

**SPECIFICATIONS**

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REV.	BY	DATE	APPRVL.

P/N J30-NM30-SB

**ELECTRICAL**

RESISTANCE TOLERANCE----- 10K OHMS  
 RESISTANCE (INDEPENDENT)----- ±20%  
 LINEARITY (INDEPENDENT)----- ±5.0%  
 POWER RATING----- 0.1 WATT (0.04 FOR "Z" AXIS)  
 LEVER ELECTRICAL ANGLE----- 20° (60° FOR "Z" AXIS)  
 RESOLUTION----- ESSENTIALLY INFINITE  
 OUTPUT SMOOTHNESS----- BELOW ±0.2% AGAINST INPUT VOLTAGE  
 CONTACT RESISTANCE VARIATION----- BELOW 6% C.R.V.  
 INSULATION RESISTANCE----- 1000 MEGA OHMS @ 500VDC  
 DIELECTRIC STRENGTH----- 1 MINUTE AT 500 VAC  
 MAX. WIPER OUTPUT----- 10µA RECOMMENDED, 1mA MAX.

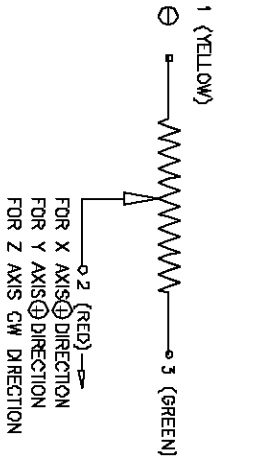
**MECHANICAL**

RANGE OF OPERATING LEVER----- "X" & "Y": ±10° ~ ±15° FROM CENTER  
 "Z" AXIS: ±30° ~ ±35° FROM KNOB CENTER  
 OPERATING FORCE----- "X" & "Y": APPROX. 3.6 ~ 7.14 OZ.-F.  
 "Z" AXIS: APPROX. 4.23 ~ 9.87 OZ.-IN.  
 OPERATING TEMPERATURE----- -20°C TO +60°C  
 LIFE EXPECTANCY----- 2 MILLION OPERATIONS  
 WEIGHT----- APPROX. 21 OZ.  
 SHOCK----- APPROX. 1.0 OZ.

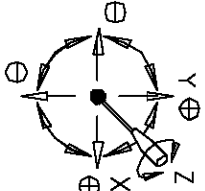
**MATERIALS**

HOUSING----- ALUMINUM AND HIGH TEMP. THERMO PLASTIC  
 ELEMENT----- CONDUCTIVE PLASTIC  
 KNOB----- HARD PLASTIC

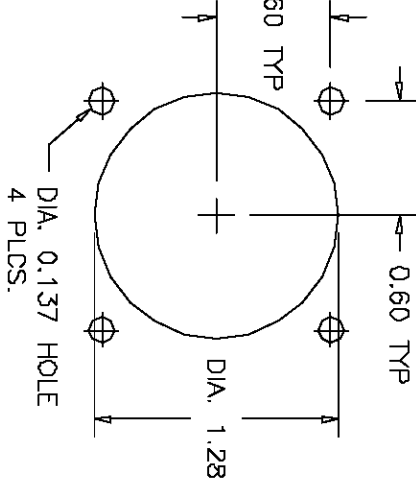
**SCHEMATIC**



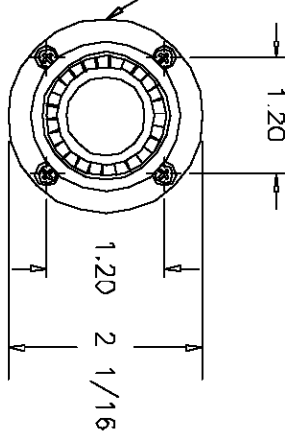
**"N" LEVER DIRECTION**



**PANEL ARRANGEMENT**

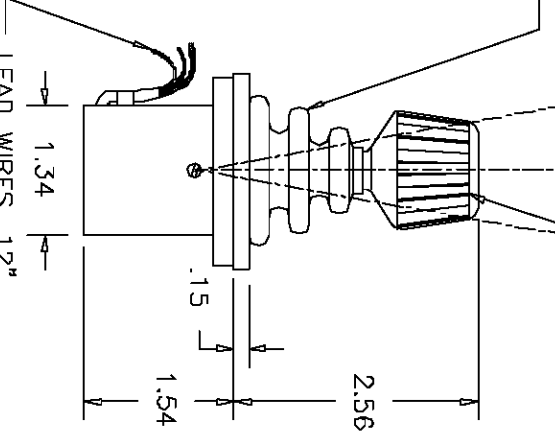


BLACK PLASTIC DRESS PANEL WITH MOUNTING SCREWS.



DUST PROOF RUBBER BOOT.

10 TO 15 DEGREES TYP.  
 "Z" AXIS CONTROL KNOB WITH SPRING CENTER POSITION RETURN.



**TITLE**

JOYSTICK

**PART NO.**

J30-NM30-SB



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