



MICROMAT/MINIMAT ESD Screwdriver

straight design - torque ranges between 0.02 - 12 Nm



- robust
- uninfluenceably accurate
- ergonomic
- durable
- quiet

ESD screwdrivers are especially designed for the operation in electrostatic exposed areas, and where an ESD-safe assembly is required (specifications according to EN 100 015). The supplied conductive pressure hose allows a simple, direct and grounded connection, without the need for an additional cable-connection. Between the air-hose for the tool and the main air-outlet an insulating connector can be installed to discharge electrostatic load. The extraordinary constructive quality of the slender MICROMAT/MINIMAT screwdriver and the capability to be used in a heavy industrial industrial environment, assures extreme high up-times.

The ergonomic design of the housing allows a fatigue-proof operation at continued use.

Torque accuracies of < 3% standard deviation and thus Cmk values of ≥ 1.67 with a tolerance of $\pm 15\%$ can be reached * with these screwdrivers. Statistically speaking, the error rate is less than 0.6 per one million screw assemblies.

*) under suitable process conditions

TECHNICAL DATA

MICROMAT - straight vers	Motor Size 0					
Screwdriver reversible, right shut-off Push-To-Start	Type Part no.	345-308UESD 376846A	345-408UESD 376846B	345-708UESD 385164A	345-508UESD 376846C	
Screws	up to	M 3	M 3	M 3	M 3	
	Ncm / in.oz	2 / 2.84	2 / 2.84	2 / 2.84	2 / 2.84	
-11			 			
soft pull-up max.	Ncm / in.oz	40 / 56.8	50 / 71	70 / 99.4	70 / 99.4	
hard pull-up max.	Ncm / in.oz	50 / 71	50 / 71	70 / 99.4	70 / 99.4	
Speed, idling	rpm	1300	950	480	300	
Air consumption	m³/min / cfm	0.1 / 3.5	0.1 / 3.5	0.1 / 3.5	0.1 / 3.5	
Main body dia.	mm / in.	17 / ¹¹ / ₁₆	17 / ¹¹ / ₁₆	17 / ¹¹ / ₁₆	17 / 11/16	
_ength	mm / in.	167 / 6 ⁹ / ₁₆	167 / 6 ⁹ / ₁₆	173 / 6 ¹³ / ₁₆	173 / 6 ¹³ / ₁₆	
Weight	kg / lbs	0.17 / 0.38	0.17 / 0.38	0.18 / 0.40	0.18 / 0.40	
Noise level	dB (A)	65	65	65	65	
Air hose dia.	mm / in.	4 / ⁵ / ₃₂	4 / 5/32	4 / 5/32	4 / ⁵ / ₃₂	
Connector thread for air-hose		M 5	M 5	M 5	M 5	
Hose dia. for screw suction	mm / in.	3 / 1/8	3 / 1/8	3 / 1/8	3 / 1/8	
nternal hex. drive DIN ISO 1173		B3 (3 mm/.118")	B3 (3 mm/.118")	B3 (3 mm/.118")	B3 (3 mm/.118'	
Suitable tool inserts and connecting						
components with a drive as per DIN ISO	1173	A3 (3 mm/.118")	A3 (3 mm/.118")	A3 (3 mm/.118")	A3 (3 mm/.118"	
			<u> </u>	+	+	
Quick change chuck, mounted MINIMAT - straight version		yes	yes	yes	yes	
		Motor Size 1				
Screwdriver reversible, right shut-off	Туре	347-218UESD	347-318UESD	347-518UESD	347-618UESD	
Push-To-Start	Part no.	403345A	403345B	403345C	403345D	
Screws	up to	M 3	M 3	M 3	M 3	
Forque min.	Nm / in.lbs	0.3 / 2.7	0.3 / 2.7	0.2 / 1.8	0.2 / 1.8	
soft pull-up max.	Nm / in.lbs	1 / 8.85	1.4 / 12.4	2 / 17.7	2 / 17.7	
hard pull-up max.	Nm / in.lbs	1 / 8.85	1.4 / 12.4	2 / 17.7	2 / 17.7	
Speed, idling	rpm	1900	1300	900	600	
Air consumption	m ³ /min / cfm	0.23 / 8	0.23 / 8	0.23 / 8	0.23 / 8	
Main body dia.	mm / in.	28 / 1 ¹ / ₈				
ength	mm / in.	190 / 7 ¹ / ₂	190 / 7 ¹ / ₂	190 / 7 ¹ / ₂	198 / 7 ⁵¹ / ₆₄	
Veight	kg / lbs	0.4 / 0.9	0.4 / 0.9	0.4 / 0.9	0.43 / 0.95	
Noise level	dB (A)	62	62	62	62	
Air hose dia.	mm / in.	5 / ³ /16				
Connector thread for air-hose		1/8"	1/8"	1/8"	1/8"	
Hose dia. for screw suction	mm / in.	3 / 1/8	3 / ¹ /8	3 / 1/8	3 / 1/8	
nternal hex. drive DIN ISO 1173		F6.3 (¹ / ₄ ")	F6.3 (1/4")	F6.3 (¹ / ₄ ")	F6.3 (¹ / ₄ ")	
Suitable tool inserts and connecting						
components with a drive as per DIN ISO	1173	E6.3 (1/4")	E6.3 (¹ / ₄ ")	E6.3 (1/4")	E6.3 (1/4")	
Quick change chuck, mounted						
•		yes	yes	yes	yes	
MINIMAT - straight version		Motor Size 2				
Screwdriver reversible, right shut-off	Туре	347-228UESD	347-328UESD	347-428UESD	347-528UESD	
Push-To-Start	Part no.	392476A	392476B	392476D	392476C	
Screws	up to	M 4	M 4	M 4	M 5	
Forque min.	Nm / in.lbs	0.5 / 4.4	0.4 / 3.5	0.4 / 3.5	0.3 / 2.7	
soft pull-up max.	Nm / in.lbs	1.3 / 11.5	2.4 / 21.2	3.5 / 31	5 / 44.3	
hard pull-up max.	Nm / in.lbs	1.8 / 15.9	2.8 / 24.8	4/35.4	5 / 44.3	
		3000				
Speed, idling	rpm		1100	750	500	
Air consumption	m³/min / cfm	0.3 /11	0.3 /11	0.3 /11	0.3 /11	
Main body dia.	mm / in.	33 / 1 ⁵ / ₁₆				
ength	mm / in.	223 / 8 ²⁵ / ₃₂				
Veight	kg / lbs	0.68 / 1.5	0.69 / 1.5	0.69 / 1.5	0.69 / 1.5	
Noise level	dB (A)	67	67	67	67	
Air hose dia.	mm / in.	6.5 / ¹ / ₄				
Connector thread for air-hose		1/8"	1/8"	1/8"	1/8"	
nternal hex. drive DIN ISO 1173		F6.3 (¹ / ₄ ")				
Suitable tool inserts and connecting			1	1		
components with a drive as per DIN ISO	1173	E6.3 (¹ /4")	E6.3 (1/4")	E6.3 (1/4")	E6.3 (1/4")	
Quick change chuck, mounted		yes	yes	yes	yes	

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

TECHNICAL DATA

MINIMAT - straight versior	n	Motor Size 2.5				
Screwdriver reversible, right shut-off Push-To-Start	Type Part no.	345-7258UESD 409631A	345-3258UESD 409631B	345-4258UESD 409631C		
Screws	up to	M 5	M 6	M 6		
Torque min.	Nm / in.lbs	1 / 8.85	1 / 8.85	1 / 8.85		
soft pull-up max.	Nm / in.lbs	5 / 44.3	10 / 88.5	12 / 106.2		
hard pull-up max.	Nm / in.lbs	6 / 53.1	10 / 88.5	12 / 106.2		
Speed, idling	rpm	1100	640	310		
Air consumption	m³/min / cfm	0.35 / 12	0.35 / 12	0.35 / 12		
Main body dia.	mm / in.	40 / 1 ⁹ / ₁₆	40 / 1 ⁹ / ₁₆	40 / 1 ⁹ /16		
Length	mm / in.	245 / 9 ⁵ /8	245 / 9 ⁵ /8	245 / 9 ⁵ /8		
Weight	kg / lbs	0.9 / 2	0.9 / 2	0.9 / 2		
Noise level	dB (A)	76	76	76		
Air hose dia.	mm / in.	6 / 1/4	6 / 1/4	6 / 1/4		
Connector thread for air-hose		1/8"	1/8"	1/8"		
Internal hex. drive DIN ISO 1173		F6.3 (¹ / ₄ ")	F6.3 (¹ / ₄ ")	F6.3 (1/4")		
Suitable tool inserts and connecting components with a drive as per DIN ISO	1173	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)

Included in delivery

Air hose ESD-applicable 1.5 m /4.9 ft. \cdot Torque adjustment tool \cdot Assortment of clutch springs

Optional Equipment

		Motor Size 0	Motor Size 1	Motor Size 2	Motor Size 2.5
Connection piece	Part no.	378379A	378379A	378379A	378379A
(Connector thread 1/4" f / 1/4" m)					
Spiral hose, antistatic	Part no.	-	346697P	346697P	346697P
Support ring	Part no.	-	3870323	389775B	_
Spring sleeve cpl.	Part no.	364670A	364672A	364672A	364680A
Spring sleeve cpl., with vacuum connection	Part no.	-	364672A	364672C	364680D
(in connection with finder,					
sea catalog: Inserting Tools D3320E)					



It is necessary to use a torque support (e.g. stand, handgrip) for maximum torque: over 4 Nm for straight handle design. Suitable torque supports can be found in our catalog D3345E.



Please also find suitable tool inserts in our catalog D3320E.

