Rotary Solenoid

Size 7E

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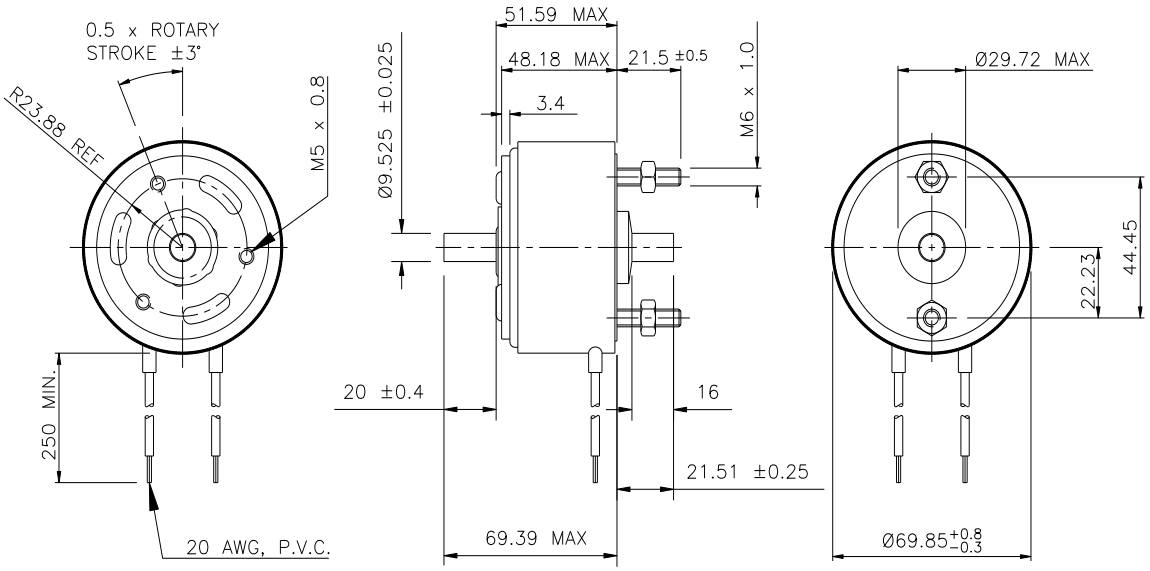
Dimensions



Solenoid shown in the de-energised position

Performance Specifications

Starting Torque (mNm) @ 20° C

Maximum Duty		100%	50%	25%	10%	5%
Stroke	**Holding Torque**					
25°	2260	1537	2723	3605	4475	4972
35°		814	1548	2633	4023	4633
45°	1469	633	1141	2000	3153	3729
67.5°		339	667	1187	1853	2147
95°	678	249	429	667	927	1006

General Specifications

Dielectric Strength:
19-29 awg. 1200 VRMS
30-33 awg. 1500 VRMS

Coil Resistance:
23-31 awg +/- 5% tolerance
32-33 awg +/- 10% tolerance

Starting Torque: Gross torque values are shown For net starting torque, subtract return spring torque

Return Spring Torque:
84.8 mNm +/- 20%

Weight: 1.25 Kg

Recommended Heat Sink: Maximum watts dissipated by the solenoid are based on an unrestricted flow of air at 20° C mounted on the equivalent of an aluminium plate 384.2 x 84.2 x 3.2mm min.

Coil Specifications

Maximum Duty Cycle	100%	50%	25%	10%	5%
Maximum ON Time (sec) when pulsed continuously		80	38	16	5.7
Maximum ON Time (sec) for single pulse		138	50	18	6.4
Watts (@ 20° C)	35	70	140	350	700
Ampere Turns (@ 20° C)	1805	2555	3610	5710	8280

Coil Data

awg.	Resistance	# Turns	Nominal DC Voltage				
19	1.56	385	7.4	10.4	14.8	23.4	33.0
20	2.53	496	9.4	13.3	18.8	29.8	42.1
21	3.99	621	11.8	16.7	23.6	37.4	52.8
22	6.33	780	14.9	21.0	29.8	47.1	66.6
23	10.8	1044	19.4	27.5	38.9	61.5	86.9
24	16.5	1274	24.0	34.0	48.1	76.0	108.0
25	27.0	1635	30.7	43.5	61.5	97.2	138.0
26	43.8	2091	39.2	55.4	78.3	124.0	175.0
27	68.4	2603	48.9	69.2	97.9	155.0	219.0
28	108.0	3255	61.5	86.9	123.0	194.0	275.0
29	162.0	3933	75.3	107.0	151.0	238.0	337.0
30	265.0	5044	96.3	136.0	193.0	305.0	431.0
31	385.0	5800	116.0	164.0	232.0	367.0	-
32	583.0	7230	143.0	202.0	286.0	452.0	-
33	882.0	8400	176.0	249.0	351.0	-	-

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X Feature Configurations & Part Numbers

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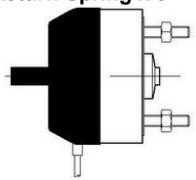
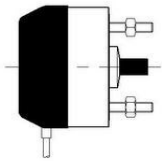
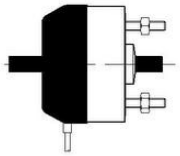
How to Order

Replace 'XX' with coil AWG required see coil specification table

Description	Stroke/ Direction	Nom. Axial Stroke	Armature Cover x 8 Armature End Shaft x 4 Return Spring x 9 		Armature Cover x 8 Base End Shaft x 3 Return Spring x 9 		Armature Cover x 8 Double Shaft x 3 x 4 Return Spring x 9 	
Direction of rotation as viewed from armature end, opposite mounting			Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered
7E Rotary	25°RH	1.9	M15430-0XX	E15430-0XX	M1404-0XX	E1404-0XX	M15043-0XX	E15043-0XX
7E Rotary	25°LH	1.9	M15431-0XX	E15431-0XX	M3291-0XX	E3291-0XX	M15044-0XX	E15044-0XX
7E Rotary	35°RH	2.0	M15432-0XX	E15432-0XX	M2315-0XX	E2315-0XX	M15440-0XX	E15440-0XX
7E Rotary	35°LH	2.0	M15433-0XX	E15433-0XX	M2316-0XX	E2316-0XX	M15441-0XX	E15441-0XX
7E Rotary	45°RH	2.0	M2529-0XX	E2529-0XX	M2353-0XX	E2353-0XX	M15442-0XX	E15442-0XX
7E Rotary	45°LH	2.0	M2677-0XX	E2677-0XX	M2352-0XX	E2352-0XX	M15443-0XX	E15443-0XX
7E Rotary	67.5°RH	2.0	M15435-0XX	E15435-0XX	M3049-0XX	E3049-0XX	M15445-0XX	E15445-0XX
7E Rotary	67.5°LH	2.0	M15436-0XX	E15436-0XX	M1119-0XX	E1119-0XX	M15446-0XX	E15446-0XX
7E Rotary	95°RH	2.2	M15437-0XX	E15437-0XX	M3017-0XX	E3017-0XX	M15447-0XX	E15447-0XX
7E Rotary	95°LH	2.2	M15438-0XX	E15438-0XX	M3103-0XX	E3103-0XX	M15448-0XX	E15448-0XX

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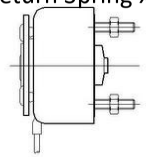
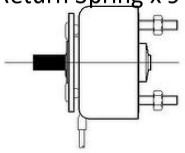
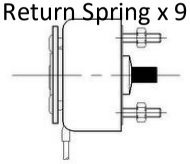
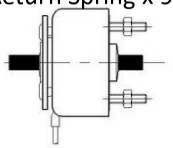
Replace 'XX' with coil AWG required see coil specification table

Description	Stroke/ Direction	Nom. Axial Stroke mm	No Shafts 3 Tapped Holes x 6 Return Spring x 9 		Armature End Shaft x 4 3 Tapped Holes x 6 Return Spring x 9 		Base End Shaft x 3 3 Tapped Holes x 6 Return Spring x 9 		Double Shaft x 3 x 4 3 Tapped Holes x 6 Return Spring x 9 	
Direction of rotation as viewed from armature end, opposite mounting studs			Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered
7E Rotary	25°RH	1.9	M3145-0XX	E3145-0XX	M15455-0XX	E15455-0XX	M15464-0XX	E15464-0XX	M15474-0XX	E15474-0XX
7E Rotary	25°LH	1.9	M3353-0XX	E3353-0XX	M15456-0XX	E15456-0XX	M15465-0XX	E15465-0XX	M15475-0XX	E15475-0XX
7E Rotary	35°RH	2.0	M15449-0XX	E15449-0XX	M15457-0XX	E15457-0XX	M15466-0XX	E15466-0XX	M15476-0XX	E15476-0XX
7E Rotary	35°LH	2.0	M15450-0XX	E15450-0XX	M15458-0XX	E15458-0XX	M15467-0XX	E15467-0XX	M15477-0XX	E15477-0XX
7E Rotary	45°RH	2.0	M2810-0XX	E2810-0XX	M1381-0XX	E1381-0XX	M15468-0XX	E15468-0XX	M15478-0XX	E15478-0XX
7E Rotary	45°LH	2.0	M15451-0XX	E15451-0XX	M1421-0XX	E1421-0XX	M15469-0XX	E15469-0XX	M15479-0XX	E15479-0XX
7E Rotary	67.5°RH	2.0	M15453-0XX	E15453-0XX	M15460-0XX	E15460-0XX	M15471-0XX	E15471-0XX	M15481-0XX	E15481-0XX
7E Rotary	67.5°LH	2.0	M15454-0XX	E15454-0XX	M15461-0XX	E15461-0XX	M1487-0XX	E1487-0XX	M15482-0XX	E15482-0XX
7E Rotary	95°RH	2.2	M2429-0XX	E2429-0XX	M15462-0XX	E15462-0XX	M15472-0XX	E15472-0XX	M15483-0XX	E15483-0XX
7E Rotary	95°LH	2.2	M2135-0XX	E2135-0XX	M15463-0XX	E15463-0XX	M15473-0XX	E15473-0XX	M15484-0XX	E15484-0XX

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