



Screwdriving technology

Automation

Air motors

Air tools

DEPRAG

SENSOMAT

Stationary SENSOMAT Screwdriver Spindles

Torque Controlled Screwdriver Spindles with Function Control and Depth Actuated Dual Torque Output from 0.3 - 5 Nm (3 - 44 in.lbs)

When the torque required to drive a screw is higher or about the same as the final torque required to seat the screw, an automatic screwdriver will shut-off, even if the screw is not assembled all the way. If the torque of the clutch is increased, the screw will strip.

The DEPRAG SENSOMAT, an enhancement of the reliable DEPRAG-MINIMAT Control Screwdriver, drives the screw using the full torque generated by the motor.

Shortly before the screw reaches final depth, the MINIMAT-clutch is released, and the driver will shut off at the preset torque value. The screw is fully assembled, without being stripped. The result: the screw is seated correctly!

Typical SENSOMAT applications are where thread cutting, thread rolling, or self-drilling screws are being used.



TECHNICAL DATA

Screwdriver style		Motor Size 2		
Spindle, right-rotation, right shut-off Push-To-Start	type order no.	347 S-228-31 391488 A	347 S-328-31 391488 B	347 S-528-31 391488 C
Spindle, right-rotation, right shut-off Remote-Start	type order no.	347 S-220-31 391489 A	347 S-320-31 391489 B	347 S-520-31 391489 C
seating torque, minimum	N / lbs	0.5 / 4.4	0.4 / 3.5	0.3 / 3
seating torque, maximum	N / lbs	1.6 / 14	3 / 26	5 / 44
driving torque, maximum	N / lbs	2 / 17.6	3.3 / 29	5.5 / 49
speed, idling	rpm	4000	1550	680
air consumption	m ³ /min / cfm	0.3 / 11	0.3 / 11	0.3 / 11
diameter max.	mm / in.	27 / 1 ¹ / ₁₆	27 / 1 ¹ / ₁₆	27 / 1 ¹ / ₁₆
length	mm / in.	245 / 9 ⁴¹ / ₆₄	245 / 9 ⁴¹ / ₆₄	245 / 9 ⁴¹ / ₆₄
weight	kg / lbs	0.9 / 2	0.9 / 2	0.9 / 2
push-to-start pressure	N / lbs	24 / 5	24 / 5	24 / 5
pressure at max screwdriver stroke	N / lbs	100 / 22	100 / 22	100 / 22
hose for air supply (O.D./I.D.)	mm / in.	8/5.5 (.314 / ⁷ / ₃₂)	8/5.5 (.314 / ⁷ / ₃₂)	8/5.5 (.314 / ⁷ / ₃₂)
hose for function control (O.D./I.D.)	mm / in.	4/2.5 (.157 / ³ / ₃₂)	4/2.5 (.157 / ³ / ₃₂)	4/2.5 (.157 / ³ / ₃₂)
(O.D. tolerances of connection hoses according to Cetop PR54P)				
internal hex. drive DIN 3126		F6.3 (1/4")	F6.3 (1/4")	F6.3 (1/4")
suitable tool inserts and connecting components with a drive as per DIN 3126		E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")
quick change chuck, mounted		yes	yes	yes

Performance data relate to an air pressure of 6.3 bar (90 PSI)

Screwdriver style		Motor Size 3	
Spindle, right-rotation, right shut-off Push-To-Start	type order no.	346 S-238-31 409280 B	346 S-738-31 409280 C
Spindle, right-rotation, right shut-off Remote-Start	type order no.	346 S-230-31 409297 B	346 S-730-31 409297 C
seating torque, minimum	Nm / in.lbs	0.5 / 4.4	0.5 / 4.4
seating torque, maximum	Nm / in.lbs	4 / 35.4	5 / 44
driving torque, maximum	Nm / in.lbs	4.5 / 40	7 / 62
speed, idling	rpm	2500	1400
air consumption	m ³ /min / cfm	0.45 / 16	0.45 / 16
diameter max.	mm / in.	36 / 1 ¹³ / ₃₂	36 / 1 ¹³ / ₃₂
length	mm / in.	264.5 / 10 ¹³ / ₃₂	264.5 / 10 ¹³ / ₃₂
weight	kg / lbs	1.3 / 2.9	1.3 / 2.9
push-to-start pressure	N / lbs	38 / 8	38 / 8
pressure at max screwdriver stroke	N / lbs	116 / 26	116 / 26
hose for air supply (O.D./I.D.)	mm / in.	10 / 7 (.422 / ¹⁷ / ₆₄)	10 / 7 (.422 / ¹⁷ / ₆₄)
hose for function control (O.D./I.D.)	mm / in.	4/2.5 (.157 / ³ / ₃₂)	4/2.5 (.157 / ³ / ₃₂)
(O.D. tolerances of connection hoses according to Cetop PR54P)			
internal hex. drive DIN 3126		F6.3 (1/4")	F6.3 (1/4")
suitable tool inserts and connecting components with a drive as per DIN 3126		E6.3 (1/4")	E6.3 (1/4")
quick change chuck, mounted		yes	yes

Performance data relate to an air pressure of 6.3 bar (90 PSI)

Please also find suitable tool inserts in our brochure D 3320 E.

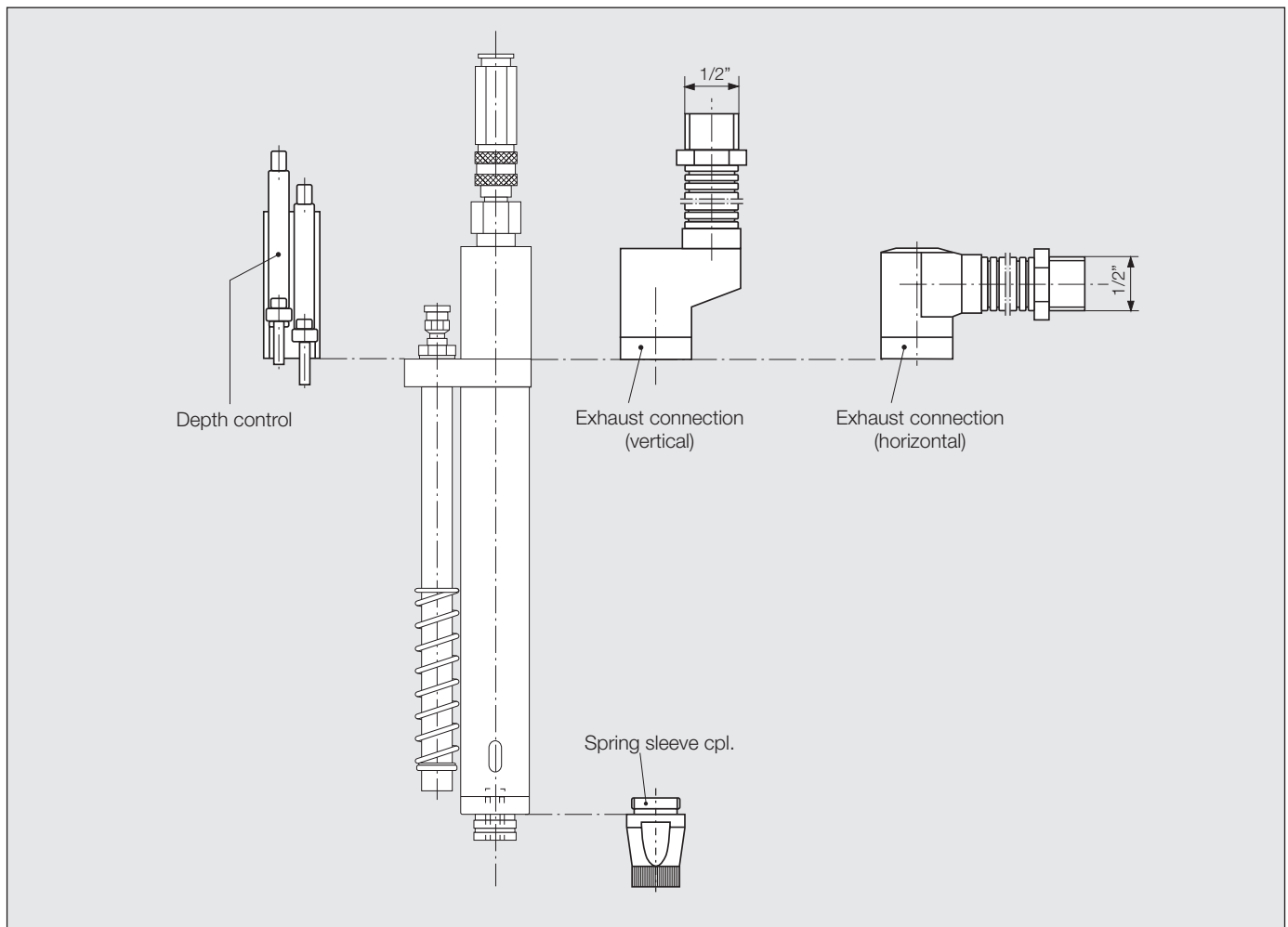
STANDARD EQUIPMENT

Set of Coupler and Connector Plug · Set of Torque Adjustment Tools · Set of Clutch Springs

OPTIONAL EQUIPMENT

		Motor Size 2	Motor Size 3
Exhaust connection (vertical) ¹⁾ (connection piece with 2 m / 6.6 ft. hose)	order no.	386924 A	386924 C
Exhaust connection (horizontal) ¹⁾ (connection piece with 2 m / 6.6 ft. hose)	order no.	386924 B	386924 D
Depth control (double) incl. 2 cables (with straight plug) 5 m / 16.4 ft.	order no.	on request	-
Sensor-Sleeve for Screwdriver Spindles with Screwfeeding	order no.	355311	355311
Sensor-Sleeve for Screwdriver Spindles without Screwfeeding (see leaflet: Accessories D 3320 E, page 14 and 15)	order no.		
Adjustment bushing (for torque adjustment without Sensor-Sleeve)		461319	461319

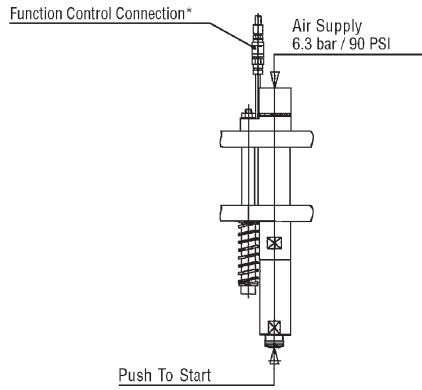
¹⁾ for corresponding exhaust filter/silencer (see leaflet D 3340 E)



FUNCTION DESCRIPTION DRIVER-START

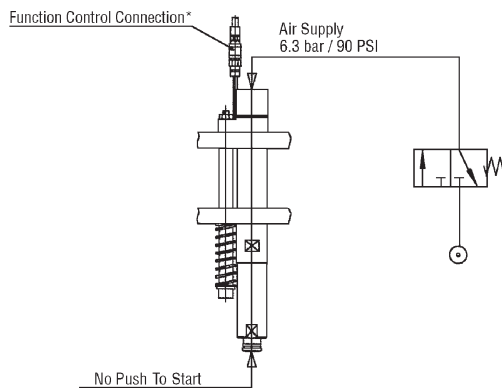
Push To Start

Driver with one way rotation,
right rotation and right shut-off



Remote Start (3/2-way valve)

Driver with one way rotation,
right rotation and right shut-off



* During drive cycle the Function Control
Line is under pressure
(approx. 2 bar).

DEPRAG

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