

Oil Filled - High Precision

OF 3001



OF 5001

- **IP65 Protection Grade**
- **2 Million Turns Life**
- **Metal Housing**
- **2 Watt and 4 Watt Model**

Specifically designed for operation in the worst environmental conditions such as salt, moisture, organic gas, etc. Element is hermetically sealed and bathed in a special mineral oil that contains no organic substances, such as PCB. Ideal for the marine industry, pits and mines, forestry machinery, chemical factories, etc.

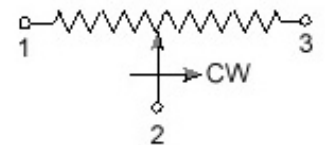
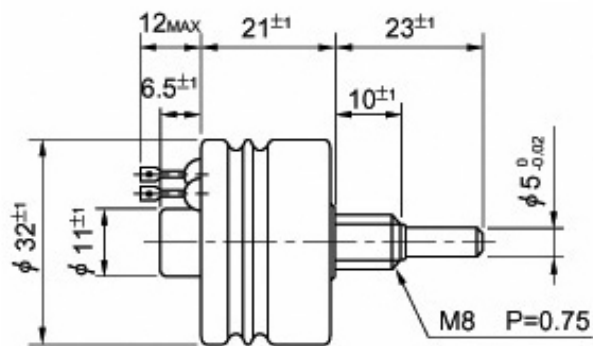
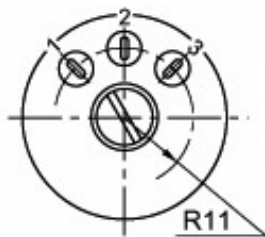
Electrical Specifications	OF 3001	OF 5001
Resistance Values (ohms)	50....20K	5....100K
Resistance Tolerance	±5%	
Linearity Tolerance (Independent)	±0.5%	
Electrical Angle	280 ±5°	
Insulation Resistance	1000 Mohms @ 1000 VDC	
Dielectric Strength	1000 VAC, 1 minute	
Noise	<100 ohms ENR	
Wiper Current	30mA (max)	50mA (max)
End Resistance	< 0.05%	
Power @ 40°C	2 Watts	4 Watts
Mechanical Specifications		
Mechanical Angle	360° - continuous (no stops)	300° ±5°
Starting (max.) Torque (Ncm)	3	
Stopper Strength (Ncm)	-	50
Max. Axial Play of Shaft (mm)	0.1	
Max. Radial Play of Shaft (mm)	0.05	
Typical Life (# of turns)	2 million	
Vibration	15G, 10Hz to 2,000Hz	
Shock	50G, 11ms	
Bearing	sleeve	
Weight	50 grams	300 grams
Environmental Specifications		
Operating Temperature	-30°C to +60°C	
IP Protection Grade	IP65	
Standards	MIL-R-12934	
Materials		
Housing	Metal	
Bushing	Metal	
Shaft	Stainless steel	
Terminals	Tin plated, glass headers	

Resolution Chart

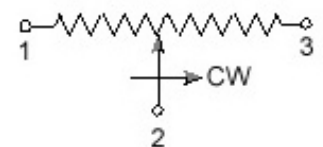
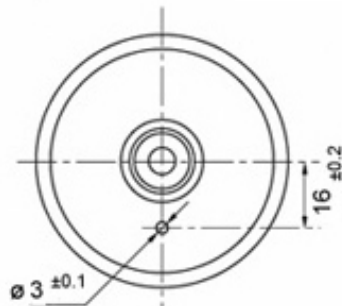
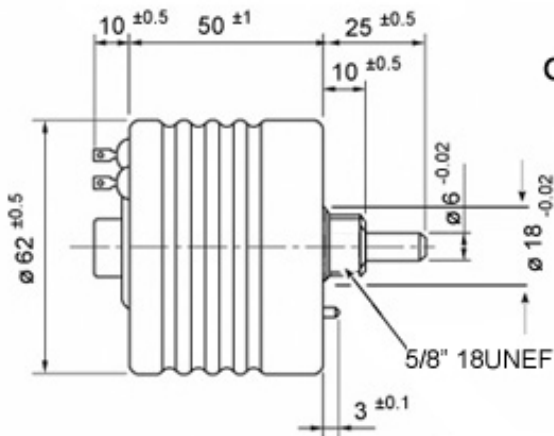
Resistance value (ohms)	Resolution (%)	Temperature coefficient of wire (\pm ...ppm/C)
100	0.385	20
200	0.313	
500	0.270	
1k	0.239	
2k	0.182	
5k	0.154	
10k	0.111	
20k	0.100	
50k	0.083	
100k	0.071	
200k	0.059	

Dimensions (mm)

OF 3001



OF 5001



Options

- Rear shaft extension (6mm x 25mm)
- Non standard resistance values
- Multiple gangs (up to 2)
- Special operating angles
- Special shaft shapes
- 1/4" shaft diameter
- Improved tolerances
- Extra tap (1 tap max.)
- Inch dimensions

P3 America - 3089C Clairemont Dr. 363 - San Diego, CA 92117

Phone: (858) 277-1420 Fax: (858) 225-0439 www.p3america.com