

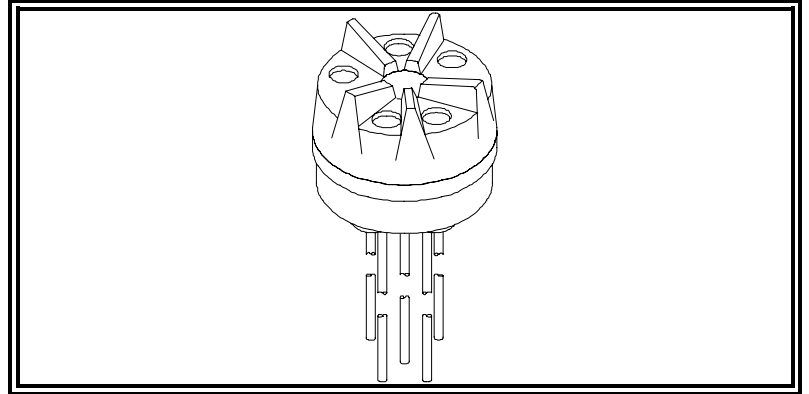


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PRODUCT DATA SHEET

POTENTIOMETER MODEL 12



NOTES: 1. All dimensions are in standard inches; metric in []
 2. Unless specified dimensions are ± 0.003 [0.08], angles $\pm 5^\circ$

PRODUCT SPECIFICATIONS

MECHANICAL DATA

Operational Torque	0.02 to 0.20 IN OZ
Stop Guide Torque	3.5 IN OZ min (5.0 IN OZ typical)
Peak Detent Torque	0.15 to 0.70 IN OZ
Rotational Angle	
Mechanical	220° Nominal
Electrical	220° Nominal
Soldering	
Temperature	350°C max
Dwell Time	2 sec max
	(During soldering, knob must be turned to Stop Opposite Switch Position)

MATERIALS DATA

Potentiometer Lead Wires ... (Insulated Lead Wires Optional)	Gold-Plated Nickel Silver
Switch Terminals	Gold-Plated Beryllium Copper
Wiper	Silver-Plated Beryllium Copper
Knob	Thermoplastic
Base	Thermoplastic
Resistor Substrate	Epoxy Multilayer Laminate
Resistor Element	Conductive Plastic Thick Film

ELECTRICAL DATA

Potentiometer	
Overall Resistance	Nominal Value $\pm 20\%$
Wattage Rating	80 Milliwatts
Contact Resistance	Less than 15% of actual overall Resistance Value
Switch	
Switch Resistance	250 milliohms max 25 milliohms typ
Contact Bounce and Noise.	3.5 milliseconds max
Voltage Rating	6.0 Volts DC max
Current Rating	500 milliamperes max
Closure Angle	20° nominal

ENVIRONMENTAL DATA

Operational Temperature	
Range	-25°C to + 55°C
Storage Temperature	
Range	-40°C to + 60°C

Overall resistance will remain within 10% of the initial value and all other Electrical and Mechanical Parameters remain within spec after:

Thermal Shock per IEC Publication 68-2-14 Test Na: "Rapid Change of Temperature with Prescribed Time of Transition". -25°C to + 55°C

48 Hours Exposure to QE008 Perspiration at 40°C

IEC Publication 68-2-3 Test Ca: "Damp Heat Steady State."

IEC Publication 68-2-30 Test Db: "Damp Heat Cyclic"

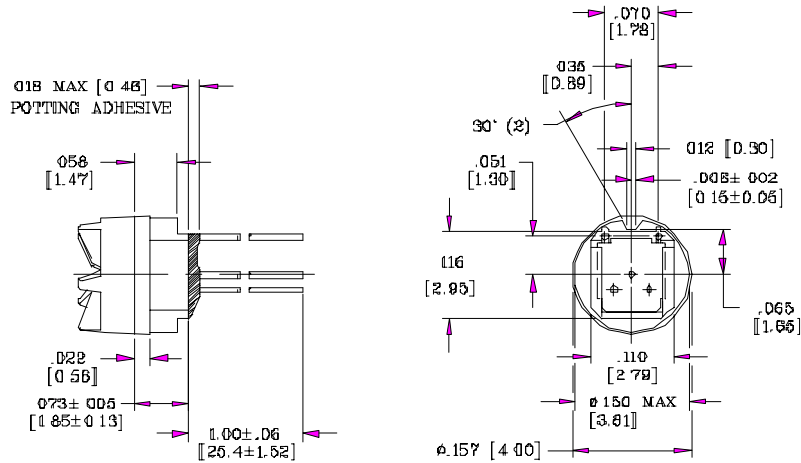
RTI reserves the right to make changes at any time to improve reliability, function, or design in order to provide the best possible product.



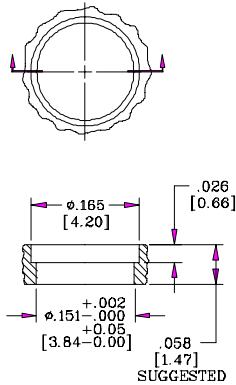
MODEL 12 PRODUCT DATA SHEET

HOUSING

MODEL 12SF (Switch Forward) - STYLE A
MODEL 12SR (Switch Reverse) - STYLE B

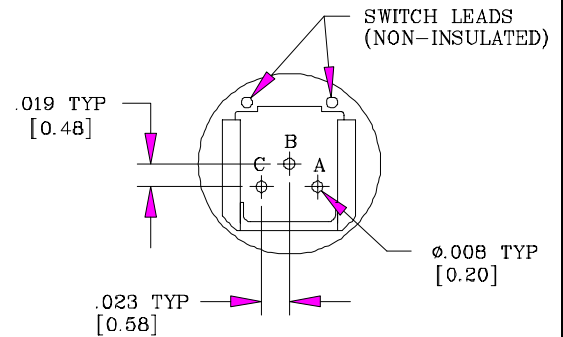


MOUNTING HOLE



LEAD WIRE OPTIONS

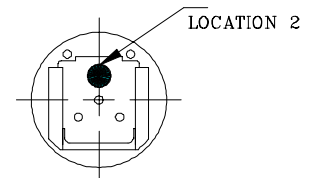
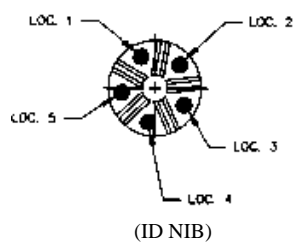
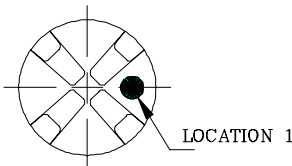
- | | | |
|---|-----------------------|---------------|
| A | 3 leads non-insulated | (A,B,C) |
| B | insulated | (A,B) Forward |
| C | 2 leads non-insulated | Taper |
| D | insulated | (B,C) Reverse |
| E | 2 leads non-insulated | Taper |
| F | 3 leads non-insulated | (A,B,C) |
| | 3 leads insulated | (A,B) Forward |
| | 2 leads insulated | Taper |
| | 2 leads insulated | (B,C) Reverse |
| | | Taper |



COLOR CODE LOCATIONS

INK OPTIONS

- 00 YELLOW
- 03 TAN
- 04 LT BLUE
- 05 ORANGE
- 07 DK GREEN
- 08 WHITE
- 09 PINK
- 10 DK BLUE
- 11 LT GRAY
- 12 BLACK
- 16 RED
- 17 PURPLE
- 24 LT GREEN



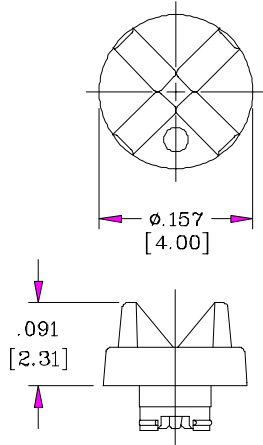
KNOB

ELEMENT

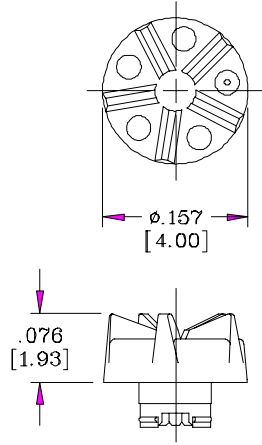


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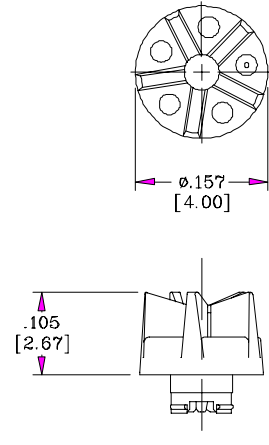
KNOBS



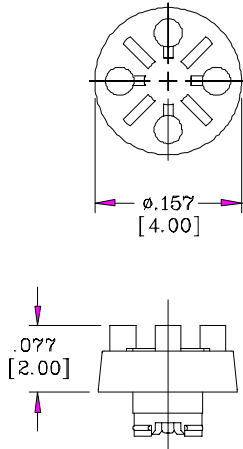
STYLE A



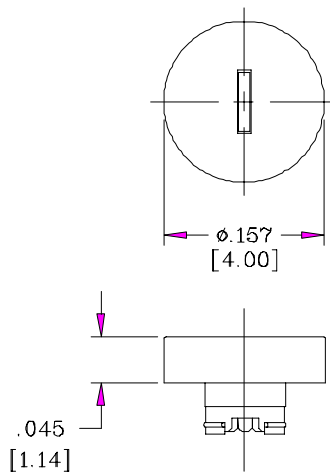
STYLE B



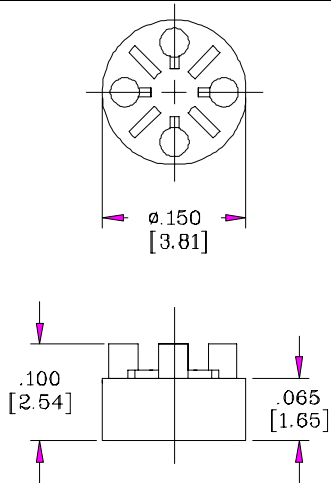
STYLE C



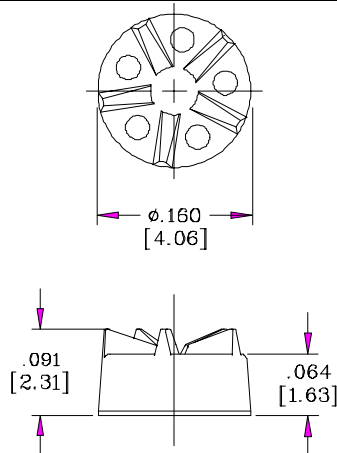
STYLE D



STYLE E



STYLE H
CAP (glues on D knob only)



STYLE K
CAP (glues on B knob only)