

# Size 7S Rotary Solenoid

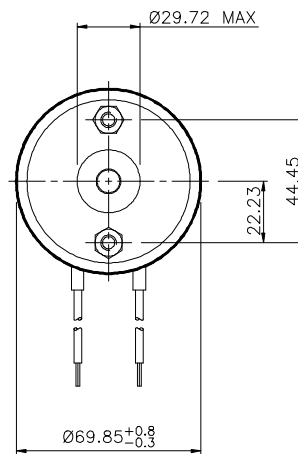
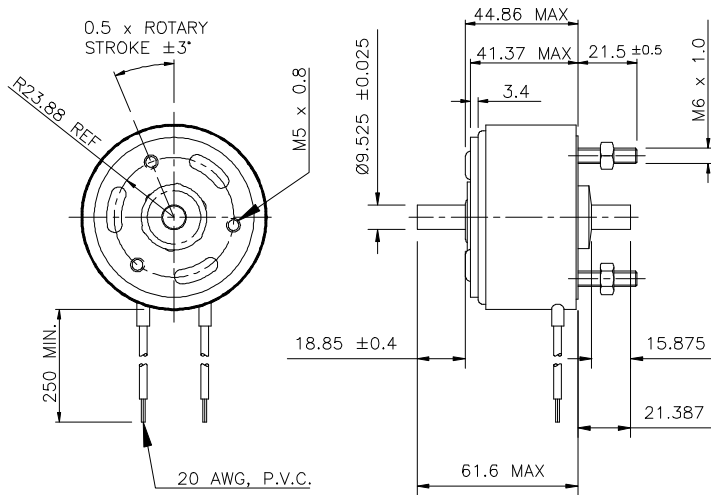


## General Specifications:

- **Dielectric Strength:** 23-29 awg. 1200 VRMS / 30-33 awg. 1500 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 384.2 x 384.2 x 3.2mm min.

- **Coil Resistance:** 23-30 awg +/- 5% tolerance / 31-33 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:** 1.02 Kg

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 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 Torque (6)					
25°	2260	1243	2689	3752	4791	5266
35°	678	1356	2486	4294	4746	
45°	1469	565	994	1853	3367	3706
67.5°	283	576	1007	1978	2181	
95°	678	170	396	723	1187	1311

## 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)		80	38	16	5.7		
Maximum ON Time (sec) for single pulse (2)		138	50	18	6.4		
Watts (@20° C)	35	70	140	350	700		
Ampere Turns (@ 20° C)	1570	2230	3150	5000	7034		
Coil Data							
awg. (3)	Resistance (@ 20°C)	# Turns (4)	Nominal DC Voltage				
23	8.09	780	16.3	23.0	33.0	52.0	73.0
24	12.34	949	21.0	29.0	41.0	65.0	92.0
25	18.62	1148	26.0	37.0	52.0	83.0	116.0
26	30.84	1472	33.0	47.0	66.0	105.0	147.0
27	48.77	1854	41.0	59.0	83.0	132.0	185.0
28	81.14	2436	52.0	74.0	105.0	167.0	234.0
29	121.0	2944	65.0	92.0	130.0	206.0	290.0
30	190.0	3650	82.0	116.0	164.0	261.0	367.0
31	275.0	4175	103.0	147.0	208.0	329.0	463.0
32	440.0	5292	130.0	169.0	239.0	380.0	-
33	715.0	6650	158.0	223.0	316.0	-	-

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

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