



Oil Filled

Heavy Duty

IP65 Protection Grade

- **2 Million Turns Life**
- **5 Watts**
- **±0.3% Standard Linearity**
- **3, 5 and 10 Turn Models**
- **Bushing or Servo Mount**

Specifically designed for operation in the worst environmental conditions such as salt, moisture, organic gases, etc. Wire-wound element is hermetically sealed and bathed in a special mineral oil that contains no organic substances such as PCB's. Ideal for the marine industry, pits and mines, forestry machinery, chemical factories and any other environmentally challenging application.

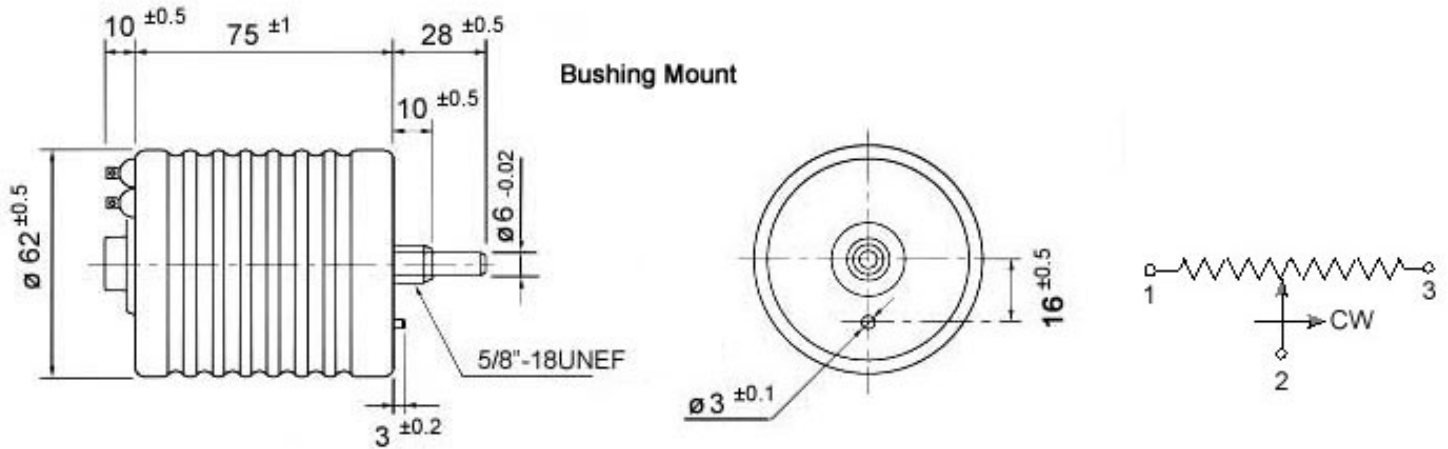
| Electrical Specifications | OF5003 | OF5005 | OF5010 |
|------------------------------|--|-----------|------------|
| Electrical Angle (±5°) | 1080° | 1800° | 3600° |
| Resistance Value (Kohms) | 100...20k | 100...50k | 100...200K |
| Resistance Tolerance | ±5% (±2% opt.) | | |
| Linearity Tolerance | ±0.3% (0.1% opt.) | | |
| Max. Voltage (V) | 900 | | |
| End Resistance | 0.05% | | |
| Power @ 40° (W) | 5 | | |
| Insulation Resistance | >100 Mohm @ 1000 VDC | | |
| Dielectric Strength | 1 minute @ 1000 VAC | | |
| Noise | <100 ohm ENR | | |
| Mechanical Specifications | | | |
| Number of Turns | 3 | 5 | 10 |
| Mechanical Angle (+10° -0°) | 1080° | 1800° | 3600° |
| Maximum Operating Friction | 4 (Ncm) | | |
| Stopper Strength | 90 (Ncm) | | |
| Life Expectancy | 2 million cycles | | |
| Weight (g) | 300 | | |
| Max. Axial Play of Shaft | 0.2 mm | | |
| Max. Radial Play of Shaft | 0.1 mm | | |
| Bearing | sleeve (servo mount version = ball bearings) | | |
| Environmental Specifications | | | |
| Operating Temperature | -30°C to +60°C | | |
| IP Protection Grade | IP65 | | |
| Standard | per MIL-R-12934 | | |
| Materials | | | |
| Housing | Aluminum | | |
| Shaft | Stainless steel | | |

Resolution Chart

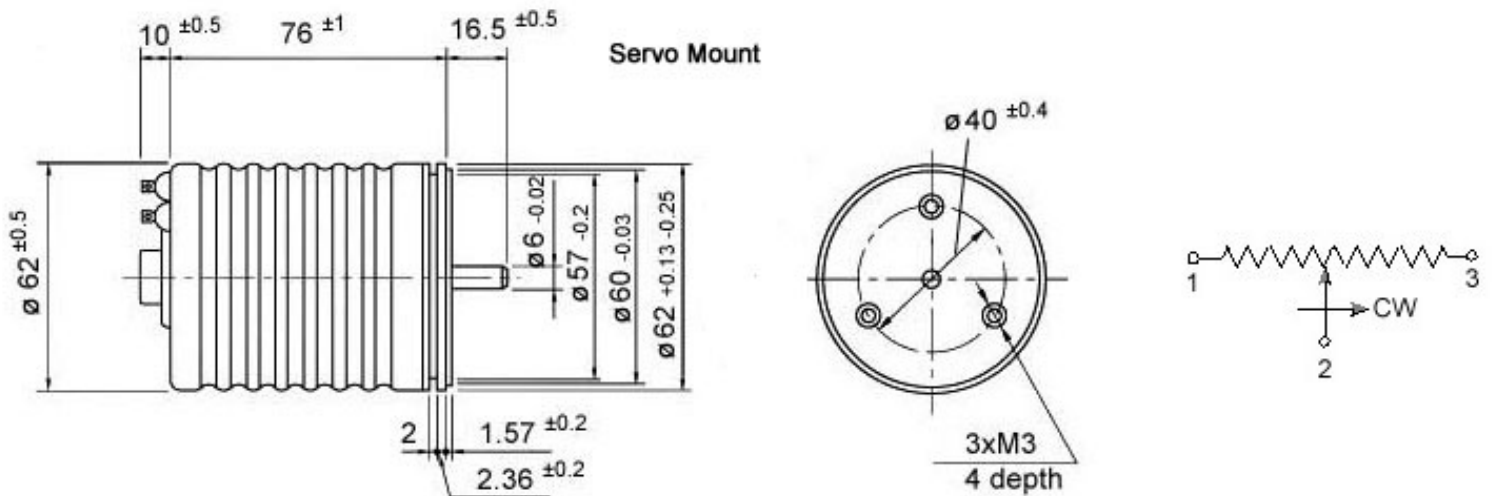
| Resistance Values | Resolution % (OF5010) | Temperature Coefficient |
|-------------------|-----------------------|-------------------------|
| 100 | 0.040 | 80 (ppm../k) |
| 200 | 0.031 | |
| 500 | 0.023 | |
| 1k | 0.018 | |
| 2k | 0.014 | |
| 5k | 0.015 | 20 (ppm../k) |
| 10k | 0.012 | |
| 20k | 0.009 | |
| 50k | 0.007 | |
| 100k | 0.005 | |
| 200k | 20.004 | |

Dimensions (mm)

Bushing Mount



Servo Mount



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