the drilling head
No annoying shadows



Fig.: DQ 14



Fig.: DQ 18



Fig.: DQ 22

Technical data and accessories



Model	DQ 14	DQ 18	DQ 22
Article no. (230V)	3191040	3191042	3191044
Article no. (400V)	-	-	3191045
Power			
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz	230 V or 400V
Motor power	350 W	450 W	550 W
Drilling performance			
Drilling performance in steel (S235JR)	Ø 13 mm	Ø 15.9 mm	Ø 16 mm
Continuous drilling performance in steel (S235JR)	Ø 12 mm	Ø 14 mm	Ø 14 mm
Spindle			
Spindle sleeve stroke	52 mm	65 mm	85 mm
Throat	104 mm	127 mm	169 mm
Spindle seat	fixed/B16	MT2	MT2
Rotational speeds			
Spindle speeds	700 - 2 500 rpm	600 - 2 400 rpm	300 - 2 300 rpm
Number of speeds	5 stages	5 stages	12 stages
Drilling table			
Drilling table workspace L x W	170 x 170 mm	200 x 200 mm	270 x 270 mm
T-slot width	14 mm, 2 diagonally	14 mm, 2 diagonally	14 mm, 2 diagonally
Table load capacity	8 kg	12 kg	15 kg
Drill table rotation / tilting sideways	360° / ± 45°	360° / ± 45°	360° / ± 45°
Max. distance spindle - drilling table	250 mm	319 mm	460 mm
Machine base			
Machine base work area L x W	138 x 128 mm	145 x 143 mm	191 x 187 mm
Max. distance spindle - machine base	340 mm	518 mm	639 mm
Dimensions and weight			
Column diameter	Ø 46 mm	Ø 60 mm	Ø 70 mm
Length x width x height	472 x 283 x 634 mm	568 x 319 x 849 mm	700 x 351 x 1006 mm
Net weight	18.5 kg	28.5 kg	41.7 kg

Accessories	Article no.
Hold-down clamp 14 mm/M 12	3352031
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Quick-action drill chuck 1 - 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Clamping tool assortment SPW 12	3352017

Accessories DQ 18/DQ 22	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050571
Direct quick-action drill chuck 1 - 13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Thread tapping chuck, 7 insertsM3 - M12	3050702

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

Scope of delivery
DQ 14
› Quick-action drill chuck 1 - 15.9 mm
› T-slot nuts
DQ 18 / DQ 22
› Quick-action drill chuck 1 - 16 mm
› Morse taper MT2/B16
› T-slot nuts

NEW

DIY

Bench drill with V-belt drive and infinitely variable speed setting

Facts that impress in terms of quality, performance and price

- Safety electrics in 24 V DC
- Guaranteed run-out accuracy ≤ 0.03 mm measured in the drilling spindle
- User-friendly safety switch with IP 54 degree of protection
- Drill spindle with precision ball bearings
- Separate EMERGENCY-STOP push button
- Drill depth stop
- V-belt cover with safety switch
- Generously dimensioned, height adjustable protective screen with safety switch
- Precise workmanship; stable drilling table with two diagonal T-slots and all-around cooling water channel
- ± 45° inclinable and 360° rotatable drilling table
- One-piece cast aluminium die-cast quill lever with soft-grip handles
- OPTIMUM quick-action drill chuck in standard scope of delivery

Belt drive



› Best power transmission due to aluminium pulleys in combination with toothed GATES quality V-belt
› V-belt cover with safety switch

Speed change



› The infinitely variable V-belt drive is used to position the V-belt to the desired V-belt diameter with the hand lever while the drilling spindle is rotating. This causes the speed to change

LED machine lamp



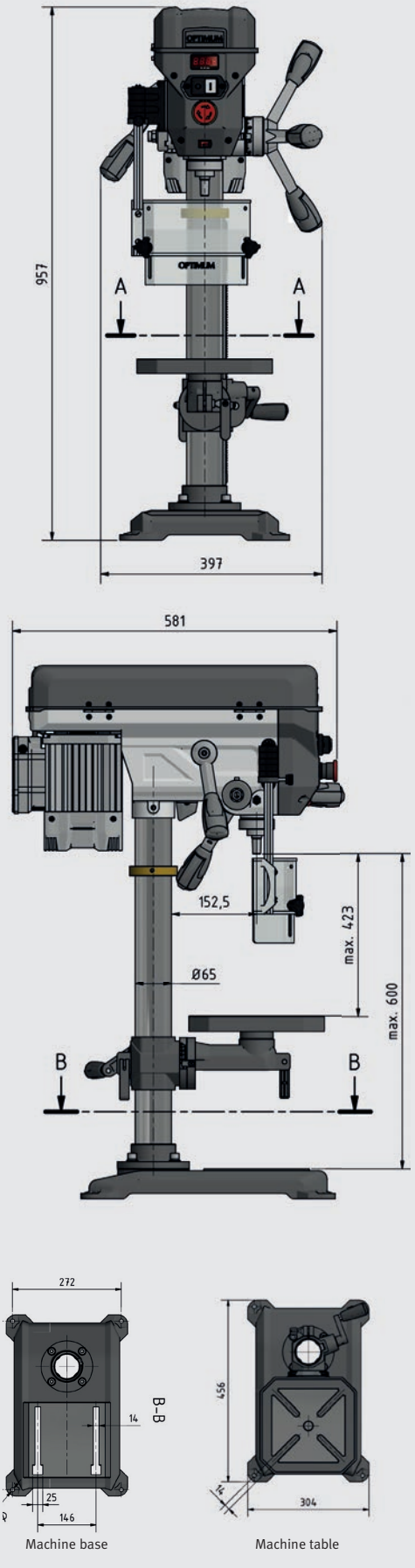
› Anti-glare LED lighting integrated into the drilling head No annoying shadows



Technical specifications, accessories and dimensions

Model	DQ 20V
Article no.	3191080
Power	
Electrical connection	230 V / 1 Ph
Motor power	0.75 kW
Drilling performance	
Drilling performance in steel (S235JR)	Ø 16 mm
Continuous drilling performance in steel (S235JR)	Ø 14 mm
Spindle	
Spindle sleeve stroke	80 mm
Throat	152 mm
Spindle seat	MT2
Rotational speeds	
Spindle speeds	450 - 2 500 rpm
Infinitely mechanically	adjustable speed
Drilling table	
Workspace length x width	243 x 243 mm
T-slot size	14 mm, 2 diagonally
Table load capacity	15 kg
Drill table rotation / tilting sideways	360° / ± 45°
Max. distance spindle - drilling table	423 mm
Machine base	
Machine base work area L x W	181 x 187 mm
Clearance spindle - machine base	max. 599 mm
Dimensions and weight	
Column diameter	Ø 65 mm
Length x width x height	581 x 397 x 957 mm
Net weight	40.7 kg

Dimensions



Scope of delivery
› Quick-action drill chuck 1 - 16 mm
› Morse taper MT2/B16
› T-slot nuts

Accessories	Article no.
Direct quick-action drill chuck MT2, 1-16 mm	3050571
Direct quick-action drill chuck MT2, 1-13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Assortment of clamping tools SPW 10, 58 parts	3352016
Cone ejector MSP1	3050636
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Universal coolant unit	3351999
Coolant mist lubricator MMC 1 with **magnetic holder**	3356663
Coolant hose KMS 2	3356660

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

NEW

CRAFTSMEN

Inexpensive post drills with V-belt drive

Facts that impress in terms of quality, performance and price

- Guaranteed run-out accuracy ≤ 0.03 mm measured in the drilling spindle
- User-friendly safety switch with IP 54 degree of protection
- Drilling spindle with precision ball bearings
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Right-/left-hand rotation
- Ground multi-tooth carrier
- Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts
- Belt cover with safety switch
- Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel
- ± 45° inclinable and 360° rotatable drilling table
- Solid, generously dimensioned baseplate with slots, rear heavily ribbed
- OPTIMUM quick-action drill chuck in standard scope of delivery

Belt drive



› Best power transmission due to aluminium pulleys in combination with toothed GATES quality V-belt
› V-belt cover with safety switch



Fig.: DQ 25



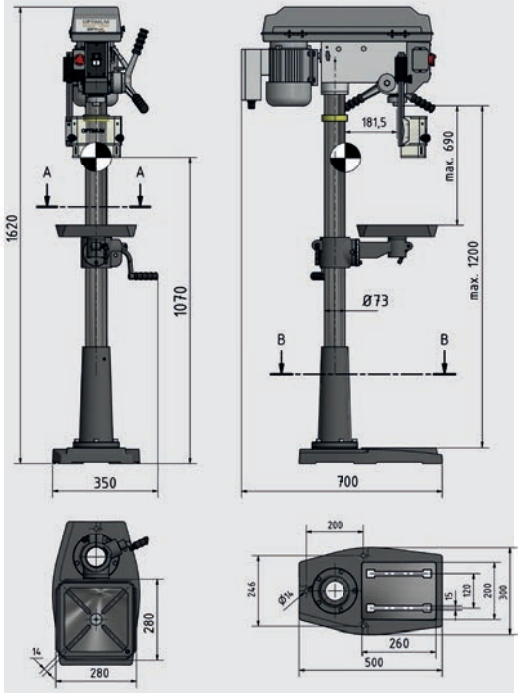
Fig.: DQ 32

BELT

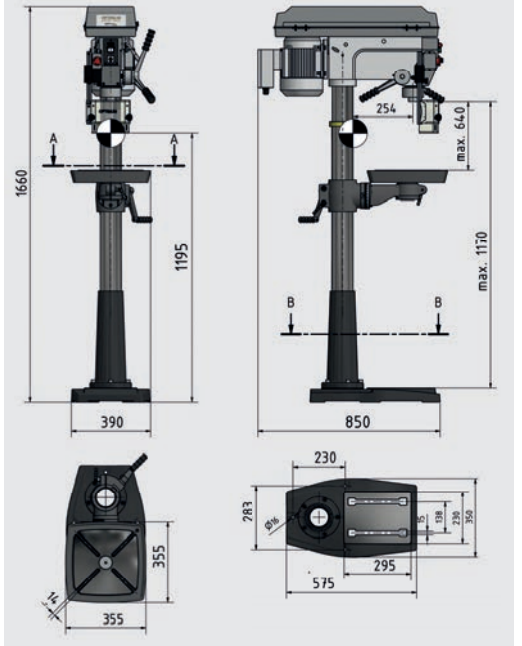
Technical specifications, accessories and dimensions

Model	DQ 25	DQ 32
Article no.	3191047	3191049
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor power	750 W	1.1 kW
Drilling performance		
Drilling performance in steel (S235JR)	Ø 25 mm	Ø 30 mm
Continuous drilling performance in steel (S235JR)	Ø 20 mm	Ø 25 mm
Spindle		
Spindle sleeve stroke	80 mm	120 mm
Throat	181 mm	254 mm
Spindle seat	MT3	MT4
Rotational speeds		
Spindle speeds	200 - 2 440 rpm	120 - 1 810 rpm
Number of speeds	12	9
Drilling table		
Drilling table workspace L x W	280 x 280 mm	355 x 355 mm
T-slot size	14 mm 2 diagonal running	14 mm 2 diagonal running
Load bearing capacity	40 kg	55 kg
Drill table rotation / tilting sideways	360° / ± 45°	360° / ± 45°
Max. distance spindle - drilling table	690 mm	640 mm
Machine base		
Machine base L x W	500 x 300 mm	575 x 350 mm
Machine base work area L x W	200 x 260 mm	230 x 295 mm
T-slot size / spacing / count	15 mm / 120 mm / 2	15 mm / 138 mm / 2
Max. distance spindle - machine base	1 200 mm	1 170 mm
Dimensions and weight		
Column diameter	Ø 73 mm	Ø 92 mm
Length x width x height	700 x 350 x 1 620 mm	850 x 390 x 1 660 mm
Net weight	71 kg	120 kg

Dimensions DQ 25



Dimensions DQ 32



Accessories	Article no.
Hold-down clamp 14 mm/M 12	3352031
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Quick-action drill chuck 1 - 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Clamping tool assortment SPW 12	3352017

More **accessories** and **information** on accessories from page 86
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Scope of delivery

- Quick-action drill chuck 1 - 16 mm
- T-slot nuts
- Morse taper MT3/B16 (DQ 25)
- Morse taper MT4/B16 (DQ 32)
- Push-out tool

Bench drill with V-belt drive

Facts that impress in terms of quality, performance and price

- Guaranteed run-out accuracy ≤ 0.02 mm measured in the drilling spindle
- User-friendly safety switch with IP 54 degree of protection
- Drill spindle with precision ball bearings
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Precise workmanship; stable drilling table with two diagonal T-slots and all-around cooling water channel
- V-belt cover with safety switch
- Premium quick-action drill chuck as standard equipment
- Foldable drill chuck guard
- Single-piece, pressure cast aluminium sleeve lever with Softgrip handles

Belt drive



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

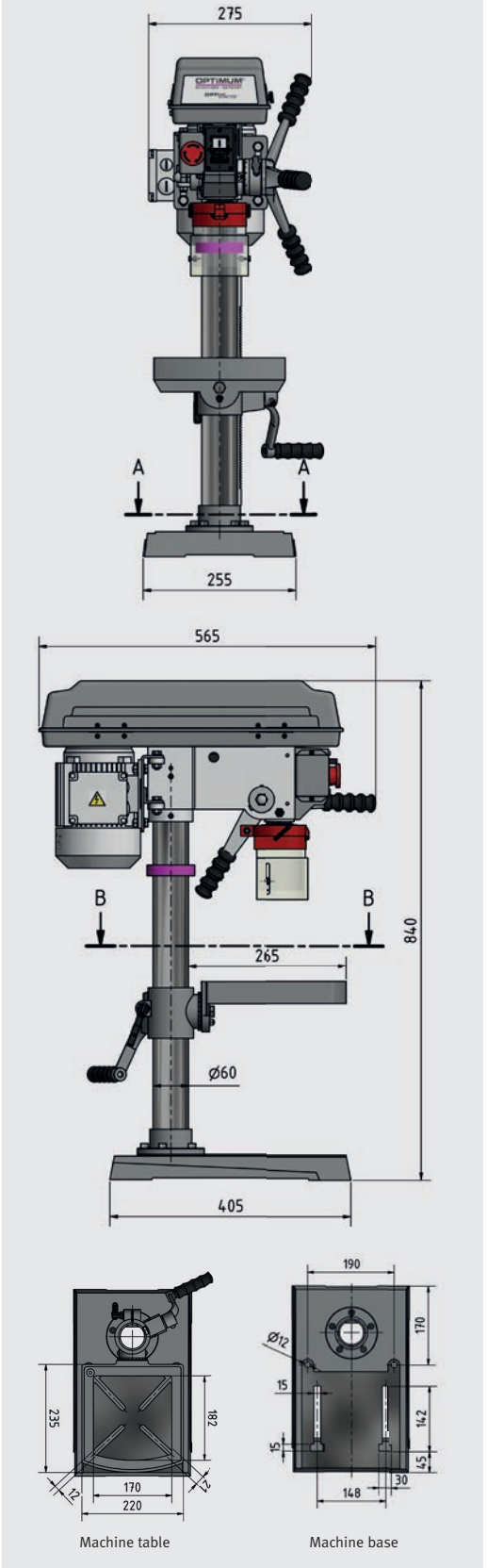


BELT

Technical specifications, accessories and dimensions

Model	B 17Pro basic
Article no.	3003161
Power	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor power	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	MT2
Throat	152 mm
Rotational speeds	
Spindle speeds	680 - 2 700 rpm
Number of speeds	5 stages
Drilling table	
Workspace length x width	235 x 220 mm
T-slot size	12 mm, 2 diagonal running
Table load capacity	18 kg
Drill table rotation / tilting sideways	360° / ± 45°
Max. distance spindle - drilling table	325 mm
Machine base	
Machine base L x W	210 x 215 mm
Machine base work area L x W	170 x 180 mm
T-slot size / spacing / count	14 mm / 148 mm / 2
Max. distance spindle - machine base	530 mm
Dimensions and weight	
Column diameter	Ø 60 mm
Length x width x height	565 x 275 x 840 mm
Net weight	36.5 kg

Dimensions



Accessories	Article no.
Hold-down clamp 14 mm/M 12 (for the machine base)	3352031
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Quick-action drill chuck 1 - 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Direct quick-action drill chuck 1 - 16 mm	3050571
Direct quick-action drill chuck 1 - 13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Clamping tool assortment SPW 10	3352016
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

Scope of delivery

- Quick-action drill chuck 1 - 15.5 mm
- Morse cone
- T-slot nuts

Bench and column drilling machines with V-belt drive and digital drilling depth and speed display

Facts that impress in terms of quality, performance and price

- Industrial motor
- Safety electrics in 24 V DC
- Guaranteed run-out accuracy ≤ 0.02 mm measured in the drilling spindle
- User-friendly safety switch with IP 54 degree of protection
- Drill spindle with precision ball bearings
- Digital drilling depth and speed display integrated in housing
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Precision spindle hole
- Generously dimensioned, height adjustable protective screen with safety switch
- Premium quick-action drill chuck as standard equipment
- Precise workmanship; stable drilling table with two diagonal T-slots and all-around cooling water channel
- V-belt cover with safety switch
- Single-piece, pressure cast aluminium sleeve lever with Softgrip handles
- Heavy duty design of entire machine

As of D 23 Pro

- GATES quality belts

As of D 23 Pro / 400 V

- Right-/left-hand rotation

D 33Pro

- Solid, generously dimensioned baseplate with T-slots, heavily ribbed on rear

Belt drive



› Smooth action thanks to ground multi-tooth carrier
› Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts (as of D 23Pro)



Fig.: D 17Pro | Fig.: D 23Pro | Fig.: D 26Pro | Fig.: D 33Pro

Technical data and accessories



Model	D 17Pro	D 23Pro	D 26Pro	D 33Pro
Article no. (230V)	3003010	3003015	-	-
Article no. (400V)	-	3003020	3003030	3003040
Power				
Electrical connection	230 V / 1 Ph ~50 Hz	230 V/1 Ph or 400 V/3 Ph	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor power	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	MT2	MT2	MT3	MT4
Throat	152 mm	180 mm	210 mm	254 mm
Rotational speeds				
Spindle speeds	680 - 2 700 rpm	200 - 2 440 rpm	200 - 2 440 rpm	120 - 1 810 rpm
Number of speeds	5 stages	12 stages	12 stages	9 stages
Drilling table				
Workspace length x width	235 x 220 mm	280 x 245 mm	330 x 290 mm	475 x 425 mm
T-slot size	12 mm, 2 diagonally	12 mm, 2 diagonally	14 mm, 2 diagonally	14 mm, 2 diagonally
Table load capacity	18 kg	18 kg	20 kg	25 kg
Drill table rotation / tilting sideways	360° / ± 45°	360° / ± 45°	360° / ± 45°	360° / ± 45°
Max. distance spindle - drilling table	325 mm	425 mm	720 mm	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
Clearance spindle - machine base	max. 530 mm	max. 618 mm	max. 1 230 mm	max. 1 180 mm
Dimensions and weight				
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 1015 mm	670 x 355 x 1640 mm	755 x 440 x 1705 mm
Net weight	41.5 kg	58 kg / 63.5 kg	85 kg	132 kg

Accessories	Article no.
Hold-down clamp 14 mm/M 12	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-action drill chuck 1 - 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0-16 mm	3050633
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

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

Accessories D 17Pro / D 23Pro	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050571
Direct quick-action drill chuck 1 - 13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Thread tapping chuck, 7 inserts M3-M12	3050702
Clamping tool assortment SPW 10	3352016
Clamping tool assortment SPW 14	3352018

Accessories D 26Pro	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050573
Reduction sleeve MT3 - MT2	3050663
Morse taper MT3/B16	3050660
Twist drill bit HSS MT3, 9 parts	3051003
Cone ejector MSP1	3050636
Clamping tool assortment SPW 12	3352017
Clamping tool assortment SPW 14	3352018

Accessories B 33Pro	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4 - MT3	3050664
Morse taper MT4/B16	3050661
Cone ejector MSP2	3050637
Clamping tool assortment SPW 12	3352017
Clamping tool assortment SPW 14	3352018

NEW

CRAFTSMEN

DP 26T bench drill and DP 26F/DP 33 column drill with V-belt drive
in modern design

Facts that impress in terms of quality, performance and price

- Industrial motor
- Slow action spindle thanks to new spindle design
- Machine operation with safety electrics in 24 V DC voltage
- Guaranteed run-out accuracy ≤ 0.02 mm measured in the drilling spindle
- Precision spindle hole
- Separate EMERGENCY-STOP push button
- Drill depth stop
- LED machine lamp integrated in drilling head
- Precise workmanship; stable drilling table with diagonal T-slots and all-around cooling water channel
- V-belt cover with safety switch
- Thick walled steel column for high force absorption and stability
- Solid, generously dimensioned baseplate with T-slots
- Heavy duty design of entire machine

400 V machines
- Right-/left-hand rotation

State-of-the-art operating concept



› Easily readable digital display for viewing the speed, depth gauge and zero point

YouTube
Follow this for the video presentation of our Optimum drilling machine DP26

Belt tension



› Premium Gates belts
› The toothed V-belts enable a higher power transmission to the shaft due to their smaller wrap angle at the V-belt pulleys
› Easy adjustment of the belt tension via excenter (toggle lever)

Drilling table



› Precise workmanship
› Robust with diagonal T-slots
› Circumferential coolant channel
› ± 45° sideways tiltable
› 360° rotatable



Fig.: DP 26T



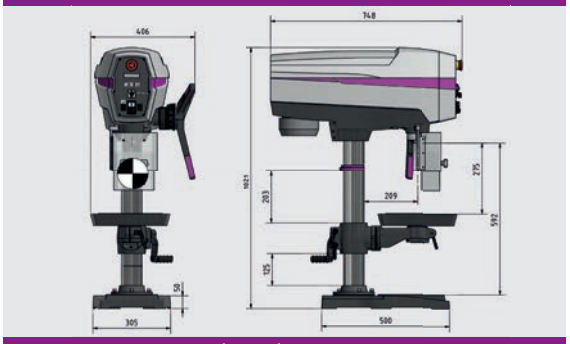
Fig.: DP 33

Technical specifications, accessories and dimensions

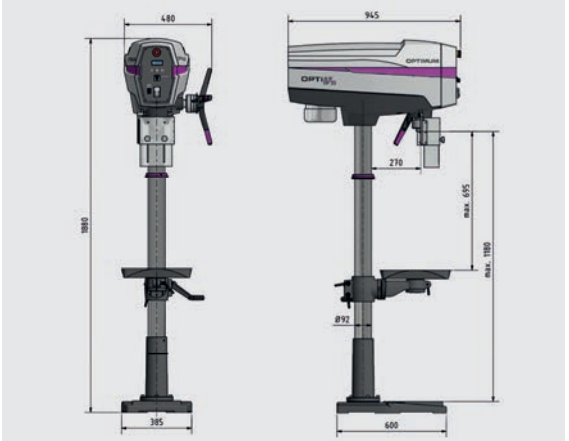
BELT

Model	DP 26-T	DP 26-F	DP 33
Article no. (230V)	3020620T	3020620F	-
Article no. (400V)	3020625T	3020625F	3020640
Power			
Electrical connection	230 V / 1 Ph ~50 Hz or 400 V / 3 Ph ~50 Hz		400 V / 3 Ph ~50 Hz
Motor power	750 W		1.1 kW
Drilling performance			
Drilling performance in steel (S235JR)	Ø 25 mm		Ø 30 mm
Cont.w drilling performance in steel (S235JR)	Ø 20 mm		Ø 25 mm
Spindle			
Spindle sleeve stroke	95 mm		125 mm
Spindle seat	MT3		MT4
Throat	209 mm		270 mm
Rotational speeds			
Spindle speeds	200 - 2 440 rpm		120 - 1 810 rpm
Number of speeds	12 stages		9 stages
Drilling table			
Workspace length x width	308 x 308 mm		387 x 387 mm
T-slot size	12 mm, 2 diagonal running		14 mm, 2 diagonal running
Table load capacity	45 kg		65 kg
Drill table sideways tiltable / rotatable	± 45° / 360°		± 45° / 360°
Max. distance spindle - drilling table	400 mm	770 mm	775 mm
Machine base			
Machine base work area L x W	202 x 265 mm		270 x 327 mm
T-slot size / spacing / count	14 mm / 120 mm / 2		16 mm / 150 / 2
Clearance spindle - machine base	max. 592 mm	max. 1 300 mm	max. 1 300 mm
Dimensions and weight			
Column diameter	Ø 80 mm		Ø 92 mm
Length x width x height	748 x 406 x 1 025 mm	748 x 406 x 1 724 mm	945 x 480 x 1 880 mm
Net weight	107 kg	116 kg	186 kg

Dimensions DP 26-T



Dimensions DP 33



Scope of delivery
› Quick-action drill chuck 0 - 16 mm
› T-slot nuts
› Push-out tool
› Adapter MT
› Operating tool

Accessories	Article no.
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Morse taper MT3/B16	3050660
Morse taper MT4/B16	3050661
Direct quick-action drill chuck MT3 / 1 - 16 mm	3050573
Direct quick-action drill chuck MT4 / 1 - 16 mm	3050574
Twist drill bit HSS MT3, 9 parts	3051003
Clamping tool assortment SPW 10	3352016
Clamping tool assortment SPW 12	3352017

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

Bench drills with infinitely variable speed control

Facts that impress in terms of quality, performance and price

- Guaranteed run-out accuracy ≤ 0.03 mm measured in the drilling spindle
- Drill spindle with precision ball bearings
- High-contrast, digital LED speed display integrated in housing, speed control via potentiometer
- Membrane keyboard, dirt/water-resistant , easy to clean
- Separate EMERGENCY-STOP push button
- Premium OPTIMUM quick-action drill chuck as standard
- Best possible force transmission thanks to to aluminium pulleys
- Height adjustability chuck guard with microswitch
- Precisely machined robust drilling table with parallel T-slots
- Thick walled cast column for high force absorption and stability
- Solid baseplate with, heavily ribbed on rear
- EMC filter class C2

DX 13V
- Drill head height adjustable

DX 15V
- Drilling table height-adjustable via rack



Fig.: DX 13V



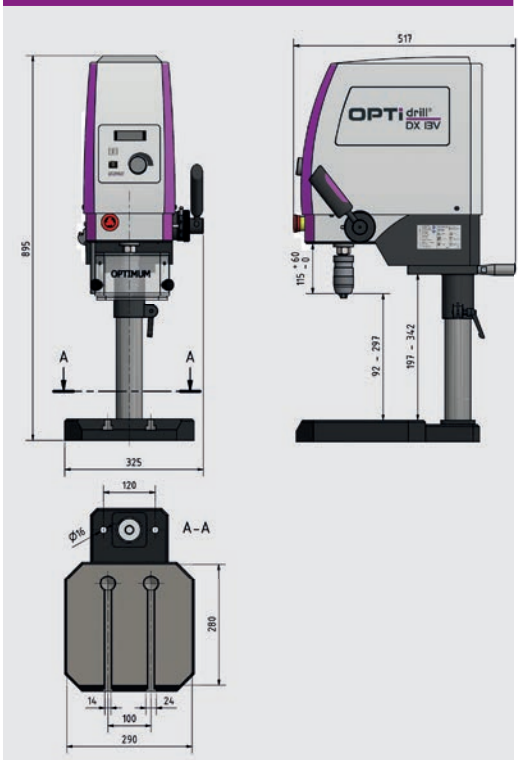
Fig.: DX 15V

Technical specifications, accessories and dimensions

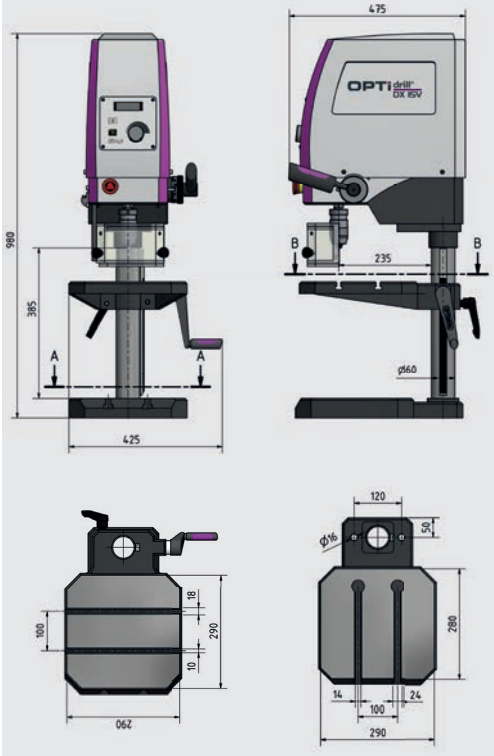
BELT VARIO

Model	DX 13V	DX 15V
Article no.	3020150	3020155
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	
Motor power	850 W	
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	MT2
Throat	235 mm	
Rotational speeds		
Spindle speeds	100 - 3 000 rpm	
Number of speeds	Electronic speed control	
Drilling table		
Workspace length x width	-	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 and weight		
Column diameter	Ø 60 mm	
Length x width x height	325 x 517 x 895 mm	425 x 475 x 980 mm
Net weight	51 kg	66 kg

DX 13V dimensions



DX 15V dimensions



Machine table Machine base

Accessories	Article no.
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
T-slot nut (individual) M 12 / 14 mm	3353025
Assortment of clamping tools SPW 12, 58 parts	3352017
Hold-down clamp 14 mm/M 12	3352031
Machine substructure MSM 1	3353000
Universal machine and tool trolley MSU 3	3352990
Universal machine and tool trolley MSU 4	3352991

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93
Information on the **machine substructures** from page 153
Information on the **universal machine and tool trolley** from page 92

Accessories DX 15V	Article no.
Twist drill bit HSS MT2	3051002
Direct quick-action drill chuck MT2 / 1 - 16 mm	3050571
Direct quick-action drill chuck MT2 / 1 - 13 mm	3050572
T-slot nut (individual) M 8 / 10 mm	3353022
Assortment of clamping tools SPW 12, 58 parts	3352017

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters, see page 323

Scope of delivery
› Quick-action drill chuck 1 - 13 mm
› Adapter MT2-B16

Table drilling machine for precision mechanics with continuously adjustable speed control. Machine DX 17V highlight - menu-controlled operation of the drilling/thread tapping operation modes.

Facts that impress in terms of quality, performance and price

- Guaranteed run-out accuracy ≤ 0.03 mm measured in the drilling spindle. Best possible force transmission thanks to to aluminium pulleys.
- Drill spindle with precision ball bearings
- Dirt/water-resistant, easy-to-clean membrane keyboard
- Separate EMERGENCY-STOP push button
- Anti-glare LED lighting on the left and right, integrated into the drilling head. No annoying shadows
- 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
- High-contrast, digital LCD speed display integrated in housing, speed control via potentiometer

DX 17V

- Menu-controlled operation of the drilling/thread tapping operation modes
- 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

DX 17E

LCD display DX 17E



› Spindle speed
› Depth display (actual)
› Right-/left-hand rotation
› Unit of dimension mm / inch
› Set zero point

SINAMICS V20



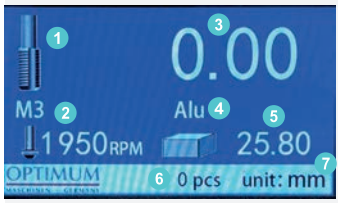
› Energy-efficient and rugged solution with the SINAMICS V20 frequency inverter

YouTube
Follow this for the video presentation of our Optimum drilling machine DX 17V

DX 17V operating panel

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

Patented



OLED-Display
1 - Selected tool and tool size
2 - Speed display
3 - Current drilling depth and thread depth
4 - Material selection
5 - Set drilling depth or thread depth as nominal value
6 - Piece counter
7 - Set unit



Fig.: DX 17E



Fig.: DX 17V

Technical specifications, accessories and dimensions

BELT VARIO

Model	DX 17E	DX 17V
Article no.	3020168	3020170
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	
Motor power	1.0 kW	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 16 mm	
Continuous drilling performance in steel (S235JR)	Ø 13 mm	
Spindle		
Spindle sleeve stroke	60 mm	
Spindle seat	MT2	
Throat	235 mm	
Rotational speeds		
Spindle speeds	50 - 4 000 rpm	
Number of speeds	Electronic speed control	
Drilling table		
Workspace length x width	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 and weight		
Column diameter	Ø 60 mm	
Length x width x height	425 x 481 x 910 mm	
Net weight	73 kg	



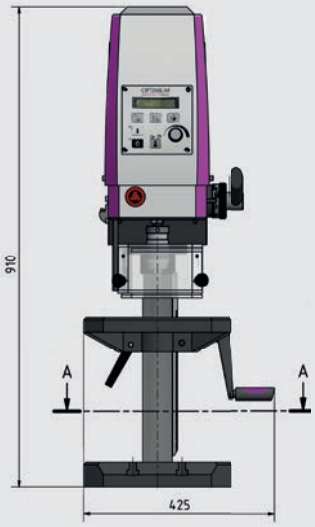
Fig.: MSU 3

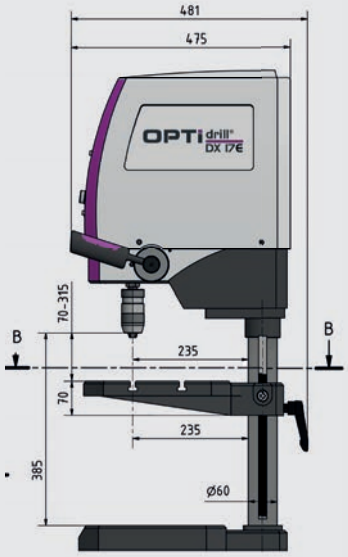
Accessories	Article no.
Clamping tool assortment SPW 8	3352015
Clamping tool assortment SPW 12	3352017
Direct quick-action drill chuck MT2 / 16 mm	3050571
Direct quick-action drill chuck MT2 / 13 mm	3050572
T-slot nut 10 mm / M 8	3353020
T-slot nut 14 mm / M 12	3353025
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Universal coolant unit	3351999
Coolant mist lubricator MMC 1 with **magnetic holder**	3356663
Coolant hose KMS 2	3356660
Machine substructure MSM 1	3353000
Universal machine and tool trolley MSU 3	3352990
Universal machine and tool trolley MSU 4	3352991

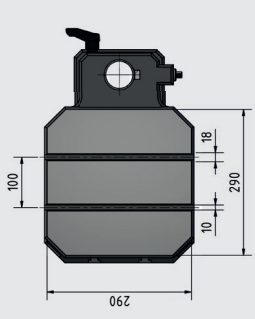
More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93
Information on the **machine substructures** from page 153
Information on the **universal machine and tool trolley** from page 92

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters, see page 323

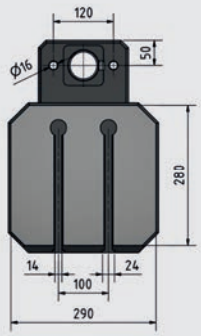
Dimensions







Machine table



Machine base

Scope of delivery

› Quick-action drill chuck 1 - 13 mm
› Adapter MT2-B16

Rugged bench/post drills with V-belt drive

Facts that impress in terms of quality, performance and price

- Smooth, powerful industrial electric motor
- Guaranteed run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Drill spindle with precision ball bearings
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Generously dimensioned, height adjustable protective screen with safety switch
- Premium Optimum quick-action drill chuck as standard equipment
- Rugged cast column
- Precision machined drilling table with two 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, heavily ribbed on rear
- The baseplate can be used for particularly high workpieces by swivelling out the drilling table

Ab B 24H
- Machine lamp

As of B 24H/400V
- Right-/left-hand rotation

As of B 28H
- Easy tool changes through integrated push-out tool
- Sleeve lever made of steel

B 34H
- Digital depth sensor
- Digital speed display

Belt drive



› Smooth action thanks to ground multi-tooth carrier
› Best possible force transmission thanks to 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. (230V)	-	3020241	-	-
Article no. (400V)	3020217	3020243	3020283	3020333
Power				
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 power	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	MT2	MT2	MT3	MT4
Throat	130 mm	165 mm	200 mm	285 mm
Rotational speeds				
Spindle speeds	450 - 3 500 rpm	350 - 4 000 rpm	120 - 4 000 rpm	145 - 4 800 rpm
Number of speeds	5 stages	7 stages	16 stages	2 x 9 speeds
Drilling table				
Workspace length x width	230 x 245 mm	280 x 300 mm	340 x 360 mm	420 x 400 mm
T-slot size	12 mm 2 diagonal running	14 mm 2 diagonal running	14 mm 2 diagonal running	14 mm 2 diagonal running
Rotating drilling table	360°	360°	360°	360°
Max. distance spindle - drilling table	370 mm	515 mm	860 mm	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
Clearance spindle - machine base	max. 495 mm	max. 590 mm	max. 1 285 mm	max. 1 275 mm
Dimensions and weight				
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
Net weight	54 kg	92 kg	142 kg	260 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
Universal coolant unit	3351999
Coolant mist lubricator MMC 1 with **magnetic holder**	3356663
Coolant hose KMS 2	3356660

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery
› Quick-action drill chuck 1 - 13 mm (B 16H)
› Quick-action drill chuck 1 – 16 mm (as of B 24H)
› Morse cone
› T-slot nuts

Accessories B 16H / B 24H	Article no.
Direct quick-action drill chuck, 1-16 mm	3050571
Direct quick-action drill chuck, 1-13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Assortment of clamping tools SPW 10, 58 parts	3352016
Cone ejector MSP1	3050636

Accessories B 28H	Article no.
Direct quick-action drill chuck MT3	3050573
Reduction sleeve MT3 - MT2	3050663
Morse taper MT3/B16	3050660
Twist drill bit HSS / MT3, 9 parts	3051003
Assortment of clamping tools SPW 12, 58 parts	3352017
Thread cutting chuck, 7 inserts M3 - M12	3050705
Thread cutting chuck, 7 inserts M8 - M20	3050706

Accessories B 34H	Article no.
Direct quick-action drill chuck MT4	3050574
Morse taper MT4/B16	3050661
Reduction sleeve MT4 - MT3	3050664
Clamping tool assortment SPW 12, 58 parts	3352017
Thread cutting chuck, 7 inserts M3 - M12	3050709
Thread cutting chuck, 7 inserts M8 - M20	3050710

*Explanation of transport packaging flat rate and surcharge, see page 323

CRAFTSMEN

Rugged bench and column drilling machines with automatic sleeve feed.

Facts that impress in terms of quality, performance and price

- Guaranteed run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Right-/left-hand rotation
- Machine lamp integrated in drilling head
- Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts
- Smooth action thanks to ground multi-tooth carrier
- Premium OPTIMUM quick-action drill chuck as standard
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Precisely machined and stable drilling table with 2 diagonally running T-slots, 360° rotatable and all-round cooling water channel
- V-belt cover with safety switch
- V-belt tensioning device
- Thick walled cast column for high force absorption and stability
- Solid baseplate, large dimensions and heavily ribbed on rear

Automatic spindle sleeve feed



› The drilling depth stop is adjustable in the range of 0-85 respectively 105 mm. The feed is automatically switched off after reaching the preset drilling depth and turned back to its original position by the spring force of the return spring

V-belt tensioning device Sleeve feed



› The feed is driven via a belt pulley
› The feed rate depends on the selected spindle speed
› Clamp and release the V-belt with a lever

Integrated push-out tool



› for simple tool changes



Fig.: DH 28FT



Fig.: DH 28FS

Technical data and accessories



Model	DH 24FT	DH 28FT	DH 28FS
Article no.	3020244	3020260	3020284
Power			
Electrical connection	400 V / 3 Ph ~50 Hz		
Motor power	850 W		
Drilling performance			
Drilling performance in steel (S235JR)	Ø 24 mm	Ø 28 mm	
Continuous drilling performance in steel (S235JR)	Ø 20 mm	Ø 24 mm	
Spindle			
Spindle sleeve stroke	85 mm	105 mm	
Spindle seat	MT2	MT3	
Throat	164 mm	200 mm	
Rotational speeds			
Spindle speeds	350 - 3 000 rpm	120 - 3 000 rpm	
Number of speeds	6 stages	12 stages	
Drilling table			
Workspace length x width	280 x 300 mm	340 x 360 mm	
T-slot size	14 mm, 2 diagonal running	14 mm, 2 diagonal running	
Max. distance spindle - drilling table	445 mm	540 mm	928 mm
Machine base			
Machine base work area L x W	280 x 360 mm	320 x 320 mm	
T-slot size / spacing / count	14 mm	14 mm / 120 mm / 2	
Clearance spindle - machine base	max. 595 mm	max. 700 mm	max. 1,279 mm
Dimensions and weight			
Column diameter	Ø 80 mm	Ø 92 mm	
Length x width x height	665 x 434 x 998 mm	715 x 455 x 1 150 mm	715 x 455 x 1 720 mm
Net weight	92 kg	132 kg	146 kg

Accessories DH 24FT	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050571
Direct quick-action drill chuck 1 - 13 mm	3050572
Collet chuck set MT2/ ER 25	3352052
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Thread tapping chuck, 7 inserts M3 - M12	3050702

Accessories DH 28FT / DH 28FS	Article no.
Direct quick-action drill chuck 1 - 16 mm	3050573
Reduction sleeve MT3 - MT2	3050663
Morse taper MT3/B16	3050660
Twist drill bit HSS MT3, 9 parts	3051003
Thread cutting chuck, 7 inserts M3 - M12	3050705
Clamping tool assortment SPW 12	3352017
Hold-down clamp 14 mm/M 12	3352031
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery
› Quick-action drill chuck 1 - 16 mm
› Morse taper MT
› T-slot nut

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

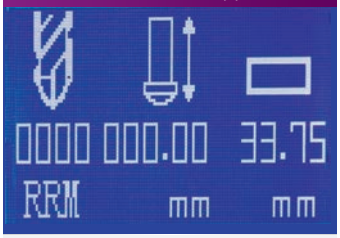
- Smooth action and powerful brushless drive
- Guaranteed run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Drilling spindle with precision ball bearings
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Membrane keyboard, soiling and water resistant, easy to clean
- Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts
- Smooth action thanks to ground multi-tooth carrier
- Premium OPTIMUM quick-action drill chuck as standard
- Precisely machined drilling table with 2 diagonally running T-slots, 360° rotatable
- Circumferential coolant channel surrounding the drilling table
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- V-belt cover with safety switch
- V-belt tensioning device
- Solid baseplate with, heavily ribbed on rear

Powerful brushless drive



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

Menu-controlled operation
Operating modes
Drilling/thread tapping



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

Thermdrill



› Information on page 94



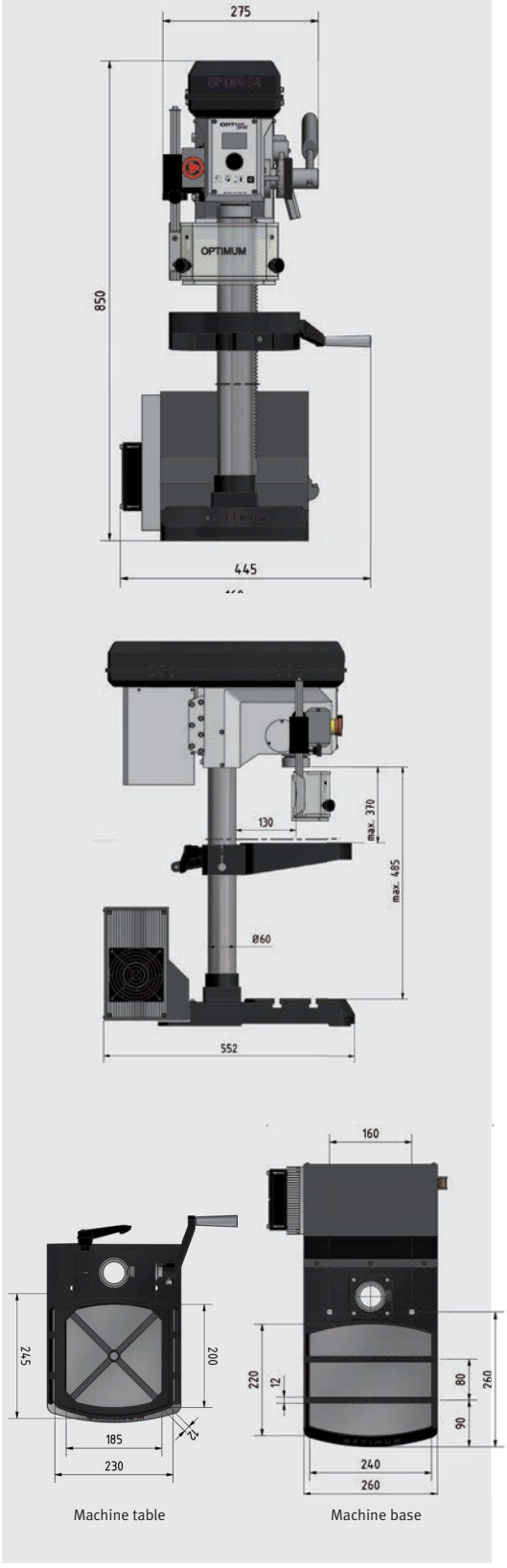
Fig.: DH 18V

Technical specifications, accessories and dimensions

BELT VARIO

Model	DH 18V
Article no.	3020220
Power	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor power	1.5 kW
Drilling performance	
Drilling performance in steel (S235JR)	Ø 18 mm
Continuous drilling performance in steel (S235JR)	Ø 16 mm
Thread tapping in steel (S235JR)	M10
Spindle	
Spindle sleeve stroke	65 mm
Spindle seat	MT2
Throat	130 mm
Rotational speeds	
Spindle speeds	100 - 6 000 rpm
Number of speeds	5 stages Electronic speed control
Drilling table	
Workspace length x width	230 x 245 mm
T-slot size	12 mm, 2 diagonal running
Rotating drilling table	360°
Max. distance spindle - drilling table	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
Max. distance spindle - machine base	485 mm
Dimensions and weight	
Column diameter	Ø 60 mm
Length x width x height	445 x 552 x 850 mm
Net weight	64 kg

Dimensions



Accessories	Article no.
Direct quick-action drill chuck MT2, 1 - 16 mm	3050571
Direct quick-action drill chuck MT2, 1 - 13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Clamping tool assortment SPW 10, 58 parts	3352016
Cone ejector MSP1	3050636
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Thread cutting chuck, 7 inserts M3 - M12	3050702
Thermdrill Basic Set	3060004
Machine substructure MSM 1	3353000
Universal machine and tool trolley MSU 3	3352990

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93
Information on the **machine substructures** from page 153
Information on the **universal machine and tool trolley** from page 92

Scope of delivery

- Quick-action drill chuck 1 - 13 mm
- Morse taper MT2
- T-slot nuts

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters, see page 323

CRAFTSMEN

Robust bench and column drills with powerful OPTIMUM brushless drive, speed electronically adjustable

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
- Guaranteed run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Separate EMERGENCY-STOP push button
- Drill depth stop
- Right-/left-hand rotation
- Machine lamp integrated in drilling head
- Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts
- Smooth action thanks to ground multi-tooth carrier
- Premium OPTIMUM quick-action drill chuck as standard
- Digital speed display integrated in housing
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Single-piece, pressure cast aluminium sleeve lever (B 24HV with Softgrip handles)
- V-belt cover with safety switch
- V-belt tensioning device
- Precisely machined and stable drilling table with 2 diagonally running T-slots, 360° rotatable and all-round cooling water channel
- Thick walled cast column for high force absorption and stability
- Solid baseplate, large dimensions and heavily ribbed on rear

Ab B 28HV

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

B 34HV

- Quill stroke 160 mm
- Thread tapping function
- Digital depth sensor

B 34HV



"auto" operating mode

› 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

"Thread tapping" operating mode

› The motor is activated by moving the handle down
› The direction of rotation changing is set by a limit switch on the adjustable drill depth stop

Powerful brushless drive



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



Fig.: B 24HV



Fig.: B 34HV

Technical data and accessories





Model	B 24HV	B 28HV	B 34HV
Article no.	3020245	3020285	3020335
Power			
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor power	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 in steel (S235JR)	-	-	M 16 x 2 mm
Spindle			
Spindle sleeve stroke	85 mm	105 mm	160 mm
Spindle seat	MT2	MT3	MT4
Throat	165 mm	200 mm	285 mm
Rotational speeds			
Spindle speeds	100 - 5 950 rpm	35 - 5 600 rpm	40 - 5 000 rpm
Number of speeds	4 stages Electronic speed control	12 stages Electronic speed control	9 stages Electronic speed control
Drilling table			
Workspace length x width	280 x 300 mm	340 x 360 mm	420 x 400 mm
T-slot size	14 mm, 2 diagonal running	14 mm, 2 diagonal running	14 mm, 2 diagonal running
Table load capacity	50 kg	50 kg	60 kg
Rotating drilling table	360°	360°	360°
Max. distance spindle - drilling table	515 mm	860 mm	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°
Clearance spindle - machine base	max. 590 mm	max. 1 285 mm	max. 1,275 mm
Dimensions and weight			
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
Net weight	96 kg	166 kg	275 kg

Accessories	Article no.
Clamping tool assortment SPW 12	3352017
Hold-down clamp 14 mm/M 12	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

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery
› Direct quick-action drill chuck 1 - 16 mm

Accessories B 34HV	Article no.
Reduction sleeve MT4 - MT3	3050664
Thread tapping chuck, 7 inserts, M3 - M12	3050709

Accessories B 24HV	Article no.
Twist drill bit HSS MT2, 9 parts	3051002
Thread tapping chuck, 7 insertsM3 - M12	3050702

Accessories B 28HV	Article no.
Reduction sleeve MT3 - MT2	3050663
Twist drill bit HSS MT3, 9 parts	3051003
Thread tapping chuck, 7 inserts M3 - M12	3050705

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters, see page 323

CRAFTSMEN

Bench and column drilling machines with infinitely variable mechanical belt transmission by BERGES. Quick adjustment of the speed by means of a lever

Facts that impress in terms of quality, performance and price

- Smooth action powerful electric motor
- Two speeds
- Guaranteed run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Drilling spindle with precision ball bearings
- Right-/left-hand rotation
- Machine lamp integrated in drilling head
- Digital speed display integrated in housing
- Precisely machined drilling table with 2 diagonally running T-slots, 360° rotatable with all-round cooling water channel
- V-belt cover with safety switch
- Height adjustable chuck guard with micro switch for greatest possible protection of the user
- Premium quick-action drill chuck as standard
- Thick walled cast column for high force absorption and stability
- Solid base plate, large dimensioned, heavily ribbed on the rear side
- 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
- 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 on page 94

MADE IN GERMANY
VARIO DRIVE



Fig.: DH 24BV



Fig.: DH 40BV

Technical data and accessories





Model	DH 24BV	DH 28BV	DH 40BV
Article no.	3020420	3020430	3020450
Power			
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor power	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	MT2	MT3	MT4
Throat	165 mm	200 mm	285 mm
Rotational 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			
Workspace length x width	280 x 300 mm	340 x 360 mm	420 x 400 mm
T-slot size	14 mm, 2 diagonal running	14 mm, 2 diagonal running	14 mm, 2 diagonal running
Max. distance spindle - drilling table	515 mm	860 mm	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°
Clearance spindle - machine base	max. 681 mm	max. 1 285 mm	max. 1,275 mm
Dimensions and weight			
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
Net weight	115 kg	152 kg	275 kg

Accessories	Article no.
Clamping tool assortment SPW 12	3352017
Hold-down clamp 14 mm/M 12	3352031
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Quick-action drill chuck 1 - 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Morse taper MT2/B16	3050659
Morse taper MT3/B16	3050660
Morse taper MT4/B16	3050661
Direct quick-action drill chuck MT2/16 mm	3050571
Direct quick-action drill chuck MT2/13 mm	3050572
Direct quick-action drill chuck MT3/16 mm	3050573
Direct quick-action drill chuck MT4/16 mm	3050574
Reduction sleeve MT3 - MT2	3050663
Reduction sleeve MT4 - MT3	3050664
Twist drill bit HSS MT2, 9 parts	3051002

Accessories	Article no.
Twist drill bit HSS MT3, 9 parts	3051003
Thread tapping chuck MT2, 7 inserts M3-12	3050702
Thread cutting chuck MT3, 7 inserts M3-12	3050705
Thread tapping chuck MT3, 7 inserts M8-20	3050706
Thread tapping chuck MT4, 7 inserts M3-12	3050709
Thread cutting chuck MT4, 7 inserts M8-20	3050706
Universal coolant unit	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660

More **accessories** and **information** on accessories from page 86
For a large selection of **machine vises** see on page 93

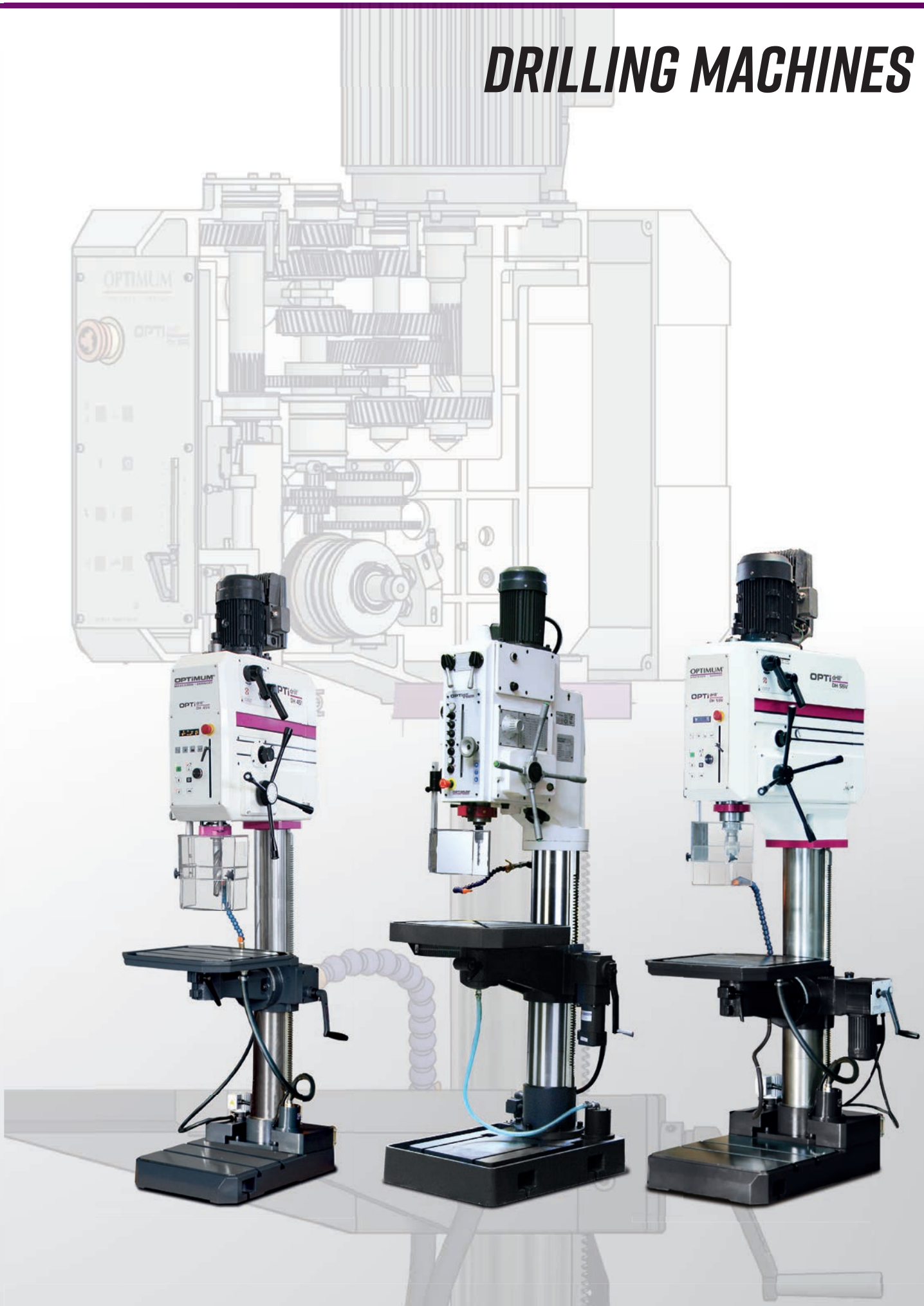
Scope of delivery
› Quick-action drill chuck 1 - 16 mm
› Morse taper MT
› T-slot nuts

*Explanation of transport surcharge, see page 323

GEAR DRILLING MACHINES



DRILLING MACHINES



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

DH 40GP with automatic spindle sleeve feed

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- High running smoothness due to ground gear wheels running in an oil bath
- 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
- Generously dimensioned, solid drilling table, precision workmanship, with 2 diagonal T-slots and recirculating coolant duct, heavily ribbed on rear side and double clamping
- Drill 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 40GP

- Automatic and manual sleeve feed

DH 40GP
Automatic spindle sleeve feed



› The drilling depth stop is adjustable in the range of 0-120 mm. The feed is automatically switched off after reaching the set drilling depth and is turned back to its initial position by the spring force of the return spring

Gearhead



› ±45° sideways tiltable

Height adjustment



› Drilling head height adjustment 0 - 265 mm



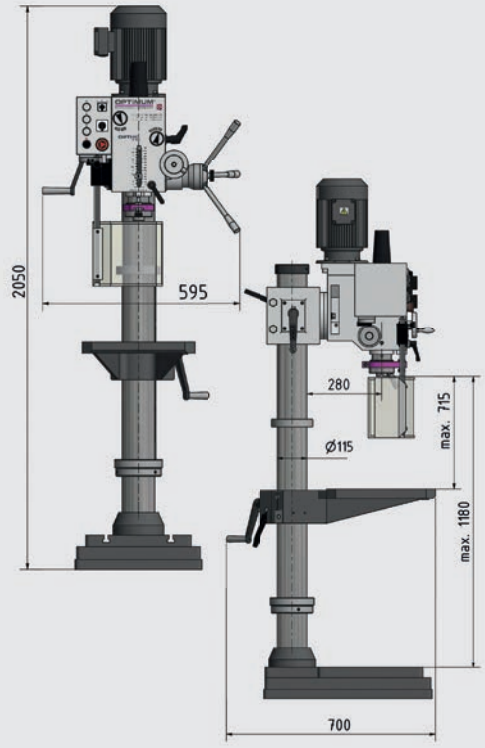
Fig.: DH 40GP

GEAR

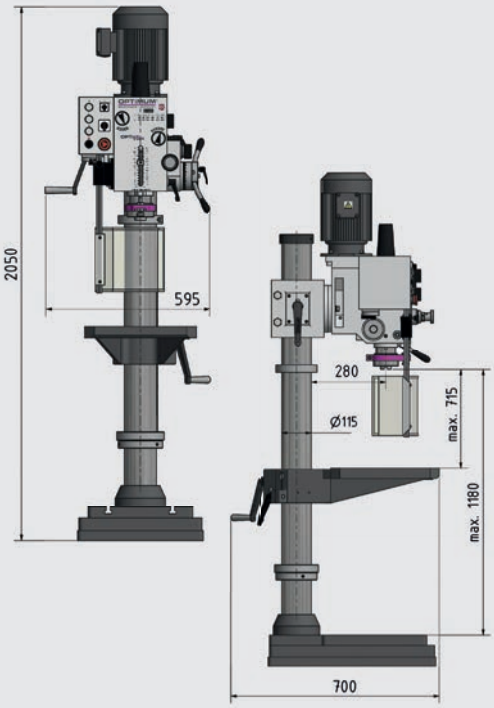
Technical specifications, accessories and dimensions

Model	DH 40G	DH 40GP
Article no.	3034355	3034360
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	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 in steel (S235JR)	M16	
Spindle		
Spindle sleeve stroke	120 mm	
Spindle sleeve diameter	75 mm	
Spindle seat	MT4	
Throat	280 mm	
Sleeve feed	manual	automatic 0.10 | 0.18 | 0.26 mm/ rev
Rotatable and sideways tiltable drill head	± 45° / 360º	
Drilling head height adjustment	265 mm	
Rotational 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, 2 diagonal running	
Cross table load bearing capacity	50 kg	
Rotatable and sideways tiltable drilling table	± 90° / 360°	
Max. distance spindle - drilling table	715 mm	
Machine base		
Machine base work area L x W	650 × 450 mm	
T-slot size / spacing / count	14 mm / 230 mm / 2	
Clearance spindle - machine base	max. 1 180 mm	
Dimensions and weight		
Column diameter	Ø 115 mm	
Length x width x height	595 x 700 x 2 050 mm	
Net weight	320 kg	335 kg

Dimensions



DH 40GP dimensions



Accessories	Article no.
Clamping tool assortment SPW 12, 58 parts	3352017
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Universal coolant unit	3351999
Coolant mist lubricator MMC 1 with **magnetic holder**	3356663
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4 - MT3	3050664
Morse taper MT4/B16	3050661

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery

- Quick-action drill chuck 1 - 13 mm
- Morse taper MT4/B16
- Draw-in rod M16
- Adapter MT4 - MT3
- Operating tool

*Explanation of transport packaging flat rate and surcharge, see page 323

Column gear drilling machines with cross table. The versatile machines for milling and drilling. DH 40CTP with automatic spindle sleeve feed

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- High running smoothness due to ground gear wheels running in an oil bath
- 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 guides are precisely adjustable via adjustable wedge bars
- Solid baseplate with precision surface finish can be used as a workspace for particularly high workpieces by swivelling out the X/Y table
- Right-/left-hand rotation
- Drill depth stop
- Thread tapping function

OPTIdrill DH 40CTP

- Automatic spindle sleeve feed

DH 40CTP
Automatic spindle sleeve feed



› The drilling depth stop is adjustable in the range of 0-120 mm. The feed is automatically switched off after reaching the set drilling depth and is turned back to its initial position by the spring force of the return spring

Follow this for the video presentation of our Optimum DH 40CT gear drilling machine

Gearhead



› ±45° pivotable

Cross table



› Generously dimensioned and solid
› Precise surface finish
› The movable X and Y axis enables precise positioning when drilling and milling



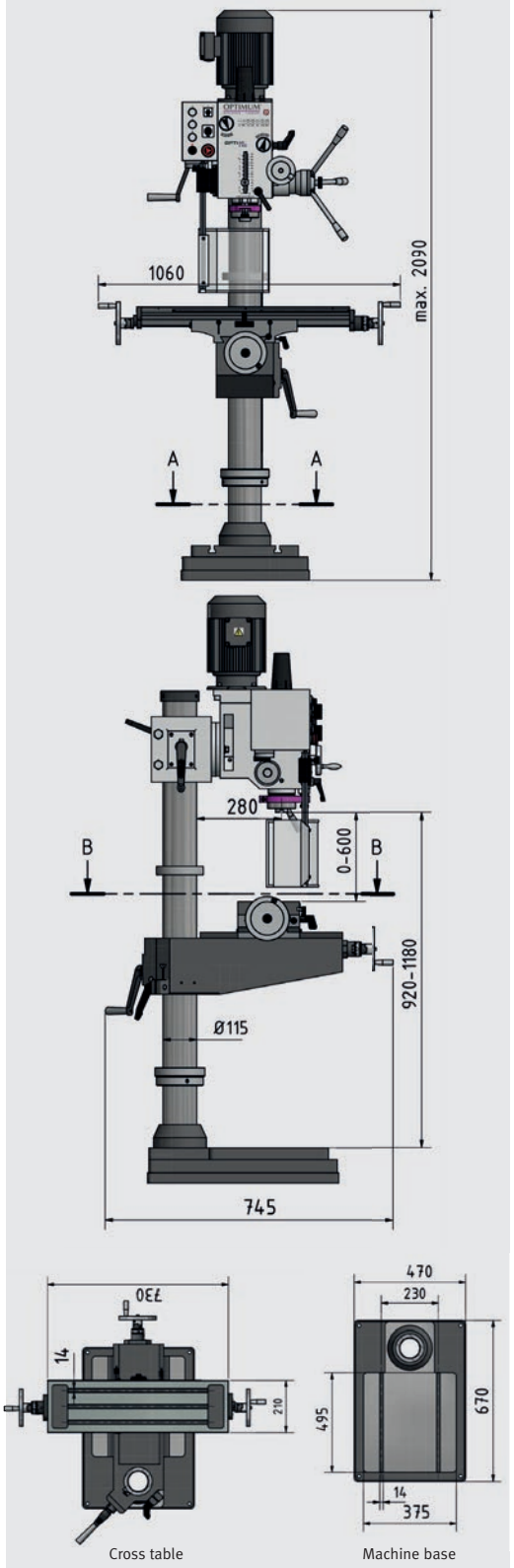
Fig.: DH 40CTP

Technical specifications, accessories and dimensions

GEAR

Model	DH 40CT	DH 40CTP
Article no.	3034350	3034351
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	1.1 / 1.5 kW	
Drilling/milling power		
Drilling performance in steel (S235JR)	Ø 32 mm	
Continuous drilling performance in steel (S235JR)	Ø 25 mm	
Cutter head size max.	Ø 76 mm	
End mill size max.	Ø 25 mm	
Thread tapping in steel (S235JR)	M16	
Spindle		
Spindle sleeve stroke	120 mm	
Spindle sleeve diameter	75 mm	
Spindle seat	MT4	
Throat	280 mm	
Sleeve feed	manual	automatic 0.10 | 0.18 | 0.26 mm/rev
Drawbar	M16	
Rotatable and sideways tiltable spindle head	± 45° / 360º	
Drilling head height adjustment	260 mm	
Rotational speeds		
Spindle speeds	95 - 3 200 rpm	
Speeds	2 x 6 speeds	
Cross table		
Workspace length x width	730 x 210 mm	
T-slot size / amount / distance	14 mm / 3 / 63 mm	
Cross table load bearing capacity	50 kg	
Clearance spindle to cross table max.	600 mm	
X-axis travel travel manual	480 mm	
Y-axis travel travel manual	180 mm	
Y-axis travel travel 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	
Clearance spindle - machine base	max. 1 180 mm	
Dimensions and weight		
Column diameter	Ø 115 mm	
Length x width x height	1 060 x 745 x 2 090 mm	
Net weight	370 kg	

Dimensions



Cross table | Machine base

Accessories	Article no.
Clamping tool assortment SPW 12, 58 parts	3352017
Hold-down clamp 14 mm/M 12	3352031
Parallel shim set, 20 parts	3354001
Horizontal-vertical rotary indexing table RT 150	3356150
Universal coolant unit	3351999

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories see page 320

Scope of delivery

- Key type drill chuck 1 - 13 mm / B18
- T-slot nuts
- Reduction sleeve MT4 - MT3
- Arbor for drill chuck MT4 / B18
- Operating tool

Explanation of transport packaging flat rate and surcharge, see page 323

CRAFTSMEN

Bench and post drills with polyamide gearwheels.

Installation of an optional footswitch possible with DH 32GS

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- Excellent true running accuracy thanks to hardened and ground main spindle
- Low-maintenance, grease-lubricated gearbox
- Gearbox with PA6 gearwheels
- Large speed range
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Adjustable drill depth stop with millimetre scale
- Right-/left-hand rotation
- Machine lamp integrated in drilling head
- Integrated push-out tool for easy tool changes
- Precision machined drilling table with two diagonal T-slots with all-around cooling water channel
- Thick walled cast column for high force absorption and stability
- Solid baseplate, large dimensions and heavily ribbed 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 rotation and for thread cutting (Article no. 3050032)

DH 32GS
Automatic spindle sleeve feed



› Activation by pressure switch in sleeve lever. An electromagnetic clutch provides propulsion. Switching off is done by the drilling depth stop or by pressing the push button in the quill lever again

Integrated push-out tool



› for simple tool change

Thermdrill



› Information on page 94



Fig.: DH 26GT with optional drill chuck



Fig.: DH 32GS with optional drill chuck

Technical data and accessories

GEAR

Model	DH 26GT	DH 28GS	DH 32GS
Article no.	3034220	3034230	3034240
Power			
Electrical connection	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz	400 V / 3 Ph ~50 Hz
Motor power	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 in steel (S235JR)	Ø 21 mm	Ø 23 mm	Ø 26 mm
Thread tapping in steel (S235JR)	-	-	M16 x 2 mm
Spindle			
Spindle sleeve stroke	127 mm	127 mm	125 mm
Spindle seat	MT3	MT3	MT4
Throat	235 mm	260 mm	285 mm
Automatic spindle sleeve feed	-	-	2 stages: 0.05 mm / 0.1 mm
Rotational speeds			
Spindle speeds	75 - 2 900 rpm	75 - 2 900 rpm	75 - 2 000 rpm
Number of speeds	8 stages	8 stages	8 stages
Drilling table			
Drilling table workspace length x width	380 x 380 mm	376 x 394 mm	400 x 420 mm
T-slot size	14 mm, 2 diagonal running	14 mm, 2 diagonal running	14 mm, 2 diagonal running
Drilling table load bearing capacity	80 kg	100 kg	120 kg
Rotating drilling table	360°	360°	360°
Max. distance spindle - drilling table	450 mm	875 mm	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
Max. distance spindle - machine base	610 mm	1,285 mm	1,270 mm
Dimensions and weight			
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
Net weight	158 kg	175 kg	312 kg

Accessories	Article no.
Clamping tool assortment SPW 12, 58 parts	3352017
Quick-action drill chuck 1 - 10 mm; B16	3050610
NEW **Quick-action drill chuck DKC 13,** 0-13 mm	3050632
NEW **Quick-action drill chuck DKC 16,** 0-16 mm	3050633
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 Basic Set	3060004

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery
› Morse taper MT

*Explanation of transport surcharge see page 323

Accessories DH 26GT / DH 28GS	Article no.
Direct quick-action drill chuck 1-16 mm	3050573
Morse taper MT3/B16	3050660
Reduction sleeve MT3 - MT2	3050663
Twist drill bit HSS MT3	3051003
Thread tapping chuck, 7 inserts M3-M12	3050705
Thread tapping chuck, 7 inserts M8-M20	3050706
Universal coolant unit	3351999

Accessories DH 32GS	Article no.
Direct quick-action drill chuck 1-16 mm	3050574
Morse taper MT4/B16	3050661
Reduction sleeve MT4-MT3	3050664
Reduction sleeve MT4-MT2	3050665
Foot switch	3050032

Functions:
› Thread tapping
› Right/left rotation toggling switch



CRAFTSMEN

Column drills with SIEMENS inverter technology and gears made of polyamide.

With infinitely variable speed control. Installation of an optional foot switch is possible

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- Frequency converter,
- Thread tapping function
- Smooth action thanks to ground multi-tooth carrier
- Excellent true running accuracy thanks to hardened and ground main spindle
- Low-maintenance, grease-lubricated gearbox
- Gearbox with PA6 gearwheels
- Large speed range
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Adjustable drill depth stop with millimetre scale
- Right-/left-hand rotation
- Machine lamp integrated in drilling head
- Integrated push-out tool for easy tool changes
- Precision machined drilling table with two diagonal T-slots with all-around cooling water channel
- Thick walled cast column for high force absorption and stability
- Solid baseplate, large dimensions and heavily ribbed on rear
- Optional footswitch available for toggling between clockwise/anticlockwise rotation and for thread cutting (Article no. 3050032)

OPTIdrill DH 32GSV

- Automatic spindle sleeve feed
- Coolant system and chip filter in line with Machinery Directive

DH 32GSV
Automatic spindle sleeve feed



› Activation by pressure switch in sleeve lever. An electromagnetic clutch provides propulsion. Switching off is done by the drilling depth stop or by pressing the push button in the quill lever again

SIEMENS
SINAMICS V20



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

Panel



› Easily readable digital display for speed
› User-friendly membrane keyboard

Thermdrill



› Information on page 94

YouTube
Follow this for the video presentation of our Optimum DH 32GSV gear drilling machine



Fig.: DH 28GSV with optional drill chuck

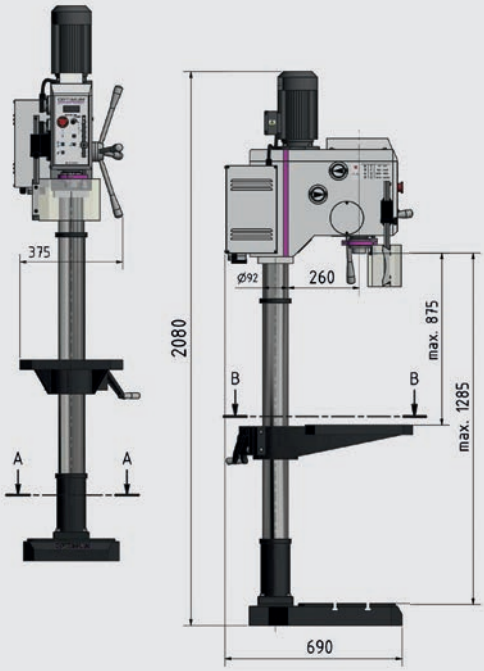


Fig.: DH 32GSV with optional drill chuck

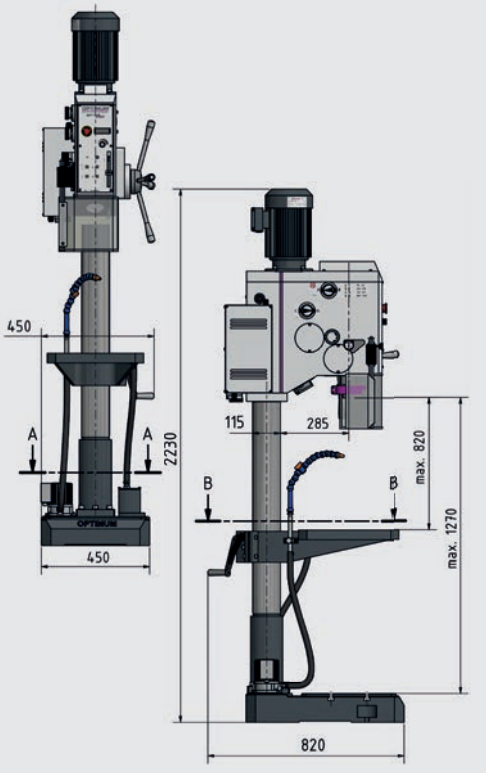
Technical specifications, accessories and dimensions

Model	DH 28GSV	DH 32GSV
Article no.	3034235	3034245
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	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 in steel (S235JR)	Ø 23 mm	Ø 26 mm
Thread tapping in steel (S235JR)	M 16 x 2 mm	
Spindle		
Spindle sleeve stroke	127 mm	125 mm
Spindle seat	MT3	MT4
Throat	260 mm	285 mm
Automatic spindle sleeve feed	-	0.05 / 0.1 mm
Rotational speeds		
Spindle speeds	45 - 3 200 rpm	40 - 3 000 rpm
Number of speeds	4 stages, electronically regulable	
Drilling table		
Drilling table workspace L x W	376 x 394 mm	400 x 420 mm
T-slot size	14 mm, 2 diagonal running	
Drilling table load bearing capacity	100 kg	120 kg
Rotating drilling table	360°	
Max. distance spindle - drilling table	875 mm	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
Clearance spindle - machine base	max. 1 285 mm	max. 1 270 mm
Dimensions and weight		
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
Net weight	184 kg	324 kg

Dimensions



Dimensions



Accessories	Article no.
Clamping tool assortment SPW 12, 58 parts	3352017
Quick-action drill chuck **1 - 10 mm; B16**	3050610
NEW **Quick-action drill chuck DKC 13,** 0 - 13 mm	3050632
NEW **Quick-action drill chuck DKC 16,** 0 - 16 mm	3050633
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021
Thermdrill Basic Set	3060004
Foot switch	3050032



Functions: Thread tapping, Right/left rotation toggling switch

Accessories DH 28GSV	Article no.
Direct quick-action drill chuck 1-16 mm	3050573
Morse taper MT3/B16	3050660
Reduction sleeve MT3 - MT2	3050663
Twist drill bit HSS / MT3	3051003
Universal coolant unit	3351999

Accessories DH 32GSV	Article no.
Direct quick-action drill chuck 1-16 mm	3050574
Morse taper MT4/B16	3050661
Reduction sleeve MT4 - MT3	3050664
Reduction sleeve MT4 - MT2	3050665

Scope of delivery

› Morse taper MT

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters and details of the packaging flat rates see page 323.

Heavy-duty gearbox drilling machine with thread tapping device. B 40GSM with electric sleeve feed

Facts that impress in terms of quality, performance and price

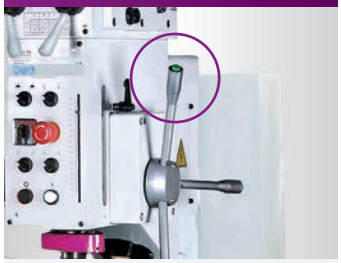
- Heavy, solid cast design
- Automatic gearwheel lubrication via oil pump
- Excellent true running accuracy thanks to hardened and ground main spindle
- Right-/left-hand rotation
- Thread tapping device
- Main switch and motor circuit breaker
- Adjustable drill depth stop with millimetre scale
- Integrated push-out tool for easy tool changes
- Machine lamp integrated in drilling head
- Precision machined, generously dimensioned drilling table with 2 diagonal T-slots, and recirculating coolant duct
- Coolant system and chip filter in line with Machinery Directive
- Thick walled cast column for high force absorption and stability
- Solid base plate with two parallel T-slots, generously dimensioned and precision surface finish

OPTIdrill B 40GSM
- Electrical sleeve feed

OPTIdrill B 40GSP
- Manual sleeve feed

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



› Clearly-arranged layout
› Generously dimensioned
› Certified switches by ABB
› Certified components by SIEMENS or Schneider

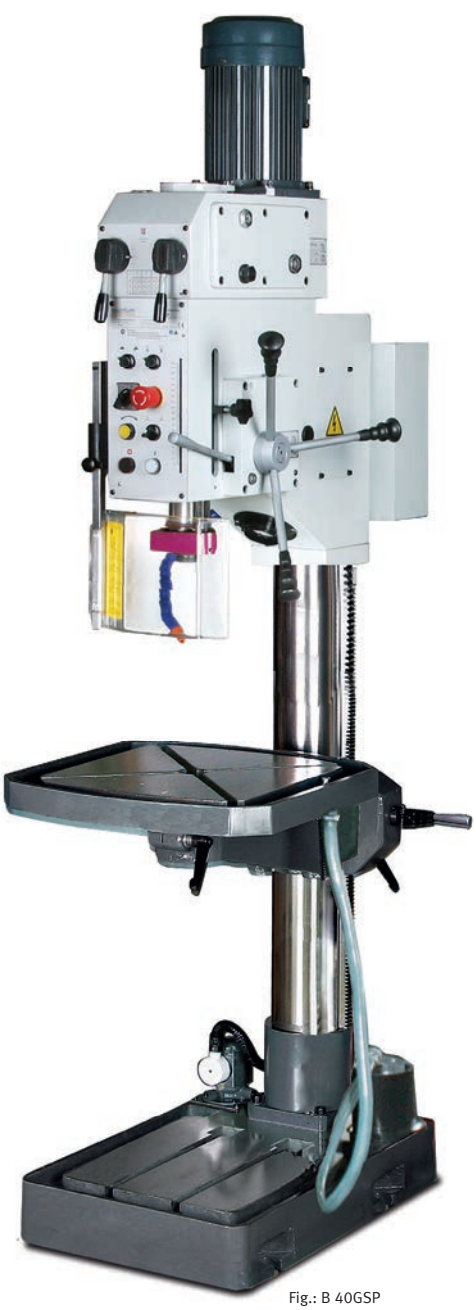


Fig.: B 40GSP



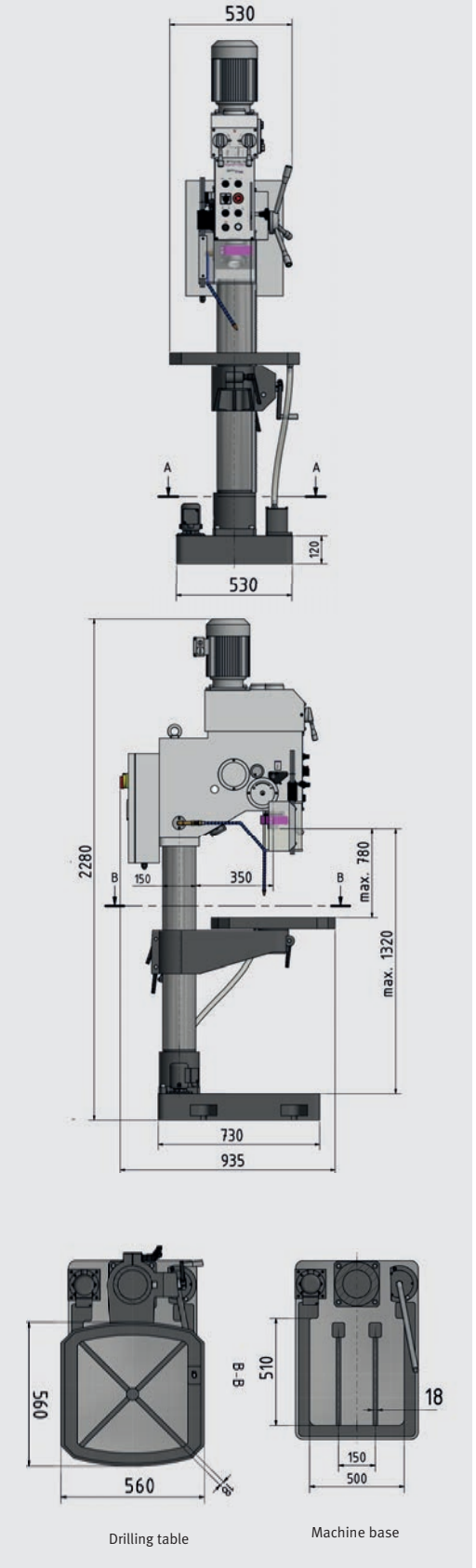
Fig.: B 40GSM

Technical specifications, accessories and dimensions

GEAR

Model	B 40GSP	B 40GSM
Article no.	3034403	3034400
Power		
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	
Continuous drilling performance in steel (S235JR)	Ø 30 mm	
Thread tapping in steel (S235JR)	M24	
Spindle seat		
Spindle sleeve stroke	180 mm	
Spindle seat	MT4	
Throat	350 mm	
Sleeve feed	2 stages: 0.1 / 0.2 mm/rev	
Rotational speeds		
Spindle speeds	50 - 1 450 rpm	
Number of speeds	18 stages	
Drilling table		
Drilling table workspace length x width	560 x 560 mm	
T-slot size	18 mm, 2 diagonal running	
Drilling table load bearing capacity	250 kg	
Rotating drilling table	± 90°	
Max. distance spindle - drilling table	780 mm	
Machine base		
Machine base work area L x W	510 x 500 mm	
T-slot size / amount / distance	18 mm / 2 / 150 mm	
Max. distance spindle - machine base	1 320 mm	
Dimensions and weight		
Column diameter	Ø 150 mm	
Length x width x height	935 x 530 x 2 280 mm	
Net weight	465 kg	500 kg

Dimensions



Drilling table

Machine base

Accessories	Article no.
Clamping tool assortment SPW 16, 58 parts	3352019
Hold-down clamp 14 mm/M 12	3352031
Direct quick-action drill chuck MT4/16 mm	3050574
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Reduction sleeve MT4-MT3	3050664

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

*Explanation of transport surcharge see page 323

Scope of delivery

› Quick-action drill chuck 1 - 16 mm
› Morse taper MT4/B16

INDUSTRY

Gear drilling machine with thread cutting device and electrically operated quill feed. DH 35V with infinitely variable speed control.

Facts that impress in terms of quality, performance and price

- Dirt/water-resistant, easy-to-clean membrane keyboard
- 24V DC Electronics
- Electrical sleeve feed
- Drill depth stop
- 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, solid drilling table, precision workmanship, with 2 diagonal T-slots and recirculating coolant duct, heavily ribbed on rear side and double clamping
- Coolant unit with coolant tank integrated into base plate
- Chip filter removes coarse components from the coolant
- Robust, 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 rotation and for thread cutting (Article no. 3050032)

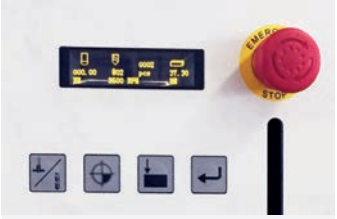
OPTIdrill DH 35V

- Infinitely variable speed
- Pitch deactivation
- Easily readable digital display
- Digitally adjustable drilling and thread depth
- Digital zero point adjustable

DH 35V
SIEMENS SINAMICS G110M



DH 35V
State-of-the-art control solution



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

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.: DH 35G
with optional accessories



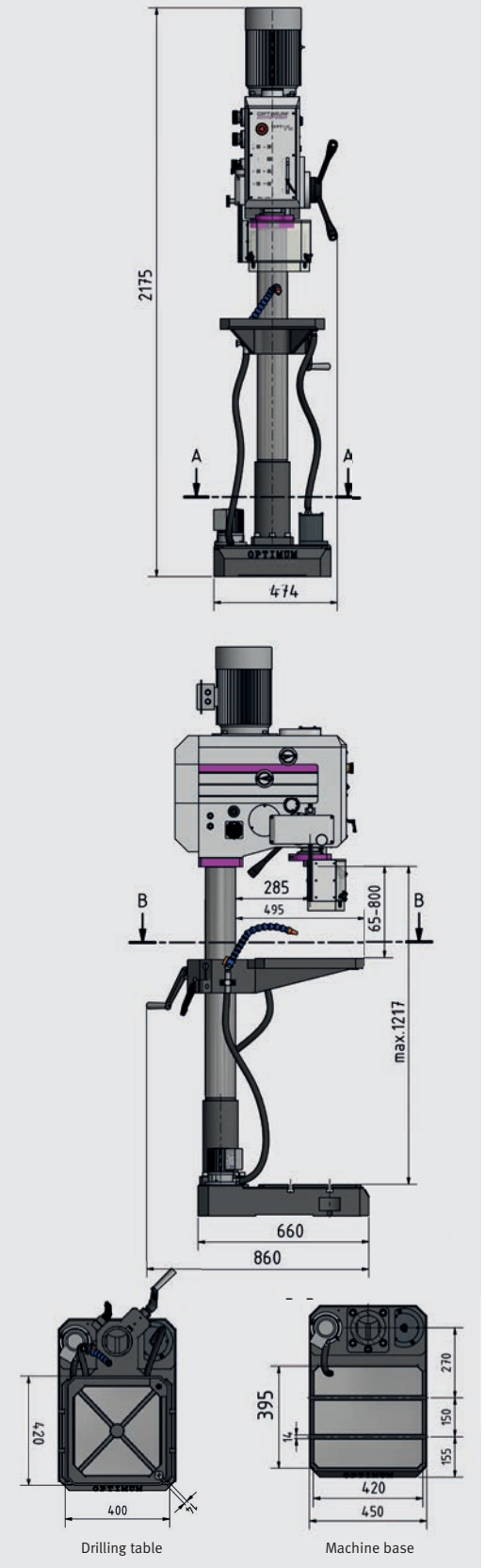
Fig.: DH 35V
with optional accessories

Technical specifications, accessories and dimensions

GEAR VARIO

Model	DH 35G	DH 35V*
Article no.	3034250	3034252
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	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 in steel (S235JR)	M24	
Spindle		
Spindle sleeve stroke	125 mm	
Spindle seat	MT4	
Throat	285 mm	
Automatic spindle sleeve feed	3 stages: 0.05 - 0.15 mm/rev	
Rotational speeds		
Spindle speeds	75 - 2 000 rpm	30 - 2 950 rpm
Number of speeds	8 stages	4 stages, Electronically controlled
Drilling table		
Drilling table workspace L x W	400 × 420 mm	
T-slot size	14 mm, 2 diagonal running	
Drilling table load bearing capacity	200 kg	
Drill table rotation / tilting sideways	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	
Clearance spindle - machine base	max. 1 217 mm	
Dimensions and weight		
Column diameter	Ø 115 mm	
Length x width x height	860 x 474 x 2 175 mm	
Net weight	350 kg	365 kg

Dimensions



Accessories	Article no.
Clamping tool assortment SPW 12, 58 parts	3352017
Hold-down clamp 14 mm/M 12	3352031
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4-MT3	3050664
Reduction sleeve MT4-MT2	3050665
Hold-down clamp 14 mm	3352031
Thermdrill Basic Set	3060004
Foot switch	3050032
for thread tapping and toggling right-handed/left-handed rotation	



More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery

› Quick-action drill chuck 1 - 16 mm
› Morse taper MT4/B16

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters and details of the packaging flat rates see page 323.

INDUSTRY

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

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- Dirt/water-resistant, easy-to-clean membrane keyboard
- 24V DC Electronics
- Mechanical sleeve feed
- Drill 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
- Largely dimensioned, solid drilling table, precisely machined with parallel T-slots and all-round cooling water channel, heavily ribbed on the rear side, ± 90° tiltable to the side
- Cooling unit and coolant tank, can be removed for easier and complete emptying
- Chip filter in line with Machinery Directive
- Robust, 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 rotation and for thread cutting (Article no. 3050032)

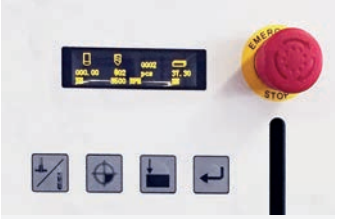
OPTIdrill DH 45V

- Electrically controlled sleeve feed
- Continuously adjustable speed control
- Feed deactivation programmable
- Easily readable digital display
- Digitally adjustable drilling and thread depth
- Digital zero point adjustable

DH 45V
SIEMENS SINAMICS G110M



DH 45V
State-of-the-art control solution



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

Integrated push-out tool



› for simple tool changes



Fig.: DH 45G



Fig.: DH 45V with optional accessories

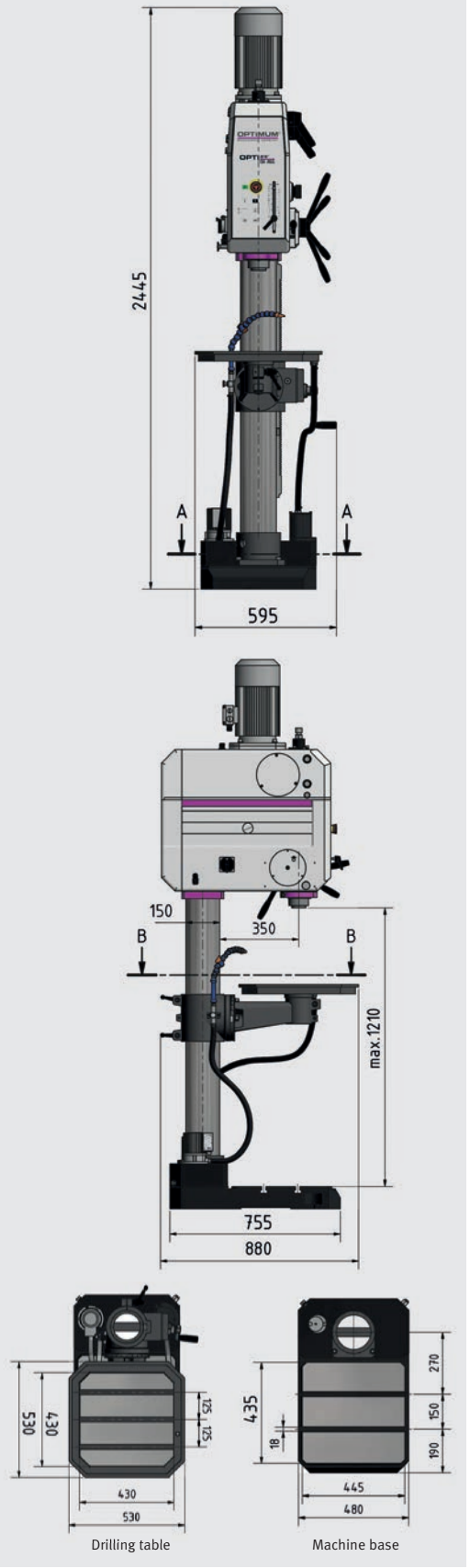
YouTube
Follow this for the video presentation of our Optimum DH 45G gear drilling machine

Technical specifications, accessories and dimensions

GEAR VARIO

Model	DH 45G	DH 45V*
Article no.	3034255	3034262
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	2.2 kW	
Coolant pump motor	100 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 40 mm	
Continuous drilling performance in steel (S235JR)	Ø 35 mm	
Thread tapping in steel (S235JR)	M35	
Spindle		
Spindle sleeve stroke	170 mm	
Spindle seat	MT4	
Throat	350 mm	
Automatic spindle sleeve feed	3 stages: 0.1 / 0.15 / 0.2 mm/rev	
Rotational speeds		
Spindle speeds	90 - 1 520 rpm	30 - 2 430 rpm
Number of speeds	8 stages	4 stages, Electronically controlled
Drilling table		
Drilling table workspace L x W	530 x 530 mm	
T-slot size / spacing / count	18 mm / 125 mm / 3	
Drilling table load bearing capacity	250 kg	
Drill table rotation / tilting sideways	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	
Clearance spindle - machine base	max. 1 210 mm	
Dimensions and weight		
Column diameter	Ø 150 mm	
Length x width x height	880 x 595 x 2 445 mm	
Net weight	530 kg	550 kg

Dimensions



Accessories	Article no.
Clamping tool assortment SPW 16, 58 parts	3352019
Assortment of clamping tools SPW 14, 58 parts	3352018
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4-MT3	3050664
Reduction sleeve MT4-MT2	3050665
Hold-down clamp 14 mm	3352031
Thermdrill Basic Set	3060004
Foot switch	3050032
for thread tapping and toggling right-handed/left-handed rotation	



More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery

› Quick-action drill chuck 1 - 16 mm
› Morse taper MT4/B16

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters and details of the packaging flat rates see page 323.

INDUSTRY

Heavy duty gearbox drill for industrial use With coolant and thread tapping device and automatic spindle sleeve feed

Facts that impress in terms of quality, performance and price

- Two-stage drive motor
- Heavy, solid cast design
- Excellent true running accuracy thanks to hardened and ground main spindle
- Right-/left-hand rotation
- Automatic gearwheel lubrication via oil pump
- Thread tapping device
- Main switch and motor circuit breaker
- Machine lamp integrated in drilling head
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Largely dimensioned, solid drilling table, precisely machined with two parallel T-slots and all-round cooling water channel, heavily ribbed on the rear side, 360° rotatable
- Coolant unit and coolant tank
- Chip filter in line with Machinery Directive
- Extremely stable, thick-walled cast column - column diameter 200 mm - for high force absorption
- Solid base plate with two parallel T-slots, precision surface finish

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

Table height adjustment



› motorised or mechanical

Heavy, solid cast design
950 kg
Smooth action, stable

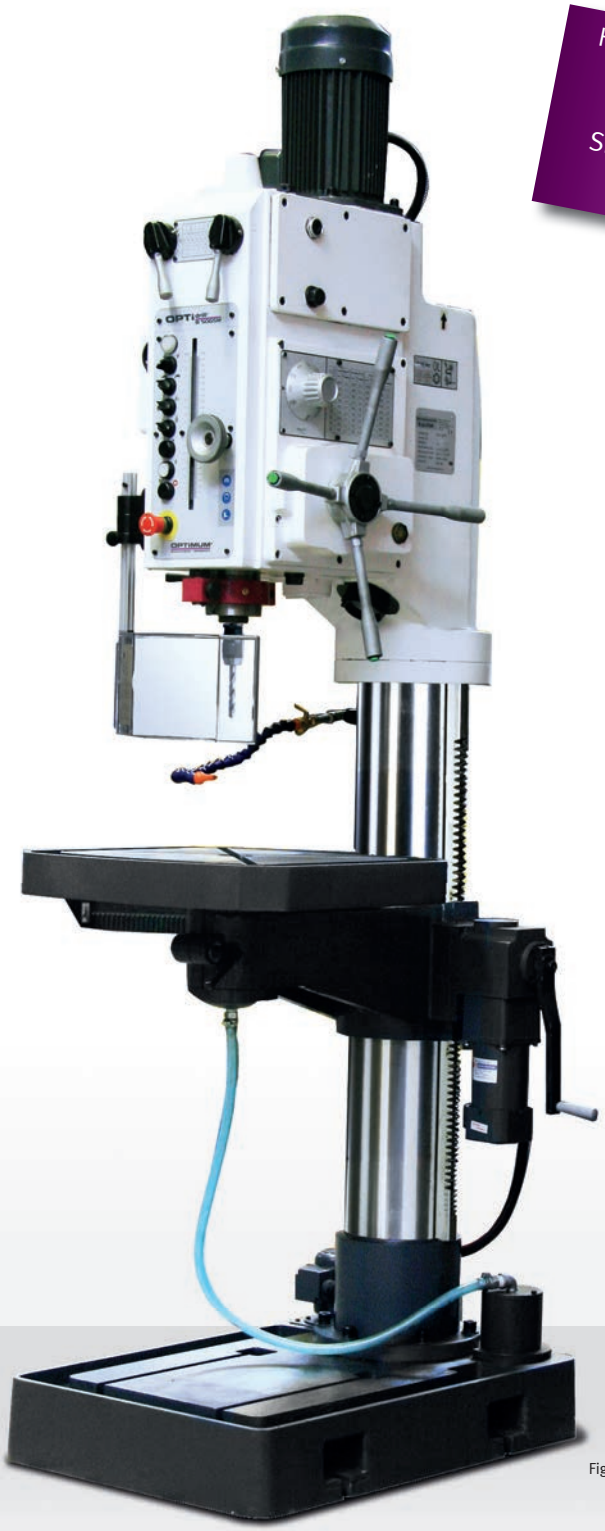


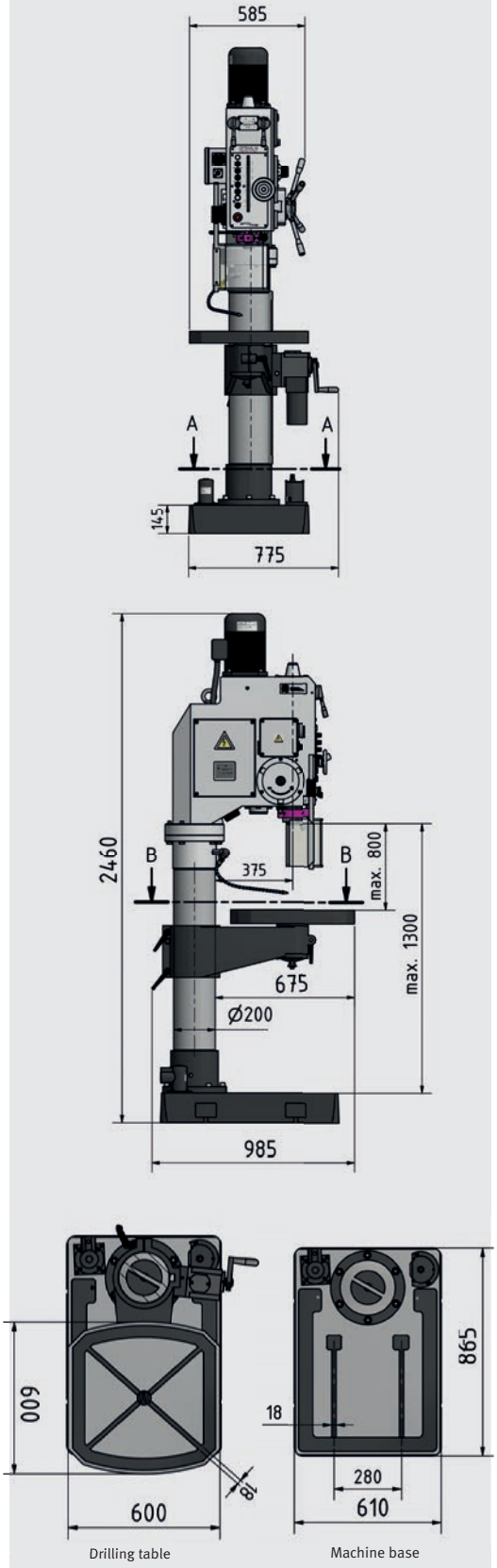
Fig.: B 50GSM

Technical specifications, accessories and dimensions

GEAR

Model	B 50GSM
Article no.	3034500
Power	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor power	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 in steel (S235JR)	M42
Spindle seat	
Spindle sleeve stroke	230 mm
Spindle seat	MT4
Throat	375 mm
Automatic spindle sleeve feed	6 stages: 0.05 - 0.3 mm/rev
Rotational speeds	
Spindle speeds	54 - 2 090 rpm
Number of speeds	18 stages
Drilling table	
Drilling table workspace length x width	600 x 600 mm
T-slot size	18 mm, 2 diagonal running
Drilling table load bearing capacity	300 kg
Rotating drilling table	360°
Max. distance spindle - drilling table	800 mm
Machine base	
Machine base workspace length x width	600 x 520 mm
T-slot size / amount / distance	18 mm / 2 / 280 mm
Max. distance spindle - machine base	1,300 mm
Dimensions and weight	
Column diameter	Ø 200 mm
Length x width x height	985 x 775 x 2 460 mm
Net weight	950 kg

Dimensions



Accessories	Article no.
Clamping tool assortment SPW 16, 58 parts	3352019
Hold-down clamp 18 mm/M 16	3352032
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4-MT3	3050664
Reduction sleeve MT4-MT2	3050665
Thermdrill Basic Set	3060004

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

*Explanation of transport surcharge see page 323

Scope of delivery

- Quick-action drill chuck 1 - 16 mm
- Morse taper MT4/B16
- T-slot nuts

INDUSTRY

Heavy-duty gear drilling machine with thread tapping device for industrial applications. DH 55V with infinitely variable speed control

Facts that impress in terms of quality, performance and price

- Heavy, solid cast design
- Dirt/water-resistant, easy-to-clean membrane keyboard
- 24V DC Electronics
- Electrically controlled sleeve feed
- Drill depth stop
- Automatic gearwheel lubrication via oil pump
- Thread tapping device
- Generously dimensioned, height adjustable protective screen with safety switch for greatest possible user protection
- Largely dimensioned, solid drilling table, precisely machined with three parallel T-slots and all-round cooling water channel, heavily ribbed on the rear side, ± 90° sideways tiltable
- Cooling unit and coolant tank, can be removed for easier and complete emptying
- Integrated push-out tool
- Machine lamp integrated in drilling head
- Chip filter in line with Machinery Directive
- Robust, thick-walled cast-iron column for excellent force absorption
- Solid base plate with two parallel T-slots, precision surface finish
- Optional footswitch available for toggling between right-handed/left-handed rotation and for thread cutting

OPTIdrill DH 55V

- Infinitely variable speed
- Adjustable feed deactivation
- Easily readable digital display
- Digitally adjustable drilling and thread depth
- Digital zero point adjustable

DH 55V
SIEMENS SINAMICS G110M



DH 55V
State-of-the-art control solution



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

Membrane keyboard



› Dirt and water resistant
› Easy to clean

Table height adjustment



› motorised or mechanical

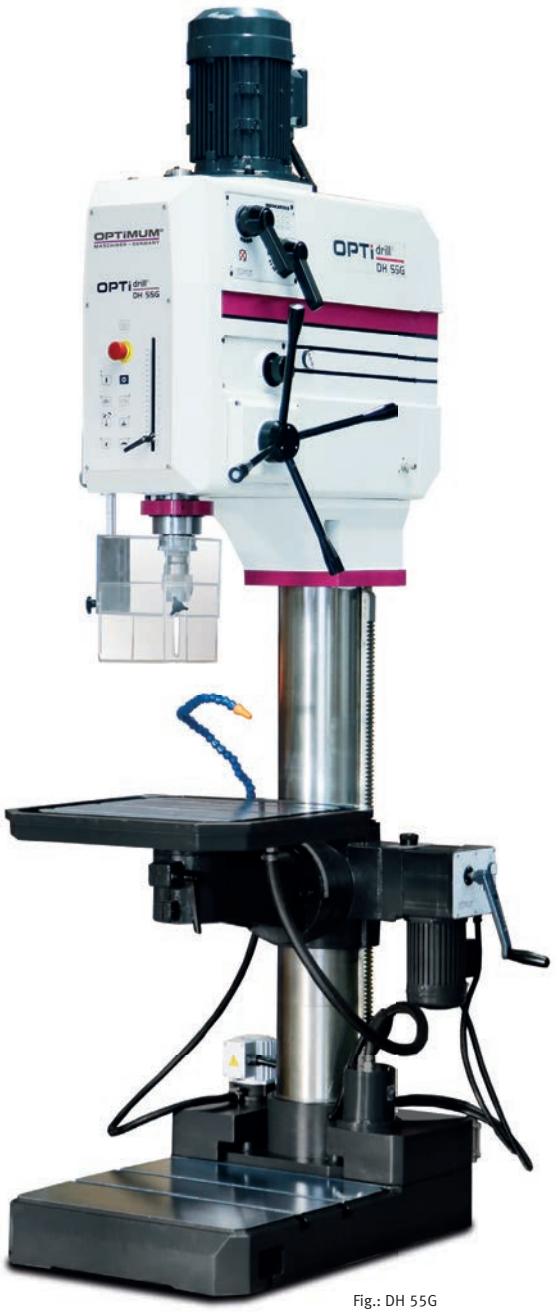


Fig.: DH 55G

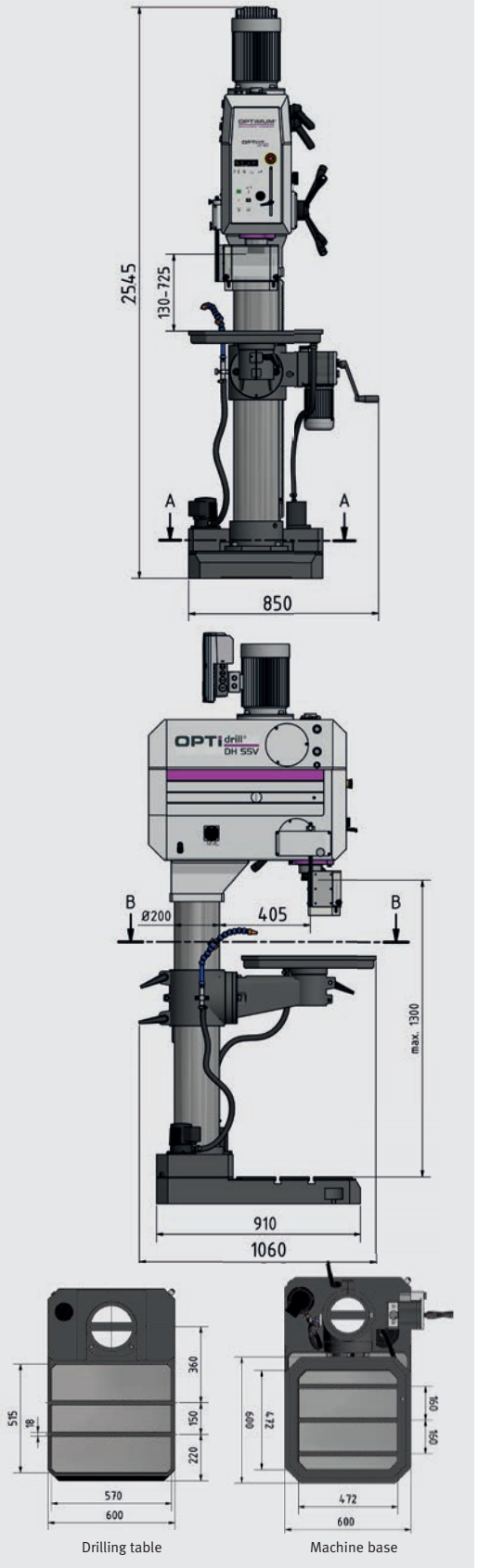


Fig.: DH 55V

Technical specifications, accessories and dimensions

Model	DH 55G	DH 55V*
Article no.	3034265	3034267
Power		
Electrical connection	400 V / 3 Ph ~50 Hz	
Motor power	2.2 / 2.8 kW	2.8 kW
Coolant pump motor	100 W	
Drilling performance		
Drilling performance in steel (S235JR)	Ø 55 mm	
Continuous drilling performance in steel (S235JR)	Ø 50 mm	
Thread tapping in steel (S235JR)	M42	
Spindle		
Spindle sleeve stroke	200 mm	
Spindle seat	MT4	
Throat	400 mm	
Automatic spindle sleeve feed	3 stages: 0.1 / 0.15 / 0.2 mm/rev	
Rotational speeds		
Spindle speeds	45 - 2 000 rpm	10 - 3 000 rpm
Number of speeds	16 stages	4 speeds; elec. control
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 / tilting sideways	360° / ± 90°	
Clearance spindle - drilling table	130 - 725 mm	
Machine base		
Machine base work area L x W	515 x 570 mm	
T-slot size / spacing / count	18 mm / 150 mm / 2	
Clearance spindle - machine base	max. 1 300 mm	
Dimensions and weight		
Column diameter	Ø 200 mm	
Length x width	850 x 1 060 mm	
height	2 500 mm	2 545 mm
Net weight	850 kg	907 kg

Dimensions



Accessories	Article no.
Clamping tool assortment SPW 16, 58 parts	3352019
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021
Direct quick-action drill chuck 1 - 16 mm	3050574
Reduction sleeve MT4-MT3	3050664
Reduction sleeve MT4-MT2	3050665
Hold-down clamp 14 mm	3352031
Thermdrill Basic Set	3060004
Foot switch	3050032
for thread tapping and toggling right-handed/left-handed rotation	



More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery

› Quick-action drill chuck 1 - 16 mm
› Morse taper MT4/B16

*Note: The machines comply with (frequency converter) the DIN EN 55011 standard: class C2
Important information on operation of machines with frequency converters and details of the packaging flat rates see page 323.

RADIAL DRILLING MACHINES



Visit our exhibition in Hallstadt/Bamberg

OPTIMUM®
MASCHINEN - GERMANY

DRILLING MACHINES



DIY

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

Facts that impress in terms of quality, performance and price

- Best possible force transmission thanks to to aluminium pulleys in combination with GATES quality toothed belts
- Guaranteed run-out accuracy of drilling spindle ≤ 0.03 mm measured in the drilling spindle
- 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 slots for T slot nuts, rear heavily ribbed
- User-friendly safety switch with IP 54 degree of protection
- Separate EMERGENCY-STOP push button
- Drill depth stop
- OPTIMUM key type drill chuck in standard scope of delivery
- Optimal price-performance ratio
- Lasting value

Throat



› variable from 115 to 430 mm by shifting the drilling head

Drilling head



› ± 45° sideways tiltable

Drilling table



› Precise workmanship
› Diagonal T-slots
› Circumferential coolant channel
› ± 45° sideways tiltable



Fig.: RB 6T



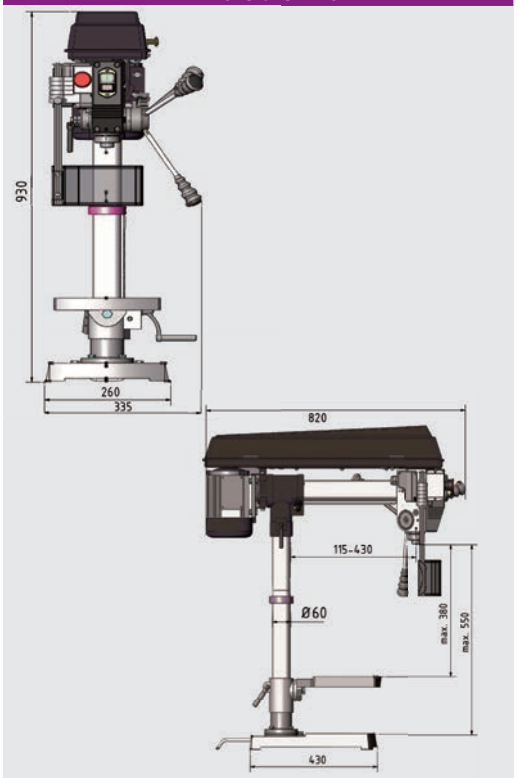
Fig.: RB 8S

Technical specifications, accessories and dimensions

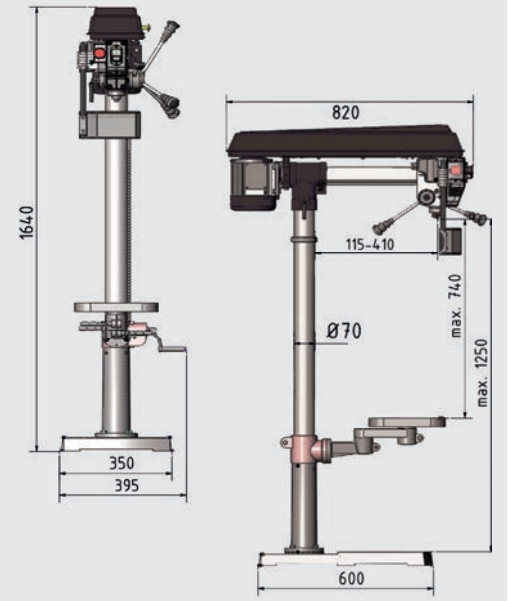
BELT

Model	RB 6T	RB 8S
Article no.	3009161	3009181
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	
Motor power	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	MT2	
Throat	115 - 430 mm	
Rotational speeds		
Spindle speeds	390 - 3 000 rpm	
Number of speeds	5 stages	
Drilling table		
Workspace length x width	225 x 230 mm	262 x 262 mm
T-slot size	-	14 mm diagonal running
Slot size	14 mm	-
Drill table rotation / tilting sideways	360° / ± 45°	
Max. distance spindle - drilling table	380 mm	740 mm
Machine base		
Machine base work area L x W	430 x 260 mm	600 x 350 mm
Slot 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 and weight		
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
Net weight	47 kg	60 kg

Dimensions RB 6T



Dimensions RB 8S



Accessories	Article no.
Direct quick-action drill chuck MT2 / 1 - 16 mm	3050571
Direct quick-action drill chuck MT2 / 1 - 13 mm	3050572
Morse taper MT2/B16	3050659
Twist drill bit HSS MT2, 9 parts	3051002
Clamping tool assortment SPW 12, 58 parts	3352017
Cone ejector MSP1	3050636
Universal coolant unit 230 V	3351999
Coolant mist lubricator MMC 1 with magnetic holder	3356663
Coolant hose KMS 2	3356660
Twist drill bits HSS-CO 5%, 1 - 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1 - 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6 - 10 mm, 41 parts	3201021

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93
Coolant accessories from page 320

Scope of delivery

› Key type drill chuck 1 - 16 mm B 16
› Morse taper MT2/B16

CRAFTSMEN

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 throat 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 run-out accuracy ≤ 0.015 mm measured in the drilling spindle
- Large speed range from 155 - 2 250 rpm thanks to two-speed motor
- Sold, precision drilling table, generously dimensioned with precision surface finish and parallel T slots
- Thick-walled steel column (Ø 115 mm) ensures smooth running and stability

DC control cabinet



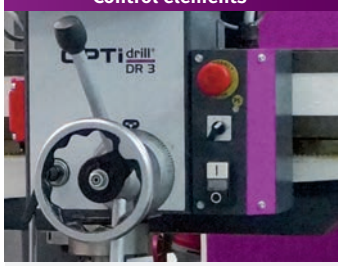
› Complete and clearly-arranged

Pull-out safety switch



› Standards-compliant as per DIN 12717

Control elements



› 24 V DC electrical system



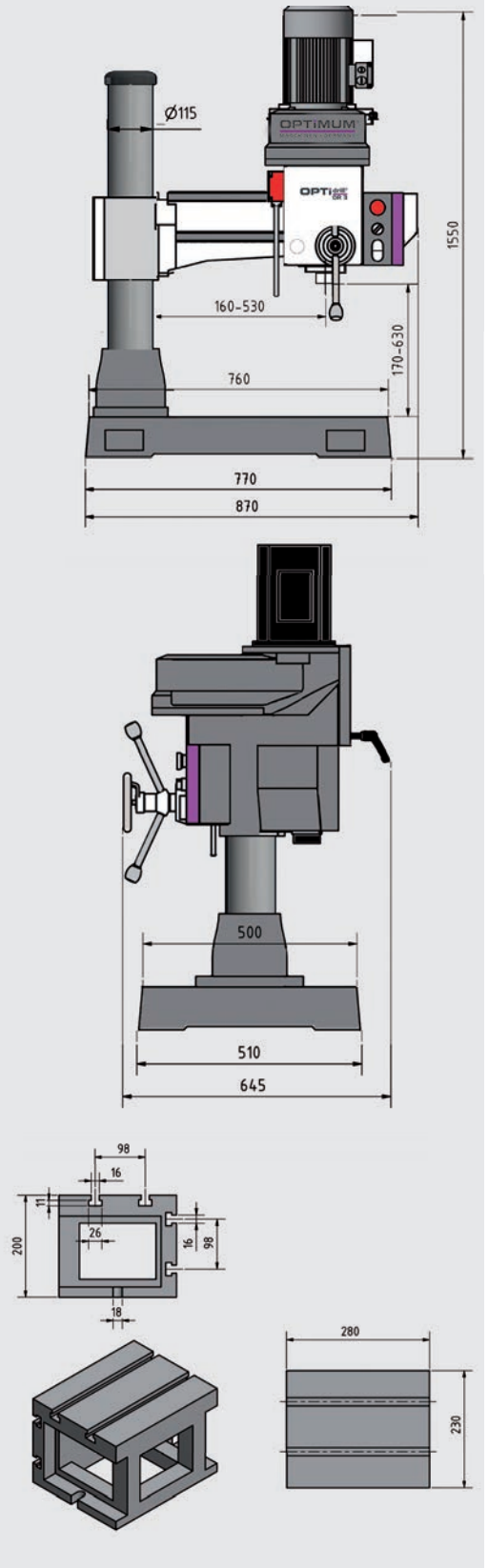
Figure with optional drill chuck

Technical specifications, accessories and dimensions

GEAR

Model	RD 3
Article no.	3049030
Power	
Electrical connection	400 V / 3 Ph ~50 Hz
Motor power	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 in steel (S235JR)	M12
Spindle	
Spindle sleeve stroke	130 mm
Spindle seat	MT3
Throat	160 - 530 mm
Rotational speeds	
Spindle speeds	155 - 2 250 rpm
Number of speeds	2 x 5 speeds
Drilling table	
Workspace length x width	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
Max. clearance spindle - clamping table	430 mm
Dimensions and weight	
Column diameter	Ø 115 mm
Length x width x height	870 x 645 x 1 550 mm (substructure 2 150 mm)
Net weight	288 kg

Dimensions



Accessories	Article no.
Direct quick-action drill chuck MT3 / 1 - 16 mm	3050573
Precision quick-action drill chuck 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
Reduction sleeve MT3 - MT2	3050663
Morse taper MT3/B16	3050660
Extension adapter MT3 - MT4	3050668
Twist drill bit HSS MT3, 9 parts	3051003
Twist drill bits HSS-CO 5%, 1- 13 mm, 25 parts	3201010
Twist drill bits HSS-CO 5%, 1- 6 mm, 51 parts	3201020
Twist drill bits HSS-CO 5%, 6- 10 mm, 41 parts	3201021
Clamping tool assortment SPW 14, 58 parts	3352018
Universal coolant unit	3351999
Thread cutting chuck, 7 inserts M3 - M12	3050705

More **accessories** and information on accessories from page 86
For a large selection of **machine vises** see on page 93

Scope of delivery

› Machine substructure
› Clamping table

*Explanation of transport packaging flat rate and surcharge see page 323

INDUSTRY

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
- Operating elements in 24 V DC electronics
- Heavy, solid, premium quality casting
- Long throat thanks to horizontally adjustable machine head
- Clearly-arranged 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 hardened and precision ground
- Gear wheels made of chrome-nickel steel, hardened and precision ground for lower noise and smooth action
- Drilling head and column can be clamped or released separately
- Right-/left-hand 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

GEAR



Fig.: RD 5 with optional clamping table, drill chuck, and machine vice

Arguments,...



DC CONTROL CABINET

› All contactors und relays by Siemens and Schneider
› Complete and clearly arranged



PULL-OUT SAFETY SWITCH

› Standards-compliant as per DIN 12717



COLUMN SWIVEL

› Elaborately crafted column pivoting with optimized clamping for maximum stability with minimal clamping offset



RD 6 - CLAMPING

› The column is clamped hydraulically

YouTube
Follow this for the video presentation of our OPTIMUM RD 5 radial drilling machine

Technical data and accessories

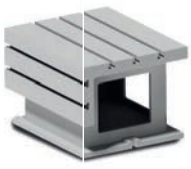
GEAR

Model	RD 4	RD 5	RD 6
Article no.	3049040	3049050	3049070
Power			
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 drive motor power	1.5 kW	2.25 kW	4 kW
Boom lift motor drive power	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
Spindle			
Spindle sleeve stroke	210 mm	230 mm	270 mm
Spindle seat	MT4	MT4	MT 5
Automatic spindle sleeve feed	3 stages: 0.05 - 0.15 mm/rev	3 stages: 0.05 - 0.15 mm/rev	3 stages: 0.06 - 0.2 mm/rev
Cantilever arm			
Rotation angle	± 180°	± 180°	± 180°
Drilling head travel (horizontal)	530 mm	820 mm	1,250 mm
Boom lift travel (vertical)	580 mm	570 mm	680 mm
Rotational 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 / amount / 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 and weight			
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
Net weight	1 120 kg	1 800 kg	3 200 kg

Accessories	Article no.
Precision quick-action drill chuck 1- 10 mm; B16	3050610
Quick-action drill chuck DKC 13, 0 - 13 mm	3050632
Quick-action drill chuck DKC 16, 0 - 16 mm	3050633
More **accessories** from page 86	

Accessories RD 4 / RD 5	Article no.
Direct quick-action drill chuck MT4 / 1 - 16 mm	3050574
Reduction sleeve MT4 - MT3	3050664
Twist drill bit HSS MT3	3051003
Morse taper MT4/B16	3050661
Hold-down clamp 18 mm/M 16	3352032
Clamping tool assortment SPW 16, 58 parts	3352019

Accessories RD 6	Article no.
Morse taper MT 5/B16	3050675
Clamping tool assortment SPW 12, 58 parts	3352017



Clamping table	Article no.
for **RD 4** L x W x H 600 x 445 x 380 mm Net weight: 144 kg	3049204
for **RD 5** L x W x H 635 x 520 x 415 mm Net weight: 159 kg	3049205
for **RD 6** L x W x H 630 x 500 x 500 mm Net weight: 250 kg	3049206



Angled table	Article no.
tiltable ± 90°	
Angled table S L x W x H 520 x 510 x 570 mm Net weight: 280 kg	3049210
Angled table L L x W x H 810 x 710 x 610 mm Net weight: 565 kg	3049212

*Explanation of transport surcharge see page 323


OPTIMUM
OPTIMUM
OPTIMUM
OPTIMUM

MAGNETIC CORE DRILLING MACHINES



Magnetic drilling machines by OPTIMUM -
when you need reliability, precision and cost-effective work results

Facts that impress in terms of quality, performance and price

- Stable drilling guidance thanks to long and especially deep mounted sleeve holder
- The devices are earthed and double insulated, hence ideal for building sites
- Internal self-lubrication function for a longer service life of the gear unit
- Soft-start is gentle on the motor and prolongs the service life
- High-quality mechanical design
- Conversion from core to full drilling in just a few actions
- Automatic return to starting position



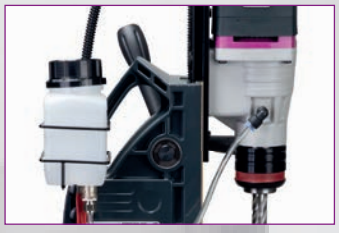
YouTube
Follow this for the video presentation of our OPTIMUM magnetic drilling machines



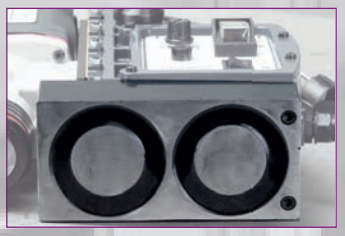
Panel
› Ergonomic switch arrangement avoids confusion



Automatic internal lubrication
› The coolant is routed directly to the tip of the core drill
› No dry running and overheating of the drill bit
› No superfluous use of coolant
› Tool service lives and work results are substantially improved



Coolant tank
› Detachable coolant tank
› External fastening
› Well-designed and practical



Magnetic base
› Monitoring of the magnetic force (if there is no enough metal or a failure of the magnets, the machine stops automatically)
› Wear-resistant design to extend the life of the magnet base and thereby the maximum magnetic holding force



Motor
› Powerful motor with high torque and low-maintenance



Transport case
› For convenient transport and optimum protection
› Ideal protection of the machines also in tough conditions.

Metal case
› for the DM 35PF and DM 50PM machines



Handles
› Ergonomic and rugged handles for "balanced" holding/fastening of the machine
› Rugged crank handle



Guides
› Safe guides for stability and precision
› Vario machines with low-wear brass guides

Tapping chuck with 6 inserts



› MT 2, M3 - M12

Article no. 3050702

Adapter for drill chuck



Article no. 3876020

Chuck



› 1.5 - 13 mm
› Including chuck key

Article no. 3876002

For drills with quick-change chuck (DM35V/50V/60V/98V/36VT)

Quick-action chuck

NEU



› Due to the surface that clamps the drill, no twisting and no longitudinal movement

MT 2	Article no. 3072102
MT 3	Article no. 3072103

HSS-TiAlN 30 core drill set

Article no. 3072010

› Five HSS core drills and one TiAlN core drill
› To try out including an 18mm core drill in our highest quality category with TiAlN coating for long service life and excellent cutting properties
› Set in a practical plastic case
› Five HSS core drills Ø 12, 14, 16, 20, 22 mm, one TiAlN core drill Ø 18 mm
› Drilling depth 30 mm, one ejector pin



TiAlN 30 core drills set

Article no. 3072020

› Core bit with hard and smooth TiAlN coating
› TiAlN coating for a long service life and excellent cutting properties
› Set in a practical plastic case
› Six TiAlN core drills Ø 12, 14, 16, 18, 20, 22 mm
› 30 mm drilling depth
› One ejector pin



OPTI drill® DM 35

▶ Weldon shank

Panel





Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 35 mm
Bit depth max.	35 mm
Twist drilling	
Drill bit Ø max.	Ø 13 mm

OPTI drill® DM 50

▶ Weldon shank

Panel





Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 50 mm
Bit depth max.	50 mm
Twist drilling	
Drill bit Ø max.	Ø 13 mm

OPTI drill® DM 35PF with automatic sleeve feed

▶ Weldon shank

Sleeve feed



› Automatic
› Return side



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 35 mm
Bit depth max.	35 mm

Model	DM 35	DM 50	DM 35PF
Article no.	3071035	3071050	3071435
Power			
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor power	1.6 kW	1.75 kW	1.6 kW
Collets			
Spindle seat	Weldon 3/4“	Weldon 3/4“	Weldon 3/4“
Head travel	210 mm	220 mm	210 mm
Magnetic foot			
Magnetic foot dimensions	166 x 80 mm	166 x 80 mm	166 x 80 mm
Magnetic attraction force	13.8 KN	14.5 KN	16 KN
Rotational speeds			
Speed without load	810 rpm	790 rpm	810 rpm
Dimensions and weight			
Length x width x height	370 x 180 x 580 mm	250 x 220 x 360 mm	350 x 250 x 430 mm
Net weight	10.5 kg	10.6 kg	14 kg

OPTIdrill® DM 35V

- Infinitely adjustable speed
- Quick-action chuck
- Weldon shank
- Low-wear brass guide



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 35 mm
Bit depth max.	35 mm
Twist drilling	
Drill bit Ø max.	Ø 13 mm

OPTIdrill® DM 50V

- Infinitely adjustable speed
- Quick-action chuck
- Weldon shank
- Low-wear brass guide

Bubble spirit level



› for perfect alignment



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 50 mm
Bit depth max.	50 mm
Twist drilling	
Drill bit Ø max.	Ø 13 mm

Model	DM 35V	DM 50V
Article no.	3071135	3071150
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor power	1.55 kW	1.7 kW
Collets		
Spindle seat	Weldon 3/4“	Weldon 3/4“
Head travel	120 mm	130 mm
Magnetic foot		
Magnetic foot dimensions	166 x 80 mm	166 x 80 mm
Magnetic attraction force	14.8 KN	15.6 KN
Rotational speeds		
Speed without load	120 - 830 rpm continuous	100 - 810 rpm continuous
Dimensions and weight		
Length x width x height	250 x 220 x 470 mm	250 x 220 x 470 mm
Net weight	10.8 kg	11 kg

The (speed controlled) magnetic drilling machines comply with the DIN EN 55011 standard,: class C2

CRAFTSMEN

OPTI drill® DM 60V

- Infinitely adjustable speed
- Quick-action chuck
- Weldon and MT shank
- Low-wear brass guide



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 60 mm
Bit depth max.	50 mm
Twist drilling	
Drill bit Ø max.	Ø 23 mm

OPTI drill® DM 98V

- Infinitely adjustable speed
- Quick-action chuck
- Weldon and MT shank
- Low-wear brass guide

Bubble spirit level



› for perfect alignment



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 98 mm
Bit depth max.	75 mm
Twist drilling	
Drill bit Ø max.	Ø 28 mm

Model	DM 60V	DM 98V
Article no.	3071160	3071198
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor power	1.89 kW	2.18 kW
Collets		
Spindle seat	MT 2	MT 3
Head travel	220 mm	230 mm
Magnetic foot		
Magnetic foot dimensions	202 x 103 mm	202 x 103 mm
Magnetic attraction force	16 KN	17 KN
Rotational speeds		
Speed without load	100 - 490 rpm continuous	160 - 370 rpm continuous
Dimensions and weight		
Length x width x height	330 x 240 x 650 mm	330 x 240 x 650 mm
Net weight	18.3 kg	18.5 kg

The (speed controlled) magnetic drilling machines comply with the DIN EN 55011 standard,: class C2

OPTIdrill® DM 36VT

With thread cutting function

- Thread tapping device
- Infinitely adjustable speed
- Quick-action chuck
- MT Weldon and MT shank



Fig.: with optional accessories

Multifunctional



› Thread tapping



› Twist drilling



› Core drilling

Model	DM 36VT
Article no.	3071236
Power	
Electrical connection	230 V / 1 Ph ~50 Hz
Motor power	1.55 kW
Collets	
Spindle seat	MT 2
Head travel	220 mm
Magnetic foot	
Magnetic foot dimensions	166 x 80 mm
Magnetic attraction force	14.2 KN
Rotational speeds	
Speed without load	15 - 270 / 29-520 rpm 2 gear steps, infinitely variable
Dimensions and weight	
Length x width x height	250 x 220 x 530 mm
Net weight	12 kg



Core drilling	
Drill bit Ø max.	Ø 36 mm
Bit depth max.	35 mm
Twist drilling	
Drill bit Ø max.	Ø 18 mm
Thread tapping	M15

OPTI drill® DM 38VF
for cramped conditions

- Infinitely adjustable speed
- Weldon shank

Bubble spirit level



› for perfect alignment

Pluggable handle



› can be fitted on the left or right side of the machine as required



Fig.: with optional accessories



Core drilling	
Drill bit Ø max.	Ø 38 mm
Bit depth max.	35 mm

OPTI drill® DM 50PM
With permanent magnet

- Infinitely adjustable speed
- Weldon shank

Two magnets



› Can be individually switched
› The machine can be moved to check or clean the hole without losing its position on the pipe



Fig.: with optional accessories

Permanent magnet



› Current-independent permanent magnet 100% safe



Core drilling	
Drill bit Ø max.	Ø 50 mm
Bit depth max.	50 mm
Twist drilling	
Drill bit Ø max.	Ø 13 mm

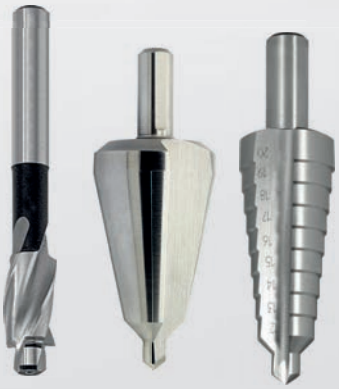
Model	DM 38VF	DM 50PM
Article no.	3071338	3071550
Power		
Electrical connection	230 V / 1 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Motor power	1.65 kW	1.7 kW
Collets		
Spindle seat	Weldon 3/4“	Weldon 3/4“
Head travel	45 mm	230 mm
Magnetic foot		
Magnetic foot dimensions	166 x 80 mm	2 pcs. 186 x 40 mm
Magnetic attraction force	14.5 KN	6.5 KN
Rotational speeds		
Speed without load	640 rpm	20 - 280 / 36-510 rpm 2 gear steps, infinitely variable
Dimensions and weight		
Length x width x height	350 x 150 x 240 mm	340 x 250 x 430 mm
Net weight	8.8 kg	11.7 kg

 The magnetic drilling machines comply with DIN EN 55011:2011- 04 class C2.

ACCESSORIES FOR DRILLS









Compatibility overview accessories for drills

Accessories drilling			Belt drive drilling machines																									Drills with gear units										Radial				
			DQ 14	DQ 18	DQ 22	DQ 20V	DQ 25	DQ 32	D 17Pro/ B 17Pro basic	D 23Pro	D 26Pro	D 33Pro	DP 26T/DP 26F	DP 33	DX 13V	DX 15V	DX 17V/ DX 17E	B 16 H	B 24H / B 24HV	B 28H / B 28HV	B 34H / B 34HV	DH 18V	DH 24FT	DH 28FT / DH 28FS	DH 24BV	DH 28BV	DH 40BV	DH 40G / DH 40GP	DH 40CT / DH 40CTP	DH 26GT	DH 28GS / DH 28GSV	DH 32GS / DH 32GSV	B 40GSP / GSM	DH 35G / DH 35V	DH 45G / DH 45V	B 50GSM	DH 55G / DH 55V	RB 6T	RB 8S	RD 3	RD 4 / RD 5	RD 6
			B16	MT2	MT2	MT2	MT3	MT4	MT2	MT2	MT3	MT4	MT3	MT4	B 16	MT2	MT2	MT2	MT2	MT3	MT4	MT2	MT2	MT3	MT2	MT3	MT4	MT4	MT4	MT3	MT3	MT4	MT4	MT4	MT4	MT4	MT4	MT2	MT2	MT3	MT4	MK5
Clamping plate		5190015						○				●	○	○							○						●	●	●	●	●	●	●	●	●	●			●	●	●
Collets for collet chucks	MT2 / ER 25	3352052		●	●	●			●	●						●	●	●	●			●	●		●													●	●			
	MT2 / ER 32	3352053		●	●	●			●	●						●	●	●	●			●	●		●													●	●			
	MT3/ 32	3352093					●				●		●							●				●		●				●	●									●		
	MT4/ ER 32	3352094						●				●		●							●						●	●	●			●	●	●	●	●	●				●	
Tapping chuck B16 (only in combination with adapter B16 / MT...)		3352042	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Tapping chuck with quick-change inserts	MT2 -M3-12	3050702			● 400V					● 400V						●	●	●	●			●	●		●													●	●			
	MT3 M3-12	3050705					●						● 400V							●				●		●				●	●									●		
	MT4 M3-12	3050709						●				●		●							●						●	●				●	●	●	●	●	●				●	
	MT3 M8-20	3050706					●				●		● 400V							●				●		●				●	●									●		
	MT4 M8-20	3050710						●				●		●							●						●	●				●	●	●	●	●	●				●	
Quick change adapter B16	small	3050715		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	large	3050716		●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thermdrill collet chuck	B16 - ER32	3060007	●												●																											
Quick-action drill chuck *(For MT spindle seat only in combination with matching adapter.)*	1 - 10 mm	3050610	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	DKC13	3050632	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	DKC16	3050633	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Direct quick release chuck	MT2	3050571		●	●	●			●	●						●	●	●	●			●	●		●													●	●			
	MT2	3050572		●	●	●			●	●						●	●	●	●			●	●		●													●	●			
	MT3	3050573					●				●									●				●		●				●	●									●		
	MT 4	3050574						●				●									●						●	●				●	●	●	●	●	●				●	
Clamping tool assortment	Size 8	3352015														●	●																									
	SPW 10	3352016							●	●								●				●	●																			
	SPW 12	3352017	●	●	●	●	●	●			●	●			●	●	●		●	●	●			●	●	●	●	●	●	●	●	●		●				●	●			
	SPW 14	3352018																																	●					●	●	
	SPW 16	3352019																																	●	●	●					
T-slot nut (individual)	M8 x 10	3353020													●	●																										
	M10 x 12	3353022							●	●								●				●	●																			
	M12 x 14	3353025	●	●	●	●	●	●			●	●			●	●	●		●	●	●			●	●	●	●	●	●	●	●	●		●				●	●			
	M12 x 16	3353024	●	●	●	●	●	●			●	●			●	●	●		●	●	●			●	●	●	●	●	●	●	●	●		●				●	●			
	M14 x 16	3353026														●																				●					●		
	M16 x 18	3353028																																		●	●	●				●	
Twist drill HSS	MT2	3051002		●	●	●			●	●						●	●	●	●			●	●		●													●	●			
	in combination with matching reduction sleeve MTx/MT2						●	●			●	●	●	●						●	●			●		●	●	●	●	●	●	●	●	●	●	●	●			●	●	●
	MT3	3051003					●				●		●							●				●		●				●	●									●		
	in combination with matching reduction sleeve MTx/MT3							●				●		●							●						●	●	●			●	●	●	●	●	●				●	●
Twist drill set	25-part	3201010	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	51-part	3201020	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	41-part	3201021	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Conical counterbore set		3201050	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Accessories drilling			Belt drive drilling machines																								Drills with gear units														Radial				
			DQ 14	DQ 18	DQ 22	DQ 20V	DQ 25	DQ 32	D 17Pro/ B 17Pro basic	D 23Pro	D 26Pro	D 33Pro	DP 26T/DP 26F	DP 33	DX 13V	DX 15V	DX 17V/ DX 17E	B 16 H	B 24H / B 24HV	B 28H / B 28HV	B 34H / B 34HV	DH 18V	DH 24FT	DH 28FT / DH 28FS	DH 24BV	DH 28BV	DH 40BV	DH 40G / DH 40GP	DH 40CT / DH 40CTP	DH 26GT	DH 28GS / DH 28GSV	DH 32GS / DH 32GSV	B 40GSP / GSM	DH 35G / DH 35V	DH 45G / DH 45V	B 50GSM	DH 55G / DH 55V	RB 6T	RB 8S	RD 3	RD 4 / RD 5	RD 6
			B16	MT2	MT2	MT2	MT3	MT4	MT2	MT2	MT3	MT4	MT3	MT4	B 16	MT2	MT2	MT2	MT2	MT3	MT4	MT2	MT2	MT3	MT2	MT3	MT4	MT4	MT4	MT3	MT3	MT4	MT4	MT4	MT4	MT4	MT4	MT2	MT2	MT3	MT4	MK5
Spot facer set		3201051	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Step drill bit set		3201055	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Thread repair		3202010	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Reduction sleeve	MT3-MT2	3050663					●				●									●				●		●				●	●										●			
	MT4-MT3	3050664						●				●									●						●		●			●		●	●	●	●				●		
	MT4-MT2	3050665						●				●									●						●		●			●		●	●	●	●				●		
Morse cone	MT2, B16	3050659		●	●	●			●	●						●	●	●	●			●	●		●													●	●				
	MT3, B16	3050660					●				●									●				●		●				●	●										●			
	MT4, B16	3050661						●				●									●						●		●			●	●	●	●	●	●				●		
	MT5, B16	3050675																																									●
Extension sleeve	MT2 - MT3	3050667															●		●			●	●		●													●	●				
	MT3 - MT4	3050668					●				●		●							●				●		●				●	●										●		
Cone ejector	MSP 1	3050636					●		●	●	●					●			●				●	●	●	●				●	●							●	●	●			
	MSP 2	3050637						●				●									●						●		●												●	●
Hold-down clamp	14 mm	3352031	●	●	●	●	●			●	●			●	●	●	●		●	●	●		●	●	●	●	●	●	●	●	●	●		●				●	●			●
	18 mm	3352032																															●		●	●	●				●		
Morse taper for drill chuck	MT4/M16 B16	3350304																												●												
Thermdrill	MT2	3060007														●	●		●	●	●	●	●		●						●	●		●	●	●	●						
Universal coolant unit		3351999		●	●	●	●	●	●	●	●	●	●	●				●	●	H only Model	H only Model	●	●	●	●	●	●	●	●	●	●													
Machine substructure MSM 1		3353000													●	●	●					●	●																				
Chip tray		3352999													●	●	●					●	●																				
Universal machine and tool trolley MSU 3		3352990	●	●	●	●			●	●			T model only		●	●	●	●	●			●	●	FT model only	●															●				
Universal machine and tool trolley MSU 4		3352991	●	●	●	●			●	●			T model only		●	●	●	●	●			●	●	FT model only	●															●				
Workplace mats			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

Machine vices

BME 85		3052630	●						○																																		
BME 100		3052632	●	●	●	●	●		●																															●	●			
BME 120		3052634			●	●	●	●	○																															●	●			
BME 150		3052636						●																																				
BMP 100		3052610	●	●	●	●	●		●	●	●				●	●	●	●	●			●	●		●														●	●			
BMP 130		3052613			●	●	○	●		○	●	●	●	○	●	●	●	●	●	●	●	●	●	●	●	●	●		●*										●	●			
BMP 160		3052616						●			○	●	●	●						●	●			●		●	●	●	●*	○	○	○	○	○	○	○	○					
BMP 200		3052620										●		●						○	●			○		○	●	●		○	○	○	○	○	○	○	○					
BSI 100		3000210						●			●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		●*	●	●	●		●						●		
BSI 140		3000214										●		●					○	○	●		○	○	○	○	●	●	●*	●	●	●	●	●	●	●				●	●	●
BSI 200		3000220												○							○						●	●					●		●	●	●				●	●
BSI-Q 100		3000230						●			●	●		●	●	●	●	●	●	●	●	●	●	●	●	●	●		●*	●	●	●		●						●		
BSI-Q 140		3000234										●		●					○	○	●		○	○	○	○	●	●	●*	●	●	●	●	●	●	●				●	●	●
BSI-Q 200		3000240												○							○						●	●					●		●	●	●				●	●

●Recommended | ●* only for drilling work! For milling work, see milling machine vices! | ○ 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

MADE IN GERMANY

› 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 optional table extension is attached to the side mounting rails and extends the clamping plate to the left, right or front



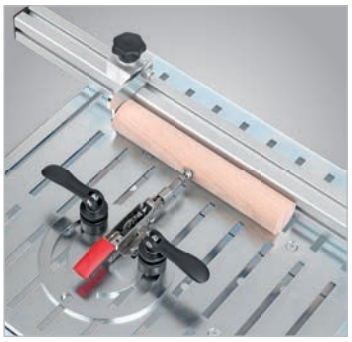
YouTube
Follow this for the video presentation

Accessories	Clamping plate
Article no.	5190015
Dimensions (L x W x H)	450 x 400 x 50 mm
Net weight	8.9 kg

Scope of delivery
› Clamping plate
› Mounting support
› 720 mm stop rail
› Two clamping elements



Machine vice
clamped

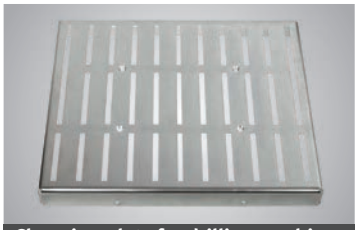


Adapter platen
with clamp, horizontal



Stop rail

Accessories



Clamping plate for drilling machines incl. assembly carrier 450 x 400 mm
Art no. 5198110



720 mm stop rail
incl. 2 clamping elements
Art no. 5198121



Machine vice
BMP 100 Art no. 3052610
BMP 130 Art no. 3052613



Machine vice
BMP 160 Art no. 3052616
BMP 200 Art no. 3052620



Adapter platen round with horizontal clamp length 180 mm
Art no. 5198161



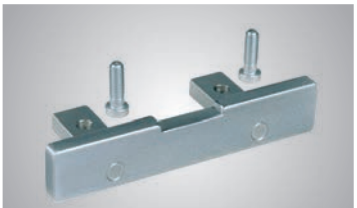
Adapter platen round with upright clamp length 180 mm
Art no. 5198163



Stop and clamping element Ø30 mm
Clamping range 14 - 26 mm
Art no. 5198149



Stop and clamping element Ø30 mm
Clamping range 2 - 14 mm
Art no. 5198150



Connecting web
Art no. 5850126



Table extension
1 100 x 172 mm
Art no. 5850112



Position bracket
incl. 1 clamping element
Art no. 5198151



L: 430 mm at the front
Art no. 5850104

Mounting rail

L: 330 mm left + right
Art no. 5850103

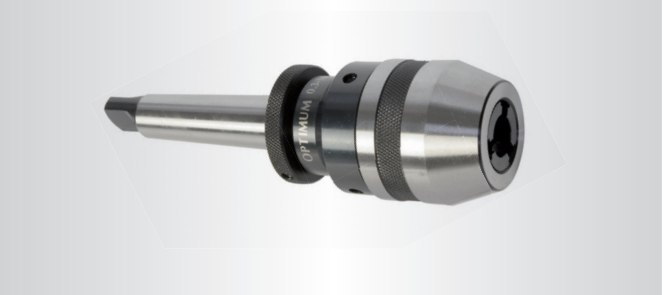
Accessories	Article no.
Collet chuck set	
MT2/ ER 25 - M10	3352052
› Collet chuck holder	
› 15 collets; sizes Ø 1.5 - Ø 16 mm/DIN ISO 15488	
› Hook spanner, aluminium case	
MT2/ ER 32 - M10	3352053
› Collet chuck holder	
› 18 collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488	
› Hook spanner, aluminium case	
MT2/ ER 32 - M12	3352093
› Collet chuck holder	
› 18 collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488	
› Hook spanner, aluminium case	
MT4/ ER 32 - M16	3352094
› Collet chuck holder	
› 18 collets; sizes Ø 2 - Ø 20 mm/DIN ISO 15488	
› Hook spanner, aluminium case	



OPTIMUM Precision quick-action drill chuck	
Concentricity better than 0.06 mm	
1 - 10 mm; B16	3050610



OPTIMUM Direct quick-action drill chuck	
MT2 1 - 16 mm; up to 6 000 rpm	3050571
MT2 1 - 13 mm; up to 8 000 rpm	3050572
MT3 1 - 16 mm; up to 6 000 rpm	3050573
MT4 1 - 16 mm; up to 6 000 rpm	3050574



Accessories	Article no.
Tapping chuck with quick-change inserts	
Note: The size of the square depends on the shank diameter of the hand tap (DIN standard)	
MT2	3050702
MT3	3050705
MT4	3050709
› 7 inserts: M3 - M12	
MT3	3050706
MT4	3050710
› 7 inserts: M8 - M20	



Thermdrill collet chuck	3060007
› B16 - ER32	



Fig.: with optional quick change adapter

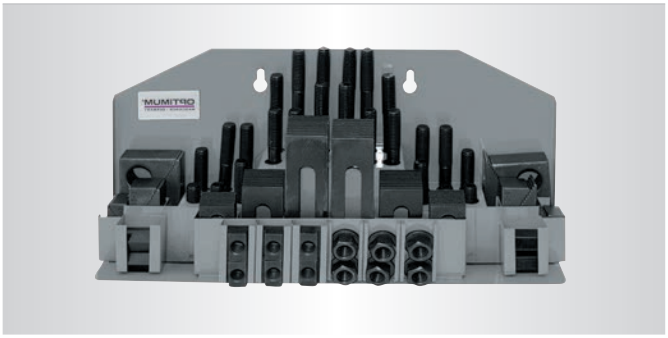
Quick change adapter with B16 collet	
Tapping chuck small (M3-M12)	3050715
Tapping chuck large (M8 - M20)	3050716



Quick-action drill chuck	
DKC13 / 0-13 mm; B16 - 4 800 rpm	3050632
DKC16 / 0-16 mm; B16 - 4 000 rpm	3050633



Accessories	Article no.
Clamping tool assortment SPW	
› Metric thread	
› 58-part: 24 pcs. tightening bolts, 6 pcs. T-nuts, 6 pcs. nuts, 4 pcs. extension nuts, 6 pcs. clamping punches, 12 pcs. clamping blocks	
Size 8	3352015
› T-slot nuts 10 mm; locking thread M 8	
SPW 10	3352016
› T-slot nuts 12 mm; locking thread M10	
SPW 12	3352017
› T-slot nuts 14 mm; locking thread M12	
SPW 14	3352018
› T-slot nuts 16 mm; locking thread M 14	
SPW 16	3352019
› T-slot nuts 18 mm; locking thread M16	



T-slot nut (individual)

Type	a	E	h	K	
M8 x 10	9.7	15	12	6	3353020
M10 x 12	11.7	18	14	7	3353022
M12 x 14	13.7	22	16	8	3353025
M12 x 16	15.7	25	18	9	3353024
M14 x 16	15.7	25	18	9	3353026
M16 x 18	17.7	28	20	10	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	
MT2	3051002
MT3	3051003



Accessories	Article no.
Twist drill set	
› As per DIN 338 HSS-CO 5 %	
› Tetrahedral 135° cross grinding enables 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)	

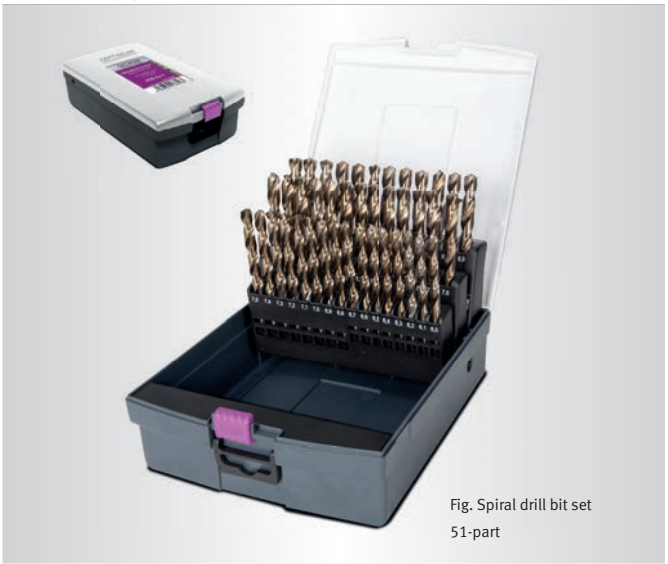


Fig. Spiral drill bit set 51-part

Conical counterbore set	3201050
› As per standard DIN 335C	
› HSS	
› 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 drilling machines	
› Practical OPTIMUM plastic case	



Accessories	Article no.
Flat countersink 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



Sheet metal peeler drill set	3201055

› 3-part: 3 - 14 mm / 8 - 20 mm / 16 - 30.5 mm
› HSS
› With sharp tip, no pre-drilling required
› Conically rising blades and radially undercut circumference for peeling action
› Drilling without burr and chatter marks
› Usage: 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



Accessories	Article no.
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 mm/ M8x1.25 mm/ M10x1.5 mm
› 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
› HSS
› 15-part
› 7 pcs. thread taps: 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

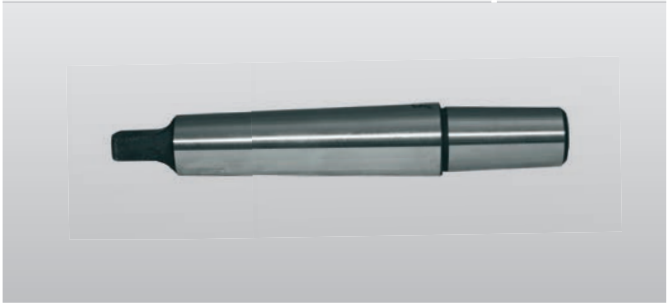


Accessories for drills

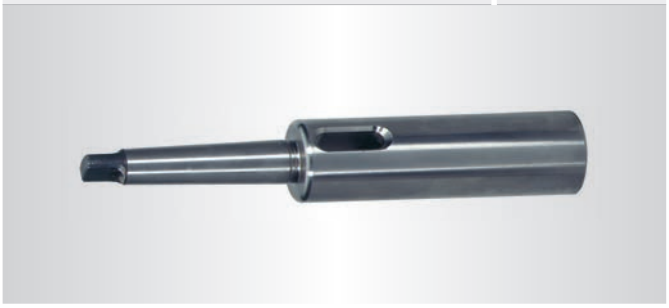
Accessories	Article no.
Reduction sleeve	
MT3 - MT2	3050663
MT4 - MT3	3050664
MT4 - MT2	3050665



Morse taper with adapter	
MT2 - B16	3050659
MT3 - B16	3050660
MT4 - B16	3050661
MT5 - B16	3050675
MT6 - B16	3050676



Extension sleeve	
MT2 - MT3	3050667
MT3 - MT4	3050668



Cone ejector	
MSP 1 for MT1 to MT3	3050636
MSP 2 for MT4 to MT6	3050637



Accessories	Article no.
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 collet
› 2 pcs. flat spanner
› Allen key



Hold-down clamp set of 2	
› Clamping height adjustable	
› Brass plate below clamping arm protects material against damage	
Table slot **14 mm/M 12**	3352031
› L x W x H: 115 x 42 x 39 mm	
› Height adjustment: 0 - 89 mm	
Table slot **18 mm/M 16**	3352032
› L x W x H: 133 x 50 x 49 mm	
› Height adjustment: 0 - 101 mm	



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 320

	Designation	Size	Article no.
	**Coolant hoses basic equipment** **1/4" - No. 1** › 8 pcs. articulated hoses 150 mm › 2 pcs. each round nozzle 1/16“ / 1/8“ / 1/4“, › 2 pcs. NPT coonnection 1/4" and 1/8", › 1 pc. flat nozzle, › 1 pc. Y-distributor, › 2 pcs. shut-off valve inside and outside, › 2 pcs. shut-off valve inside - 1/4", › 2 pc. NPT extension, › 1 pc. magnetic base, 1 pc. flexible sealing tape	1/4"	3356704
	**Coolant hoses basic equipment** **1/4" - No. 2** › 6 pcs. articulated hose 150 mm › 2 pcs. each round nozzle 1/16“ / 1/8“ / 1/4“, › 2 pcs. each NPT connection 1/4" and 1/8", › 5 pcs. flat nozzle, › 4 pcs. 90° nozzle, › 1 pc. Y-distributor, › 1 pc. shut-off valve, inside and outside, › 1 pc. shut-off valve, inside - 1/4" › 1 piece clamping tong	1/4"	3356705
	**Coolant hoses basic equipment** **1/2" - No. 1** › 6 pcs. articulated hose 150 mm › 2 pcs. each round nozzle 1/2" / 3/8" / 1/4", › 2 pcs. each NPT connection 1/4" and 1/2", › 1 pc. flat nozzle, › 3 pcs. 90° round nozzle 1/2" / 3/8" / 1/4", › 1 pc. Y-distributor, › 1 pc. shut-off valve, inside and outside, › 1 pc. shut-off valve, inside - 1/2" › 1 piece clamping tong	1/2"	3356800

Accessories	Article no.
Universal coolant unit	3351999
› 100W 230 V ~50 Hz connection	
› Delivery height max. 2.5 m	
› Delivery volume 3.5 litres per minute	
› Tank capacity 11 litres	
› Size L x W x H: 375 x 250 x 260	
› Complete with tank, flexible tube, hose and switch/plug combination	
› Magnetic base fastener for coolant hose	



Accessories	Article no.
MMC1 coolant mist lubricator	3356663
› Magnetic base with a holding force of 75 kg	
› Base size L x W x H: 62 x 50 x 55 mm	
› Screw connection for external compressed air supply	
› Flexible and stable hose with a length of 500 mm	



Accessories	Article no.
KMS 2 coolant hose	3356660
› Insensitive to most solvents and chemicals	
› Not electrically conductive	
› Magnetic base holding force up to 50 kg	
› Length of coolant hoses each 335 mm	
› 6mm hose connection	
› ¼“ coolant hoses	



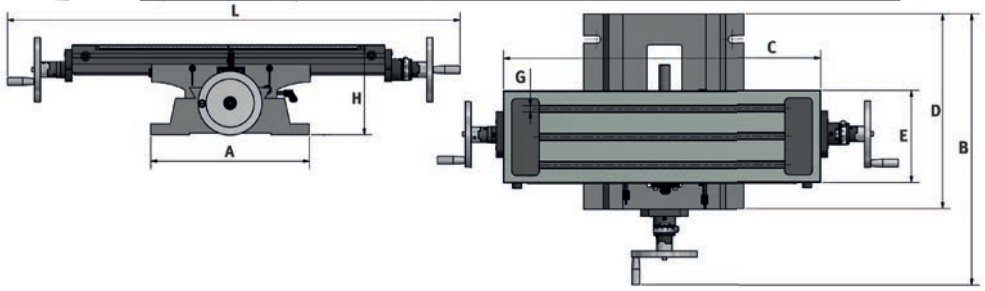
KT cross tables

Facts that impress in terms of quality, performance and price

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



Technical data	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
L x w x h	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
Net weight	22 kg	40 kg	52 kg	84 kg
Traverse paths				
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



KT cross tables	Article no.
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

- 14 mm thickness
- Colour anthracite
- Temperature resistant -35°C to +95°C
- Fire-resistant B1 as per DIN 4102
- Made of polyurethane on polyether basis
- Surface: nubbed
- Underside: nubbed for maximum standing comfort and slip resistance
- 5-year warranty







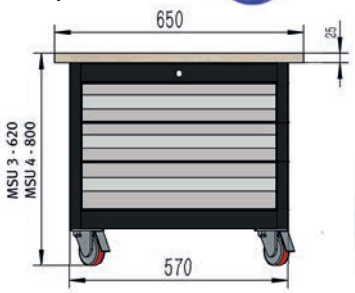
Work mat	Size: 1,840 x 640 mm	Size: 1,840 x 940 mm	Size: 3,040 x 640 mm	Size: 3,040 x 940 mm
Article no.	6800000	6800005	6800001	6800006
Net weight	6 kg	9 kg	10.5 kg	15 kg

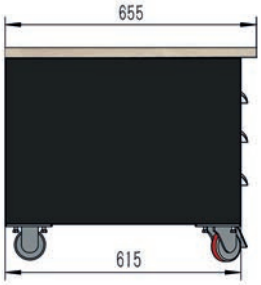
MSU 3 / MSU 4 - Universal machine and tool trolley

Facts that impress in terms of quality, performance and price

- All three ball bearing mounted drawers can be operated with full extension and are equipped with a stop at the end to prevent accidental opening when shunting or transporting
- Stable design
- Lockable with cylinder lock

NEW







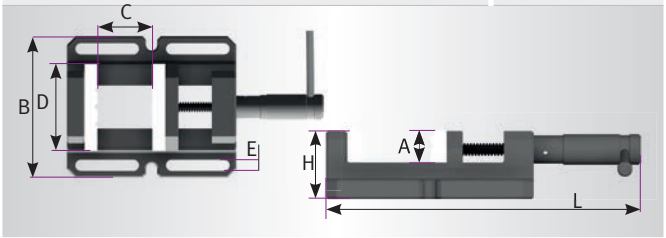
MSU 3



MSU 3

Model	MSU 3	MSU 4
Article no.	3352990	3352991
Load bearing capacity	max. 500 kg	max. 500 kg
Load bearing capacity per drawer	max. 45 kg	max. 45 kg
Dimensions LxWxH	650 x 655 x 620 mm	650 x 655 x 800 mm
Net weight	47 kg	55.5 kg

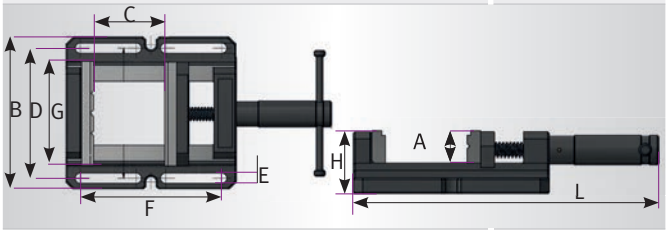
BME machine vices	Article no.
› Smooth action	
› Precise jaw guidance	
› Spindle with rolled trapezoid thread	
› Many assembly options on drill table thanks to slots	
BME 85	3052630
BME 100	3052632
BME 120	3052634
BME 150	3052636



Tech. data		A	C	D	E	L	B	H	kg
BME 85	mm	30	69	85	12	235	132	58	2.8
BME 100	mm	30	100	100	14	288	160	60	4.0
BME 120	mm	30	120	120	14	327	180	63	5.0
BME 150	mm	30	165	150	14	428	220	70	8.0


BME 100

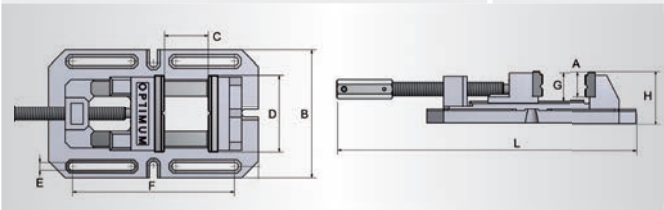
BMP machine vices	Article no.
› Smooth action	
› Rugged design with prism jaws	
› Spindle with rolled trapezoid thread	
› Many assembly options on drill table thanks to slots	
BMP 100	3052610
BMP 130	3052613
BMP 160	3052616
BMP 200	3052620



Tech. data		A	G	C	D	E	F	L	B	H	kg
BMP 100	mm	30	100	100	133	13	165	294	162	64	5.6
BMP 130	mm	35	130	120	163	13	177	334	192	69	7.4
BMP 160	mm	40	160	145	205	13	200	420	250	77	13
BMP 200	mm	50	200	195	245	14.5	280	535	290	87	21.6


BMP 130 BMP 160

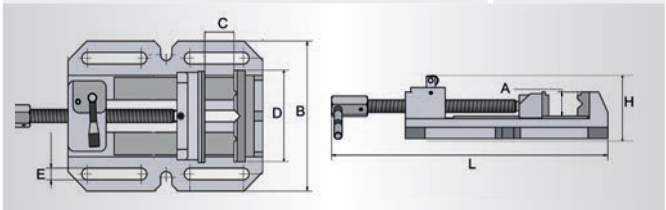
BSI machine vices	Article no.
› Drill vices in industrial quality	
› Replaceable prism jaws	
› Long guides on moving jaw prevent pivoting	
› Precision ground prism jaws	
› Many assembly options on drill table thanks to slots	
› Premium grey cast	
› Scraped guide surfaces	
BSI 100	3000210
BSI 140	3000214
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

BSI-Q machine vices	Article no.
› Drill vices in industrial quality	
› Quick clamping thanks to quick release	
› Replaceable prism jaws	
› Long guides on moving jaw prevent pivoting	
› 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

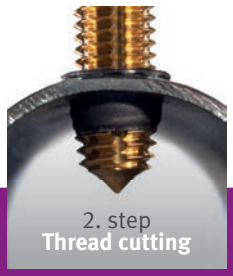
Secure threaded connection for thin wall thicknesses

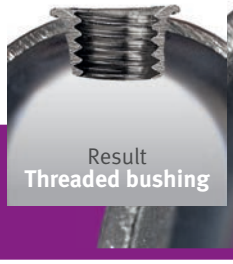
THERMDRILL®

Verbindungstechnik – Made in Germany

The Thermdrill® process









MADE IN GERMANY



In thermal drilling, the friction heat from the existing material is used to create an anti-twist protected bushing without material removal in which a thread is then tapped.

- For aluminium, brass, copper, steel, stainless steel as of 1.0 mm wall thickness
- For use with milling cutters, CNC systems and post drills

www.thermdrill.com

- **Cost savings**
- **Time savings**
- **Maximum safety**

You need

1 Thermal drill



SHAPE
For bushes with collar





CUT
For bushes without collar



Please note: important!

› Made of solid carbide with a special polygon grind

Size	Design	Material thickness (max.)	Art. no.	Material thickness (max.)	Art. no.
M4	short	1.5 mm	3060104	2.0 mm	3060164
	long	2.5 mm	3060124	4.0 mm	3060144
M5	short	2.0 mm	3060105	3.0 mm	3060165
	long	3.0 mm	3060125	4.5 mm	3060145
M6	short	2.0 mm	3060106	3.0 mm	3060166
	long	3.5 mm	3060126	5.0 mm	3060146
M8	short	2.5 mm	3060108	4.0 mm	3060168
	long	4.0 mm	3060128	6.0 mm	3060148
M10	short	2.5 mm	3060110	4.0 mm	3060170
	long	4.5 mm	3060130	6.5 mm	3060150
M12	short	2.5 mm	3060112	4.0 mm	3060172
	long	4.5 mm	3060132	6.5 mm	3060152

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

2 Thread tapper



with TiN coating
and lubricant grooves
tolerance 6HX
form C

› Conventional tool holders can be used

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

NEW



Thermdrill Basic Set	3060004

Contents:
- › Open-ended spanner and cable spanner
- › MT3 tool holder with cooling ring
- › Adapter MT3 with morse taper B16
- › Adapter MT2 with morse taper B16
- › Collets (Ø 6/8/10/12 mm)
- › Thread cutting oil
- › THERMDRILL Paste
- › Brush
- › Case

Quick change adapter

small (M3-M12)	3050715
large (M8-M20)	3050716

Quick change adapter with B16 collet for thread cutting collet



Collet chuck B16

Art. no. 3060007



Thread cutting oil, 1 litre

Art. no. 3060092

- ▶ Including brush
- ▶ High-performance oil specially for thread cutting in aluminium, CU, CUSN, steel, stainless



THERMDRILL Paste, 1 kg

Art. no. 3060090

- ▶ Including brush
- ▶ Protection against excessive wear.



Tool set = Thermal drill + thread tapper

		Type SHAPE		Type CUT	
Size	Design	Material thickness (max.)	Art. no.	Material thickness (max.)	Art. no.
M4	short	1.5 mm	3060024	2.0 mm	3060044
	long	2.5 mm	3060034	4.0 mm	3060054
M5	short	2.0 mm	3060025	3.0 mm	3060045
	long	3.0 mm	3060035	4.5 mm	3060055
M6	short	2.0 mm	3060026	3.0 mm	3060046
	long	3.5 mm	3060036	5.0 mm	3060056
M8	short	2.5 mm	3060028	4.0 mm	3060048
	long	4.0 mm	3060038	6.0 mm	3060058
M10	short	2.5 mm	3060030	4.0 mm	3060050
	long	4.5 mm	3060040	6.5 mm	3060060
M12	short	2.5 mm	3060032	4.0 mm	3060052
	long	4.5 mm	3060042	6.5 mm	3060062

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

Product features



The specifications are guide values for applications with steel

	Speed		Motor power		Speed
Size	min	ideal	mm	kW	
M4	2300	2600	up to 1.5	1.0	1000
			up to 4.0	1.5	
M5	2200	2500	3.0	1.0	800
			4.5	1.5	
M6	2000	2400	4.0	1.5	650
			5.0	2.0	
M8	1600	2200	4.0	1.5	500
			6.0	2.0	
M10	1500	2000	3.0	1.5	400
			5.0	2.0	

Stainless steel speed setting -10%, aluminium +40% (applies to thermal drilling)