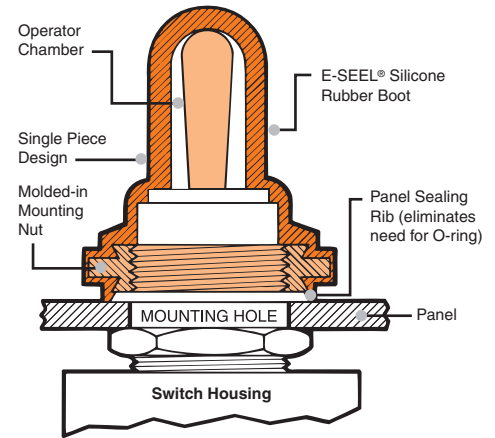


METRIC Sizes for Toggle, Pushbutton and Rotary Switches and Circuit Breakers

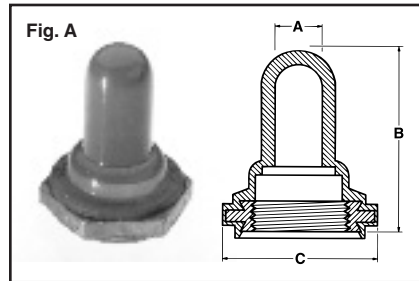
SPECIFICATIONS

Material.....Silicone rubber polymer type ASTM D 1418 or A-A-59588
Mounting NutBrass, black-oxide. *Brass, nickel-plated.
Temperature Range....-80°F to +400°F (-62°C to +204°C)
Enclosure Protection..NEMA/UL/ULC Types 1, 2, 3, 3S, 3R, 4, 4X, 6P, 12, 13; IEC IP66/IP68
Pressure RangeExceeds 15 psi internal and 1500 psi external
Operational Life100,000 actuations (minimum)
Shelf LifeExcess of 25 years
Resistant toSalt spray, sunlight, ozone, weather, fungus, and most acids and lubricating oils
Agency Recognition...UL & ULC Recognized Component to UL Std. 50
Installation.....Please see installation instructions on page 19



Additional metric sizes available (consult factory)

TOGGLE SWITCH BOOTS



IP66/IP68/NEMA 6P Enclosure Protection

Full Toggle (with Constant I.D.) Switch Boots

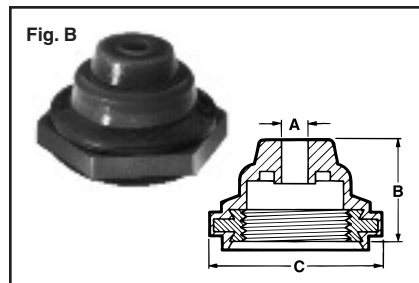
(covers all external portions of switch & seals switch mounting hole)

Figure A

Thread Size	Throat Size ¹ ("A")		Max Toggle Height ²		Max Boot Height ("B")		Flat ("C")		Color	APM Cat. No.
	mm	in.	mm	in.	mm	in.	mm	in.		
M6 X 0.75	2.9	0.116	10.8	0.43	14.3	0.562	9.0	0.352	Black	1131/25*
M12 X 0.75	5.3	0.21	16.2	0.64	21.6	0.85	15.8	0.625	Black	C1131/41
M12 X 0.75	5.5	0.219	22.8	0.90	27.7	1.1	15.8	0.625	Black	1131/26-M12-.75
M12 X 1	6.5	0.256	16.7	0.66	21.4	0.844	15.8	0.625	Black	1131/31-M12
M12 X 1	5.9	0.234	16.9	0.66	21.8	0.859	15.8	0.625	Black	1131/40
M12 X 1	5.5	0.219	22.8	0.90	27.7	1.1	15.8	0.625	Black	1131/26-M12-.10

¹ Throat size is the maximum diameter of the switch toggle/handle (Dimension "A").

² Max toggle height is the maximum distance from the end of the switch mounting stem to the end of the switch toggle.



IP66/IP68/NEMA 6P Enclosure Protection

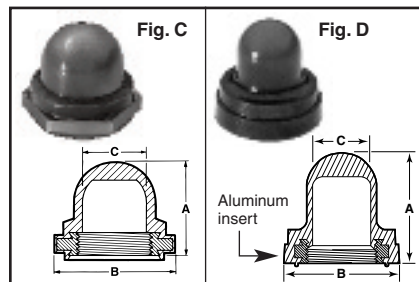
Half Toggle Switch Boots

(Seals switch mounting stem & hole; toggle actuator protrudes)

Figure B

Thread Size	Throat Size ("A")		Toggle Diameter Accommodated		Max Boot Height ("B")		Flat ("C")		Color	APM Cat. No.
	mm	in.	mm	in.	mm	in.	mm	in.		
M5 X 0.5	1.1	0.42	1.57-4.57	0.062-0.18	5.7	0.225/0.25	7.9	0.313	Black	1132/17-M5-5
M12 X 1	2.36	0.093	2.92-6.09	0.115-0.24	11.1	0.437	15.9	0.625	Black	1132/33-M12-1

PUSHBUTTON SWITCHES & CIRCUIT BREAKERS/PROTECTORS



IP66/IP68/NEMA 6P Enclosure Protection

Pushbutton Boots

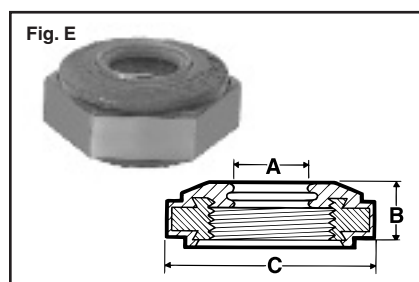
(Seals switch mounting stem & hole; toggle actuator protrudes)

Figures C & D

Thread Size ¹	Max Boot Height ("A")		Max Plunger Height		Dimension "B"		Max Plunger Diameter ("C")		Color ¹	APM Cat. No.	Fig.
	mm	in.	mm	in.	mm	in.	mm	in.			
M10 X 1	15.47	0.62	8.4	0.33	16.3	0.64	8.1	0.32	Black	C1221/21-M10	D
M11 X 1	15.47	0.62	6.8	2.67	18.3	0.72	8.1	0.32	Clear	C1221/27	D
M12 X 1	18.64	0.733	11.9	0.469	15.9	0.625	10.72	0.422	Black	NC3030H-M12-1	C
M12 X 1	13.89	0.547	7.14	0.281	15.88	0.625	10.72	0.422	Black	N3030 M12x1	C
M12 X .75	13.89	0.547	7.14	0.281	15.88	0.625	10.72	0.422	Black	N3030 M12x.75	C

¹ "Clear" allows viewing of breaker amp rating and trip state; please enquire for other available colors.

ROTARY SHAFT SEALS



IP66/IP68/NEMA 6P Enclosure Protection

Seal the shaft and mounting hole of standard rotary switches/potentiometers that use a threaded stem and nut mounting.

Figure E

Thread Size	Shaft Size ¹ ("A")		Height ("B")		Flat ("C")		Color ²	APM Cat. No.
	mm	in.	mm	in.	mm	in.		
M7 X 0.75	5.0	0.2	5.5	0.2	12.7	0.500	Gray	1332/39-2*
M9 X 0.75	6.35	0.250	5.56	0.219	12.7	0.500	Gray	C1332/41*
M10 X 1	6.0	0.236	5.9	0.236	12.7	0.500	Gray	1332/45*

¹ Switch/potentiometer shaft must have a smooth, round cross-section where it meets the sealing edge of the shaft seal device.

² Please enquire for other available colors.