



High Precision

Very Long Life

- **3, 5 and 10 Turn Models**
- **Infinite Resolution**
- **High Precision**
- **100 to 100K Ohm Models**

The HH17/19 series is a true 'Hybrid' potentiometer that combines a wire-wound element with conductive plastic providing a high precision, long life, high resolution multi-turn potentiometer.

| Electrical Specifications | HH1703(M) HH1903(M) | HH1705(M) AL1905(M) | HH1710(M) HH1910(M) |
|--------------------------------|-------------------------|------------------------|------------------------|
| Resistance Values (ohms) | 1K to 50K | | 2K to 100K |
| Resistance Tolerance | ± 5% | | |
| Linearity Tolerance | ± 0.5% | ± 0.35% (0.2 opt.) | ± 0.25% (0.1 opt.) |
| Electrical Angle +10°, -0° | 1080° | 1800° | 3600° |
| End Resistance | 0.1% | | |
| Max. Voltage | 40 V | | |
| Insulation Resistance | 1000 Mohms at 1000 VDC | | |
| Dielectric Strength | 1000 VAC, 1 minute | | |
| Noise | < 0.1%, per VRCI-R-200A | | |
| Power @40°C | 0.5W | 1.5W | 2W |
| Mechanical Specifications | | | |
| Number of Turns | 3 | 5 | 10 |
| Mechanical Angle +10°, -0° | 1080° | 1800° | 3600° |
| Starting (max.) Torque (Ncm) | 0.5 | | |
| Stopper Strength (Ncm) | 150 | | |
| Slipping Torque (Ncm) | 6 to 7 (HHR model) | | |
| Vibration | 15g, 10Hz to 2,000Hz | | |
| Shock | 50g, 11ms | | |
| Max. Axial Play of Shaft (mm) | 0.3 | | |
| Max. Radial Play of Shaft (mm) | 0.1 | | |
| Typical Life (# of turns) | 1.5 million | 2.5 million | 5 million |
| Bearing | sleeve | | |

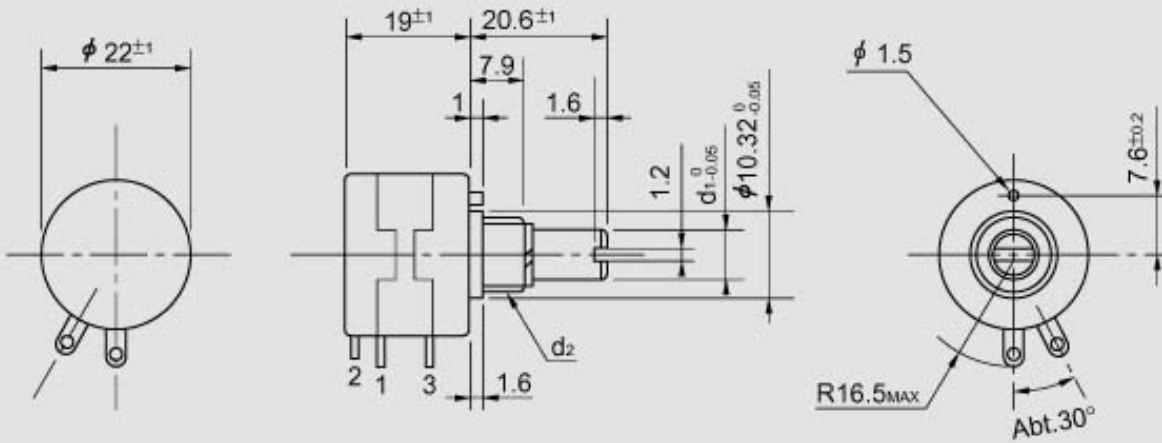
Environmental Specifications

| | |
|-----------------------|----------------------|
| Operating Temperature | -55°C to +105°C |
| IP Protection Grade | IP40 (IP65 optional) |
| Standards | MIL-R-12934 |

Materials

| | |
|-----------|--|
| Housing | Glass reinforced nylon |
| Bushing | 17xx & 19xx: glass reinforced nylon / 17xxM & 19xxM: Metal |
| Shaft | Stainless steel |
| Terminals | Gold plated brass |

Dimensions (mm)



| Model | Shaft Dia. d1 (Ø) | Bushing 3/8-32UNEF d2 |
|-------|-------------------|-----------------------|
| 17xx | 6.35 | Nylon |
| 17xxM | 6.35 | Metal |
| 19xx | 6 | Nylon |
| 19xxM | 6 | Metal |

Options

- Rear shaft extension
- Special resistance values
- Slipping clutch
- Plastic shaft
- Multiple gangs (up to 10)
- Special shaft shapes
- Sealed housing
- Extra tap (10 turn version)
- Tighter tolerance
- High torque
- Shaft o-ring

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