

DEPRAG

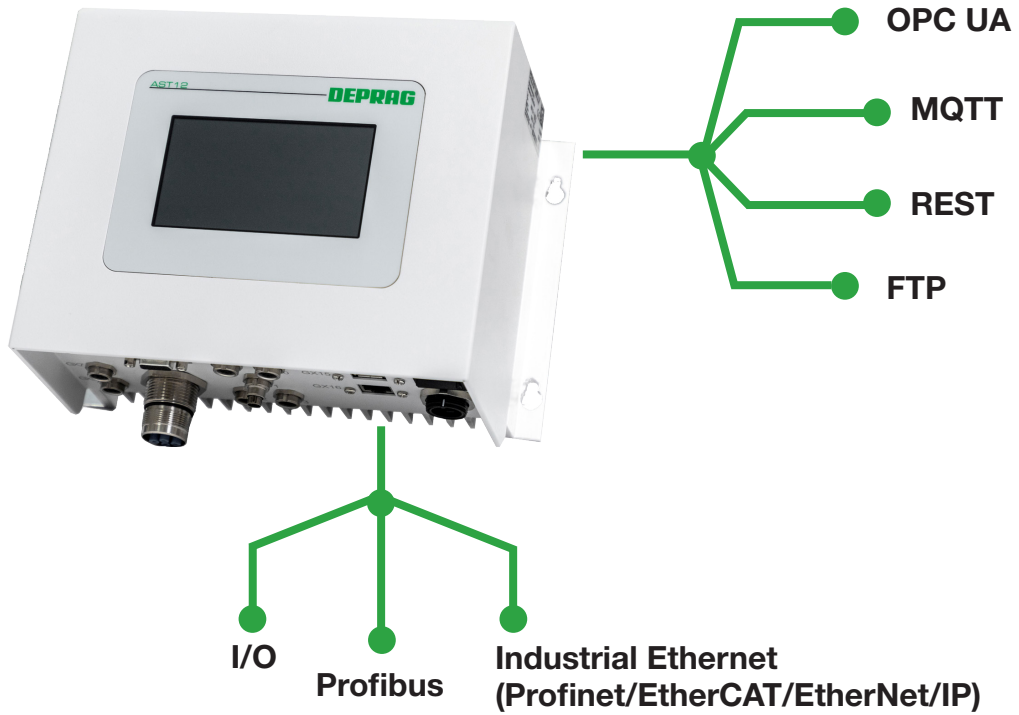
machines unlimited

SCREWDRIVING SYSTEM DEPRAG Plus



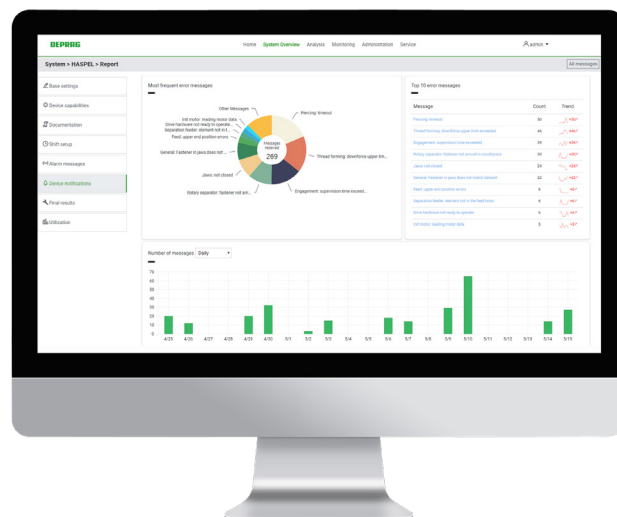
+ CONNECTIVITY

Interfaces



DEPRAG Cockpit / DEPRAG Cockpit Cloud

Maintain an overview of your screwdriving systems with the DEPRAG Cockpit. The software enables supervision and analysis of assembly tasks (condition monitoring) and provides analysis tools for continuous process optimization, recognition of trends and predictive maintenance. The DEPRAG Cockpit can even be used to supervise and analyse screwdriving systems from other manufacturers.



DEPRAG Cockpit / DEPRAG Cockpit Cloud

As part of the screwdriving system DEPRAG Plus you also receive in the DEPRAG Cockpit Basic **your central user interface** in responsive design

- for parameterisation

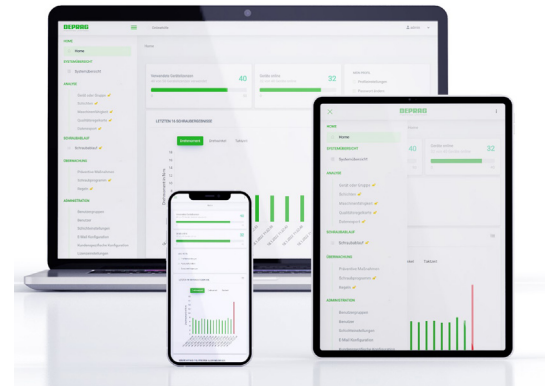
- administration of global settings
- creation and organisation of screwdriving programs
- activation of additional features under DEPRAG Apps
- creation of back-ups and logic functions

- for visualisation

- processing data acquisition for single user

- for documentation

- automatic processing data acquisition of end values and screwdriving curves



Organizer

Organize screwdriving programs > create program groups:

- Simple structuring of screwdriving programs according to component version or product
- Fast change of screwdriving programs for different product versions > saves assembly time
- Easy retrieval of screwdriving programs relating to a specific product

Back-up function

Convenient back-up of system settings, screwdriving parameters, screwdriving results and screwdriving curves

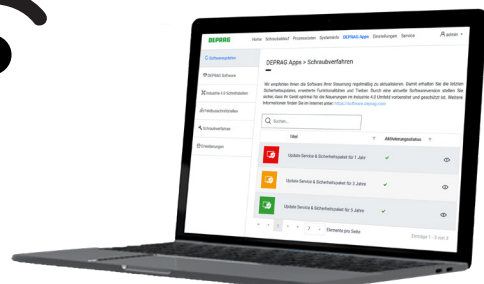
We now have the software packages Professional and Advanced available to augment the software package Cockpit Basic.

Further information can be found in our catalog D3900 Software solutions and updates.

Please note: When using the DEPRAG Cockpit Advanced or DEPRAG Cockpit Professional variant in combination with the AST12 sequence controller, the I4.0 interface (article no. 142962) is mandatory and must be ordered separately.

WLAN Client

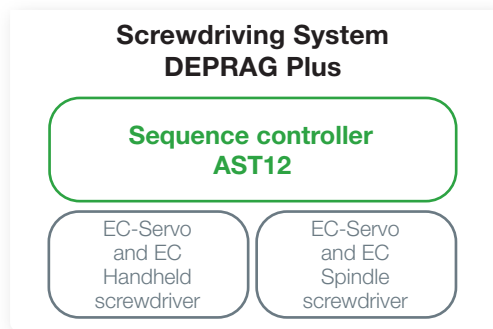
- Wireless connection
- Perfect in restricted areas
- External wireless parameterization
- Secure connection > https



+ FLEXIBILITY

Screwdriving System DEPRAG Plus: ONE system for DEPRAG handheld and spindle screwdrivers transducerized (EC-Servo) or motor current (EC)

- Extremely versatile for changing assembly requirements
- Reduces training needs
- Intuitive operator guidance with the DEPRAG Cockpit



DEPRAG Apps

Software solutions

- DEPRAG Cockpit Advanced and Professional
- DEPRAG Graph Viewer
- DEPRAG Operator Guidance
- Visualisation of the process
- Safety & Change tracking
- DEPRAG Universal Robots Link
- TIA Link | TwinCAT Link | Allen-Bradley Link
- Process Control
- DEPRAG GraphViewer Cloud
- DEPRAG Cockpit Cloud

Industry 4.0 interfaces

- OPC UA, MQTT, REST, FTP

Fieldbus interfaces

- EtherNet/IP, EtherCAT, Profinet, Profibus

Screwdriving procedures

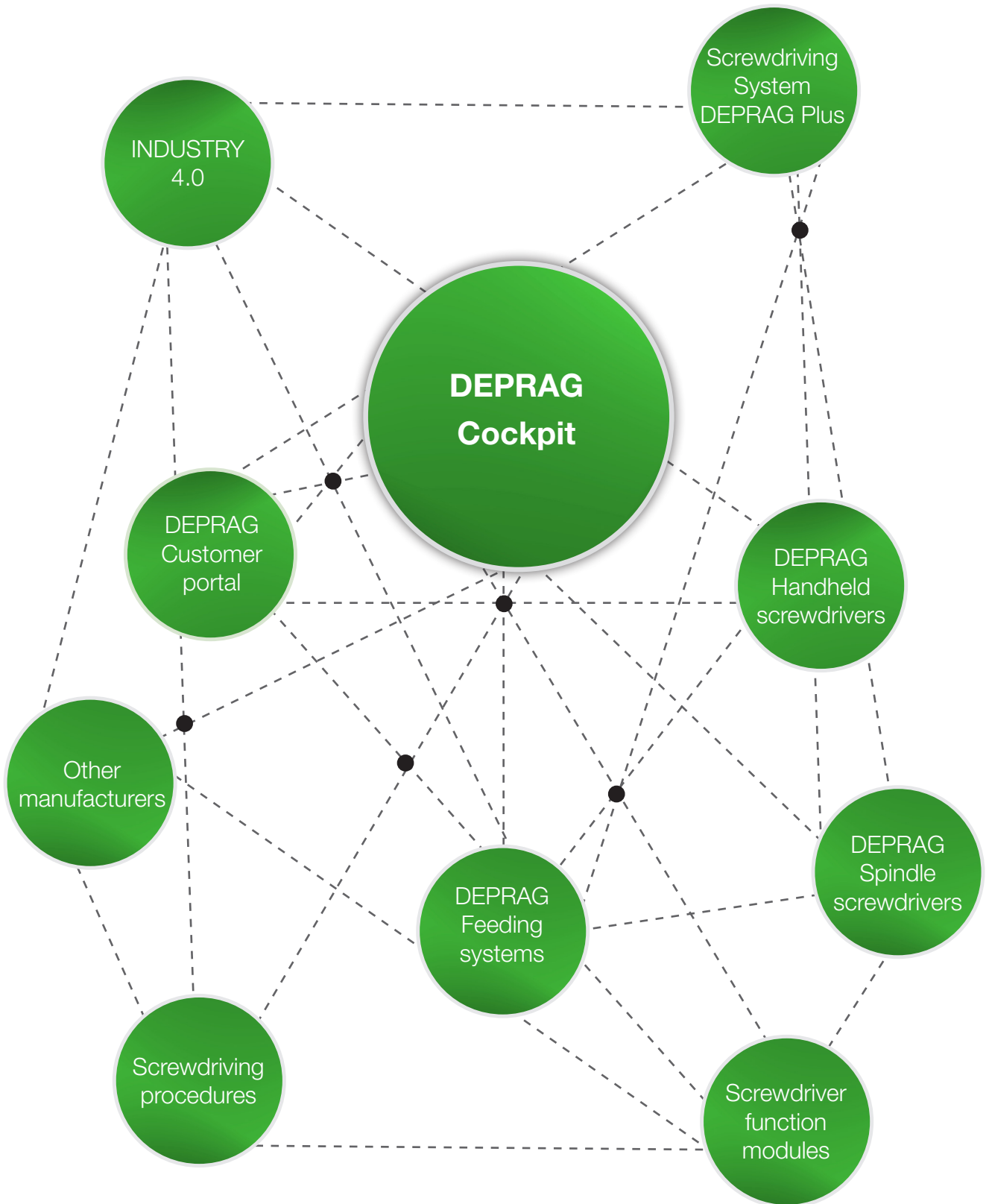
- Torque controlled
- Angle controlled
- Clamp Force Control (seating point detection)
- Friction procedure (friction dependent torque assembly)

Software updates

- Update service and safety package
- one-time
- annual licence

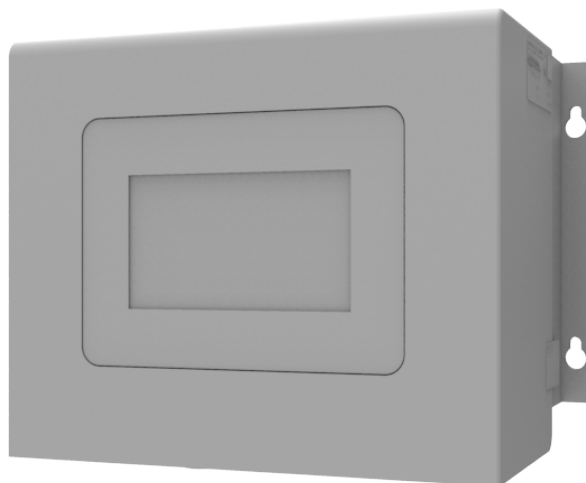


Fit for the future ...
with the DEPRAG Cockpit Platform



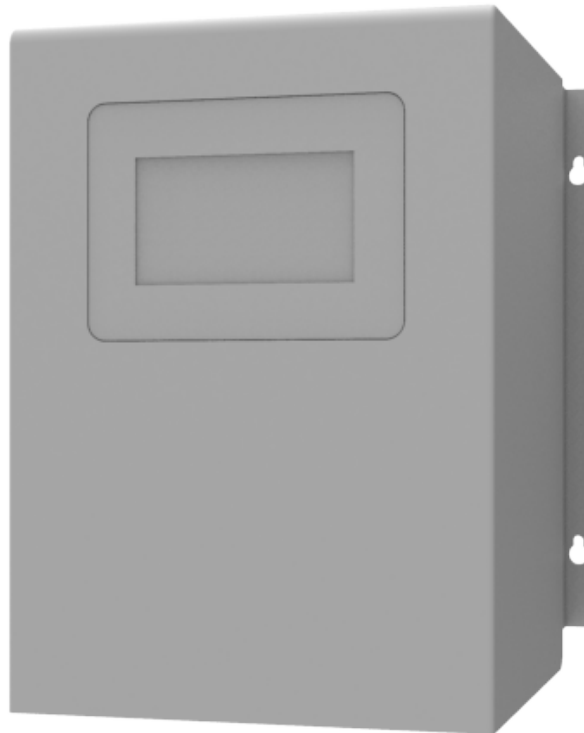
TECHNICAL DATA SEQUENCE CONTROLLER

Type Part no.	AST12-1 115001A	AST12-1 PB 115001B	AST12-1 IE 115001C
Software DEPRAG Cockpit Basic is already pre-installed			
Torque range from to	Nm	0.01 - 6	
Max. number of programs saved		1000	
Max. number of screwdriving curves saved (graphic data)		1000	
Max. number of screwdriving results saved		last 7 days complete (> 80.000 in 24h)	
Interfaces	EA = inputs/outputs	EA = inputs/outputs PB = Profibus	EA = inputs/outputs IE = Profinet/EtherCAT/EtherNet/IP
Display		Graphic display with touch feature (capacitive)	
Industry 4.0 interfaces		REST OPC UA MQTT FTP	
Power connection	V / Hz	85-264 / 50-60	
Protection class		IP40	
Dimensions (W x H x D)	mm/in.	232 x 175 x 138 / 9.05 x 6.8 x 5.38	
Weight	kg/lbs	3.8 / 8.36	
Required accessories:			
Power cable EU US UK Brazil China	Part no.	833790 833791 833792 207388 832927	
Optional accessories:			
Base stand	Part no.	120234A	
WLAN Client	Part no.	146766	
Part sensor capacitive	Part no.	354841G	
Scanner	Part no.	914783A	
Connection cable AST12 to scanner	Part no.	128136A	
Connection cable AST12 to feeder	Part no.	125493A	



TECHNICAL DATA SEQUENCE CONTROLLER

Type	AST12-2	AST12-2 PB	AST12-2 IE
Part no.	115002A	115002B	115002C
Type	AST12-3	AST12-3 PB	AST12-3 IE
Part no.	115003A	115003B	115003C
Software DEPRAG Cockpit Basic is already pre-installed			
Torque range from to (AST12-2)	Nm	0.7 - 25	
Torque range from to (AST12-3)	Nm	1 - 70	
Max. number of programs saved		1000	
Max. number of screwdriving curves saved (graphic data)		1000	
Max. number of screwdriving results saved		last 7 days complete (> 80.000 in 24h)	
Interfaces	EA = inputs/outputs	EA = inputs/outputs PB = Profibus	EA = inputs/outputs IE = Profinet/EtherCAT/EtherNet/IP
Display		Graphic display with touch feature (capacitive)	
Industry 4.0 interfaces		REST OPC UA MQTT FTP	
Power connection	V / Hz	100-240 / 50-60	
Protection class		IP54	
Dimensions (W x H x D)	mm/in.	232 x 295 x 235.5 / 9.05 x 11.6 x 9.27	
Weight AST12-2 AST12-3	kg/lbs	9.3/20.46 11.3/24.86	
Required accessories:			
Power cable EU US China Brazil	Part no.	385443A 385443B 385443C 385443D	
Optional accessories:			
Scanner	Part no.	914783A	
Connection cable AST12 to scanner	Part no.	128136A	
Base stand	Part no.	300085A	
WLAN Client	Part no.	146766	
Part sensor capacitive	Part no.	354841G	
Connection cable AST12 to feeder	Part no.	125493A	



OVERVIEW HANDHELD SCREWDRIVERS for Screwdriving System DEPRAG Plus

Torque range (Nm)	Speed range (rpm)	Measuring principle (shut-off)	Type	Technical data see page
0.01 - 0.05	120 - 1500	Motor current	321EG(A/T)22-00005	10
0.03 - 0.12	120 - 1500	Motor current	321EG(A/T)22-00012	10
0.05 - 0.25	100 - 2000	Motor current	321EG(A/T/Z)22-00025	10
0.1 - 0.5	80 - 1600	Motor current	321EG(A/T/Z)22-00050	10
0.15 - 1	50 - 1000	Motor current	321EG(A/T)27-0010, 321EPT27-0010	11, 16
0.15 - 1	50 - 1000	Transducerized	326EG(A/T)27-0010	12
0.15 - 1	50 - 1000	Transducerized	326EPT27-0010	17
0.16 - 0.8	60 - 1200	Motor current	321EG(A/T/Z)22-00080	10
0.18 - 1.2	50 - 900	Motor current	321EG(A/T/Z)22-00120	10
0.4 - 1.8	100 - 1000	Motor current	321EG(A/T/Z)27-0018	11
0.4 - 1.8	100 - 1000	Transducerized	326EG(A/T/Z)27-0018	12
0.4 - 2	30 - 550	Motor current	321EG(A/T/Z)22-00200	10
0.4 - 2.2	80 - 800	Motor current	321EWT27-0022-(E6/E10/F6/D6/DM6)	20
0.4 - 2.2	80 - 800	Transducerized	326EWT27-0022-(E6/E10/F6/D6/DM6)	20
0.4 - 2.4	50 - 700	Motor current	321EG(A/T/Z)27-0024, 321EPT27-0024	11, 16
0.4 - 2.4	50 - 700	Transducerized	326EG(A/T/Z)27-0024	12
0.4 - 2.4	50 - 700	Transducerized	326EPT27-0024	17
0.7 - 3.5	50 - 500	Motor current	321EWT27-0035-(E6/E10/F6/D6/DM6)	20
0.7 - 3.5	50 - 500	Transducerized	326EWT27-0035-(E6/E10/F6/D6/DM6)	20
0.7 - 4.2	40 - 400	Motor current	321EG(A/T/Z)27-0042, 321EPT27-0042	11, 16
0.7 - 4.2	40 - 400	Transducerized	326EG(A/T/Z)27-0042	12
0.7 - 4.2	40 - 400	Transducerized	326EPT27-0042	17
0.7 - 4.2	40 - 750	Motor current	321EG(A/T/Z)27-0042-HP, 321EPT27-0042-HP	11, 16
0.7 - 4.2	40 - 750	Transducerized	326EG(A/T/Z)27-0042-HP	12
0.7 - 4.2	40 - 750	Transducerized	326EPT27-0042-HP	17
0.8 - 4	100 - 1000	Motor current	321EG(A/T/Z)36-0040, 321EPT36-0040	13, 18
1 - 6	30 - 300	Motor current	321EWT27-0060-(E6/E10/F6/D6/DM6)	19
1 - 6	30 - 300	Transducerized	326EWT27-0060-(E6/E10/F6/D6/DM6)	20
1 - 6	50 - 550	Motor current	321EWT27-0060-HP-F6	19
1 - 6	50 - 550	Transducerized	326EWT27-0060-HP-F6	20
1 - 6	70 - 740	Motor current	321EG(A/T/Z)36-0060, 321EPT36-0060	13, 18
1 - 6	75 - 750	Motor current	321EWT36-0060-(E6/E10/F6/D6/DM6)	21
1.5 - 8	30 - 450	Motor current	321EPT27-0080-HP	16
1.5 - 8	30 - 450	Transducerized	326EPT27-0080-HP	17
1.5 - 15	40 - 900	Transducerized	327EG(A/T)36-0150	15
2 - 9	50 - 540	Motor current	321EG(A/T/Z)36-0090	13
2 - 12	35 - 380	Motor current	321EG(A/T/Z)36-0120, 321EPT36-0120	13, 18
2 - 12	40 - 400	Motor current	321EWT36-0120-(E6/E10/F6/D6/DM6)	21
2.4 - 12	50 - 1000	Motor current	322EG(A/T)36-0120	14
3 - 18	20 - 240	Motor current	321EWT36-0180-E10	21
3 - 18	25 - 280	Motor current	321EG(A/T/Z)36-0180, 321EPT36-0180	13, 18
4 - 15	50 - 900	Transducerized	327EWT36-0150-E10	22
4 - 20	35 - 700	Motor current	322EG(A/T)-36-0200	14
4 - 20	35 - 700	Transducerized	327EG(A/T)36-0200	15
5 - 25	15 - 180	Motor current	321EWT36-0250-E10	21
5 - 25	20 - 220	Motor current	321EG(A/T)36-0250	13
6 - 20	40 - 700	Motor current	322EWT36-0200-E10	22
6 - 20	40 - 700	Transducerized	327EWT36-0200-E10	22
6.4 - 32	25 - 450	Motor current	322EG(A/T)36-0320	14
6.4 - 32	25 - 450	Transducerized	327EG(A/T)36-0320	15
10 - 12	60 - 1300	Transducerized	327EG(A/T)36-0100	15
10 - 30	30 - 450	Motor current	322EWT36-0300-E10	22
10 - 30	30 - 450	Transducerized	327EWT36-0300-E10	22
10 - 50	20 - 290	Motor current	322EG(A/T)36-0500	14
10 - 50	20 - 290	Transducerized	327EG(A/T)36-0500	15
15 - 50	20 - 280	Motor current	322EWT36-0500-E12.5	22
20 - 70	20 - 170	Motor current	322EWT36-0700-E12.5	22

OVERVIEW SPINDLE SCREWDRIVERS for Screwdriving System DEPRAG Plus

Torque range (Nm)	Speed range (rpm)	Measuring principle (shut-off)	Type	Technical data see page
0.03 - 0.2	150 - 1500	Motor current	321E19-0002	23
0.08 - 0.5	60 - 1200	Motor current	321E19-0005	23
0.15 - 0.8	100 - 1000	Motor current	321E19-0008	23
0.15 - 1	50 - 1000	Motor current	321E27-0010	24
0.15 - 1	50 - 1000	Transducerized	326E27-0010	25
0.18 - 1.2	50 - 900	Motor current	321E22-00120	24
0.4 - 1.8	100 - 1000	Motor current	321E27-0018	24
0.4 - 1.8	100 - 1000	Transducerized	326E27-0018	25
0.4 - 2	30 - 550	Motor current	321E22-00200	24
0.4 - 2.4	50 - 700	Motor current	321E27-0024	24
0.4 - 2.4	50 - 700	Transducerized	326E27-0024	25
0.7 - 4.2	40 - 400	Motor current	321E27-0042	24
0.7 - 4.2	40 - 400	Transducerized	326E27-0042	25
0.7 - 4.2	40 - 750	Motor current	321E27-0042-HP	24
0.7 - 4.2	40 - 750	Transducerized	326E27-0042-HP	25
0.8 - 4	100 - 1000	Motor current	321E36-0040	26
1 - 6	70 - 740	Motor current	321E36-0060	26
1 - 10	60 - 1300	Transducerized	327E36-0100	27
1.5 - 8	30 - 450	Motor current	321E27-0080-HP	24
1.5 - 8	30 - 450	Transducerized	326E27-0080-HP	25
1.5 - 15	40 - 900	Transducerized	327E36-0150	27
2 - 9	50 - 540	Motor current	321E36-0090	26
2 - 12	35 - 380	Motor current	321E36-0120	26
2.4 - 12	50 - 1000	Motor current	322E36-0120	28
3 - 18	25 - 280	Motor current	321E36-0180	26
4 - 20	35 - 700	Motor current	322E36-0200	28
4 - 20	5 - 700	Transducerized	327E36-0200	28
5 - 25	20 - 220	Motor current	321E36-0250	26
6 - 20	40 - 700	Motor current	322EW36-0200-F10	29
6 - 20	40 - 700	Transducerized	327EW36-0200-F10	29
6.4 - 32	25 - 450	Motor current	322E36-0320	28
6.4 - 32	25 - 450	Transducerized	327E36-0320	28
10 - 30	30 - 450	Motor current	322EW36-0300-F10	29
10 - 30	30 - 450	Transducerized	327EW36-0300-F10	29
10 - 50	20 - 290	Motor current	322E36-0500	28
10 - 50	20 - 290	Transducerized	327E36-0500	28
15 - 50	20 - 280	Motor current	322EW36-0500-F12.5	29
20 - 70	20 - 170	Motor current	322EW36-0700-F12.5	29

Type code handheld screwdrivers

321/322/326/327**EGA**


G = straight design **A** = push-to-start
P = pistol grip **T** = lever Istart
W = angle head **Z** = in combination with feeder

Type code spindle screwdrivers

321/322/326/327**EW**


E = straight design
EW = angle head

TECHNICAL DATA EC HANDHELD SCREWDRIVER, straight design, size 22

MINIMAT-EC Handheld screwdriver Straight design, push-to-start		Type	321EGA22-00005	321EGA22-00012	321EGA22-00025	321EGA22-00050	321EGA22-00080
Part no.		503031A	503031B	503031C	503031D	503031E	
MINIMAT-EC Handheld screwdriver Straight design, lever start		Type	321EGT22-00005	321EGT22-00012	321EGT22-00025	321EGT22-00050	321EGT22-00080
Part no.		503032A	503032B	503032C	503032D	503032E	
MINIMAT-EC Handheld screwdriver In combination with feeder		Type	-	-	321EGZ22-00025	321EGZ22-00050	321EGZ22-00080
Part no.			-	-	503033C	503033D	503033E
Torque tolerance for Cmk ≥ 1.67			±10%				
Torque range from to	Nm	0.01 - 0.05	0.03 - 0.12	0.05 - 0.25	0.1 - 0.5	0.16 - 0.8	
	in.lbs	0.09 - 0.44	0.27 - 1.06	0.44 - 2.2	0.89 - 4.43	1.42 - 7.08	
Speed range from to	rpm	120 - 1500	120 - 1500	100 - 2000	80 - 1600	60 - 1200	
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	
Length	mm/in.	223 / 8.7	223 / 8.7	223 / 8.7	223 / 8.7	223 / 8.7	
Weight	kg/lbs	0.6 / 1.32	0.6 / 1.32	0.6 / 1.32	0.6 / 1.32	0.6 / 1.32	
Noise level	dB (A)	60	60	60	60	60	
Drive with quick change chuck		4 mm half moon	4 mm half moon	4 mm half moon	4 mm half moon	4 mm half moon	
Connection parts with inserting end							
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE					
Optional accessories:							
Spring sleeve cpl., without suction			4032802A *)				
Spring sleeve cpl., with suction			4032802B *)				
Support ring			389775C *)				
Motor cable extension			see page 31				

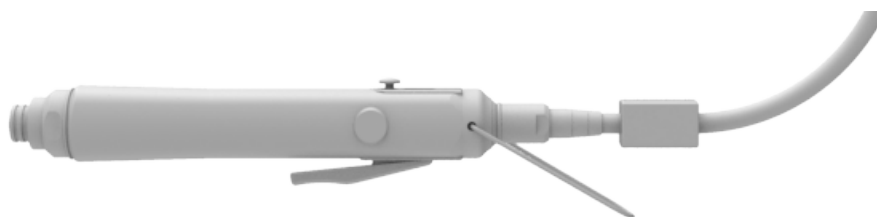
*) not suitable for screwdriver in combination with feeder

The motor cable, 2.5-meters long, is solidly connected to the screwdriver


MINIMAT-EC Handheld screwdriver Straight design, push-to-start		Type	321EGA22-00120	321EGA22-00200	
Part no.		503031F	503031G		
MINIMAT-EC Handheld screwdriver Straight design, lever start		Type	321EGT22-00120	321EGT22-00200	
Part no.		503032F	503032G		
MINIMAT-EC Handheld screwdriver In combination with feeder		Type	321EGZ22-00120	321EGZ22-00200	
Part no.			503033F	503033G	
Torque tolerance for Cmk ≥ 1.67			±10%		
Torque range from to	Nm/in.lbs	0.18 - 1.2 / 1.6 - 10.6	0.4 - 2 / 3.5 - 17.7		
Speed range from to	rpm	50 - 900	30 - 550		
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2		
Length	mm/in.	215 / 8.4	215 / 8.4		
Weight	kg/lbs	0.6 / 1.32	0.6 / 1.32		
Noise level	dB (A)	60	60		
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")		
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")		
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			
Optional accessories:					
Spring sleeve cpl., without suction			364672A *)		
Spring sleeve cpl., with suction			364672C *)		
Support ring			389775C *)		
Motor cable extension			see page 31		

*) not suitable for screwdriver in combination with feeder

The motor cable, 2.5-meters long, is solidly connected to the screwdriver




TECHNICAL DATA EC HANDHELD SCREWDRIVER, straight design, size 27

							High Performance
MINIMAT-EC Handheld screwdriver Straight design, push-to-start		Type Part no.	321EGA27-0010 503042A	321EGA27-0018 503042B	321EGA27-0024 503042C	321EGA27-0042 503042D	321EGA27-0042-HP 503042E
MINIMAT-EC Handheld screwdriver Straight design, lever start		Type Part no.	321EGT27-0010 503043A	321EGT27-0018 503043B	321EGT27-0024 503043C	321EGT27-0042 503043D	321EGT27-0042-HP 503043E
MINIMAT-EC Handheld screwdriver In combination with feeder		Type Part no.	- -	321EGZ27-0018 503044B	321EGZ27-0024 503044C	321EGZ27-0042 503044D	321EGZ27-0042-HP 503044E
Torque tolerance for Cmk ≥ 1.67		±10%					
Torque range from to	Nm/in.lbs	0.15-1/1.33-8.85	0.4-1.8/3.54-15.9	0.4-2.4/3.54-21.2	0.7-4.2/6.2-37.2	0.7-4.2/6.2-37.2	
Speed range from to	rpm	50 - 1000	100 - 1000	50 - 700	40 - 400	40 - 750	
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	
Length	mm/in.	238 / 9.3	238 / 9.3	238 / 9.3	251 / 9.8	238 / 9.3	
Weight	kg/lbs	0.58 / 1.3	0.58 / 1.3	0.58 / 1.3	0.63 / 1.4	0.58 / 1.3	
Noise level	dB (A)	60	60	60	60	60	
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE					AST12-2 AST12-2 PB AST12-2 IE
Required accessories:							
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E					
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E					
Optional accessories:							
Spring sleeve cpl., without suction							364672A *)
Spring sleeve cpl., with suction							364672C *)
Support ring							389775C *)

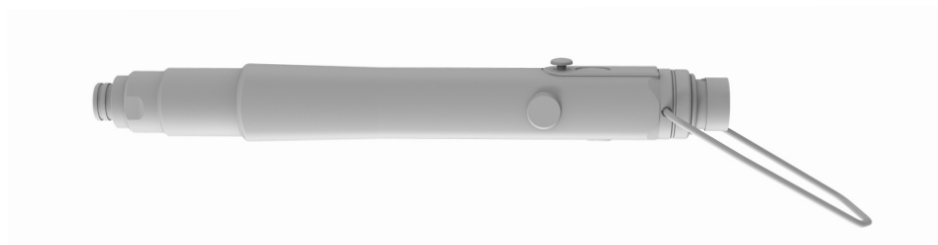
*) not suitable for screwdriver in combination with feeder




TECHNICAL DATA EC-SERVO HANDHELD SCREWDRIVER, straight design, size 27

						High Performance
MINIMAT-EC-Servo Handheld screwdriver Straight design, push-to-start	 Type Part no.	326EGA27-0010 505042A	326EGA27-0018 505042B	326EGA27-0024 505042C	326EGA27-0042 505042D	326EGA27-0042-HP 505042E
MINIMAT-EC-Servo Handheld screwdriver Straight design, lever start	Type Part no.	326EGT27-0010 505043A	326EGT27-0018 505043B	326EGT27-0024 505043C	326EGT27-0042 505043D	326EGT27-0042-HP 505043E
MINIMAT-EC-Servo Handheld screwdriver In combination with feeder	Type Part no.	- -	326EGZ27-0018 505044B	326EGZ27-0024 505044C	326EGZ27-0042 505044D	326EGZ27-0042-HP 505044E
Torque tolerance for Cmk ≥ 1.67		±7%				
Torque range from to	Nm/in.lbs	0.15-1/1.33-8.85	0.4-1.8/3.54-15.9	0.4-2.4/3.54-21.2	0.7-4.2/6.2-37.2	0.7-4.2/6.2-37.2
Speed range from to	rpm	50 - 1000	100 - 1000	50 - 700	40 - 400	40 - 750
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2
Length 326EGA/326EGT	mm/in.	261 / 10.18	261 / 10.18	261 / 10.18	273 / 10.65	261 / 10.18
Length 326EGZ	mm/in	-	262 / 10.22	262 / 10.22	274 / 10.69	262 / 10.22
Weight 326EGA/326EGT	kg/lbs	0.63 / 1.4	0.63 / 1.4	0.63 / 1.4	0.68 / 1.5	0.63 / 1.4
Weight 326EGZ	kg/lbs	-	0.58 / 1.3	0.58 / 1.3	0.63 / 1.4	0.58 / 1.3
Noise level	dB (A)	60	60	60	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE				AST12-2 AST12-2 PB AST12-2 IE
Required accessories:						
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E				
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E				
Optional accessories:						
Spring sleeve cpl., without suction		364672A *)				
Spring sleeve cpl., with suction		364672C *)				
Support ring		389775C *)				

*) not suitable for screwdriver in combination with feeder




TECHNICAL DATA EC HANDHELD SCREWDRIVER, straight design, size 36

MINIMAT-EC Handheld screwdriver Straight design, push-to-start		Type Part no.	321EGA36-0040 503061A	321EGA36-0060 503061B	321EGA36-0090 503061C	321EGA36-0120 503061D	321EGA36-0180 503061E	321EGA36-0250 503061F
MINIMAT-EC Handheld screwdriver Straight design, lever start		Type Part no.	321EGT36-0040 503062A	321EGT36-0060 503062B	321EGT36-0090 503062C	321EGT36-0120 503062D	321EGT36-0180 503062E	321EGT36-0250 503062F
MINIMAT-EC Handheld screwdriver In combination with feeder		Type Part no.	321EGZ36-0040 503069A	321EGZ36-0060 503069B	321EGZ36-0090 503069C	321EGZ36-0120 503069D	321EGZ36-0180 503069E	- -
Torque tolerance for Cmk ≥ 1.67			±10%					
Torque range from to	Nm in.lbs	0.8 - 4 7.08 - 35.4	1 - 6 8.85 - 53.1	2 - 9 17.7 - 79.65	2 - 12 17.7 - 106.2	3 - 18 26.55 - 159.3	5 - 25 44.25 - 221.25	
Speed range from to	rpm	100 - 1000	70 - 740	50 - 540	35 - 380	25 - 280	20 - 220	
Diameter	mm/in.	36.5/1.42	36.5/1.42	36.5/1.42	36.5/1.42	36.5/1.42	36.5/1.42	
Length	mm/in.	259/10.1	259/10.1	259/10.1	259/10.1	259/10.1	259/10.1	
Weight	kg/lbs	0.84/1.85	0.84/1.85	0.84/1.85	0.84/1.85	0.89/1.96	0.89/1.96	
Noise level	dB (A)	62	62	62	62	62	62	
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE						
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E						
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E						
Optional accessories: Spring sleeve cpl., without suction Spring sleeve cpl., with suction Support ring		364672A *) 364672C *) 389775C *)						

*) not suitable for screwdriver in combination with feeder




TECHNICAL DATA EC HANDHELD SCREWDRIVER, straight design, size 36

MINIMAT-EC Handheld screwdriver Straight design, push-to-start		Type Part no.	322EGA36-0120 504011A	322EGA36-0200 504011B	322EGA36-0320 504011C	322EGA36-0500 504011D
MINIMAT-EC Handheld screwdriver Straight design, lever start		Type Part no.	322EGT36-0120 504012A	322EGT36-0200 504012B	322EGT36-0320 504012C	322EGT36-0500 504012D
Torque tolerance for $C_{mk} \geq 1.67$			$\pm 10\%$			
Torque range from to	Nm in.lbs	2.4 - 12 21.24 - 106.2	4 - 20 35.4 - 177	6.4 - 32 56.64 - 283.2	10 - 50 88.5 - 442.5	
Speed range from to	rpm	50 - 1000	35 - 700	25 - 450	20 - 290	
Diameter D1/D2	mm in.	45/39 1.75/1.52	45/39 1.75/1.52	45/39 1.75/1.52	45/39 1.75/1.52	
Length	mm/in.	400/15.6	400/15.6	430/16.77	430/16.77	
Weight	kg/lbs	1.7 / 3.7	1.7 / 3.7	1.9 / 4.2	1.9 / 4.2	
Noise level	dB (A)	59	59	59	59	
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (1/4")	F6.3 (1/4")	F11.2 (7/16")	F11.2 (7/16")	
Connection parts with inserting end DIN ISO 1173		E6.3 (1/4")	E6.3 (1/4")	E11.2 (7/16")	E11.2 (7/16")	
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE				
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m		125496A 125496B 125496C 125496D				
Optional accessories: Spring sleeve cpl.. without suction Spring sleeve cpl.. with suction Support ring Hanging bracket		364672A 364672C 134139A 3275961				




TECHNICAL DATA EC-SERVO HANDHELD SCREWDRIVER, straight design, size 36

MINIMAT-EC-Servo Handheld screwdriver Straight design, push-to-start		Type	327EGA36-0100	327EGA36-0150	327EGA36-0200	327EGA36-0320	327EGA36-0500
		Part no.	506011B	506011C	506011D	506011E	506011F
MINIMAT-EC-Servo Handheld screwdriver Straight design, lever start		Type	327EGT36-0100	327EGT36-0150	327EGT36-0200	327EGT36-0320	327EGT36-0500
		Part no.	506012B	506012C	506012D	506012E	506012F
Torque tolerance for Cmk ≥ 1.67			±7%				
Torque range from to	Nm/in.lbs	1-10 / 8.85-88.5	1.5-15 / 13.3-132.75	4-20 / 35.4-177	6.4-32 / 56.6-283.2	10-50 / 88.5-442.5	
Speed range from to	rpm	60 - 1300	40 - 900	35 - 700	25 - 450	20 - 290	
Diameter	mm/in.	45/1.75	45/1.75	45/1.75	45/1.75	45/1.75	
Length	mm/in.	415/16.2	415/16.2	415/16.2	454/17.7	454/17.7	
Weight	kg/lbs	1.7/3.7	1.7/3.7	1.7/3.7	2/4.4	2/4.4	
Noise level	dB (A)	62	62	62	62	62	
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F11.2 (7/16")	F11.2 (7/16")	
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E11.2 (7/16")	E11.2 (7/16")	
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE					
Required accessories:							
Motor cable straight design	Length 2.5m 5m 8m 12m	125496A 125496B 125496C 125496D					
Optional accessories:							
Spring sleeve cpl.. without suction		364672A					
Spring sleeve cpl.. with suction		364672C					
Support ring		134139B					
Hanging bracket		3275961					




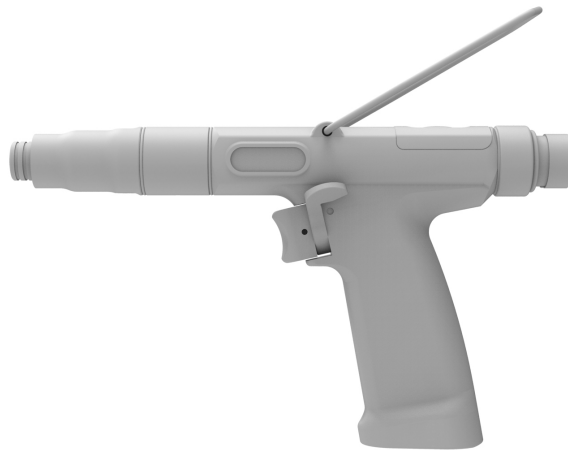
TECHNICAL DATA EC HANDHELD SCREWDRIVER, pistol grip, size 27

MINIMAT-EC Handheld screwdriver Pistol grip, trigger-start		Type Part no.				High Performance	High Performance	
			321EPT27-0010 503045A	321EPT27-0024 503045B	321EPT27-0042 503045C	321EPT27-0042-HP 503045D	321EPT27-0080-HP 503045E	
Torque tolerance for Cmk ≥ 1.67							±10%	
Torque range from to	Nm in.lbs	0.15 - 1 1.33 - 8.85	0.4 - 2.4 3.5 - 21.2	0.7 - 4.2 6.2 - 37.2	0.7 - 4.2 6.2 - 37.2	1.5 - 8 13.28 - 70.8		
Speed range from to	rpm	50 - 1000	50 - 700	40 - 400	40 - 750	30 - 450		
Diameter	mm/in.	29 / 1.13	29 / 1.13	29 / 1.13	29 / 1.13	29 / 1.13		
Length	mm/in.	207 / 8.1	207 / 8.1	219 / 8.54	207 / 8.1	221 / 8.62		
Weight	kg/lbs	0.54 / 1.3	0.54 / 1.3	0.58 / 1.3	0.54 / 1.3	0.63 / 1.4		
Noise level	dB (A)	60	60	60	60	60		
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")		
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")		
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			AST12-2 AST12-2 PB AST12-2 IE			
Required accessories:								
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E						
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E						
Optional accessories:								
Spring sleeve cpl., without suction		364672A						
Spring sleeve cpl., with suction		364672C						




TECHNICAL DATA EC-SERVO HANDHELD SCREWDRIVER, pistol grip, size 27

MINIMAT-EC-Servo Handheld screwdriver Pistol grip, trigger-start	 Type Part no.	326EPT27-0010 505045A	326EPT27-0024 505045B	326EPT27-0042 505045C	High Performance 326EPT27-0042-HP 505045D	High Performance 326EPT27-0080-HP 505045E
Torque tolerance for Cmk ≥ 1.67		±7%				
Torque range from to	Nm/in.lbs	0.15-1/1.3-8.85	0.4-2.4/3.54-21.2	0.7-4.2/6.2-37.2	0.7-4.2/6.2-37.2	1.5-8/13.3-70.8
Speed range from to	rpm	50 - 1000	50 - 700	40 - 400	40 - 750	30 - 450
Diameter	mm/in.	29	29	29	29	29
Length	mm/in.	222	222	234	222	235
Weight	kg/lbs	0.59	0.59	0.64	0.59	0.64
Noise level	dB (A)	60	60	60	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			AST12-2 AST12-2 PB AST12-2 IE	
Required accessories:						
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E				
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E				
Optional accessories:						
Spring sleeve cpl., without suction		364672A				
Spring sleeve cpl., with suction		364672C				



TECHNICAL DATA EC HANDHELD SCREWDRIVER, pistol grip, size 36

MINIMAT-EC Handheld screwdriver Pistol grip, trigger-start		Type Part no.	321EPT36-0040 503063A	321EPT36-0060 503063B	321EPT36-0120 503063C	321EPT36-0180 503063D
Torque tolerance for Cmk ≥ 1.67			±10%			
Torque range from to	Nm in.lbs	0.8 - 4 7.08 - 35.4	1 - 6 8.85 - 53.1	2 - 12 17.7 - 106.2	3 - 18 26.55 - 159.3	
Speed range from to	rpm	100 - 1000	70 - 740	35 - 380	25 - 280	
Diameter	mm/in.	41 / 1.6	41 / 1.6	41 / 1.6	41 / 1.6	
Length	mm/in.	235 / 9.2	235 / 9.2	235 / 9.2	235 / 9.2	
Weight	kg/lbs	1 / 2.2	1 / 2.2	1 / 2.2	1.05 / 2.31	
Noise level	dB (A)	62	62	62	62	
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE				
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E				
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E				
Optional accessories: Spring sleeve cpl., without suction Spring sleeve cpl., with suction		364672A 364672C				




TECHNICAL DATA EC HANDHELD SCREWDRIVER, angle head, size 27

MINIMAT-EC Handheld screwdriver Angle head, lever start External square drive DIN 3121 Connection parts with inserting end DIN 3121 Internal square drive		Type Part no.	321EWT27-0022-E6 503046A E6.3 (1/4") G6.3 (1/4")	321EWT27-0035-E6 503046B E6.3 (1/4") G6.3 (1/4")	321EWT27-0060-E6 503046C E6.3 (1/4") G6.3 (1/4")	
MINIMAT-EC Handheld screwdriver Angle head, lever start External square drive DIN 3121 Connection parts with inserting end DIN 3121 Internal square drive		Type Part no.	321EWT27-0022-E10 503047A E10 (3/8") G10 (3/8")	321EWT27-0035-E10 503047B E10 (3/8") G10 (3/8")	321EWT27-0060-E10 503047C E10 (3/8") G10 (3/8")	
MINIMAT-EC Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 with quick change chuck Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	321EWT27-0022-F6 503048A F6.3 (1/4") E6.3 (1/4")	321EWT27-0035-F6 503048B F6.3 (1/4") E6.3 (1/4")	321EWT27-0060-F6 503048C F6.3 (1/4") E6.3 (1/4")	High Performance 321EWT27-0060-HP-F6 503048D F6.3 (1/4") E6.3 (1/4")
MINIMAT-EC Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 for bits Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	321EWT27-0022-D6 503049A D6.3 (1/4") C6.3 (1/4")	321EWT27-0035-D6 503049B D6.3 (1/4") C6.3 (1/4")	321EWT27-0060-D6 503049C D6.3 (1/4") C6.3 (1/4")	
MINIMAT-EC Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 for bits with magnet Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	321EWT27-0022-DM6 503050A D6.3 (1/4") C6.3 (1/4")	321EWT27-0035-DM6 503050B D6.3 (1/4") C6.3 (1/4")	321EWT27-0060-DM6 503050C D6.3 (1/4") C6.3 (1/4")	

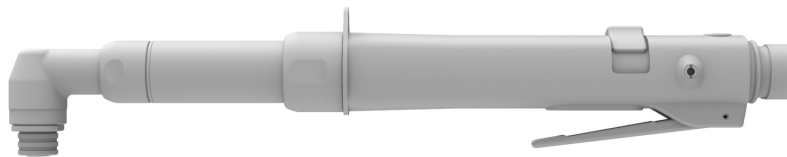
Torque tolerance for Cmk ≥ 1.67			±10%		
Torque range from to	Nm/in.lbs	0.4 - 2.2 / 3.5 - 19.5	0.7 - 3.5 / 6.2 - 31	1 - 6 / 8.85 - 53.1	1 - 6 / 8.85 - 53.1
Speed range from to	rpm	80 - 800	50 - 500	30 - 300	50 - 550
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2
Length	mm/in.	296 / 11.5	296 / 11.5	309 / 12.05	296 / 11.5
Weight	kg/lbs	0.75 / 1.65	0.75 / 1.65	0.8 / 1.76	0.8 / 1.76
Noise level	dB (A)	60	60	60	60
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			AST12-2 AST12-2 PB AST12-2 IE
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E			
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E			



TECHNICAL DATA EC-SERVO HANDHELD SCREWDRIVER, angle head, size 27

MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start External square drive DIN 3121 Connection parts with inserting end DIN 3121 Internal square drive		Type Part no.	326EWT27-0022-E06 505046A	326EWT27-0035-E06 505046B	326EWT27-0060-E6 505046C	
MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start External square drive DIN 3121 Connection parts with inserting end DIN 3121 Internal square drive		Type Part no.	326EWT27-0022-E10 505047A	326EWT27-0035-E10 505047B	326EWT27-0060-E10 505047C	
MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 with quick change chuck Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	326EWT27-0022-F6 505048A	326EWT27-0035-F6 505048B	326EWT27-0060-F6 505048C	High Performance 326EWT27-0060-HP-F6 505048D
MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 for bits Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	326EWT27-0022-D6 505049A	326EWT27-0035-D6 505049B	326EWT27-0060-D6 505049C	
MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start Internal hex drive DIN ISO 1173 for bits with magnet Connection parts with inserting end DIN ISO 1173 External hex drive		Type Part no.	326EWT27-0022-DM6 505050A	326EWT27-0035-DM6 505050B	326EWT27-0060-DM6 505050C	

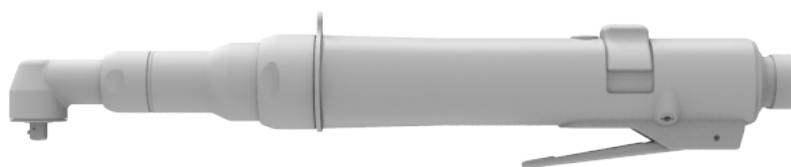
Torque tolerance for Cmk ≥ 1.67		±7%			
Torque range from to	Nm/in.lbs	0.4 - 2.2 / 3.5 - 19.5	0.7 - 3.5 / 6.2 - 31	1 - 6 / 8.85 - 53.1	1 - 6 / 8.85 - 53.1
Speed range from to	rpm	80 - 800	50 - 500	30 - 300	50 - 550
Diameter	mm/in.	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2	30.5 / 1.2
Length	mm/in.	312 / 12.2	312 / 12.2	325 / 12.67	312 / 12.2
Weight	kg/lbs	0.83 / 1.83	0.83 / 1.83	0.86 / 1.9	0.83 / 1.83
Noise level	dB (A)	60	60	60	60
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			AST12-2 AST12-2 PB AST12-2 IE
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E			
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E			




TECHNICAL DATA EC HANDHELD SCREWDRIVER, angle head, size 36

MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	321EWT36-0060-E6 503064A	321EWT36-0120-E6 503064B	-	-
External square drive DIN 3121			E6.3 (1/4")	E6.3 (1/4")	-	-
Connection parts with inserting end DIN 3121			G6.3 (1/4")	G6.3 (1/4")	-	-
Internal square drive						
MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	321EWT36-0060-E10 503065A	321EWT36-0120-E10 503065B	321EWT36-0180-E10 503065C	321EWT36-0250-E10 503065D
External square drive DIN 3121			E10 (3/8")	E10 (3/8")	E10 (3/8")	E10 (3/8")
Connection parts with inserting end DIN 3121			G10 (3/8")	G10 (3/8")	G10 (3/8")	G10 (3/8")
Internal square drive						
MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	321EWT36-0060-F6 503066A	321EWT36-0120-F6 503066B	-	-
Internal hex drive DIN ISO 1173 with quick change chuck			F6.3 (1/4")	F6.3 (1/4")	-	-
Connection parts with inserting end DIN ISO 1173			E6.3 (1/4")	E6.3 (1/4")	-	-
External hex drive						
MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	321EWT36-0060-D6 503067A	321EWT36-0120-D6 503067B	-	-
Internal hex drive DIN ISO 1173 for bits			D6.3 (1/4")	D6.3 (1/4")	-	-
Connection parts with inserting end DIN ISO 1173			C6.3 (1/4")	C6.3 (1/4")	-	-
External hex drive						
MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	321EWT36-0060-DM6 503068A	321EWT36-0120-DM6 503068B	-	-
Internal hex drive DIN ISO 1173 for bits with magnet			D6.3 (1/4")	D6.3 (1/4")	-	-
Connection parts with inserting end DIN ISO 1173			C6.3 (1/4")	C6.3 (1/4")	-	-
External hex drive						


Torque tolerance for $C_{mk} \geq 1.67$		$\pm 10\%$			
Torque range from to	Nm/in.lbs	1 - 6 / 8.85 - 53.1	2 - 12 / 17.7 - 106.2	3 - 18 / 26.55 - 159.3	5 - 25 / 44.25 - 221.25
Speed range from to	rpm	75 - 750	40 - 400	20 - 240	15 - 180
Diameter	mm/in.	40 / 1.56	40 / 1.56	40 / 1.56	40 / 1.56
Length	mm/in.	313 / 12	313 / 12.2	321 / 12.52	321 / 12.52
Weight	kg/lbs	1.1 / 2.42	1.1 / 2.42	1.2 / 2.64	1.2 / 2.64
Noise level	dB (A)	62	62	62	62
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE			
Required accessories:					
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E			
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E			



TECHNICAL DATA EC HANDHELD SCREWDRIVER, angle head, size 36

MINIMAT-EC Handheld screwdriver Angle head, lever start		Type Part no.	322EWT36-0200-E10 504014A	322EWT36-0300-E10 504014B	322EWT36-0500-E12,5 504014C	322EWT36-0700-E12,5 504014D
External square drive DIN 3121			E10 (3/8")	E10 (3/8")	E12.5 (1/2")	E12.5 (1/2")
Connection parts with inserting end DIN 3121 Internal square drive			G10 (3/8")	G10 (3/8")	G12.5 (1/2")	G12.5 (1/2")
Torque tolerance for Cmk ≥ 1.67			±10%			
Torque range from to	Nm/in.lbs		6-20 / 53.1-177	10-30 / 88.5-265.5	15-50 / 132.75-442.5	20-70 / 177-619.5
Speed range from to	rpm		40 - 700	30 - 450	20 - 280	20 - 170
Diameter D1/D2	mm		45/36	45/36	45/36	45/36
	in.		1.75/1.4	1.75/1.4	1.75/1.4	1.75/1.4
Length	mm/in.		435 / 16.97	435 / 16.97	453.5 / 17.69	453.5 / 17.69
Weight	kg/lbs		1.7 / 3.7	1.7 / 3.7	1.9 / 4.2	1.9 / 4.2
Noise level	dB (A)		69	69	69	69
Used with sequence controller			AST12-3 AST12-3 PB AST12-3 IE			
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m			125497A 125497B 125497C 125497D			
Optional accessories:						
Hanging bracket					3275961	
Suspension					134241A	

TECHNICAL DATA EC-SERVO HANDHELD SCREWDRIVER, angle head, size 36

MINIMAT-EC-Servo Handheld screwdriver Angle head, lever start		Type Part no.	327EWT36-0150-E10 506014B	327EWT36-0200-E10 506014C	327EWT36-0300-E10 506014D
External square drive DIN 3121			E10 (3/8")	E10 (3/8")	E10 (3/8")
Connection parts with inserting end DIN 3121 Internal square drive			G10 (3/8")	G10 (3/8")	G10 (3/8")
Torque tolerance for Cmk ≥ 1.67			±7%		
Torque range from to	Nm/in.lbs		4 - 15 / 35.4-132.75	6 - 20 / 53.1-177	10 - 30 / 88.5-265.5
Speed range from to	rpm		50 - 900	40 - 700	30 - 450
Diameter D1/D2	mm		45/36	45/36	45/36
	in.		1.75/1.4	1.75/1.4	1.75/1.4
Length	mm/in.		450 / 17.55	450 / 17.55	450 / 17.55
Weight	kg/lbs		1.8 / 3.96	1.8 / 3.96	1.8 / 3.96
Noise level	dB (A)		62	62	62
Used with sequence controller			AST12-3 AST12-3 PB AST12-3 IE		
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m			125497A 125497B 125497C 125497D		
Optional accessories:					
Hanging bracket					3275961
Suspension					134241A



TECHNICAL DATA EC SPINDLE SCREWDRIVER, straight design, size19

MICROMAT-EC Spindle screwdriver Straight design	Type Part no.	321E19-0002 503020A	321E19-0005 503020B	321E19-0008 503020C
Torque tolerance for Cmk ≥ 1.67			$\pm 10\%$	
Torque range from to	Nm/in.lbs	0.03 - 0.2 / 0.26 - 1.77	0.08 - 0.5 / 0.7 - 4.4	0.15 - 0.8 / 1.33 - 7.1
Speed range from to	rpm	150 - 1500	60 - 1200	100 - 1000
Diameter	mm/in.	19 / 0.74	19 / 0.74	19 / 0.74
Length	mm/in.	188 / 7.33	194 / 7.57	194 / 7.57
Weight	kg/lbs	0.25 / 0.55	0.25 / 0.55	0.25 / 0.55
Noise level	dB (A)	60	60	60
Drive with quick change chuck		4 mm half moon	4 mm half moon	4 mm half moon
Connection parts with inserting end		4 mm half moon	4 mm half moon	4 mm half moon
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE		
Required accessories:				
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E		
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E		
Optional accessories:				
Depth control digital		909052C		
Depth control analog 10 mm		908838C plus amplifier 813712		



Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC SPINDLE SCREWDRIVER, straight design, size 22 and 27

MINIMAT-EC Spindle screwdriver Straight design	Type Part no.	321E22-00120 503030A	321E22-00200 503030B	321E27-0010 503040A	321E27-0018 503040B	321E27-0024 503040C	321E27-0042 503040D
Torque tolerance for Cmk ≥ 1.67		±10%					
Torque range from to	Nm/in.lbs	0.18-1.2/1.6-10.6	0.4-2/3.54-17.7	0.15-1/1.33-8.85	0.4-1.8/3.54-15.9	0.4-2.4/3.54-21.2	0.7-4.2/6.2-37.2
Speed range from to	rpm	50 - 900	30 - 550	50 - 1000	100 - 1000	50 - 700	40 - 400
Diameter	mm/in.	22/0.86	22/0.86	27/1.05	27/1.05	27/1.05	27/1.05
Length	mm/in.	220/8.6	220/8.6	237/9.2	237/9.2	237/9.2	249/9.66
Weight	kg/lbs	0.55/1.21	0.55/1.21	0.66/1.45	0.75/1.65	0.75/1.65	0.75/1.65
Noise level	dB (A)	60	60	60	60	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE					
Required accessories:							
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E					
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E					
Optional accessories:							
Depth control digital		909052E		909052D			
Depth control analog 10 mm		908838I plus amplifier 813712		908838E plus amplifier 813712			

MINIMAT-EC Spindle screwdriver Straight design	Type Part no.	High Performance 321E27-0042-HP 503040E	High Performance 321E27-0080-HP 503040F
Torque tolerance for Cmk ≥ 1.67		±10%	
Torque range from to	Nm/in.lbs	0.7 - 4.2 / 6.2 - 37.2	1.5 - 8 / 13.28 - 70.8
Speed range from to	rpm	40 - 750	30 - 450
Diameter	mm/in.	27 / 1.05	27 / 1.05
Length	mm/in.	237 / 9.24	251 / 9.79
Weight	kg/lbs	0.75 / 1.65	0.8 / 1.76
Noise level	dB (A)	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE	
Required accessories:			
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E	
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E	
Optional accessories:			
Depth control digital		909052D	
Depth control analog 10 mm		908838E plus amplifier 813712	

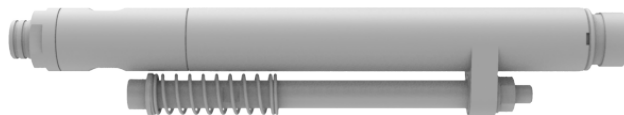


Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC-SERVO SPINDLE SCREWDRIVER, straight design, size 27

MINIMAT-EC-Servo Spindle screwdriver Straight design	Type Part no.	326E27-0010 505040A	326E27-0018 505040B	326E27-0024 505040C	326E27-0042 505040D
Torque tolerance for Cmk ≥ 1.67		±7%			
Torque range from to	Nm/in.lbs	0.15 - 1 / 1.33 - 8.85	0.4 - 1.8 / 3.54 - 15.9	0.4-2.4 / 3.54 - 21.2	0.7-4.2 / 6.2 - 37.2
Speed range from to	rpm	50 - 1000	100 - 1000	50 - 700	40 - 400
Diameter	mm/in.	27 / 1.05	27 / 1.05	27 / 1.05	27 / 1.05
Length	mm/in.	243 / 9.5	243 / 9.5	243 / 9.5	256 / 9.98
Weight	kg/lbs	0.65 / 1.43	0.65 / 1.43	0.65 / 1.43	0.75 / 1.65
Noise level	dB (A)	60	60	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-1 AST12-1 PB AST12-1 IE			
Required accessories:					
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E			
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E			
Optional accessories:					
Depth control digital		909052D			
Depth control analog 10 mm		908838E plus amplifier 813712			

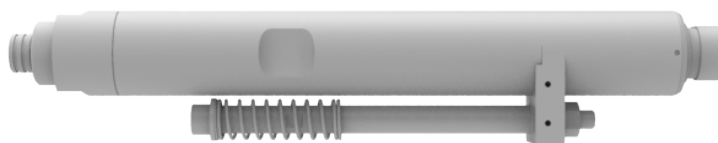
MINIMAT-EC-Servo Spindle screwdriver Straight design	Type Part no.	High Performance 326E27-0042-HP 505040E	High Performance 326E27-0080-HP 505040F
Torque tolerance for Cmk ≥ 1.67		±7%	
Torque range from to	Nm/in.lbs	0.7-4.2 / 6.2 - 37.2	1.5 - 8 / 13.28 - 70.8
Speed range from to	rpm	40 - 750	30 - 450
Diameter	mm/in.	27 / 1.05	27 / 1.05
Length	mm/in.	243 / 9.5	257 / 10
Weight	kg/lbs	0.65 / 1.43	0.75 / 1.65
Noise level	dB (A)	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE	
Required accessories:			
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E	
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E	
Optional accessories:			
Depth control digital		909052D	
Depth control analog 10 mm		908838E plus amplifier 813712	



Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC SPINDLE SCREWDRIVER, straight design, size 36

MINIMAT-EC Spindle screwdriver Straight design	Type Part no.	321E36-0040 503060A	321E36-0060 503060B	321E36-0090 503060C	321E36-0120 503060D	321E36-0180 503060E	321E36-0250 503060F
Torque tolerance for Cmk ≥ 1.67		±10%					
Torque range from to	Nm in.lbs	0.8 - 4 7.08 - 35.4	1 - 6 8.85 - 53.1	2 - 9 17.7 - 79.65	2 - 12 17.7 - 106.2	3 - 18 26.55 - 159.3	5 - 25 44.25 - 221.25
Speed range from to	rpm	100 - 1000	70 - 740	50 - 540	35 - 380	25 - 280	20 - 220
Diameter	mm/in.	36/1.4	36/1.4	36/1.4	36/1.4	36/1.4	36/1.4
Length	mm/in.	284/11.08	284/11.08	284/11.08	284/11.08	284/11.08	284/11.08
Weight	kg/lbs	1.4/3.1	1.4/3.1	1.4/3.1	1.4/3.1	1.4/3.1	1.4/3.1
Noise level	dB (A)	60	60	60	60	60	60
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-2 AST12-2 PB AST12-2 IE					
Required accessories:							
Motor cable straight design Length 2.5m 5m 8m 12m 20m		117352A 117352B 117352C 117352D 117352E					
Motor cable with angle connector Length 2.5m 5m 8m 12m 20m		117353A 117353B 117353C 117353D 117353E					
Optional accessories:							
Depth control digital		941177I					
Depth control analog 10 mm		908838D plus amplifier 813712					



Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC-SERVO SPINDLE SCREWDRIVER, straight design, size 36

MINIMAT-EC-Servo Spindle screwdriver Straight design	Type Part no.	327E36-0100 506010B	327E36-0150 506010C
Torque tolerance for Cmk ≥ 1.67			±7%
Torque range from to	Nm/in.lbs	1 - 10 / 8.85 - 88.5	1.5 - 15 / 13.27 - 132.75
Speed range from to	rpm	60 - 1300	40 - 900
Diameter	mm/in.	40 / 1.56	40 / 1.56
Length	mm/in.	383 / 14.9	383 / 14.9
Weight	kg/lbs	2.5 / 5.5	2.5 / 5.5
Noise level	dB (A)	62	62
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE	
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m The cable connection can be rotated 330°.		125495A 125495B 125495C 125495D	
Optional accessories: Depth control digital Depth control analog 10 mm		9411771 908838D plus amplifier 813712	



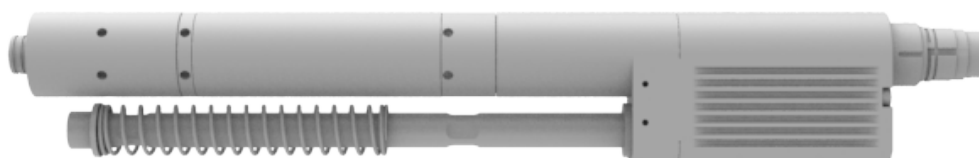
Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC SPINDLE SCREWDRIVER, straight design, size 36

MINIMAT-EC Spindle screwdriver Straight design	Type Part no.	322E36-0120 504010A	322E36-0200 504010B	322E36-0320 504010C	322E36-0500 504010D
Torque tolerance for Cmk ≥ 1.67		±10%			
Torque range from to	Nm/in.lbs	2.4 - 12 / 21.2-106.2	4 - 20 / 35.4-177	6.4 - 32 / 56.6-283.2	10 - 50 / 88.5 - 442.5
Speed range from to	rpm	50 - 1000	35 - 700	25 - 450	20 - 290
Diameter	mm/in.	36/1.4	36/1.4	36/1.4	36/1.4
Length	mm/in.	387.5 / 15.1	387.5 / 15.1	390 / 15.2	390 / 15.2
Weight	kg/lbs	2.3 / 5.1	2.3 / 5.1	2.5 / 5.5	2.5 / 5.5
Noise level	dB (A)	59	59	59	59
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F6.3 (¼")	F11.2 (7/16")	F11.2 (7/16")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E6.3 (¼")	E11.2 (7/16")	E11.2 (7/16")
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE			
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m		125495A 125495B 125495C 125495D			
Optional accessories:					
Depth control digital		941177I			
Depth control analog 10 mm		908838D plus amplifier 813712			

TECHNICAL DATA EC-SERVO SPINDLE SCREWDRIVER, straight design, size 36

MINIMAT-EC-Servo Spindle screwdriver Straight design	Type Part no.	327E36-0200 506010D	327E36-0320 506010E	327E36-0500 506010F
Torque tolerance for Cmk ≥ 1.67		±7%		
Torque range from to	Nm/in.lbs	4 - 20 / 35.4-177	6.4 - 32 / 56.6-283.2	10 - 50 / 88.5 - 442.5
Speed range from to	rpm	35 - 700	25 - 450	20 - 290
Diameter	mm/in.	40/1.56	40/1.56	40/1.56
Length	mm/in.	383 / 14.94	386 / 15.05	386 / 15.05
Weight	kg/lbs	2.5 / 5.5	2.7 / 5.94	2.7 / 5.94
Noise level	dB (A)	62	62	62
Internal hex drive with quick change chuck DIN ISO 1173		F6.3 (¼")	F11.2 (7/16")	F11.2 (7/16")
Connection parts with inserting end DIN ISO 1173		E6.3 (¼")	E11.2 (7/16")	E11.2 (7/16")
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE		
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m		125495A 125495B 125495C 125495D		
Optional accessories:				
Depth control digital		941177I		
Depth control analog 10 mm		908838D plus amplifier 813712		



Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

TECHNICAL DATA EC SPINDLE SCREWDRIVER, angle head, size 36

MINIMAT-EC Spindle screwdriver Angle head	Type Part no.	322EW36-0200-F10 504013A	322EW36-0300-F10 504013B	322EW36-0500-F12,5 504013C	322EW36-0700-F12,5 504013D
External square drive DIN 3121		F10 (3/8")	F10 (3/8")	F12,5 (1/2")	F12,5 (1/2")
Connection parts with inserting end DIN 3121 Internal square drive		G10 (3/8")	G10 (3/8")	G12,5 (1/2")	G12,5 (1/2")
Torque tolerance for Cmk ≥ 1.67		±10%			
Torque range from to	Nm/in.lbs	6 - 20 / 53.1-177	10 - 30 / 88.5-265.5	15 - 50 / 132.8-442.5	20 - 70 / 177-619.5
Speed range from to	rpm	40 - 700	30 - 450	20 - 280	20 - 170
Diameter	mm/in.	36/1.4	36/1.4	36/1.4	36/1.4
Length	mm/in.	500 / 19.5	500 / 19.5	500 / 19.5	500 / 19.5
Weight	kg/lbs	3.8 / 8.4	3.8 / 8.4	4.1 / 9	4.1 / 9
Noise level	dB (A)	69	69	69	69
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE			
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m The cable connection can be rotated 330°.		125495A 125495B 125495C 125495D			
Optional accessories:					
Depth control digital		9411771			
Depth control analog 10 mm		908838D plus amplifier 813712			

TECHNICAL DATA EC-SERVO SPINDLE SCREWDRIVER, angle head, size 36

MINIMAT-EC-Servo Spindle screwdriver Angle head	Type Part no.	327EW36-0200-F10 506013C	327EW36-0300-F10 506013D
External square drive DIN 3121		F10 (3/8")	F10 (3/8")
Connection parts with inserting end DIN 3121 Internal square drive		G10 (3/8")	G10 (3/8")
Torque tolerance for Cmk ≥ 1.67		±7%	
Torque range from to	Nm/in.lbs	6 - 20 / 53.1-177	10 - 30 / 88.5-265.5
Speed range from to	rpm	40 - 700	30 - 450
Diameter	mm/in.	40 / 1.56	40 / 1.56
Length	mm/in.	514 / 20.05	514 / 20.05
Weight	kg/lbs	4.2 / 9.24	4.2 / 9.24
Noise level	dB (A)	62	62
Used with sequence controller		AST12-3 AST12-3 PB AST12-3 IE	
Required accessories: Motor cable straight design Length 2.5m 5m 8m 12m The cable connection can be rotated 330°.		125495A 125495B 125495C 125495D	
Optional accessories:			
Depth control digital		9411771	
Depth control analog 10 mm		908838D plus amplifier 813712	



Further information on installation as well as CAD models can be found in the download area on our website www.deprag.com.

OPTIONALLY AVAILABLE SOFTWARE SOLUTIONS

DEPRAG Cockpit Basic 1 device license	Part no.	145806 (included in delivery of the screwdriving system DEPRAG Plus)
DEPRAG Cockpit Advanced1 1 device license	Part no.	145795
DEPRAG Cockpit Advanced5 5 device licenses	Part no.	145796
DEPRAG Cockpit Advanced10 10 device licenses	Part no.	145797
DEPRAG Cockpit Advanced20 20 device licenses	Part no.	145798
DEPRAG Cockpit Advanced50 50 device licenses	Part no.	145799
DEPRAG Cockpit Professional1 1 device license	Part no.	145440
DEPRAG Cockpit Professional5 5 device licenses	Part no.	142967
DEPRAG Cockpit Professional10 10 device licenses	Part no.	142968
DEPRAG Cockpit Professional20 20 device licenses	Part no.	142978
DEPRAG Cockpit Professional50 50 device licenses	Part no.	142979
Demo version DEPRAG Cockpit Professional Activation code	Part no.	164785
Cockpit Programming Samples	Part no.	166217
DEPRAG Graph Viewer Activation code	Part no.	128901
TIA Link Activation code	Part no.	135839
TwinCAT Link Activation code	Part no.	140996
Clamp Force Control (seating point detection) Activation code	Part no.	142961
Friction dependent torque screw assembly Activation code	Part no.	142959
Software update one-time Activation code	Part no.	142966
Software update annual license Activation code	Part no.	142965
Visualisation of the process Activation code	Part no.	144248
DEPRAG Operator Guidance Activation code	Part no.	146536
Safety & Change tracking Activation code	Part no.	144251
Industry 4.0 interfaces Activation code	Part no.	142962
DEPRAG Universal Robots Link Activation code	Part no.	164982
DEPRAG ABB Link Activation code	Part no.	208936
Process Control Activation code	Part no.	179966
Process Control (duration 30 days) Activation code	Part no.	179972
Allen-Bradley Link Activation code	Part no.	190928

DEPRAG GraphViewer Cloud (integrated in myDEPRAG - separate licensing as individual software is no longer necessary). Use the advantages of GraphViewer Cloud now exclusively via myDEPRAG. To use it, you only need one Gold license per user.

DEPRAG Cockpit Cloud (integrated in myDEPRAG). Use the advantages of Cockpit Cloud now exclusively via myDEPRAG.

Further details on the software products can be found in our catalog D3900E.

Please note: When using the DEPRAG Cockpit Advanced or DEPRAG Cockpit Professional variant in combination with the AST12 sequence controller, the I4.0 interface (article no. 142962) is mandatory and must be ordered separately.

FURTHER OPTIONALLY AVAILABLE ACCESSORIES

Motor cable extension	suitable for series 321EGx22-..
Length 2.5 m	127859A
Length 5.5 m	127859B
Length 9.5 m	127859C

The total length including the motor cable extension must not exceed 12 meters.

Toolbox	Type Part no.	TB 7 398097B
Technical data:		
Tool holders		7
Tool size		up to Ø 24 mm/0.9 in. (AF 19)
Voltage		DC 24 Volt
Amperage		100 mA
Input/output interface		SUB-D 15-pin connector
Start signal		4-pin connector
Dimensions (WxHxD)		225x50x120 mm / 8.8x1.9x4.7 in.
Weight		1.2 kg / 2.6 lbs.
Required: connection cable AST12-TB 7		385451C

Suitable screwdriver adaptors can be found in product catalog D3345E.

The logo for DEPRAG, consisting of the word "DEPRAG" in a bold, green, sans-serif font.

DEPRAG SCHULZ GMBH u. CO. KG
P.O. Box 1352 | D-92203 Amberg
Carl-Schulz-Platz 1 | D-92224 Amberg
Phone: +49 9621 371-0 | Fax: +49 9621 371-120
www.deprag.com | info@deprag.de

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