

Size 7E Rotary Solenoid

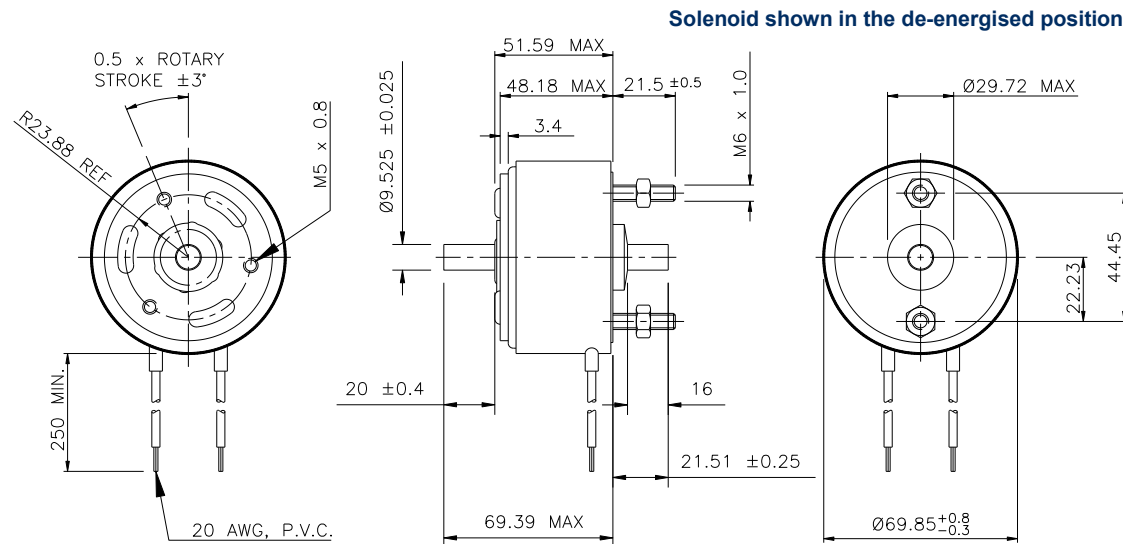


General Specifications:

- **Dielectric Strength:** 19-29 awg. 1200 VRMS / 30-33 awg. 1500 VRMS
- **Coil Resistance:** 23-31 awg +/- 5% tolerance / 32-33 awg +/- 10% tolerance
- **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.
- **Starting Torque:** Gross torque values are shown For net starting torque, subtract return spring torque
- **Return Spring Torque:** 84.8 mNm +/- 20%

Notes

1. Continuously pulsed at stated watts and duty cycle
2. Single pulsed at stated watts (with coil at ambient room temperature 20°C)
3. Other coil gauges available, consult factory
4. Reference number of turns
5. Gross starting torques are shown. For net starting torque, subtract return spring torque of 84.8mNm +/-20%
6. Holding torque is shown at the stabilised temperature of 105°C, 100% duty cycle



Performance Specification

Starting Torque (mNm) @ 20° C (5)						
Maximum Duty Cycle	100%	50%	25%	10%	5%	
Stroke						
Holding						
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

Coil Specifications

Maximum Duty Cycle	100%	50%	25%	10%	5%
Maximum ON Time (sec) When pulsed		80	38	16	5.7
Maximum ON Time (sec)		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 (4)	Nominal DC Voltage		
19	1.56	385	7.4	10.4	14.8
20	2.53	496	9.4	13.3	18.8
21	3.99	621	11.8	16.7	23.6
22	6.33	780	14.9	21.0	29.8
23	10.8	1044	19.4	27.5	38.9
24	16.5	1274	24.0	34.0	48.1
25	27.0	1635	30.7	43.5	61.5
26	43.8	2091	39.2	55.4	78.3
27	68.4	2603	48.9	69.2	97.9
28	108.0	3255	61.5	86.9	123.0
29	162.0	3933	75.3	107.0	151.0
30	265.0	5044	96.3	136.0	193.0
31	385.0	5800	116.0	164.0	232.0
32	583.0	7230	143.0	202.0	286.0
33	882.0	8400	176.0	249.0	351.0

How to Order - Please Specify

- Direction and angle of rotation
- Coil awg, or voltage and duty cycle
- Supplementary 'X' features i.e. method of load take off
- Operating temperature range
- Any special features, if complex please submit

Please Note: In line with continued development we reserve the right to amend specification without prior notice (Rev 03/19)

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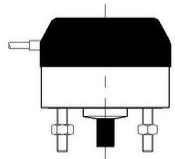
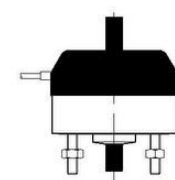
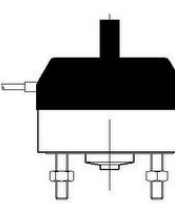
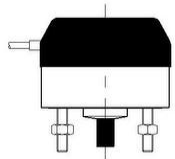
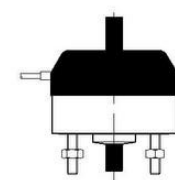
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X Feature Configurations & Part Numbers

How to Order

Replace 'XX' with coil AWG required

see coil specification table

Description	Stroke/ Direction	Nom. Axial Stroke	Standard		Endurance		Standard		Endurance	
			Standard	Engineered	Standard	Engineered	Standard	Engineered		
7E Rotary	25°RH	1.9	M15430-0XX	E15430-0XX	M1404-0XX	E1404-0XX	M15043-0XX	E15043-0XX	 <p>Armature Cover x 8 Base End Shaft x 3 Return Spring x 9</p>	
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	 <p>Armature Cover x 8 Double Shaft x 3 x 4 Return Spring x 9</p>	
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	 <p>Armature Cover x 8 Armature End Shaft x 4 Return Spring x 9</p>	
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	 <p>Armature Cover x 8 Base End Shaft x 3 Return Spring x 9</p>	
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	 <p>Armature Cover x 8 Double Shaft x 3 x 4 Return Spring x 9</p>	
7E Rotary	95°LH	2.2	M15438-0XX	E15438-0XX	M3103-0XX	E3103-0XX	M15448-0XX	E15448-0XX		

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see coil specification table

Description	Stroke/ Direction	Norm. Axial Stroke mm	Direction of rotation as viewed from armature end, opposite mounting studs		Standard		Endurance Engineered		Standard		Endurance Engineered		Standard		Endurance Engineered	
			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										
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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