

Fully Sealed Container Cermet Potentiometer Military and Professional Grade



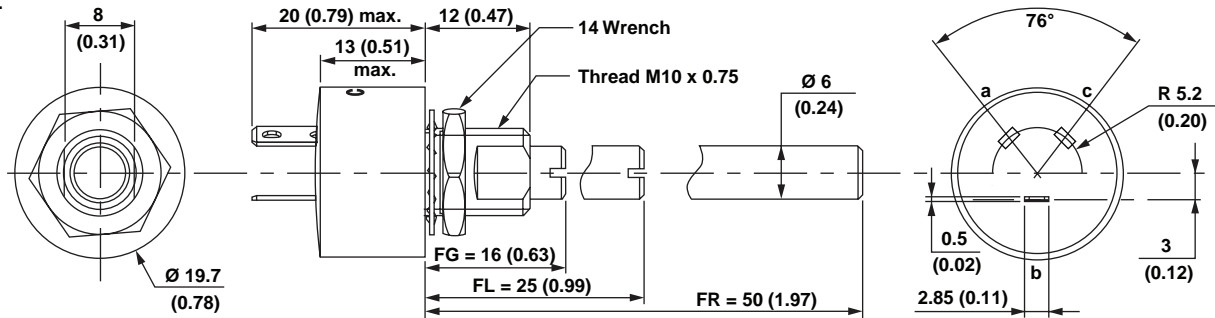
FEATURES

- High power rating (3 W at 70 °C)
- Low temperature coefficient (150 ppm/°C typical)
- Full sealing
- Use of faston 2.86 connections
- Tests according to CECC 41 000
- Wires and connectors available
- Custom design on request

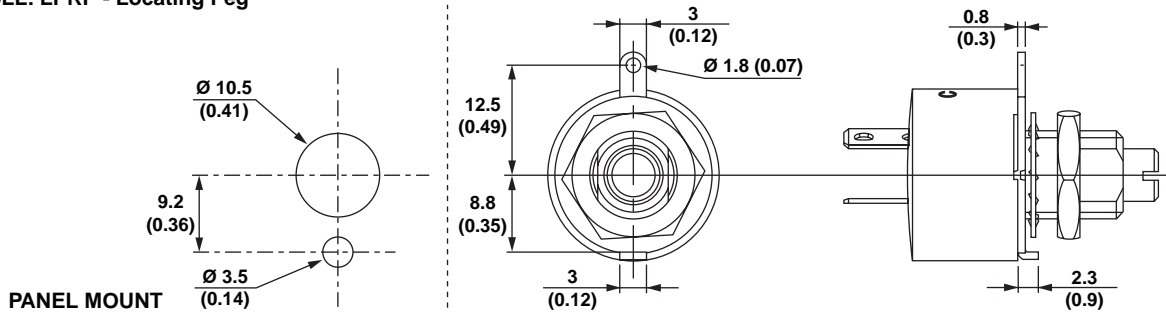


DIMENSIONS in millimeters (inches) ± 0.5 (± 0.02)

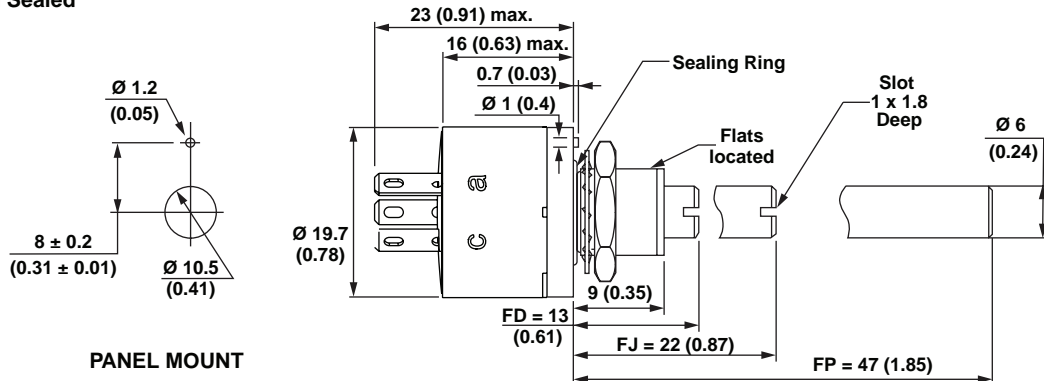
PE30L



PE30LL: LPRP - Locating Peg



PE30ME: Panel Sealed



ELECTRICAL SPECIFICATIONS	
Resistive Element	Cermet
Electrical Travel	270° ± 10 °
Resistance Range	Linear Law 22 Ω to 10 MΩ
	Logarithmic Laws 100 Ω to 2.2 MΩ
Standard Series E3	1 - 2.2 - 4.7 and on request 1 - 2 - 5
Tolerance	Standard ± 20 %
	On Request ± 10 % to ± 5 %
Variation Law	Linear A
	<p>CIRCUIT DIAGRAM</p>
Power Rating	<p>Linear 3 W at 70 °C</p> <p>Logarithmic 1.5 W at 70 °C</p>
	<p>Temperature Coefficient (Typical) ± 150 ppm/°C</p> <p>Limiting Element Voltage 300 V</p> <p>Contact Resistance Variation 3 % Rn or 3 Ω</p> <p>End Resistance (Typical) 1 Ω</p> <p>Dielectric Strength (RMS) 2500 V</p> <p>Insulation Resistance (300 VDC) 10⁵ MΩ</p> <p>Independent Linearity (Typical) ± 5 %</p>



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Vishay Sfernice

STANDARD RESISTANCE ELEMENT DATA							
STANDARD RESISTANCE VALUES	LINEAR LAW			LOGS LAW			TYPICAL TCR - 55 °C + 125 °C
	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH WIPER	MAX. POWER AT 70 °C	MAX. WORKING VOLTAGE	MAX. CUR. THROUGH WIPER	
Ω	W	V	mA	W	V	mA	ppm/°C
22	3	8.12	369				± 150
47	3	11.87	252				
100	3	17.32	173				
220	3	25.69	116				
470	3	37.55	79				
1K	3	57.44	54	1.5	38.7	38.7	
2.2K	3	81.24	37	1.5	57.4	26.1	
4.7K	3	118.74	25	1.5	83.9	17.9	
10K	3	173.20	17	1.5	122	12.2	
22K	3	256.9	11	1.5	181.6	8.25	
47K	1.91	300	6.3	1.5	265	5.64	
100K	0.90	300	3	0.9	300	3	
220K	0.41	300	1.36	0.41	300	1.36	
470K	0.19	300	0.63	0.19	300	0.63	
1M	0.09	300	0.30	0.09	300	0.30	
2.2M	0.04	300	0.13				
4.7M	0.02	300	0.06				
10M	0.01	300	0.03				

MECHANICAL SPECIFICATIONS		
Mechanical Travel	300° ± 5°	
Operating Torque (Typical)	3 Ncm max.	4.25 oz.-inch max.
End Stop Torque	120 Ncm max.	10.51 lb oz.-inch max.
Tightening Torque of Mounting Nut	250 Ncm max.	22 lb-inch max.
Unit Weight	23 to 32 g max.	0.8 to 1.13 oz.
Terminals	e3: pure Sn	

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

OPTIONS	
Special Feature Command Shaft	Length is measured from the mounting surface to the free end of the shaft. The screwdriver slot is aligned with the wiper within ± 10°. Special shafts are available, in accordance to drawings supplied by customers. We recommend that customers should not machine tool shafts, in order to avoid damage. Bending or torsion of terminals should also be avoided.
Panel Sealing (PE30M)	The panel sealing device consists of a ring located in a groove on the potentiometer face. Sealing is obtained by tightening the ring against the panel when mounting the potentiometer. Old code: PE30P