DEPRAG
machines unlimited

Screwdriver Spindles electric

MINIMAT-E Screwdriver Spindles

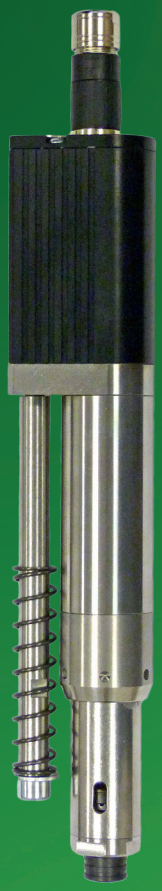
The electric screwdriver with mechanical shut-off clutch.

Torque range from 0.1 - 4.8 Nm

- **robust, long life cycle**
- **highest shut-off accuracy**
- **brushless electric drive**
- **highest process reliability**
- **lowest maintenance requirements**

The strength of the MINIMAT-E spindle screwdriver lies in the screw assembly torque range of 0.1 Nm to 4.8 Nm. High speeds of 650 up to 2000 rpm secure short cycle times.

D3170E 04.2025



MINIMAT-E Screwdriver Spindle

Working Principle

The MINIMAT-E screwdriver operates using the well-established principle of the mechanical MINIMAT shut-off clutch.

Torque accuracies of < 3% standard deviation and thus Cmk values of ≥ 1.67 with a tolerance of ± 15% can be reached *) with MINIMAT-E screwdrivers. Statistically speaking, the error rate is less than 0.6 per one million screw assemblies.

*) under suitable process conditions

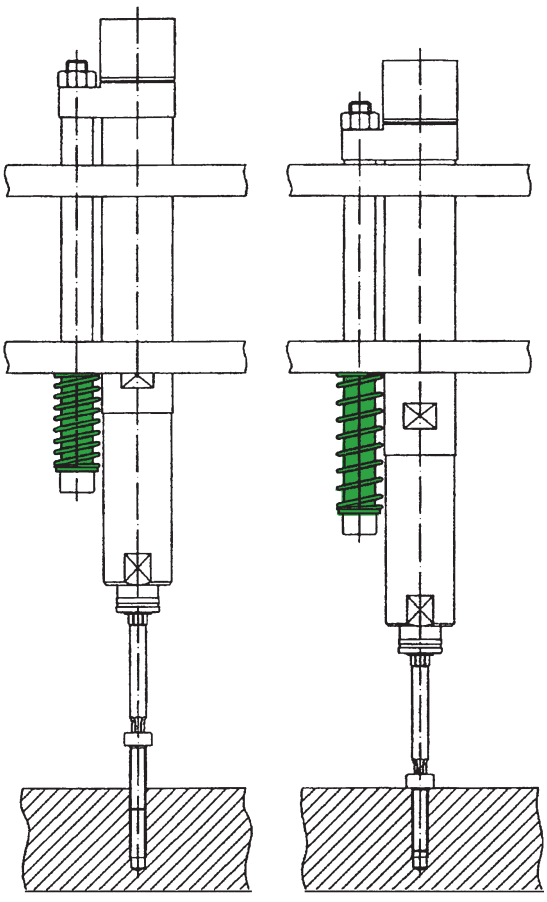
Depending on application case very short cycle times can be achieved as this screwdriver runs at maximum speed right up to the shut-off point of the clutch. Whereas in order to reach the stated accuracy other controlled screwdrivers are subject to a speed reduction before shut-off.

The screwdriver is designed for tough industrial use with high quality, robust system components guaranteeing reliability and a long life-span.

The maintenance free brushless EC drive provides outstanding dynamics and high maximum torque which is ideal for screw tightening.

The screwdriver is available with push-to-start or remote start PLC signal.

The options for inserting tools and additional components such as guide sleeves or vacuum connections are designed in the same way as the DEPRAG MINIMAT pneumatic screwdriver motor size 2 so that identical accessories may be used.

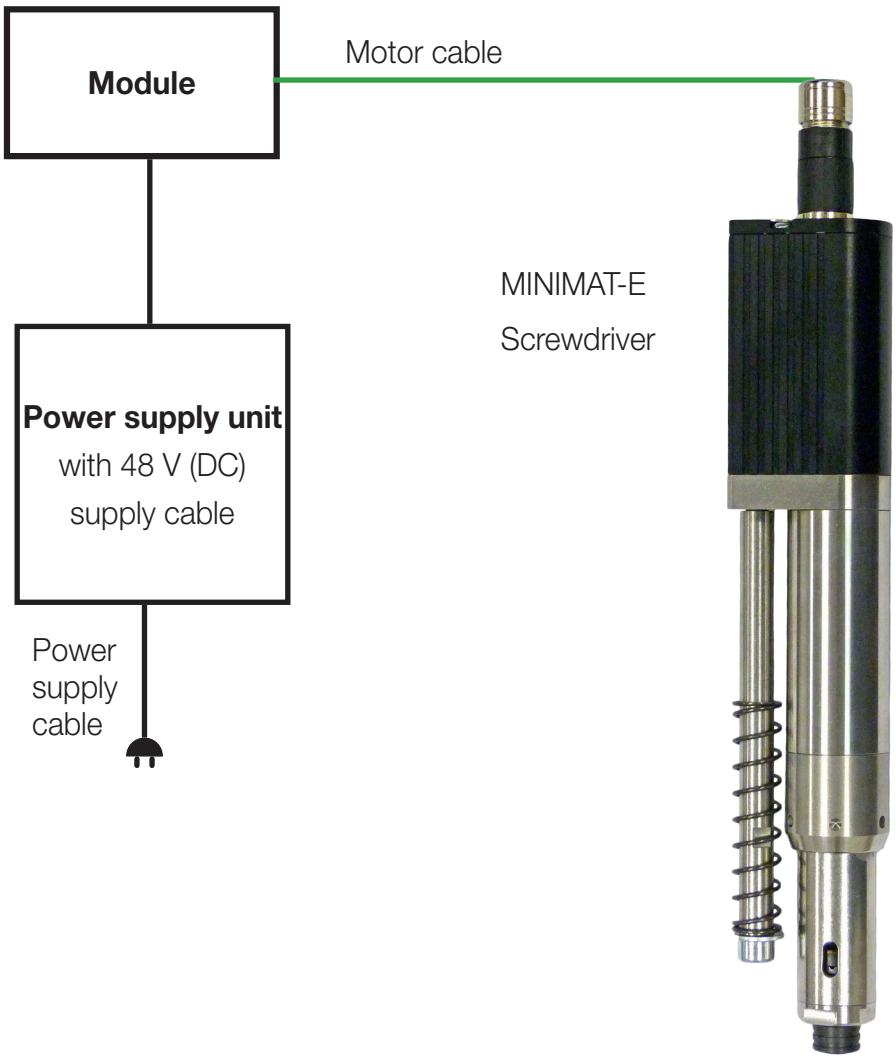


Axial spring loaded suspension

Due to the axial movement of the entire screwdriver in the screwdriver fixture a spring loaded drive element is not required.

Therefore low-priced standard inserting tools can be used.

System Overview



Technical Data MINIMAT-E screwdriver, stationary, straight spindle form

Spindle, remote start	**Type**	**342EF27-0005-200**	**342EF27-0005-100**	**342EF27-0005-65**	**342EF27-0012-100**	**342EF27-0012-65**
reversible, right shut-off	Part no.	308000A	308000B	308000C	308001A	308001B
Torque min.	Nm/in.lbs	0.1/0.885			0.4/3.54	
Torque max.	Nm/in.lbs	0.5/4.43			1.2/10.62	
Speed	rpm	2000	1000	650	1000	650
Diameter	mm/in.	27/1.05	27/1.05	27/1.05	27/1.05	27/1.05
Length	mm/in.	271/10.57	271/10.57	271/10.57	287/11.2	287/11.2
Weight	kg/lbs	0.75/1.65	0.75/1.65	0.75/1.65	0.9/1.98	0.9/1.98
Noise level	dB (A)	68	68	68	68	68
Line voltage (DC)	V	48	48	48	48	48
Spindle output		4 mm half moon	4 mm half moon	4 mm half moon	-	-
Suitable inserting tools and connection parts with inserting end		4 mm half moon	4 mm half moon	4 mm half moon	-	-
Internal hex. drive DIN ISO 1173					F6.3 (1/4")	F6.3 (1/4")
Suitable inserting tools and connection parts with inserting end DIN ISO 1173		-	-	-	E6.3 (1/4")	E6.3 (1/4")

Required accessories

Motor cable (2m/6.56ft.)	**Type**	**KS4-2m**	**KS4-2m**	**KS4-2m**	**KS4-2m**	**KS4-2m**
	Part no.	151515A	151515A	151515A	151515A	151515A
Alternative motor cable (5m/16.4ft.)	**Type**	**KS4-5m**	**KS4-5m**	**KS4-5m**	**KS4-5m**	**KS4-5m**
	Part no.	151515B	151515B	151515B	151515B	151515B
Alternative motor cable (8m/26.24ft.)	**Type**	**KS4-8m**	**KS4-8m**	**KS4-8m**	**KS4-8m**	**KS4-8m**
	Part no.	151515C	151515C	151515C	151515C	151515C
Power unit	**Type**	**NG18**	**NG18**	**NG18**	**NG18**	**NG18**
	Part no.	101067	101067	101067	101067	101067
Source (AC)	V/Hz	100-240/50-60	100-240/50-60	100-240/50-60	100-240/50-60	100-240/50-60
Output (DC)	V	48	48	48	48	48
Dimensions L x W x H	mm/in.	170x85x42 / 6.6 x 3.3 x 1.6			170x85x42 / 6.6 x 3.3 x 1.6	
Weight	kg/lbs	0.85 / 1.87	0.85 / 1.87	0.85 / 1.87	0.85 / 1.87	0.85 / 1.87
Power cable EU	**Type**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**
	Part no.	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)
alternative:						
Power cable US	**Type**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**
	Part no.	833791 (2m)	833791 (2m)	833791 (2m)	833791 (2m)	833791 (2m)
Power cable UK	**Type**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**
	Part no.	833792 (2m)	833792 (2m)	833792 (2m)	833792 (2m)	833792 (2m)
Power cable Brazil	**Type**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**
	Part no.	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)
Power cable China	**Type**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**
	Part no.	832927(2.5m)	832927(2.5m)	832927(2.5m)	832927(2.5m)	832927(2.5m)
Module	Part no.	100901A	function: supply of the signals - screwdriver running, - screwdriver start and reverse			

Optional equipment

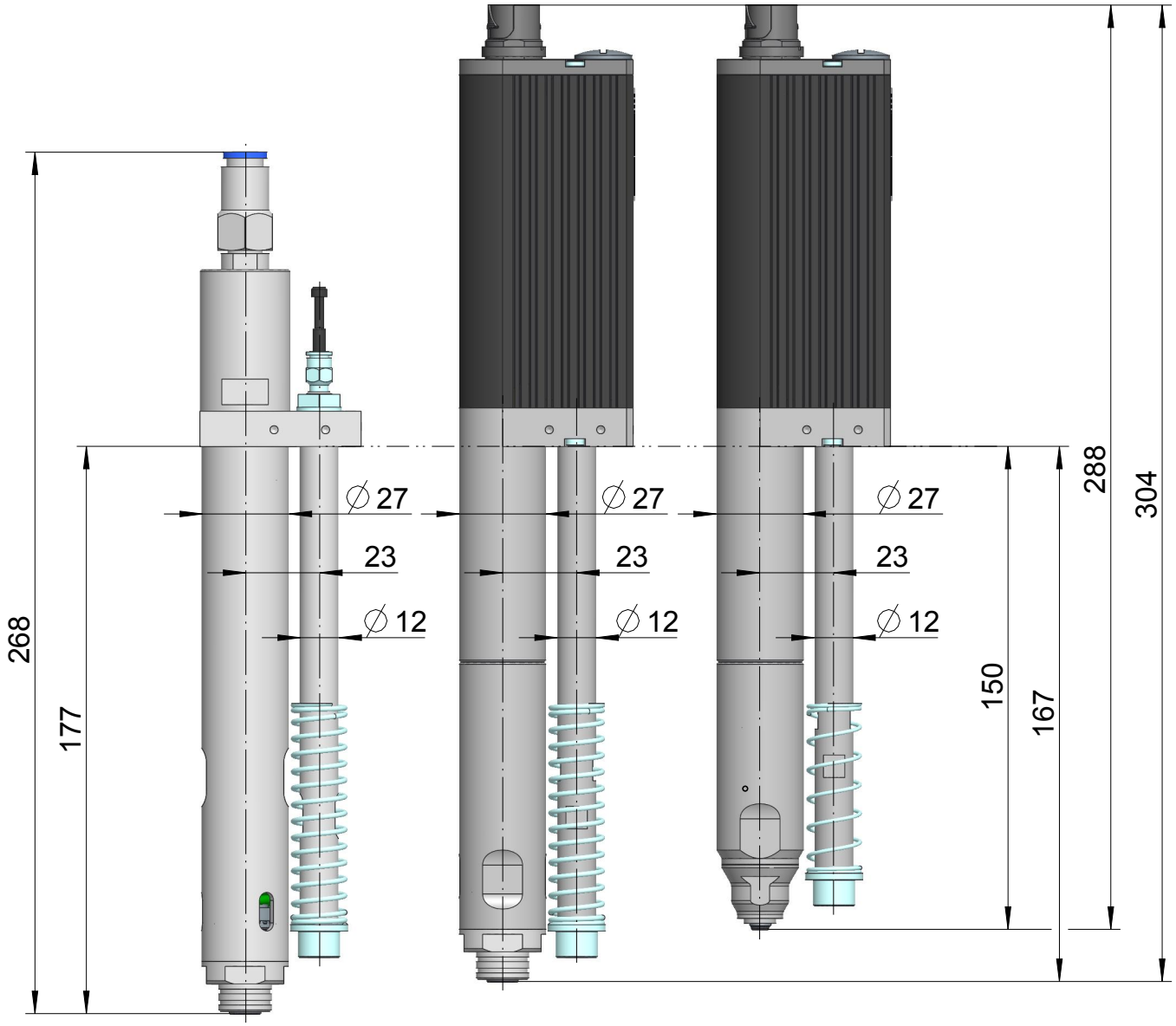
Spring sleeve cpl.	Part no.	4032801B	364672A
Spring sleeve cpl., with vacuum connection (in connection with finder, see catalogue: Inserting tools D3320E)	Part no.	4032801B	364672C
Screwdriver adapter	Part no.	9082434A	9082434A
Depth control digital	Part no.	941177I	941177I
Depth control analog 10 mm	Part no.	908838D plus amplifier 813712	908838D plus amplifier 813712

The MINIMAT-E screwdriver spindle in comparison to the pneumatic screwdriver of the DEPRAG series MINIMAT, motor size 2

MINIMAT
pneumatic
screwdriver spindle,
motor size 2

MINIMAT-E
electric screwdriver spindle
with mechanical shut-off
clutch
Spindle output:
Internal hex. drive
DIN 1173, F6.3 (1/4")

MINIMAT-E
electric screwdriver spindle
with mechanical shut-off
clutch
Spindle output:
4 mm half moon



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Technical Data MINIMAT-E screwdriver, stationary, straight spindle form

Spindle, push to start	**Type**	**342EA36-0009-200**	**342EA36-0009-100**	**342EA36-0009-65**	**342EA36-0018-200**	**342EA36-0018-100**	**342EA36-0018-65**
right rotation, right shut-off	Part no.	304001A	304001B	304001C	304004A	304004B	304004C
Spindle, remote start	**Type**	**342EF36-0009-200**	**342EF36-0009-100**	**342EF36-0009-65**	**342EF36-0018-200**	**342EF36-0018-100**	**342EF36-0018-65**
reversible, right shut-off	Part no.	305001A	305001B	305001C	305004A	305004B	305004C
Torque min.	Nm/in.lbs	0.4 / 3.5			0.5 / 4.4	0.4 / 3.5	0.4 / 3.5
Torque max.	Nm/in.lbs	0.9 / 8			1.8 / 16		
Speed	rpm	2000	1000	650	2000	1000	650
Diameter	mm/in.	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4
Length	mm/in.	283 / 11	283 / 11	283 / 11	283 / 11	283 / 11	283 / 11
Weight	kg/lbs	1 / 2.2	1 / 2.2	1 / 2.2	1 / 2.2	1 / 2.2	1 / 2.2
Noise level	dB (A)	68	68	68	68	68	68
Line voltage (DC)	V	48	48	48	48	48	48
Internal hex. drive DIN ISO 1173		F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")
Suitable inserting tools and connection parts with inserting end DIN ISO 1173		E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")
Spindle, push to start	**Type**	**342EA36-0024-100**	**342EA36-0024-65**	**342EA36-0036-65**	**342EA36-0048-100**	**342EA36-0048-65**	
right rotation, right shut-off	Part no.	304002A	304002B	304003A	**304005A**	**304005B**	
Spindle, remote start	**Type**	**342EF36-0024-100**	**342EF36-0024-65**	**342EF36-0036-65**	**342EF36-0048-100**	**342EF36-0048-65**	
reversible, right shut-off	Part no.	305002A	305002B	305003A	305005A	305005B	
Torque min.	Nm/in.lbs	0.4 / 3.5		0.5 / 4.4	0.4 / 3.5	0.4 / 3.5	
Torque max.	Nm/in.lbs	2.4 / 21.24		3.6 / 31.86	4.8 / 42.48		
Speed	rpm	1000	650	650	1000	650	
Diameter	mm/in.	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4	
Length	mm/in.	283	283	283	283	283	
Weight	kg/lbs	1 / 2.2	1 / 2.2	1 / 2.2	1 / 2.2	1 / 2.2	
Noise level	dB (A)	68	68	68	68	68	
Line voltage (DC)	V	48	48	48	48	48	
Internal hex. drive DIN ISO 1173		F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")	
Suitable inserting tools and connection parts with inserting end DIN ISO 1173		E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	

Required accessories

Motor cable (2m/6.56ft.)	**Type**	**KS4-2m**	**KS4-2m**	**KS4-2m**	**KS4-2m**	**KS4-2m**	**KS4-2m**
	Part no.	151515A	151515A	151515A	151515A	151515A	151515A
Alternative motor cable (5m/16.4ft.)	**Type**	**KS4-5m**	**KS4-5m**	**KS4-5m**	**KS4-5m**	**KS4-5m**	**KS4-5m**
	Part no.	151515B	151515B	151515B	151515B	151515B	151515B
Alternative motor cable (8m/26.24ft.)	**Type**	**KS4-8m**	**KS4-8m**	**KS4-8m**	**KS4-8m**	**KS4-8m**	**KS4-8m**
	Part no.	151515C	151515C	151515C	151515C	151515C	151515C
Power unit	**Type**	**NG18**	**NG18**	**NG18**	**NG300**	**NG300**	**NG300**
	Part no.	101067	101067	101067	126423A	126423A	126423A
Source (AC)	V/Hz	100-240/50-60	100-240/50-60	100-240/50-60	90-264/47-63	90-264/47-63	90-264/47-63
Output (DC)	V	48	48	48	48	48	48
Dimensions L x W x H	mm/in.	170x85x42 / 6.6 x 3.3 x 1.6			197.4 x 88.9 x 39 / 7.7 x 3.5 x 1.5		
Weight	kg/lbs	0.85 / 1.87	0.85 / 1.87	0.85 / 1.87	1.34 / 2.95	1.34 / 2.95	1.34 / 2.95
Power cable EU	**Type**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**	**230V-1.8m**
	Part no.	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)	812587 (1.8m)
alternative:							
Power cable US	**Type**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**	**KN-C13/US**
	Part no.	833791 (2m)	833791 (2m)	833791 (2m)	833791 (2m)	833791 (2m)	833791 (2m)
Power cable UK	**Type**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**	**KN-C13/UK**
	Part no.	833792 (2m)	833792 (2m)	833792 (2m)	833792 (2m)	833792 (2m)	833792 (2m)
Power cable Brazil	**Type**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**	**KN-C13/BR**
	Part no.	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)	207388 (1.8m)
Power cable China	**Type**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**	**KN-C13/CN**
	Part no.	832927(2.5m)	832927(2.5m)	832927(2.5m)	832927(2.5m)	832927(2.5m)	832927(2.5m)
Module suitable for spindle with remote start	Part no.	100901A	function: supply of the signals - screwdriver running, - screwdriver start and reverse				
Module suitable for spindle with push to start	Part no.	100901B	function: supply of the signal - screwdriver running				

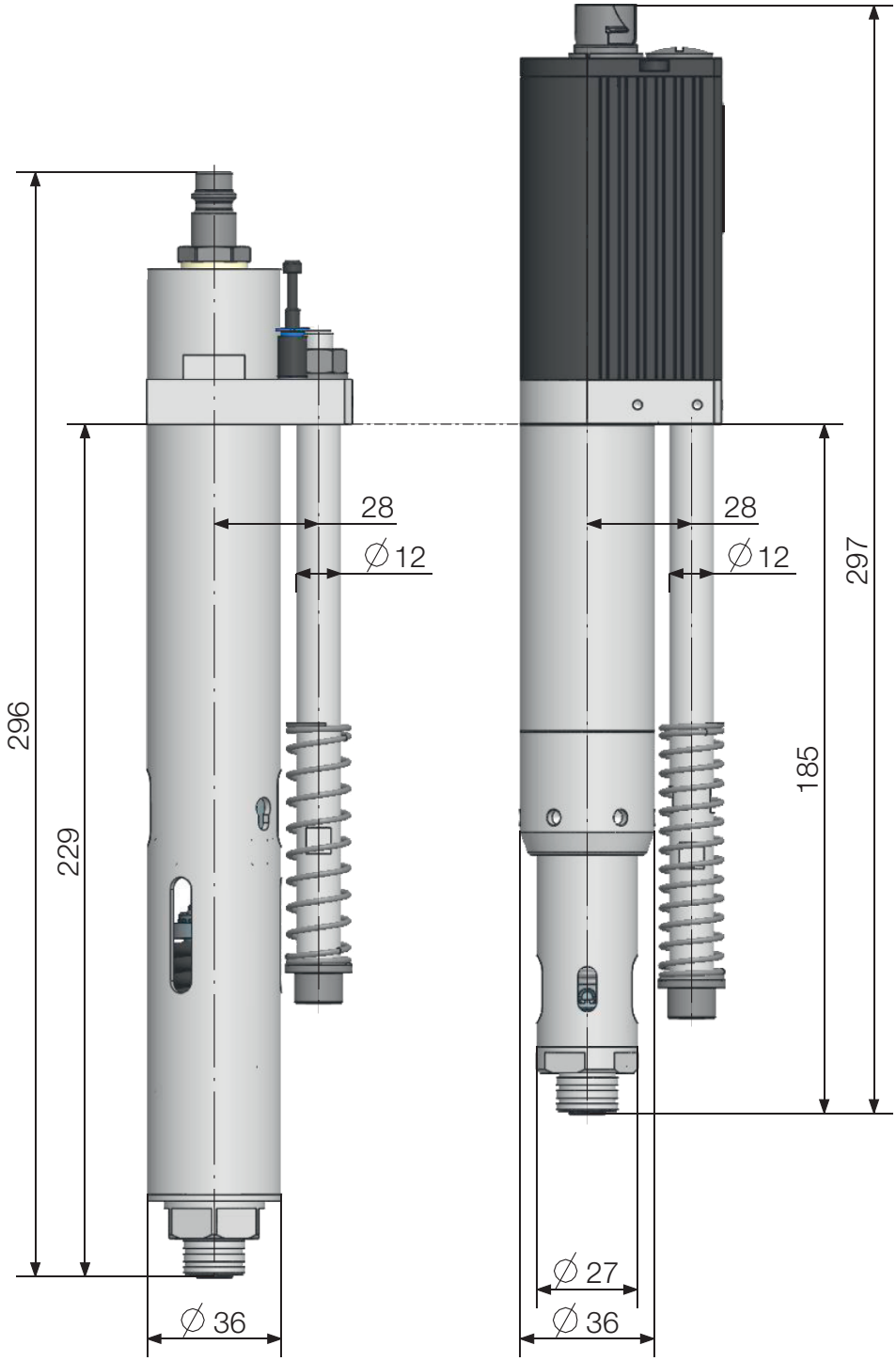
Optional equipment

Spring sleeve cpl.	Part no.	364672A
Spring sleeve cpl., with vacuum connection (in connection with finder, see catalogue: Inserting tools D3320E)	Part no.	364672C
Screwdriver adapter	Part no.	9082435A
Depth control digital	Part no.	941177I
Depth control analog 10 mm	Part no.	908838D plus amplifier 813712

The MINIMAT-E screwdriver spindle in comparison to the pneumatic screwdriver of the DEPRAG series MINIMAT, motor size 3

MINIMAT
pneumatic screwdriver spindle,
motor size 3

MINIMAT-E
electric screwdriver spindle
with mechanical shut-off clutch



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