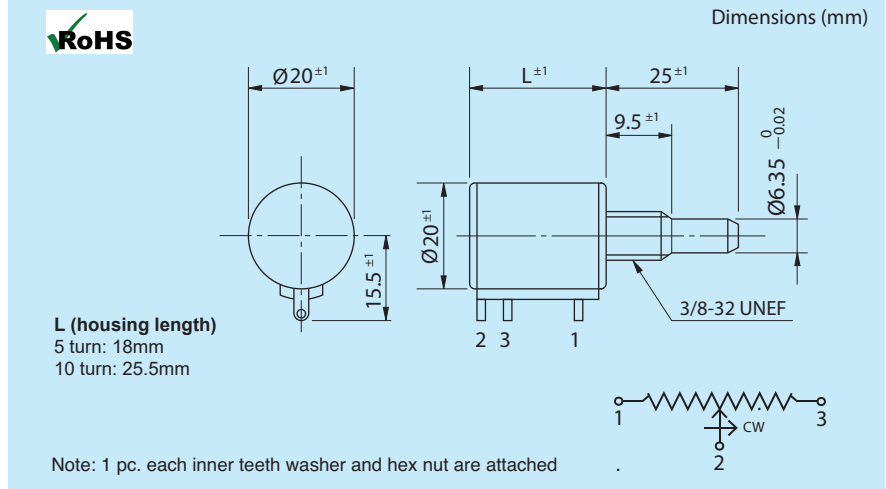


# MT20H Series

## Multi-Turn Potentiometer (Hybrid)



### • Standard Model Nos.

MT20H-5 (5-turn)  
MT20H-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° × n ±5° (n: No. of turns)

#### Mechanical Travel:

360° × n +10°  
-0° (n: No. of turns)

#### Rotational Life:

5,000,000 (5-turn)

(shaft revolutions)

#### Protection Grade:

IP40 (IP54 optional)

#### 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)

#### Stopper Strength:

Approx. 0.9N·m (9kgf·cm)

#### Resist. Temperature

±100p.p.m./°C

#### Coefficient of Wire:

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

#### Vibration:

50G / 11ms 18 times

#### Shock:

Approx. 20g (5-turn)

#### Mass:

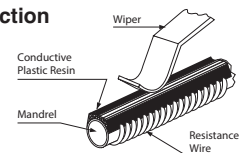
Approx. 25g (10-turn)

### 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.), sealed housing and o-ring shaft seal for IP54 protection grade (torque increases), slipping clutch (20mN·m~60mN·m), limit switch adaptor

Note 1: Customers should test and verify device performance in any given application. Specifications subject to change without notice.

# MT20H Series

## Multi-Turn Potentiometer

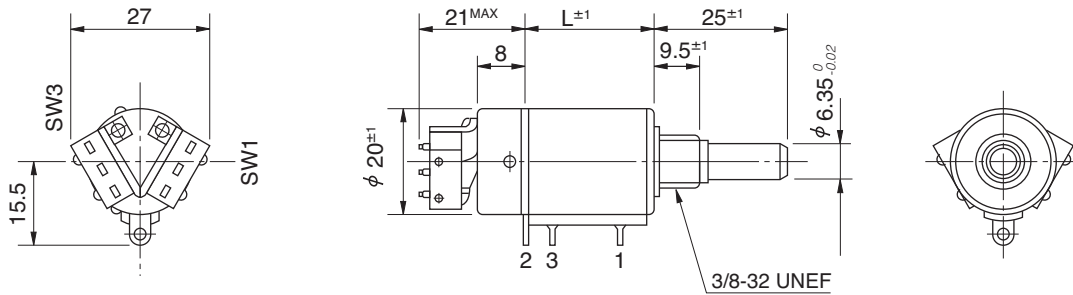
### (Hybrid)

**Limit Switch Adaptor Option**



**Limit-Switch Characteristics**

Rating of limit-switch 3A, 125V.A.C. (resistance load)  
 Life expectancy of limit-switch: 50,000 operations  
 Operating temperature range: -55 °C ~ +105 °C



Model No.	L
MT20-3 (3-turn)	18
MT20-5 (5-turn)	18
MT20-10 (10-turn)	25.5

**Limit-Switch Function**  
 Unless otherwise specified, the limit-switch is of inscription type on both ends as shown.

