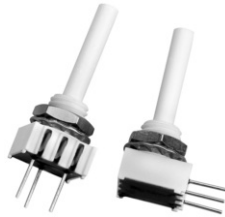


3/8" Square Panel Potentiometer Miniature - Cermet - Fully Sealed



P10 panel potentiometer combines the very good setting stability offered by VISHAY SFERNICE trimmers (due to their proprietary multifinger wiper), with a mechanical life of 10 000 cycles.

It is an ideal choice to set and control parameters such as temperature, time, volume levels, etc.

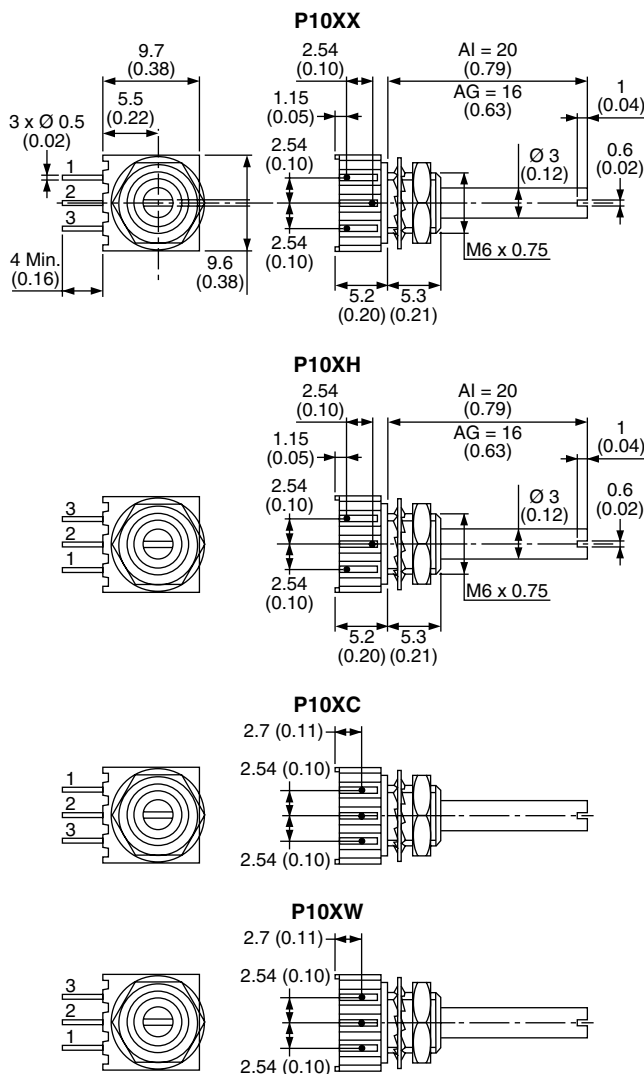
FEATURES

- Industrial Grade
- 0.5 W at 70 °C
- Miniature compact
- Plastic housing and shaft
- Fully sealed
- 7 standard pin styles
- 10 000 cycles rotational life
- RoHS compliant since date code 0452

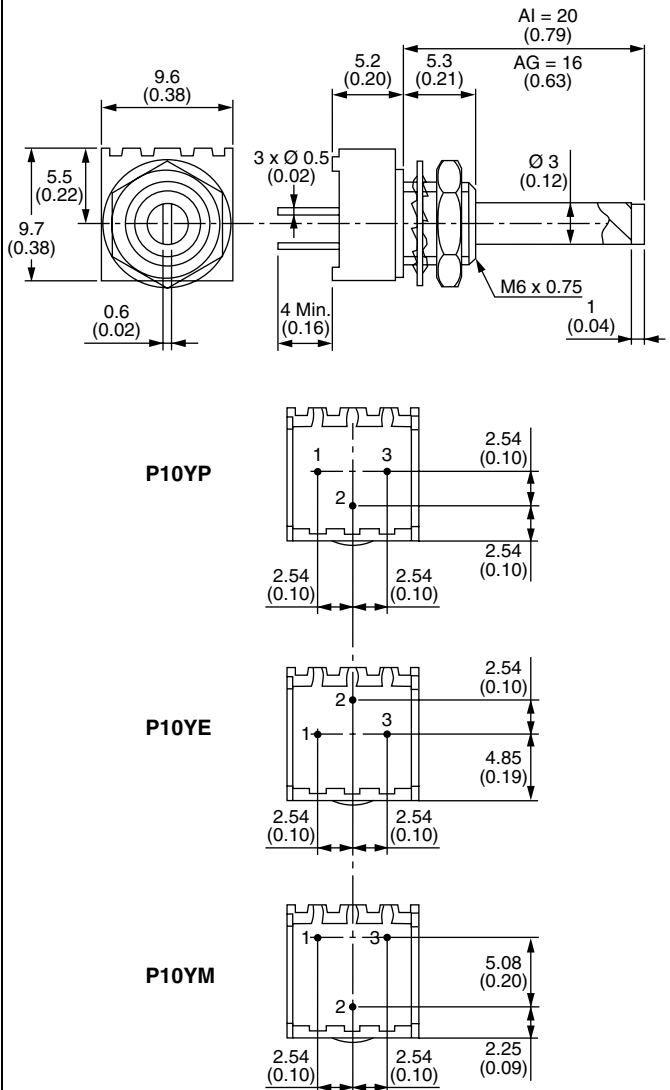


DIMENSIONS in millimeters (inches) (± 0.5 mm)

P10: Side Adjust



P10: Top Adjust





ELECTRICAL SPECIFICATIONS																																																											
Resistive Element	CERMET																																																										
Electrical Travel	250° ± 15°																																																										
Standard Resistance Values	100 Ω to 2 MΩ																																																										
Tolerance	10 % - 5 % on request																																																										
Variation Law	Linear A																																																										
	<p>CIRCUIT DIAGRAM</p> <p>OUTPUT VOLTAGE RATIO (%)</p>																																																										
Power Rating	<p>0.5 W at 70 °C</p>																																																										
Standard Resistance Element Data	<table border="1"> <thead> <tr> <th>Standard Resistance Values</th> <th>Max. Power at 70 °C</th> <th>Max. Working Voltage</th> <th>Max. Cur. Through Wiper</th> </tr> <tr> <th>W</th> <th>W</th> <th>V</th> <th>mA</th> </tr> </thead> <tbody> <tr><td>100</td><td>0.5</td><td>7.0</td><td>70</td></tr> <tr><td>200</td><td rowspan="5" style="text-align: center;">↓</td><td>10.0</td><td>50</td></tr> <tr><td>500</td><td>15.8</td><td>32</td></tr> <tr><td>1K</td><td>22.4</td><td>22</td></tr> <tr><td>2K</td><td>31.8</td><td>16</td></tr> <tr><td>5K</td><td>50.0</td><td>10</td></tr> <tr><td>10K</td><td rowspan="5" style="text-align: center;">↓</td><td>70.7</td><td>7.0</td></tr> <tr><td>20K</td><td>100</td><td>5.0</td></tr> <tr><td>50K</td><td>158</td><td>3.2</td></tr> <tr><td>100K</td><td>0.5</td><td>224</td><td>2.2</td></tr> <tr><td>200K</td><td>0.28</td><td>250</td><td>1.3</td></tr> <tr><td>500K</td><td>0.13</td><td>250</td><td>0.5</td></tr> <tr><td>1M</td><td>0.06</td><td>250</td><td>0.25</td></tr> <tr><td>2M</td><td>0.028</td><td>250</td><td>0.13</td></tr> </tbody> </table>	Standard Resistance Values	Max. Power at 70 °C	Max. Working Voltage	Max. Cur. Through Wiper	W	W	V	mA	100	0.5	7.0	70	200	↓	10.0	50	500	15.8	32	1K	22.4	22	2K	31.8	16	5K	50.0	10	10K	↓	70.7	7.0	20K	100	5.0	50K	158	3.2	100K	0.5	224	2.2	200K	0.28	250	1.3	500K	0.13	250	0.5	1M	0.06	250	0.25	2M	0.028	250	0.13
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Temperature Coefficient (Typical)	± 150 ppm/°C																																																										
Contact Resistance Variation	1 % Rn or 2 Ω																																																										
End Resistance (Typical)	1 Ω																																																										
Dielectric Strength (RMS)	1000 V																																																										
Insulation Resistance (300 VDC)	10 ⁶ MΩ																																																										



3/8" Square Panel Potentiometer
Miniature - Cermet - Fully Sealed

Vishay Sfernice

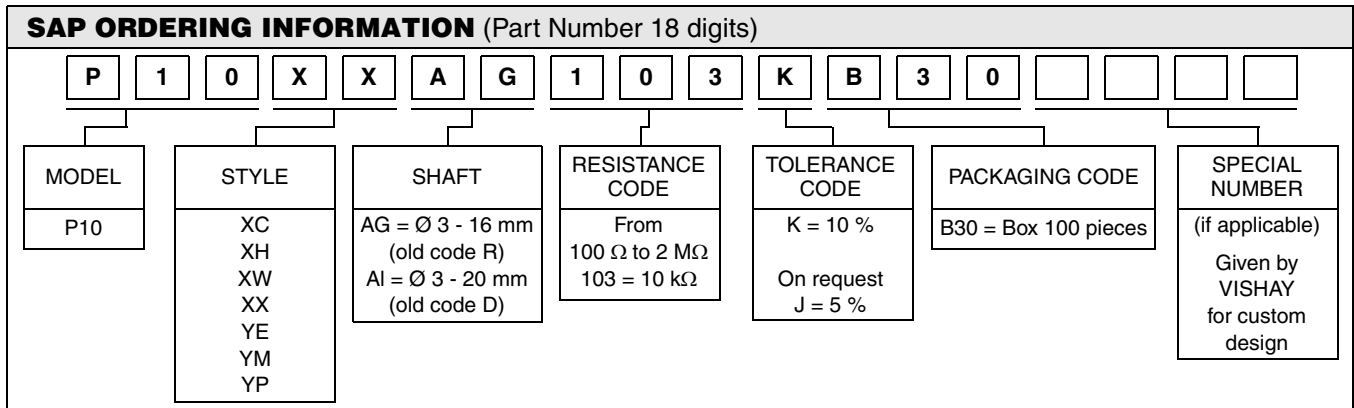
MECHANICAL SPECIFICATIONS		
Mechanical Travel	290° ± 5	
Operating Torque (Typical)	2 Ncm max.	2.83 oz.-inch max.
End Stop Torque	7 Ncm max.	9.9 oz.-inch max.
Tightening Torque of Mounting Nut	25 Ncm max.	2.2 lb-inch max.
Unit Weight	1 g	3.5 10 ⁻² oz.
Terminals	e3: pure Sn	
Shafts	Standard shaft 20 mm length (R or AI code) and 16 mm length (D or AG code) is measured from the mounting face to the free end of the shaft. Vishay guarantee is lost if the customer modifies the shaft himself.	
Hardware	Nuts and washer are supplied separately (not mounted on the potentiometer) in a small bag placed in the packaging.	

ENVIRONMENTAL SPECIFICATIONS	
Temperature Range	- 55 °C to 125 °C
Climatic Category	55/100/56
Sealing	Fully sealed - Container IP67

MARKING	
<ul style="list-style-type: none">• VISHAY trademark• Model• Ohmic Value code• Tolerance code• Manufacturing date code• Marking of terminals 3	<p>The ohmic value is indicated by a 3 figures code: the first two digits are significant figures, the third digit is the multiplier: Example: 101 = 100 Ω 102 = 1000 Ω 503 = 50 000 Ω</p> <p>The manufacturing date is indicated by a figures code. The first two digits are the year, the last two digits are the week.</p>



PERFORMANCES				
TESTS	CONDITIONS	TYPICAL VALUES AND DRIFTS		
		$\Delta R_T/R_T$ (%)	$\Delta R_{1-2}/R_{1-2}$ (%)	OTHER
Climatic Sequence	Phase A dry heat 100 °C Phase B damp heat Phase C cold - 55 °C Phase D damp heat 5 cycles	± 1 %	± 2 %	-
Long Term Damp Heat	56 days 40 °C 93 % HR	± 1 %	± 2 %	Dielectric strength: 1000 V _{RMS} Insulation resistance > 10 ⁴ MΩ
Rotational Life	10 000 cycles	± 3 %	-	Contact resistance variation ≤ 2 % R _n
Load Life	1000 h at rated power 90/30' Ambient temperature 70 °C	± 1 %	± 2 %	Contact resistance variation 1 %
Rapid Temperature Change	5 cycles - 55 °C at 125 °C	± 1 %	-	$\Delta V_{1-2}/V_{1-3} \leq \pm 2 \%$
Shock	50 g at 11 ms 3 successive shocks in 3 directions	± 0.5 %	± 1 %	-
Vibration	10 - 55 Hz 0.75 mm or 10 g during 6 h	± 0.5 %	-	$\Delta V_{1-2}/V_{1-3} < \pm 1 \%$



PART NUMBER DESCRIPTION (for information only)

P10	XX	AG	10K	10 %		BO100	e3
MODEL	STYLE	SHAFT	VALUE	TOLERANCE	SPECIAL	PACKAGING	LEAD (Pb)-FREE



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