

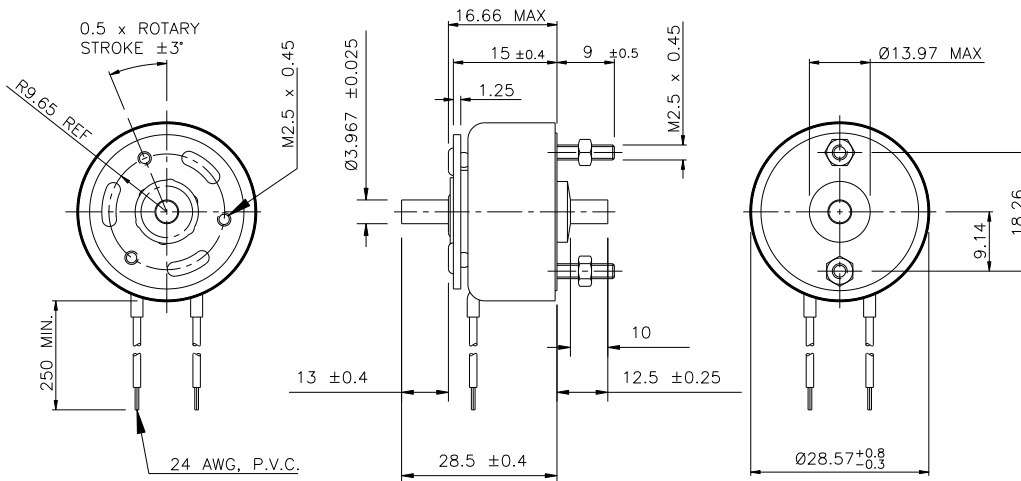
Size 2E Rotary Solenoid



General Specifications:

- **Dielectric Strength:** 1000 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 84.7 x 84.7 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:** 6.8 mNm +/- 20%
- **Weight:** 56.7 g



Solenoid shown in the de-energised position

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 6.8mNm +/-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 Torque (6)					
25°	56.5	22.6	45.2	79.1	192.1	192.1
35°		22.6	33.9	56.5	124.3	146.9
45°	33.9	11.3	22.6	45.2	79.1	101.7

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

Coil Specifications							
Maximum Duty Cycle	100%	50%	25%	10%	5%		
Maximum ON Time (sec) When pulsed continuously (1)		100	36	7	2.5		
Maximum ON Time (sec) for single pulse (2)		162	44	8	2.8		
Watts (@20° C)	7	14	28	70	140		
Ampere Turns (@ 20° C)	425	602	849	1350	1904		
Coil Data							
avg. (3)	Resistance (@ 20°C)	# Turns (4)	Nominal DC Voltage				
24	0.68	130	2.2	3.2	4.5	7.1	10.0
25	1.16	174	2.8	4.0	5.7	9.0	12.7
26	1.96	231	3.6	5.1	7.2	11.5	16.2
27	3.16	296	4.5	6.4	9.0	14.4	20.0
28	5.10	378	5.7	8.1	11.5	18.2	26.0
29	6.94	423	7.0	9.9	13.9	22.0	31.0
30	11.03	530	8.8	12.5	17.7	28.0	40.0
31	16.85	649	11.0	15.6	22.0	35.0	49.0
32	28.15	858	13.9	19.8	28.0	44.0	63.0
33	42.75	1036	17.5	25.0	35.0	56.0	79.0
34	69.56	1312	23.0	32.0	45.0	72.0	101.0
35	112.00	1674	29.0	40.0	57.0	91.0	128.0

Please Note: In line with continued development we reserve the right to amend specification without prior notice (Rev 01/12)

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X Feature Configurations & Part Numbers

Description	Stroke/Direction	Nom. Axial Stroke (mm)	Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE	
Direction of rotation as viewed from armature end, opposite mounting studs			Armature cover: X8 Armature end shaft: X4 Return spring: X9	Standard	Endurance Engineered
2E Rotary	25° RH	0.6		M1244-0XX	E1244-0XX
2E Rotary	25° LH	0.6		M3259-0XX	E3259-0XX
2E Rotary	35° RH	0.6		M1294-0XX	E1294-0XX
2E Rotary	35° LH	0.6		M1159-0XX	E1159-0XX
2E Rotary	45° RH	0.6		M2264-0XX	E2264-0XX
2E Rotary	45° LH	0.6		M2265-0XX	E2265-0XX

Description	Stroke/Direction	Nom. Axial Stroke (mm)	Configuration: 'X' >Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE	
Direction of rotation as viewed from armature end, opposite mounting studs			Armature cover: X8 Base end shaft: X3 Return spring: X9	Standard	Endurance Engineered
2E Rotary	25° RH	0.6		M1024-0XX	E1024-0XX
2E Rotary	25° LH	0.6		M2452-0XX	E2452-0XX
2E Rotary	35° RH	0.6		M2116-0XX	E2116-0XX
2E Rotary	35° LH	0.6		M15004-0XX	E15004-0XX
2E Rotary	45° RH	0.6		M2117-0XX	E2117-0XX
2E Rotary	45° LH	0.6		M2450-0XX	E2450-0XX

Description	Stroke/Direction	Nom. Axial Stroke (mm)	Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE	
Direction of rotation as viewed from armature end, opposite mounting studs			Armature cover: X8 Double shaft: X3, X4 Return spring: X9	Standard	Endurance Engineered
2E Rotary	25° RH	0.6		M2390-0XX	E2390-0XX
2E Rotary	25° LH	0.6		M2389-0XX	E2389-0XX
2E Rotary	35° RH	0.6		M3405-0XX	E3405-0XX
2ERotary	35° LH	0.6		M15111-0XX	E15111-0XX
2E Rotary	45° RH	0.6		M1344-0XX	E1344-0XX
2E Rotary	45° LH	0.6		M15046-0XX	E15046-0XX

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Description	Stroke/Direction	Nom. Axial Stroke(mm)	Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE
Direction of rotation as viewed from armature end, opposite mounting studs			No shafts 3 tapped holes: X6 Return spring: X9	Standard Endurance Engineered
2E Rotary	25°RH	0.6		M2168-0XX E2168-0XX
2E Rotary	25°LH	0.6		M2346-0XX E2346-0XX
2E Rotary	35°RH	0.6		M2193-0XX E2193-0XX
2E Rotary	35°LH	0.6		M2483-0XX E2483-0XX
2E Rotary	45°RH	0.6		M1079-0XX E1079-0XX
2E Rotary	45°LH	0.6		M2744-0XX E2744-0XX

Description	Stroke/Direction	Nom. Axial Stroke(mm)	Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE
Direction of rotation as viewed from armature end, opposite mounting studs			Armature end shaft: X4 3 tapped holes: X6 Return spring: X9	Standard Endurance Engineered
2E Rotary	25°RH	0.6		M1094-0XX E1094-0XX
2E Rotary	25°LH	0.6		M2670-0XX E2670-0XX
2E Rotary	35°RH	0.6		M2685-0XX E2685-0XX
2E Rotary	35°LH	0.6		M15094-0XX E15094-0XX
2E Rotary	45°RH	0.6		M2362-0XX E2362-0XX
2E Rotary	45°LH	0.6		M3112-0XX E3112-0XX

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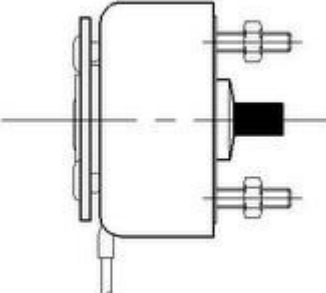
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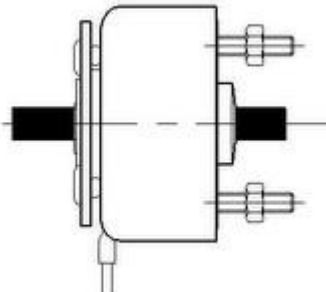
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X Feature Configurations & Part Numbers



Description	Stroke/Direction	Nom. Stroke	Axial Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE	
Direction of rotation as viewed from armature end, opposite mounting studs			Base end shaft: X3 3 tapped holes: X6 Return spring: X9	Standard	Endurance Engineered
2E Rotary	25°RH	0.6		M2933-0XX	E2933-0XX
2E Rotary	25° LH	0.6		M2748-0XX	E2748-0XX
2E Rotary	35°RH	0.6		M1088-0XX	E1088-0XX
2E Rotary	35°LH	0.6		M15615-0XX	E15615-0XX
2E Rotary	45°RH	0.6		M3265-0XX	E3265-0XX
2E Rotary	45°LH	0.6		M2436-0XX	E2436-0XX

Description	Stroke/Direction	Nom. Stroke(mm)	Axial Configuration: 'X' Features	REPLACE 'XX' WITH COIL AWG REQUIRED - SEE GUIDANCE TABLE	
Direction of rotation as viewed from armature end, opposite mounting studs			Double shaft: X3, X4 3 tapped holes: X6 Return spring: X9	Standard	Endurance Engineered
2E Rotary	25° RH	0.6		M2411-0XX	E2411-0XX
2E Rotary	25°LH	0.6		M2537-0XX	E2537-0XX
2E Rotary	35°RH	0.6		M2994-0XX	E2994-0XX
2E Rotary	35°LH	0.6		M15220-0XX	E15220-0XX
2E Rotary	45°RH	0.6		M3244-0XX	E3244-0XX
2E Rotary	45°LH	0.6		M3245-0XX	E3245-0XX

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