



Screwdriving technology

Automation

Air motors

Air tools

DEPRAG

**Screwdriver Spindles
pneumatic**

MINIMAT Control Screwdrivers

The basic solution for almost all screwdriving tasks

angle head design – torque from 0.3 - 67 Nm / 2.7 to 593 in.lbs

- highly accurate shut-off clutch
- for limited space
- durable
- robust

The particular strength of a MINIMAT control screwdriver in angle design is that it can carry out screw assemblies with torque ranges of 0.3 Nm to 67 Nm. In these ranges you can not only assemble screws but also adjust them.

The ergonomic MINIMAT screwdriver is extremely durable due to its extraordinary processing quality and design for heavy industrial use.

The MINIMAT clutch works with the tried and tested principle of a mechanical separation and shut-off clutch.

This highly precise shut-off clutch allows torque precision of < ±3% standard deviation, which is maintained for millions of assemblies.

When used under correct conditions DEPRAG pneumatic screwdrivers with shut off clutch conform with a Cmk value of ≥ 1.67 with $\pm 10\%$ tolerance in relation to 6 Sigma according to ISO 5393. In other words a Cmk value of 1.67 means that there is a failure rate of 0.6 per million screw assemblies.

The MINIMAT spindles can be easily integrated and are extremely small.

Control screwdrivers with angle head design are available in right rotation and reversible.

These tools can be used without lubrication: This should however only be done in specific applications. Using a tool without lubrication will decrease its lifespan.

The DEPRAG stationary control screwdriver spindles with angle head design are preferably used for assemblies in tight areas.



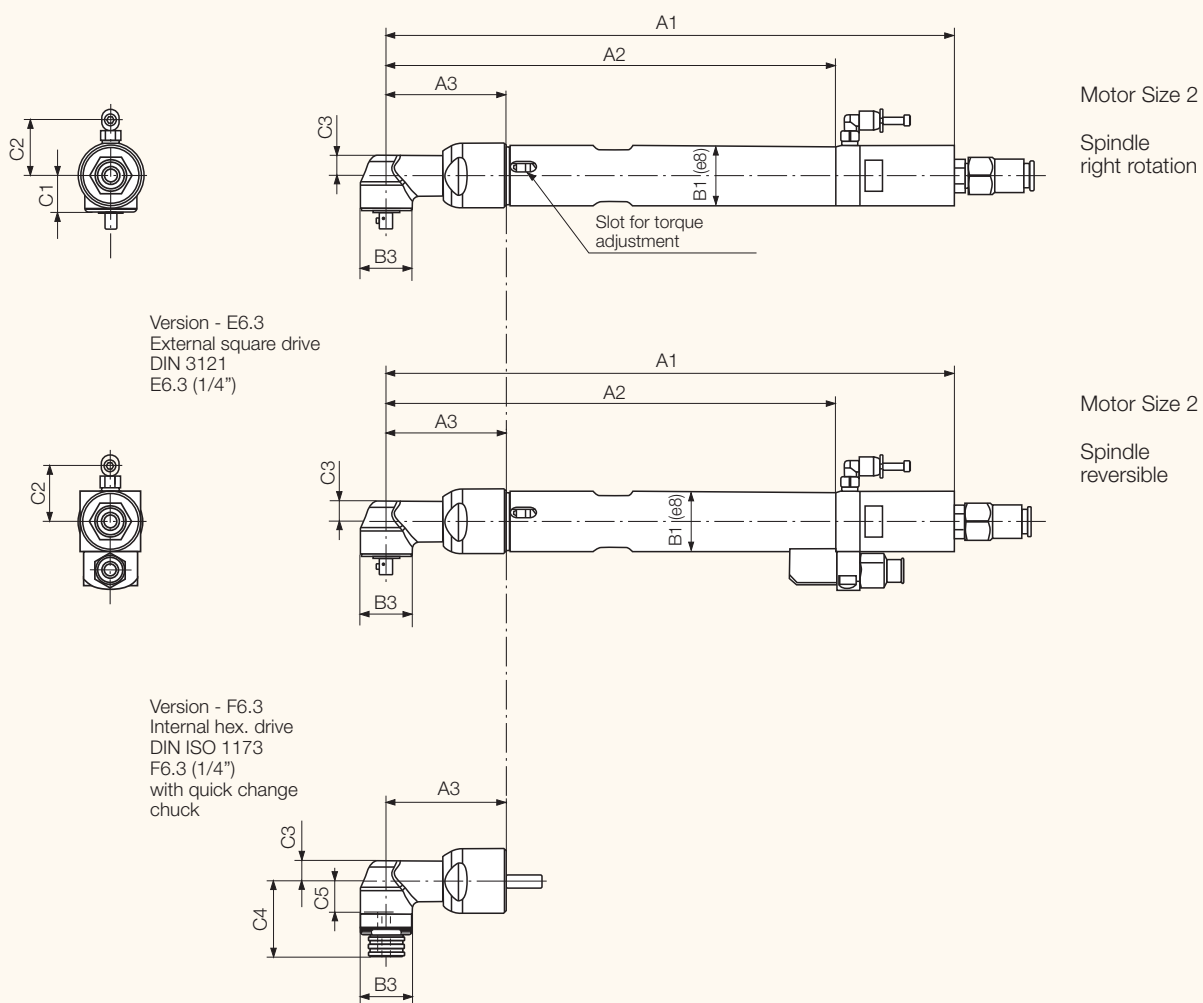
TECHNICAL DATA

Screwdriver Style		Motor Size 2		
Spindle right rotation Remote Start	Type Part no.	377-320-7-E6.3 200616 B	377-420-7-E6.3 200616 D	377-520-7-E6.3 200616 C
Spindle end Suitable tool inserts with		External Square Drive DIN 3121 - E6.3 (1/4") Internal Square Drive DIN 3121 - G6.3 (1/4")		
Spindle right rotation Remote Start	Type Part no.	377-320-7-F6.3 2006161B	377-420-7-F6.3 2006161D	377-520-7-F6.3 2006161C
Spindle end Suitable tool inserts with		Internal hex. Drive DIN ISO 1173 - F6.3 (1/4") with quick change chuck External hex. Drive DIN ISO 1173 - E6.3 (1/4")		
Torque min.	Nm / in.lbs	0.4 / 3.5	0.4 / 3.5	0.3 / 2.7
Torque max.	Nm / in.lbs	3.6 / 31.9	4.5 / 39.8	6.5 / 57.5
Speed, idling	rpm	1070	710	470
Air consumption	m ³ /min / cfm	0.3 / 11	0.3 / 11	0.3 / 11
Weight	kg / lbs	0.9 / 2	0.9 / 2	0.9 / 2
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)
Noise level	dB (A)	72	72	72

Screwdriver Style		Motor Size 2		
Spindle reversible Remote Start	Type Part no.	377-320-7U-E6.3 200633 B	377-420-7U-E6.3 200633 D	377-520-7U-E6.3 200633 C
Spindle end Suitable tool inserts with		External Square Drive DIN 3121 - E6.3 (1/4") Internal Square Drive DIN 3121 - G6.3 (1/4")		
Spindle reversible Remote Start	Type Part no.	377-320-7U-F6.3 2006331B	377-420-7U-F6.3 2006331D	377-520-7U-F6.3 2006331C
Spindle end Suitable tool inserts with		Internal hex. Drive DIN ISO 1173 - F6.3 (1/4") with quick change chuck External hex. Drive DIN ISO 1173 - E6.3 (1/4")		
Torque min.	Nm / in.lbs	0.4 / 3.5	0.4 / 3.5	0.3 / 2.7
Torque max.	Nm / in.lbs	3.6 / 31.9	4.5 / 39.8	6.5 / 57.5
Speed, idling	rpm	780	580	360
Air consumption	m ³ /min / cfm	0.3 / 11	0.3 / 11	0.3 / 11
Weight	kg / lbs	0.93 / 2	0.93 / 2	0.93 / 2
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)
Noise level	dB (A)	76	76	76

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

▶ Please find suitable accessories on page 7.	▶ Please also find suitable tool inserts in our brochure D3320E.
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Motor Size 2												
Type			Dimensions (mm)									
Spindle right rotation			A1	A2	A3	B1	B3	C1	C2	C3	C4	C5
377-320-7-E6.3	377-420-7-E6.3	377-520-7-E6.3	263.2	208.2	55.4	27	24	17.1	25.5	9.5	35.1	14.1
377-320-7-F6.3	377-420-7-F6.3	377-520-7-F6.3										
Spindle reversible												
377-320-7U-E6.3	377-420-7U-E6.3	377-520-7U-E6.3	263.2	208.2	55.4	27	24	17.1	25.5	9.5	35.1	14.1
377-320-7U-F6.3	377-420-7U-F6.3	377-520-7U-F6.3										

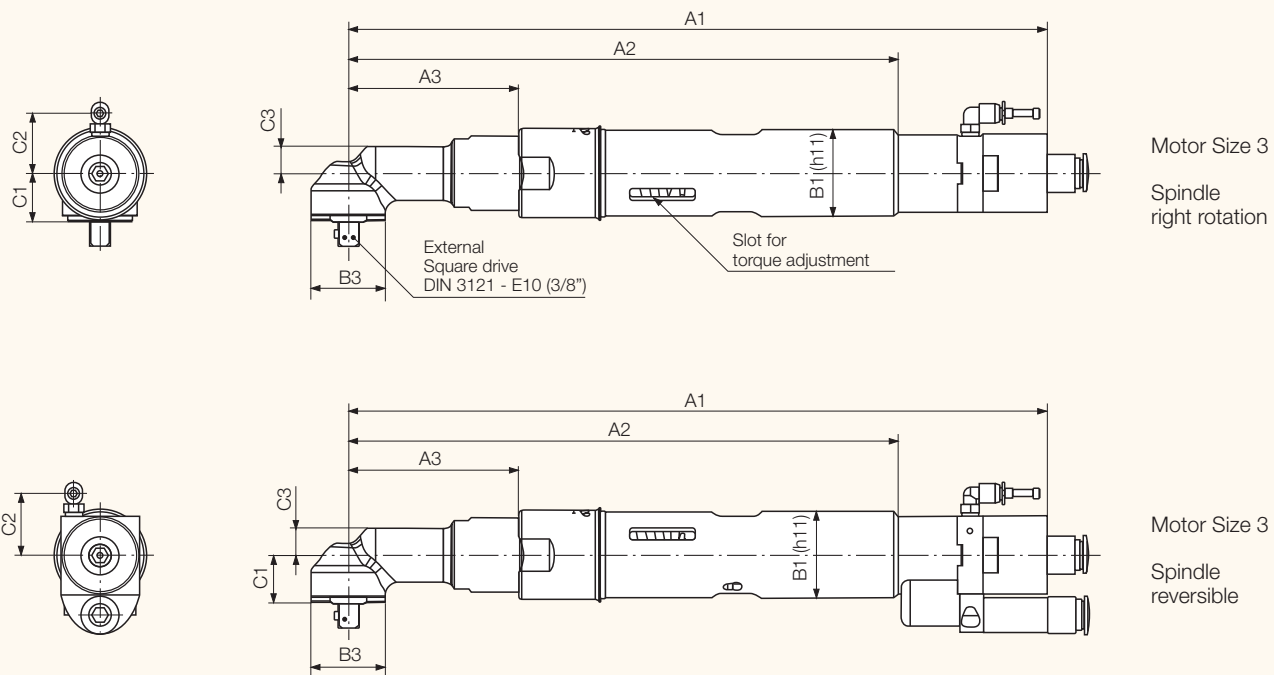
TECHNICAL DATA

Screwdriver Style		Motor Size 3			
Spindle right rotation	Type	377-230-7-E10	377-730-7-E10	377-330-7-E10	377-430-7-E10
Remote Start	Part no.	200941 B	200941 C	200941 D	200941 E
Spindle end		External Square Drive DIN 3121 - E10 (3/8")			
Suitable tool inserts with		Internal Square Drive DIN 3121 - G10 (3/8")			
Torque min.	Nm / in.lbs	4 / 35.4	4 / 35.4	4 / 35.4	4 / 35.4
Torque max.	Nm / in.lbs	7 / 62	12 / 106.2	20 / 177	35 / 309.8
Speed, idling	rpm	1500	840	450	240
Air consumption	m ³ /min / cfm	0.45 / 16	0.45 / 16	0.45 / 16	0.45 / 16
Weight	kg / lbs	1.9 / 4.2	1.9 / 4.2	1.9 / 4.2	1.9 / 4.2
Hose for air supply (O.D./I.D.)	mm / in.	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)
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)	4 / 2.5 (.157 / 3/32)
Noise level	dB (A)	79	79	79	79

Screwdriver Style		Motor Size 3			
Spindle reversible	Type	377-230-7U-E10	377-730-7U-E10	377-330-7U-E10	377-430-7U-E10
Remote Start	Part no.	200619 B	200619 C	200619 D	200619 E
Spindle end		External Square Drive DIN 3121 - E10 (3/8")			
Suitable tool inserts with		Internal Square Drive DIN 3121 - G10 (3/8")			
Torque min.	Nm / in.lbs	4 / 35.4	4 / 35.4	4 / 35.4	4 / 35.4
Torque max.	Nm / in.lbs	6.5 / 57.5	10 / 88.5	19 / 168.2	32 / 283.2
Speed, idling	rpm	1400	730	365	190
Air consumption	m ³ /min / cfm	0.45 / 16	0.45 / 16	0.45 / 16	0.45 / 16
Weight	kg / lbs	2.15 / 4.7	2.15 / 4.7	2.15 / 4.7	2.15 / 4.7
Hose for air supply (O.D./I.D.)	mm / in.	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)	10 / 7 (3/8 / .273)
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)	4 / 2.5 (.157 / 3/32)
Noise level	dB (A)	79	79	79	79

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

▶ Please find suitable accessories on page 7.	▶ Please also find suitable tool inserts in our brochure D3320E.
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Motor Size 3								
Type	Dimensions (mm)							
	A1	A2	A3	B1	B3	C1	C2	C3
Spindle right rotation								
377-230-7-E10								
377-730-7-E10	324.3	255.3	78.9	40	34.5	22.6	28	12.5
377-330-7-E10								
377-430-7-E10								
Spindle reversible								
377-230-7U-E10								
377-730-7U-E10	324.3	255.3	78.9	40	34.5	22.6	28.5	12.5
377-330-7U-E10								
377-430-7U-E10								

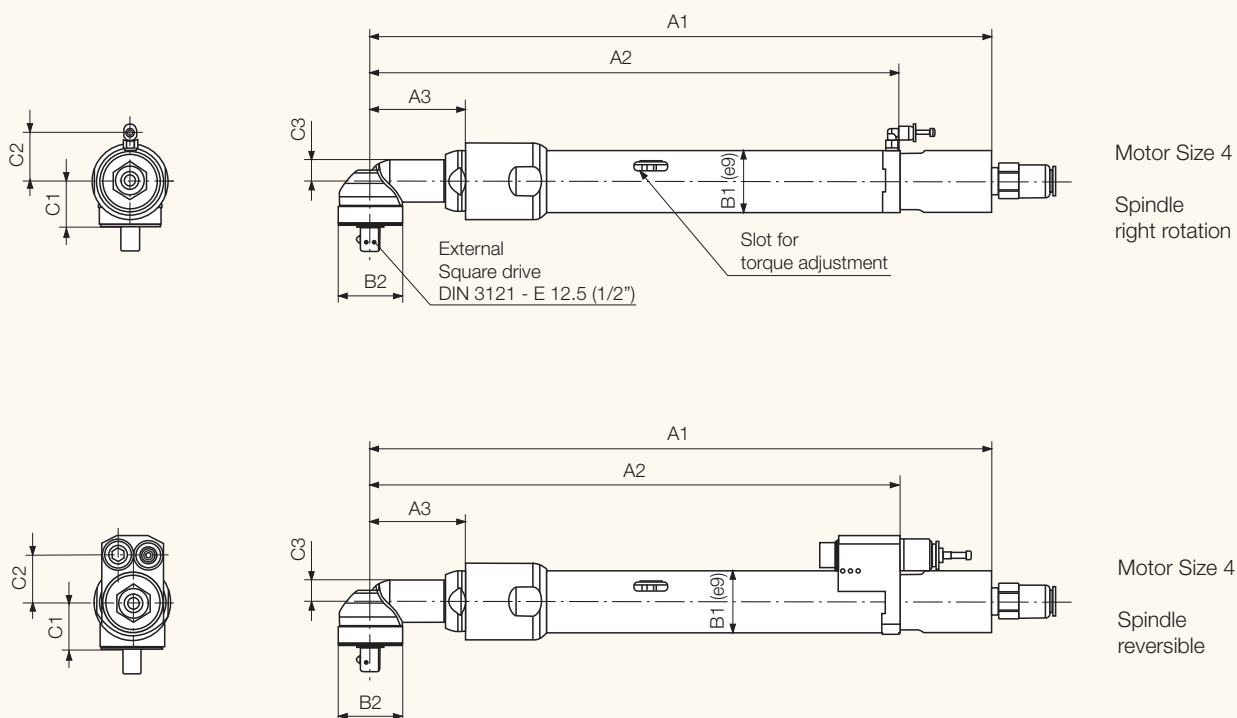
TECHNICAL DATA

Screwdriver Style		Motor Size 4			
		right rotation		reversible	
Spindle	Type	377-740-7-E12.5	377-840-7-E12.5	377-740-7U-E12.5	377-840-7U-E12.5
Remote Start	Part no.	200662 C	200662 D	200671 C	200671 D
Spindle end		External Square Drive DIN 3121 - E12.5 (1/2")			
Suitable tool inserts with		Internal Square Drive DIN 3121 - G12.5 (1/2")			
Torque min.	Nm / in.lbs	20 / 177	20 / 177	15 / 132.8	15 / 132.8
Torque max.	Nm / in.lbs	48 / 424.8	67 / 593	46 / 407.1	65 / 575.3
Speed, idling	rpm	390	270	300	220
Air consumption	m ³ /min / cfm	1.1 / 38.8	1.1 / 38.8	1.1 / 38.8	1.1 / 38.8
Weight	kg / lbs	2.7 / 5.9	2.7 / 5.9	3.1 / 6.8	3.1 / 6.8
Hose for air supply (O.D./I.D.)	mm / in.	12 / 8 (.472 / ⁵ / ₁₆)	12 / 8 (.472 / ⁵ / ₁₆)	12 / 8 (.472 / ⁵ / ₁₆)	12 / 8 (.472 / ⁵ / ₁₆)
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)	4 / 2.5 (.157 / ³ / ₃₂)
Noise level	dB (A)	78	78	80	80

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

► Please find suitable accessories on page 7.

► Please also find suitable tool inserts in our brochure D3320E.



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Motor Size 4

Type	Type	Dimensions (mm)							
Spindle right rotation	Spindle reversible	A1	A2	A3	B1	B2	C1	C2	C3
377-740-7-E12.5	377-740-7U-E12.5	401	341	61.5	40	41	29.5	30.5	13.8
377-840-7-E12.5	377-840-7U-E12.5								

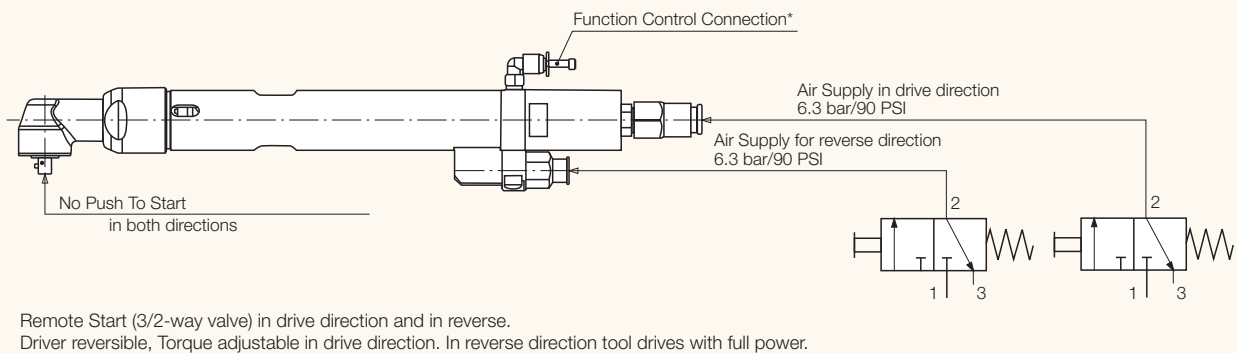
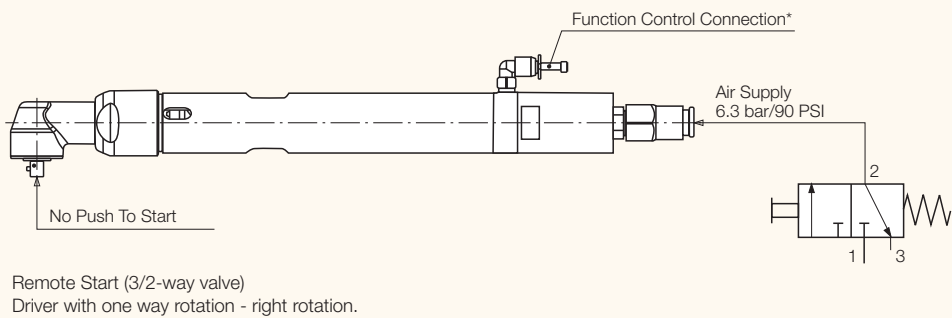
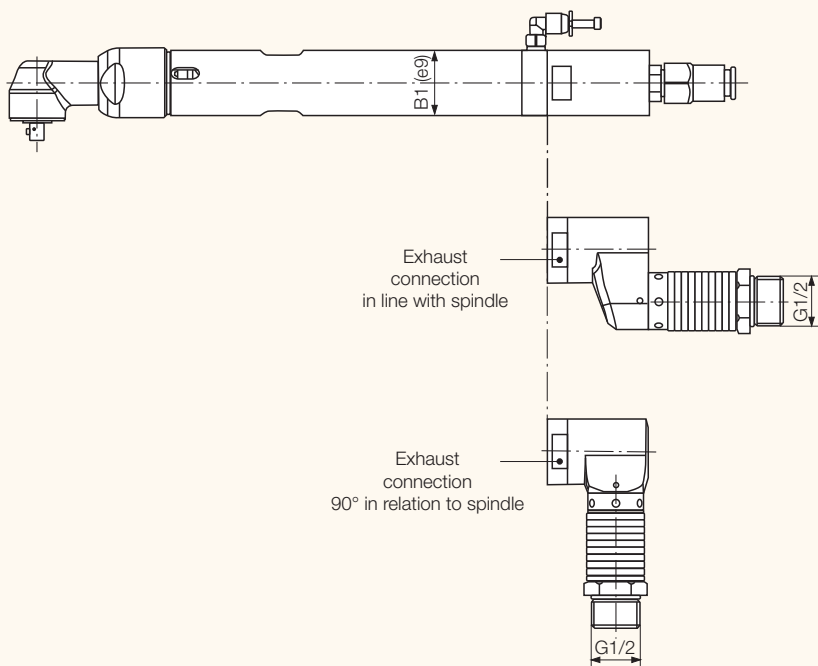
ACCESSORIES

Standard Equipment (included in delivery)

Set of coupler and connector plugs · Torque and adjustment tool · Assortment of clutch springs

Optional Equipment

suitable for		Motor Size 2	Motor Size 3 right rotation / reversible	Motor Size 4
Exhaust connection in line with spindle	Part no.	386924 A	386924 A / 386924 C	351820 R
90° in relation to spindle	Part no.	386924 B	386924 B / 386924 D	351820 U



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

DEPRAG

DEPRAG SCHULZ GMBH u. CO.

P.O. Box 1352, D-92203 Amberg, Germany
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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