



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.

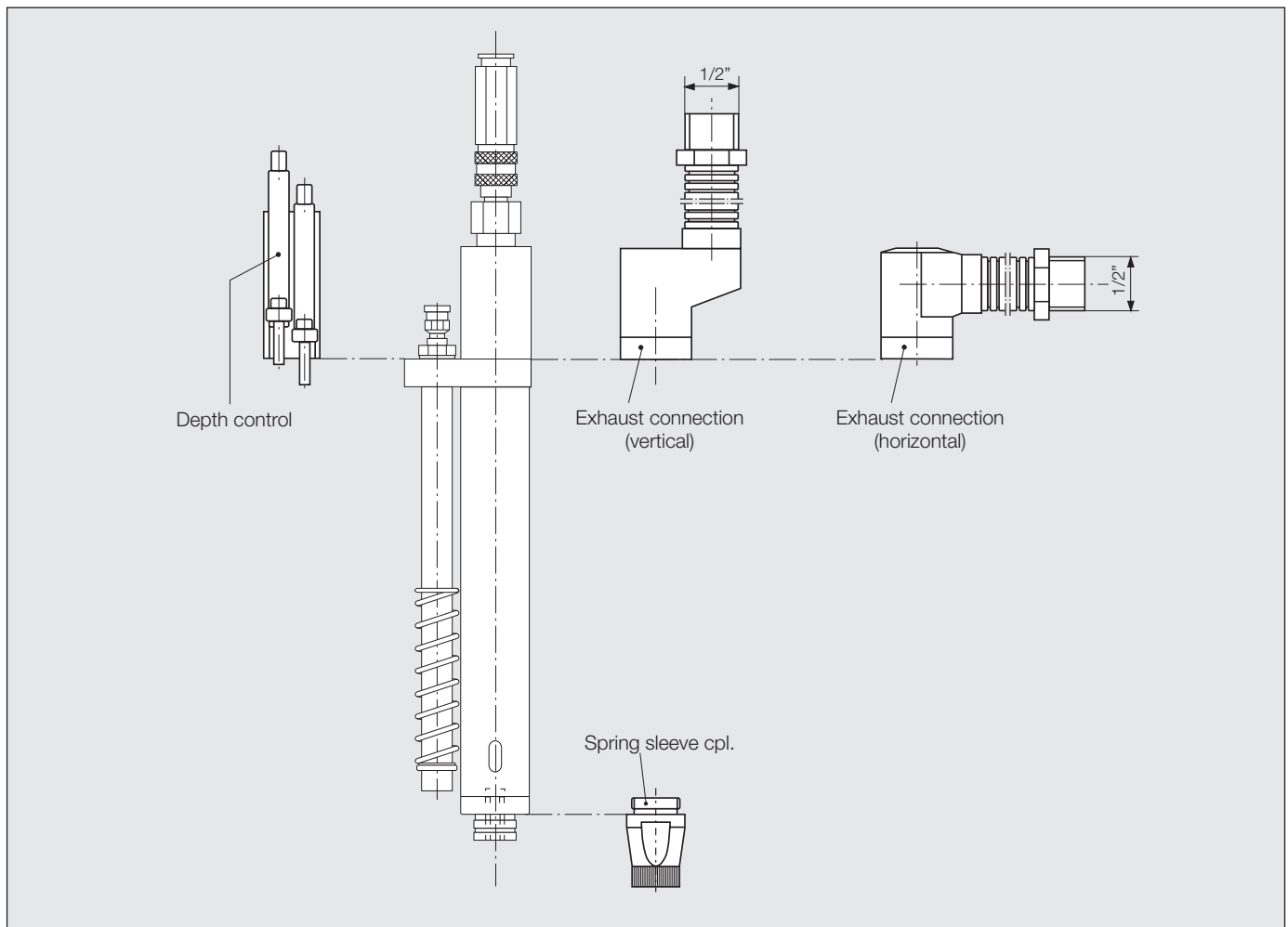
STANDARD EQUIPMENT

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 |

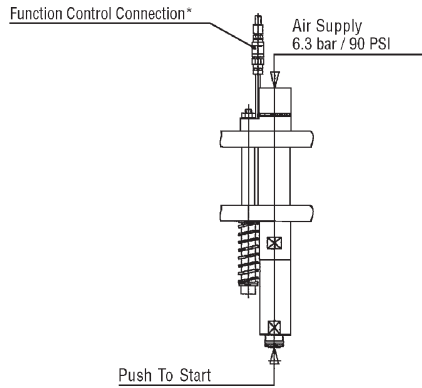
¹⁾ for corresponding exhaust filter/silencer (see leaflet D 3340 E)



FUNCTION DESCRIPTION DRIVER-START

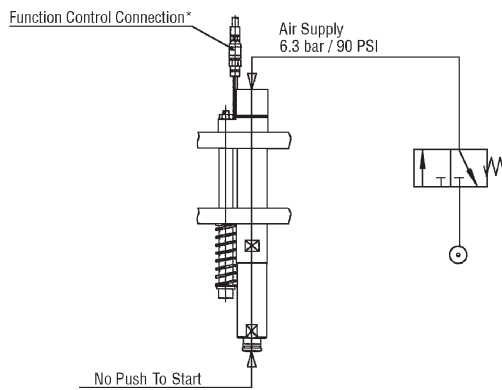
Push To Start

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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