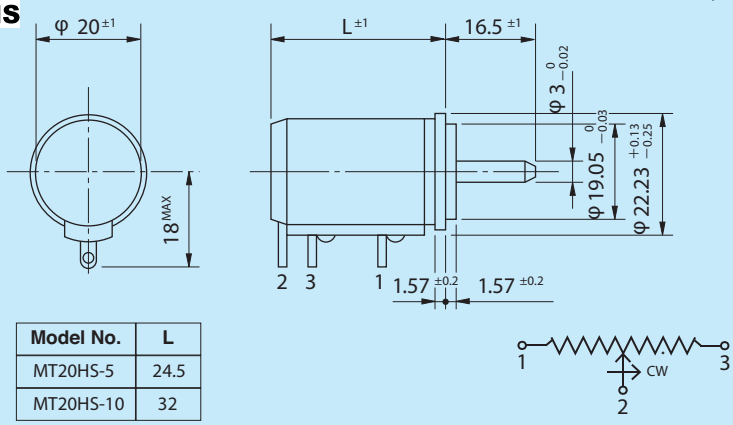
P3 America, Inc.

Motion Control and Automation Products

Multi-Turn Hybrid Potentiometer — *Series MT20HS*

RoHS

Dimensions (mm)



Model No.	L
MT20HS-5	24.5
MT20HS-10	32

• Standard Model Nos.

MT20HS-5 (5-turn)
MT20HS-10 (10-turn)

• General Specifications (Note 1)

Standard Resistance Range: 1k, 2k, 5k, 10k, 20k Ω

Max. Practical Resistance Value: 100kΩ (10-turn)

Total Resistance Tolerance: Standard Class ±10%
Precision Class ±5%

Independent Linearity Tolerance:

	5-turn	10-turn
Standard Class	±0.35%	±0.25%
Precision Class	±0.2%	±0.1%

Power Rating: 1.0W (5-turn)
2.0W (10-turn)

Output Smoothness: Within 0.05% against input voltage (5-turn)
Within 0.015% against input voltage (10-turn)

Contact Resistance Variation: Within 5% C.R.V. (5-turn)
Within 3% C.R.V. (10-turn)

Electrical Travel: $360^\circ \times n \pm 5^\circ$ (n: No. of turns)

Mechanical Travel: $360^\circ \times n \,{}^{+10^\circ}_{-0^\circ}$ (n: No. of turns)

Rotational Life: (shaft revolutions) 5,000,000 (5-turn)
10,000,000 (10-turn)

Protection Grade: IP40

Operating Temp.: -55°C...+105°C

Insulation Resistance: Over 100 MΩ at 1000V.D.C.

Dielectric Strength: 1 minute at 1000V.A.C.

Starting Torque: Within 5mN • m (50gf • cm)

Resist. Temperature Coefficient of Wire: ±100p.p.m./°C

Vibration: 15G / 10Hz to 2,000Hz 12 hours

Shock: 50G / 11ms 18 times

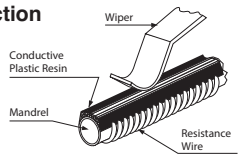
Mass: Approx. 20g (5-turn)
Approx. 25g (10-turn)

Features of Hybrid resistive element

• Main Features

- Good stability of resistance value
- Good resistance temperature coefficient
- Essentially infinite resolution
- Less resistance variation
- Long life expectancy

• Construction



• Special Specifications Available

Extra tap (1 tap), multi-ganged (up to 2 gangs), shaft with front and rear extension (rear shaft with 2mm dia. and 10mm length), special shaft machining (flat, pin hole, length, dia., etc.), limit switch adaptor

Note 1: Customers should test and verify device performance in any given application. General specifications are measured at temperatures of +15°C ~ +35°C. Specifications subject to change without notice.

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