

**High Precision**

**Bushing Mount**

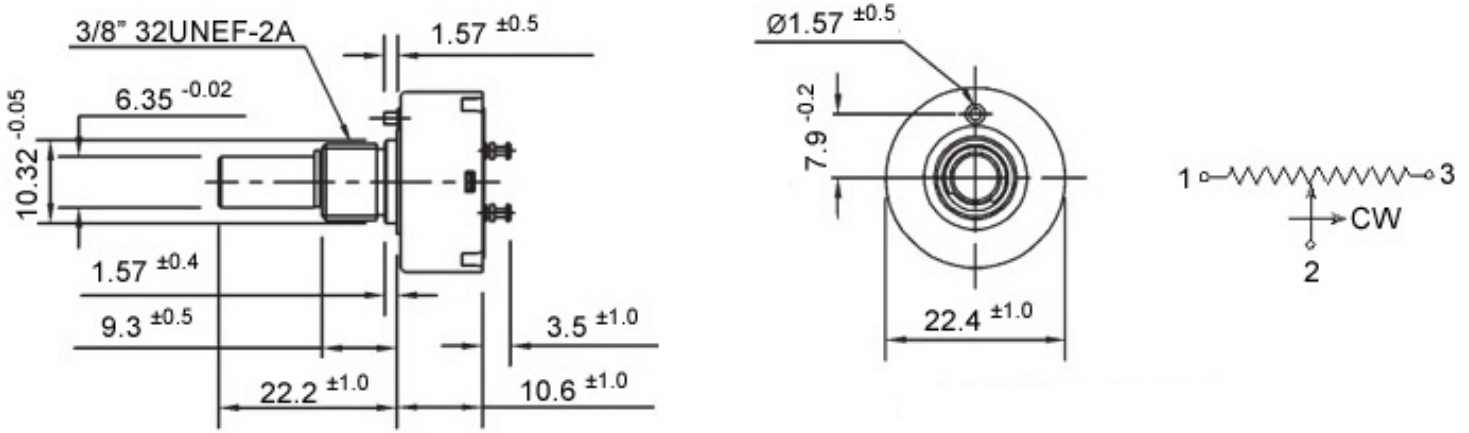
**Economical**

- **Rear Terminals**
- **10 Million Turns Life**
- **Infinite Resolution**
- **500 to 100K ohms Resistance Values**

Industry standard 22mm (7/8") body diameter with rear turret terminals. Very long life, high precision with a wide range of options available. Available with or without mechanical stops.

Electrical Specifications	MPA20	MPA21
Electrical Angle	340 ±4°	320 ±4°
Resistance Value (ohms)	500...100k	
Resistance Tolerance	±15% (±10% opt.)	
Linearity Tolerance (std.)	±1%	
Linearity Tolerance (best)	±0.5%	
Resolution	Essentially infinite	
Max. Voltage (V)	400	
Wiper Current	2 µA recommended / 10 µA max.	
Power @ 40° (W)	1	
Insulation Resistance	>1000 Mohm @ 500 VDC	
Dielectric Strength	1 minute @ 500 VAC	
Output Smoothness	< 0.1% per MIL-R-39023	
Mechanical Specifications		
Mechanical Angle	360° (continuous)	320° ±5°
Maximum Operating Friction	0.5 (Ncm)	
Stopper Strength	-	60 (Ncm)
Life Expectancy	10 million turns	
Max. Axial Play of Shaft	0.2 mm	
Max. Radial Play of Shaft	0.1 mm	
Vibration	15 g / 10Hz to 2,000 Hz	
Shock	50 g / 11ms	
Bearing	sleeve	
Environmental Specifications		
Operating Temperature	-55°C to +105°C	
IP Protection Grade	IP40 (IP65)	
Standard	per MIL-R-12934	
Materials		
Housing	Engineered plastic	
Shaft	Stainless steel	
Bushing	Brass	
Terminals	Turret type	

**Dimensions (mm)**



**Options**

- Extra tap (1 only)
- Special operating angles
- Higher IP ratings
- Special shaft machining
- Tighter tolerances
- Special resistance values

**P3 America** - 3089C Clairemont Dr. #363 - San Diego, Ca. 92117  
P:(858) 277-1420 F: (858) 225-0439 - [www.p3america.com](http://www.p3america.com)

© P3 America 2004. All Rights Reserved