

Size 6E Rotary Solenoid



General Specifications:

•**Dielectric Strength:** 20 awg. 1000 VRMS / 21-31 awg. 1200 VRMS / 32-33 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 323.9 x 323.9 x 3.2mm min.

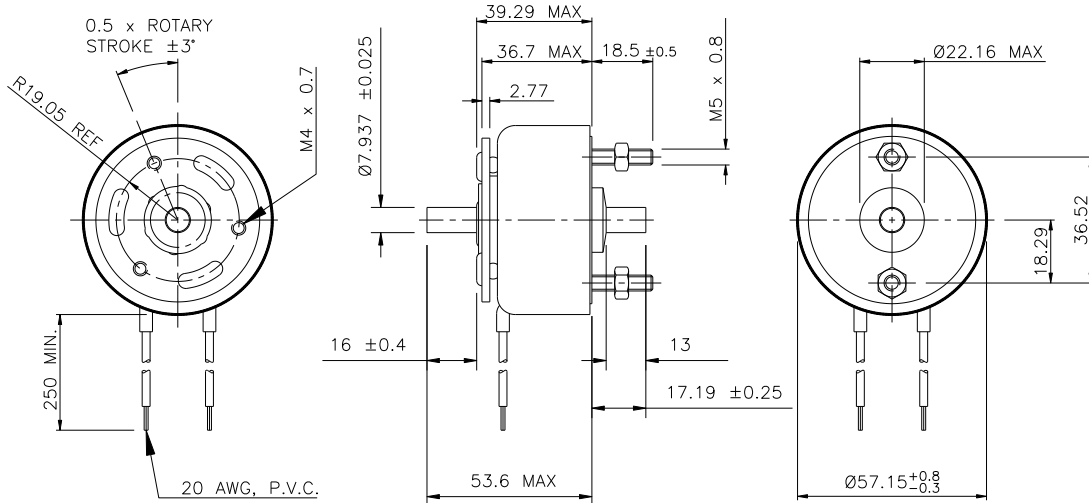
•**Coil Resistance:** +/- 5% tolerance

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

•**Return Spring Torque:** 56.5 mNm +/- 20%

•**Weight:** 624 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 56.5mNm +/-20

Performance Specification

Starting Torque (mNm) @ 20° C (5)							
Maximum Duty Cycle	100%	50%	25%	10%	5%		
Stroke	Holding Torque (6)						
	25°	1017	711.9	1310.8	1977.5	2938.0	3141.4
	35°	519.8	960.5	1412.5	1966.2	2101.8	
	45°	678.0	271.2	519.8	802.3	1186.5	1209.1
	67.5°	248.6	452.0	655.4	937.9	994.4	
95°	339.0	135.6	259.9	384.2	553.7	587.6	

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)

Coil Specifications

Maximum Duty Cycle	100%	50%	25%	10%	5%		
Maximum ON Time (sec)							
When pulsed		87	36	13	4.6		
continuously (1)							
Maximum ON Time (sec)		140	44	16	5.7		
for single pulse (2)							
Watts (@20° C)	32	64	128	320	640		
Ampere Turns (@ 20° C)	1480	2080	2940	4620	6620		
Coil Data							
awg. (3)	Resistance (@ 20°C)	# Turns (4)	Nominal DC Voltage				
20	1.34	315	6.5	9.3	13.1	20.7	29.3
21	1.82	350	7.6	10.8	15.3	24.1	34.1
22	3.02	456	9.8	13.9	19.7	31.1	44.0
23	4.69	567	12.3	17.3	24.5	38.7	54.8
24	7.43	710	15.4	21.8	30.8	48.8	69.0
25	12.90	960	20.3	28.7	40.6	64.2	90.9
26	19.70	1170	25.1	35.5	50.2	79.4	112.0
27	32.00	1500	32.0	45.3	64.0	101.0	143.0
28	51.60	1904	40.6	57.5	81.3	129.0	182.0
29	74.40	2232	48.8	69.0	97.6	154.0	218.0
30	126.0	2940	63.5	89.8	127.0	201.0	284.0
31	195.0	3611	79.0	112.0	158.0	250.0	353.0
32	288.0	4350	96.0	136.0	192.0	304.0	429.0
33	427.0	5010	117.0	165.0	234.0	370.0	-
34	627.0	5800	142.0	200.0	283.0	448.0	-
35	1025.0	7600	181.0	256.0	362.0	-	-

Size 6E Rotary Solenoid

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
6E Rotary	25°RH	1.4	M15340-0XX	E15340-0XX	M2908-0XX	E2908-0XX	M15354-0XX	E15354-0XX
6E Rotary	25°LH	1.4	M15341-0XX	E15341-0XX	M2907-0XX	E2907-0XX	M15355-0XX	E15355-0XX
6E Rotary	35°RH	1.5	M15342-0XX	E15342-0XX	M2090-0XX	E2090-0XX	M15356-0XX	E15356-0XX
6E Rotary	35°LH	1.5	M15343-0XX	E15343-0XX	M2920-0XX	E2920-0XX	M15357-0XX	E15357-0XX
6E Rotary	45°RH	1.5	M15344-0XX	E15344-0XX	M2331-0XX	E2331-0XX	M15358-0XX	E15358-0XX
6E Rotary	45°LH	1.5	M3020-0XX	E3020-0XX	M1438-0XX	E1438-0XX	M2647-0XX	E2647-0XX
6E Rotary	67.5°RH	1.5	M15346-0XX	E15346-0XX	M3048-0XX	E3048-0XX	M15360-0XX	E15360-0XX
6E Rotary	67.5°LH	1.5	M15347-0XX	E15347-0XX	M3272-0XX	E3272-0XX	M15361-0XX	E15361-0XX
6E Rotary	95°RH	1.5	M15348-0XX	E15348-0XX	M2208-0XX	E2208-0XX	M15156-0XX	E15156-0XX
6E Rotary	95°LH	1.5	M3263-0XX	E3263-0XX	M2819-0XX	E2819-0XX	M15053-0XX	E15053-0XX

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

NSF Controls Ltd | Ingrow Bridge Works | Keighley | West Yorkshire | BD21 5EF | UK | Registered in England No. 3378269

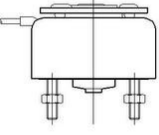
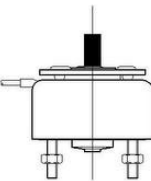
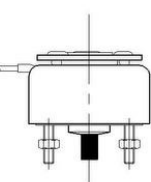
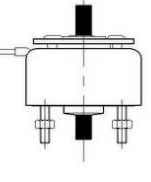
T: +44 (0) 1535 661 144 | F: +44 (0) 1535 661 474 | E: info@nsfcontrols.co.uk | www.nsfcontrols.co.uk

Size 6E Rotary Solenoid

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
6E Rotary	25°RH	1.4	M2771-0XX	E2771-0XX	M2838-0XX	E2838-0XX	M2059-0XX	E2059-0XX	M15390-0XX	E15390-0XX
6E Rotary	25°LH	1.4	M1124-0XX	E1124-0XX	M15372-0XX	E15372-0XX	M15381-0XX	E15381-0XX	M15391-0XX	E15391-0XX
6E Rotary	35°RH	1.5	M15110-0XX	E15110-0XX	M15373-0XX	E15373-0XX	M2456-0XX	E2456-0XX	M15392-0XX	E15392-0XX
6E Rotary	35°LH	1.5	M15364-0XX	E15364-0XX	M15374-0XX	E15374-0XX	M15382-0XX	E15382-0XX	M15393-0XX	E15393-0XX
6E Rotary	45°RH	1.5	M2425-0XX	E2425-0XX	M1420-0XX	E1420-0XX	M2457-0XX	E2457-0XX	M15394-0XX	E15394-0XX
6E Rotary	45°LH	1.5	M2426-0XX	E2426-0XX	M1419-0XX	E1419-0XX	M15383-0XX	E15383-0XX	M15395-0XX	E15395-0XX
6E Rotary	67.5°RH	1.5	M15366-0XX	E15366-0XX	M15376-0XX	E15376-0XX	M15385-0XX	E15385-0XX	M2541-0XX -	E2541-0XX
6E Rotary	67.5°LH	1.5	M15367-0XX	E15367-0XX	M3100-0XX	E3100-0XX	M15386-0XX	E15386-0XX	M3119-0XX -	E3119-0XX -
6E Rotary	95°RH	1.5	M15368-0XX	E15368-0XX	M15377-0XX	E15377-0XX	M15387-0XX	E15387-0XX	M3186-0XX -	E3186-0XX -
6E Rotary	95°LH	1.5	M15369-0XX	E15369-0XX	M15378-0XX	E15378-0XX	M15170-0XX	E15170-0XX	M15397-0XX	E15397-0XX

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

NSF Controls Ltd | Ingrow Bridge Works | Keighley | West Yorkshire | BD21 5EF | UK | Registered in England No. 3378269

T: +44 (0) 1535 661 144 | F: +44 (0) 1535 661 474 | E: info@nsfcontrols.co.uk | www.nsfcontrols.co.uk