

Size 5E Rotary Solenoid



General Specifications:

•**Dielectric Strength:** 22-23 awg. 1000 VRMS /

24-33 awg. 1200 VRMS

•**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 190.5 x 190.5 x 3.2mm min.

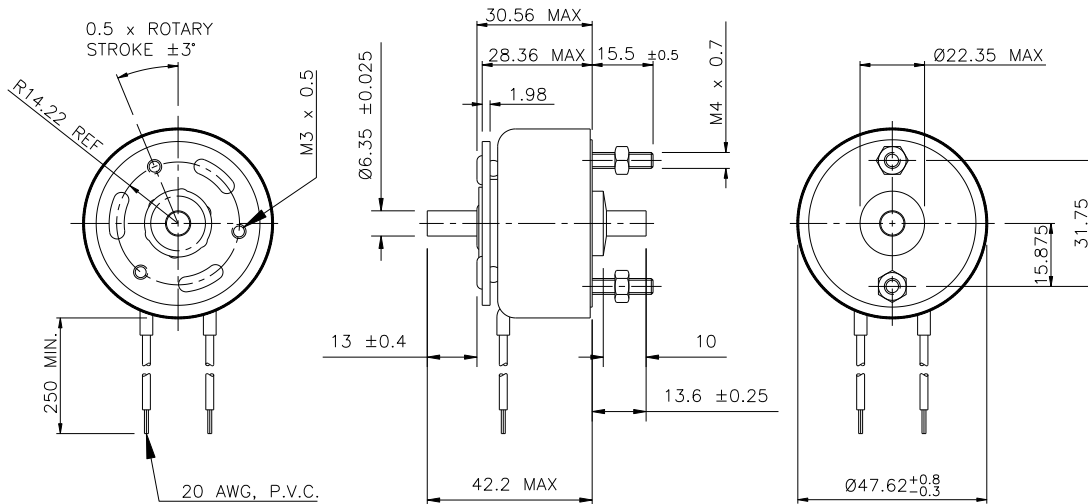
•**Coil Resistance:** +/- 5% tolerance

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

•**Return Spring Torque:** 28.2mNm +/- 20%

•**Weight:** 312 g

Solenoid shown in the de-energised position



Notes

- Continuously pulsed at stated watts and duty cycle
- Single pulsed at stated watts (with coil at ambient room temperature 20°C)
- Other coil gauges available, consult factory
- Reference number of turns
- Gross starting torques are shown. For net starting torque, subtract return spring torque of 28.2mNm +/- 20%

Performance Specification

Starting Torque (mNm) @ 20° C (5)

Maximum Duty Cycle	100%	50%	25%	10%	5%	
25°	565	237.3	576.3	915.3	1288.2	1491.6
35°	192.1	361.6	576.3	858.8	971.8	
45°	339	135.6	248.6	429.4	666.7	813.6
67.5°	90.4	169.5	282.5	440.7	519.8	
95°	226	33.9	79.1	135.6	226.0	293.8

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 a drawing of your requirements

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

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Coil Specifications

Maximum Duty Cycle	100%	50%	25%	10%	5%
Maximum ON Time (sec)					
When pulsed		100	36	10	3.5
continuously (1)					
Maximum ON Time (sec)		162	44	13	4.6
for single pulse (2)					
Watts (@20° C)	21	42	84	210	420
Ampere Turns (@ 20° C)	1015	1440	2030	3210	4650

Coil Data

awg. (3)	Resistance (@ 20°C)	# Turns (4)	Nominal DC Voltage				
22	1.68	301	5.9	8.4	11.9	18.8	26.6
23	2.70	384	7.5	10.6	15.1	23.8	33.7
24	4.30	486	9.5	13.4	19.0	30.0	42.5
25	6.66	590	11.8	16.7	23.7	37.4	52.9
26	10.30	737	14.7	20.8	29.4	46.5	65.8
27	15.70	900	18.2	25.7	36.3	57.4	81.2
28	26.60	1190	23.6	33.4	47.3	74.7	105.7
29	38.00	1380	28.2	39.9	56.5	89.3	126.3
30	62.10	1768	36.1	51.1	72.2	114.0	161.0
31	96.10	2166	44.9	63.5	89.8	142.0	201.0
32	157.00	2816	57.4	81.2	115.0	182.0	257.0
33	241.00	3432	71.1	101.0	142.0	225.0	318.0

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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	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	
			Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered
5E Rotary	25°RH	1.1	M15037-0XX	E15037-0XX	M2361-0XX	E2361-0XX	M15253-0XX	E15253-0XX
5E Rotary	25°LH	1.1	M3199-0XX	E3199-0XX	M2449-0XX	E2449-0XX	M15254-0XX	E15254-0XX
5E Rotary	35°RH	1.1	M2717-0XX	E2717-0XX	M2804-0XX	E2804-0XX	M15255-0XX	E15255-0XX
5E Rotary	35°LH	1.1	M15240-0XX	E15240-0XX	M2805-0XX	E2805-0XX	M15256-0XX	E15256-0XX
5E Rotary	45°RH	1.1	M15241-0XX	E15241-0XX	M2043-0XX	E2043-0XX	M15257-0XX	E15257-0XX
5E Rotary	45°LH	1.1	M15106-0XX	E15106-0XX	M2615-0XX	E2615-0XX	M15258-0XX	E15258-0XX
5E Rotary	67.5°RH	1.3	M15168-0XX	E15168-0XX	M1454-0XX	E1454-0XX	M15261-0XX	E15261-0XX
5E Rotary	67.5°LH	1.3	M15169-0XX	E15169-0XX	M15251-0XX	E15251-0XX	M15262-0XX	E15262-0XX
5E Rotary	95°RH	1.4	M15245-0XX	E15245-0XX	M1031-0XX	E1031-0XX	M15264-0XX	E15264-0XX
5E Rotary	95°LH	1.4	M15246-0XX	E15246-0XX	M1513-0XX	E1513-0XX	M15265-0XX	E15265-0XX

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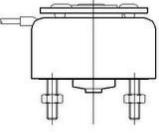
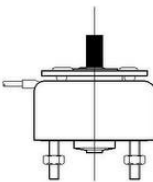
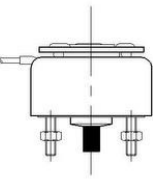
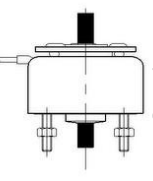
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X Feature Configurations & Part Numbers

How to Order

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

Description	Stroke/ Direction	Nom. Axial Stroke 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 	
			Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered	Standard	Endurance Engineered
5E Rotary	25°RH	1.1	M2729-0XX	E2729-0XX	M3370-0XX	E3370-0XX	M1128-0XX	E1128-0XX	M1375-0XX	E1375-0XX
5E Rotary	25°LH	1.1	M1053-0XX	E1053-0XX	M1167-0XX	E1167-0XX	M15283-0XX	E15283-0XX	M15295-0XX	E15295-0XX
5E Rotary	35°RH	1.1	M3183-0XX	E3183-0XX	M15274-0XX	E15274-0XX	M15284-0XX	E15284-0XX	M2894-0XX	E2894-0XX
5E Rotary	35°LH	1.1	M3184-0XX	E3184-0XX	M15275-0XX	E15275-0XX	M15285-0XX	E15285-0XX	M15296-0XX	E15296-0XX
5E Rotary	45°RH	1.1	M2064-0XX	E2064-0XX	M1418-0XX	E1418-0XX	M15286-0XX	E15286-0XX	M2617-0XX	E2617-0XX
5E Rotary	45°LH	1.1	M1460-0XX	E1460-0XX	M1233-0XX	E1233-0XX	M15287-0XX	E15287-0XX	M15297-0XX	E15297-0XX
5E Rotary	67.5°RH	1.3	M15270-0XX	E15270-0XX	M3115-0XX	E3115-0XX	M2454-0XX	E2454-0XX	M1386-0XX	E1386-0XX
5E Rotary	67.5°LH	1.3	M1341-0XX	E1341-0XX	M15278-0XX	E15278-0XX	M15290-0XX	E15290-0XX	M15300-0XX	E15300-0XX
5E Rotary	95°RH	1.4	M2580-0XX	E2580-0XX	M1393-0XX	E1393-0XX	M2455-0XX	E2455-0XX	M3056-0XX	E3056-0XX
5E Rotary	95°LH	1.4	M2475-0XX	E2475-0XX	M15280-0XX	E15280-0XX	M15292-0XX	E15292-0XX	M15302-0XX	E15302-0XX

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