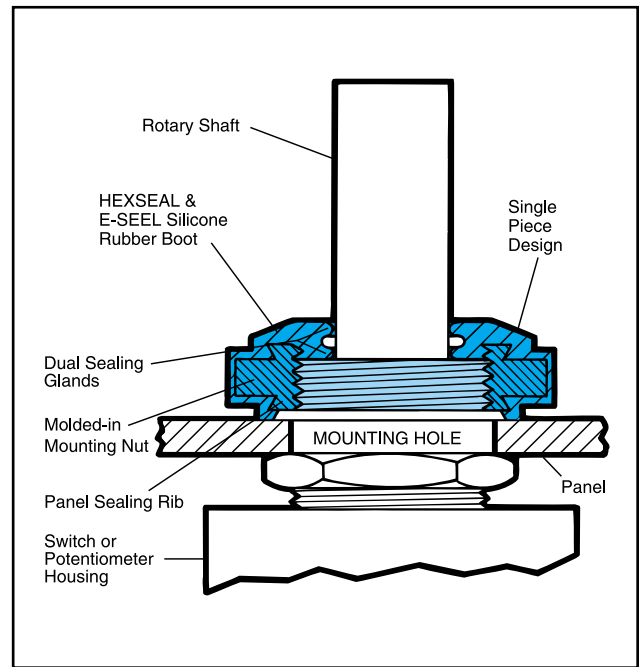


Rotary Shaft Seals For Switches & Potentiometers

HEXSEAL® and E-SEEL® rotary shaft seals are molded from a high tear-strength silicone rubber bonded to a built-in mounting nut. Each seal surrounds the rotary shaft and forms a watertight and dust-tight seal against the shaft and front panel surface.

SPECIFICATIONS

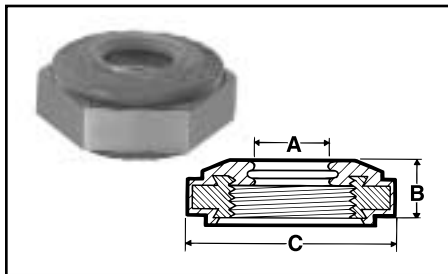
Material: HEXSEALS: Silicone rubber conforms to ZZ-R-765 Class III, GR 60 (unless otherwise specified)
 E-SEELS: Silicone rubber polymer type ASTM D 1418
Mounting Nut: HEXSEALS: Brass, nickel-plated
 E-SEELS: Brass, black oxide
Temperature Range: HEXSEALS: -94°F to +400°F
 E-SEELS: -80°F to +400°F
Pressure Range: Exceeds 15 psi internal and 1500 psi external
Operational Life: 50,000 actuations, minimum
Shelf Life: In excess of 25 years
Resistant to: Salt spray, sunlight, ozone, weather, fungus and most acids and lubricating oils
Military Approvals: Most HEXSEALS are QPL-approved under MIL-B-5423 (see QPL listing on page 5)
Agency Recognition: E-SEELS and HEXSEALS are UL-listed to UL Std. 50 types 1-13, and meet CSA standards
Installation: Please see installation instructions on page 14.



HOW TO ORDER

Specify APM boot part number and, if necessary, the appropriate bushing adaptor part number (please see page 14).

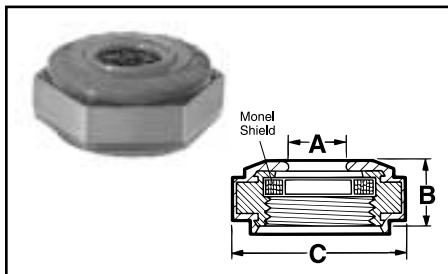
FIGURE 21 Rotary Shaft Seals



Thread Size	A Shaft Size		B Height		C Flat		Military Part Number	APM Boot Part Number	Color*	HEXSEAL	E-SEEL
	inch	mm	inch	mm	inch	mm					
1/4-28NF2B	.125	3.18	.219	5.56	.375	9.53	—	N9042 x 1/8	Gray	•	
1/4-32NEF-2B	.125	3.18	.219	5.56	.375	9.53	M5423/09-03	N9040 x 1/8	Gray	•	
3/8-32NEF-2B	.125	3.18	.219	5.56	.500	12.70	M5423/09-01	N9030 x 1/8	Gray	•	
3/8-32NEF-2B	.188	4.78	.219	5.56	.500	12.70	—	N9030 x 3/16	Gray	•	
3/8-32NEF-2B	.250	6.35	.219	5.56	.500	12.70	M5423/09-02	N9030 x 1/4	Gray	•	
3/8-32NEF-2B	.250	6.35	.359	9.12	.500	12.70	—	N9033 x 1/4	Gray	•	
15/32-32NS-2B	.250	6.35	.219	5.56	.625	15.88	M5423/09-04	N9060 x 1/4	Gray	•	
1/2-32NS-2B	.250	6.35	.219	5.56	.625	15.88	M5423/09-06	N9063 x 1/4	Gray	•	
5/8-24NEF-2B	.375	9.53	.219	5.56	.750	19.05	M5423/09-05	N9065 x 3/8	Gray	•	
5/8-24NEF-2B	.500	12.70	.219	5.56	.750	19.05	—	N9065 x 1/2	Gray	•	
3/8-32NEF-2B	.250	6.35	.219	5.56	.500	12.70	—	C1332/40	Black		•

*Other colors available. Please consult factory.

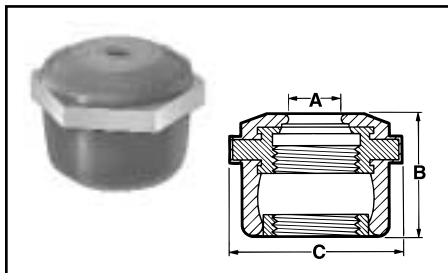
FIGURE 22 RFI/EMI Shielded Rotary Shaft Seals



Thread Size	A Shaft Size		B Height		C Flat		Military Part Number	APM Boot Part Number	Color*	HEXSEAL	E-SEEL
	inch	mm	inch	mm	inch	mm					
1/4-32NF2B	.125	3.18	.219	5.56	.375	9.53	M5423/09-09	N9040 x 1/8 RFI	Gray	•	
3/8-32NEF-2B	.125	3.18	.219	5.56	.500	12.70	M5423/09-07	N9030 x 1/8 RFI	Gray	•	
3/8-32NEF-2B	.250	6.35	.219	5.56	.500	12.70	M5423/09-08	N9030 x 1/4 RFI	Gray	•	
3/8-32NEF-2B	.250	6.35	.359	9.12	.500	12.70	M5423/09-14	N9033 x 1/4 RFI	Gray	•	
15/32-32NS-2B	.250	6.35	.219	5.56	.625	15.88	M5423/09-10	N9060 x 1/4 RFI	Gray	•	
5/8-24NEF-2B	.375	9.53	.219	5.56	.750	19.05	M5423/09-11†	N9065 x 3/8 RFI	Gray	•	
1/2-32NS-2B	.250	6.35	.219	5.56	.625	15.88	M5423/09-12	N9063 x 1/4 RFI	Gray	•	
1/4-28NF-2B	.125	3.18	.219	5.56	.375	9.53	—	N9042 x 1/8 RFI	Gray	•	
3/8-32NEF-2B	.125	3.18	.531	13.49	.625	15.88	—	NLK9030 x 1/8 RFI	Gray	•	
3/8-32NEF-2B	.250	6.35	.531	13.49	.625	15.88	—	NLK9030 x 1/4 RFI	Gray	•	

*Other colors available. Please consult factory. †Inactive for new designs. All Standard RFI/EMI boots feature knitted Monel wire shields.

FIGURE 23 Locking Rotary Shaft Seals



Thread Size	A Shaft Size		B Height		C Flat		Lock Nut O.D.		Military Part Number	APM Boot Part Number	Color*	HEXSEAL	E-SEEL
	inch	mm	inch	mm	inch	mm	inch	mm					
1/4-32NS-2B	.125	3.18	.500	12.70	.500	12.70	.344	8.74	—	NLK9040 x 1/8	Gray	•	
3/8-32NS-2B	.125	3.18	.531	13.49	.625	15.88	.469	11.91	—	NLK9030 x 1/8	Gray	•	
3/8-32NS-2B	.250	6.35	.531	13.49	.625	15.88	.469	11.91	—	NLK9030 x 1/4	Gray	•	

*Other colors available. Please consult factory.

DIMENSIONS FOR REFERENCE ONLY.