

MINIMAT-ED Digital Electric Screwdriver

Straight handle design: torque ranges between 0.24 - 18 Nm

 \bowtie

- flexible
- economical
- comfortable
- process reliable
- robust

A good team: The MINIMAT-ED handheld screwdriver, combined with the ComCenter ED, is the ideal solution for a wide range of applications. The powerful MINIMAT-ED is available in eight versions for torques between 0.24 to 18 Nm at speeds of 1500 rpm. The speeds can be individually adjusted up to the maximum speed for each screwdriver type.

The special highlight: The set torque and the final value is shown directly on the screwdriver display - for maximum precision and userfriendliness!

The MINIMAT-ED is recommended for a wide range of applications, particularly for workplaces with varying tightening parameters. There are opportunities for use in controller and control cabinet installations, in reworking stations, in series production or in repair facilities.

MINIMAT-ED Handheld Screwdriver – Advantages

- **Flexible:** The required torque can be set directly on the screwdriver by the push of a button.
- **Economical:** Attractive purchase price and compact size due to the fully integrated controller.

Ergonomic:

- End value displayed on the screwdriver
- Adjustable search run
- Programming using tablet/smartphone via ComCenter ED
- Suspension hanger for balancer hookup
- Ergonomic design
- Process reliable:
 - Torque precision
 - Status display by LED lights red/green
 - Integrated diagnostics

- Trigger-start or push-to-start
- Speed for each step is adjustable
- Integrated quick change chuck for easy bit/socket exchange
- Flexible power cable
- Password protected against unauthorized changes to the preset parameter
- ESD-safe

Robust:

As robust as all DEPRAG MINIMAT screwdriver series: absolutely reliable and renowned for durability. The brushless drive enables high performance with low maintenance requirements.

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

*) under suitable process conditions

ComCenter ED

The ComCenter ED enables user-friendly parameterisation of screwdriving programs using the web interface. The integrated input/output port can now also be used to select MINIMAT-ED screwdriving programs. In addition, an external start release of the screwdriver is available. The main advantage: If this function is activated, the handheld screwdriver can be used in combination with other products or a higher-level PLC.

This value-for-money option presents attractive opportunities. One example is combination with a position control stand (PKS). Only when the screwdriver has reached the right position is the correct screwdriving program selected and the start approval given.

Furthermore, there is the option of use in applications where sensors are used for supervision, such as in the detection of components, pick-and-place procedures or the use of a toolbox.

Your advantages:

- flexible
- Iow cost solution
- for varying tightening parameters
- upgraded communication

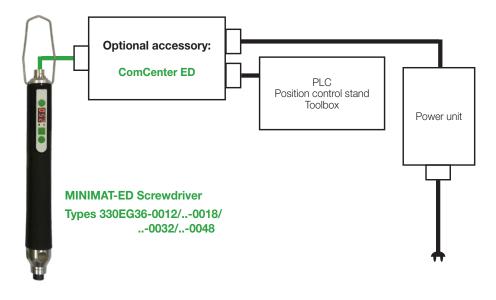
Important note:

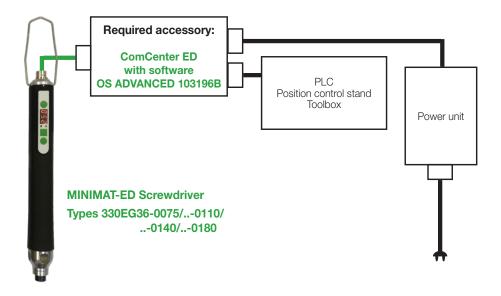
A ComCenter ED with OS ADVANCED software (material no. 103196B) is mandatory for screwdriver types



- Low noise level

System structure and components





It is necessary to use a torque support (e.g. stand, handgrip) for torque: over 4 Nm for straight design and over 10 Nm for pistol grip. Suitable torque supports can be found in our brochure D3345E.

System Components

MINIMAT-ED Screwdriver Straight handle design, size 36	Type Part no.	330EG36-0012 440000A	330EG36-0018 440000B	330EG36-0032 440000E	330EG36-0048 440000C
Torque min.	Nm / in.lbs	0.24 / 2.1	0.36 / 3.2	0.64 / 5.66	1.0 / 8.85
Torque max.	Nm / in.lbs	1.2 / 10.6	1.8 / 15.9	3.2 / 28.3	4.8 / 42.5
Speed	rpm	1500	1500	1200	900
Diameter	mm / in.	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4
Length	mm / in.	290 / 11.3	290/11.3	290 / 11.3	290 / 11.3
Weight	kg / lbs.	0.75 / 1.65	0.75 / 1.65	0.75 / 1.65	0.75 / 1.65
Noise level	dB(A)	63	63	65	65
Internal hex drive DIN ISO 1173		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")
Required accessories					
Motor cable length 2 m/6.6 ft. Motor cable length 5 m/16.5 ft. Motor cable length 8 m/26.4 ft. Motor cable length 10 m/33 ft.	Part no. Part no. Part no. Part no.		1 1	51515A 51515B 51515C 51515D	
Power supply cable (EU) length 2 m/6.6 ft. Power supply cable (USA) length 2 m/6.6 ft. Power supply cable (UK) length 2 m/6.6 ft. Power supply cable (China) length 2.5 m/8.25 f Power supply cable (Brazil) length 1.8 m/5.94 ft		833790 833791 833792 832927 207388			
Power unit	Part no.	126422A			
Optional accessories					
Spring sleeve cpl.	Part no.		3	64672A	
Spring sleeve cpl., with vacuum connection (in connection with finder, see leaflet: Inserting tools D3320E)	Part no.		3	64672C	
Screwdriver adaption	Part no.		1	18246B	
ComCenter ED with software OS BASIC	Part no.	103196A			
ComCenter ED with software OS ADVANCED	Part no.		1	03196B	

Optional additional software for the ComCenter Suitable for the screwdriver types	ED	with software OS BASIC 103196A / OS ADVANCED 103196B 330EG36-0012/0018/0032/0048		
Upgrade to software OS ADVANCED activation key	Part no.	160491		
DEPRAG Friction Value Process activation key	Part no.	201820 (only in combination with OS ADVANCED software)		
DEPRAG Operator Guidance activation key	Part no.	146536		
DEPRAG Cockpit Advanced 1/5/10/20/50 licenses	Part no.	145795/145796/145797/145798/145799		
DEPRAG Cockpit Professional 1/5/10/20/50 licenses	Part no.	145440/142967/142968/142978/142979		
DEPRAG Cockpit Cloud (integrated in myDEPRAG). Use the advantages of Cockpit Cloud now exclusively via myDEPRAG.				

Our software solutions undergo continuous improvements. We recommend that you regularly update your software. In this way you will always receive the most up-to-date security updates, upgraded features and drivers. With the most current version of the software you can be sure that your device is optimally prepared for Industry 4.0.

System Components

MINIMAT-ED Screwdriver Straight handle design, size 36	Type Part no.	330EG36-0075 440000F	330EG36-0110 440000G	330EG36-0140 440000H	330EG36-0180 440000I
Torque min.	Nm / in.lbs	1.5 / 13.3	2.2 / 19.5	2.8 / 24.8	3.6 / 31.9
Torque max.	Nm / in.lbs	7.5 / 66.4	11 / 97.35	14 / 123.9	18 / 159.3
Speed	rpm	560	390	290	220
Diameter	mm / in.	36 / 1.4	36 / 1.4	36 / 1.4	36 / 1.4
Length	mm / in.	327 / 12.75	327 / 12.75	327 / 12.75	327 / 12.75
Weight	kg / lbs.	0.95 / 2.1	0.95 / 2.1	0.95 / 2.1	0.95 / 2.1
Noise level	dB(A)	62	62	62	62
Internal hex drive DIN ISO 1173		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")
Required accessories					
Motor cable length 2 m/6.6 ft. Motor cable length 5 m/16.5 ft. Motor cable length 8 m/26.4 ft. Motor cable length 10 m/33 ft.	Part no. Part no. Part no. Part no.	151515A 151515B 151515C 151515D			
Power supply cable (EU) length 2 m/6.6 ft. alternatives Power supply cable (USA) length 2 m/6.6 ft. Power supply cable (UK) length 2 m/6.6 ft. Power supply cable (China) length 2.5 m/8.25 ft Power supply cable (Brazil) length 1.8 m/5.94 ft		833790 833791 833792 832927 207388			
Power unit	Part no.	126422A			
ComCenter ED with software OS ADVANCED	Part no.	103196B			
Optional accessories					
Spring sleeve cpl.	Part no.		364	672A	
Spring sleeve cpl., with vacuum connection (in connection with finder, see leaflet: Inserting tools D3320E)	Part no.		364	.672C	
Screwdriver adaption	Part no.		118	8246B	

Optional additional software for the ComCenter Suitable for the screwdriver types	ED	with software OS ADVANCED 103196B 330EG36-0075/0110/0140/0180	
DEPRAG Friction Value Process activation key	Part no.	201820	
DEPRAG Operator Guidance activation key	Part no.	146536	
DEPRAG Cockpit Advanced 1/5/10/20/50 licenses	Part no.	145795/145796/145797/145798/145799	
DEPRAG Cockpit Professional 1/5/10/20/50 licenses	Part no.	145440/142967/142968/142978/142979	
DEPRAG Cocknit Cloud (integrated in myDEPRAG). Use the advantages of Cocknit Cloud now exclusively via myDEPRAG			

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System Components

Optional equipment		
Toolbox Technical data: Tool holders Tool size Voltage / Amperage Input/output interface Start signal Dimensions (W x H x D) Weight	Type Part no. mm/in. V / mA mm/in. kg/lbs.	TB 7 398097B 7 up to Ø 24/0.9 (AF 19) DC 24 / 100 SUB-D 15-pin connector 4-pin connector 225 x 50 x 120 / 8.8 x 1.9 x 4.7 1.2/2.6
Verbindungskabel ComCenter ED - Toolbox	Part no.	122840A (length 5 m/16.5 ft.)
Connection cable ComCenter ED - PKS	Part no.	101289D
Connection cable ComCenter ED - PFC100	Part no.	952227A
Router	Part no.	127545A The router enables direct WiFi access to the ComCenter ED for use as an Access Point. It is operated via the Ethernet port (RJ45) of the ComCenter ED. This means that settings can easily be changed or screwdriving pro- grams created or adjusted at any time with a smartphone, tablet or other mobile device.

Additional accessories for integration in the manual work station can be found in our brochure D3345E. For more details to the software products, please see brochure D3900E.

ComCenter ED - comparison of the software

Characteristics	ComCenter ED in combination with standard software OS BASIC	ComCenter ED in combination with software OS ADVANCED
Maximum number of screwdriving programs	5 tightening programs / 5 loosening programs	16
Maximum number of program steps	3	25
Tightening to torque	\checkmark	
Tightening to torque with angle control	×	
Tightening to angle	$\overline{\checkmark}$	\checkmark
Tightening to angle with torque control	×	
Loosening to angle	$\overline{\checkmark}$	
DEPRAG Friction Value Process	×	
Search run / save values / waiting time	×	
Statistics	×	
Automatic speed reduction	×	
Documentation	7 days production	7 days production
DEPRAG Operator Guidance	×	
Communication interfaces	I/O interface	I/O interface and http interface
Category B (VDI/VDE 2862)	$\overline{\checkmark}$	\checkmark
Category C (VDI/VDE 2862)	\checkmark	\checkmark

Please note: In combination with OS ADVANCED, the MINIMAT–ED screwdriver requires display version 2.0. The display can be upgraded in house at DEPRAG.

Please send the MINIMAT-ED screwdriver to Amberg for the update.

