

## Type 409 Series

### Key Features

- Stable High Resolution Cermet Element
- Rugged Construction
- PCB Standoffs
- Wide Value Range
- 0.5 Watt Power Rating
- High Reliability
- Dust and Splash Proof
- Auto Adjust Head Available



The 409 series offers typical TE Connectivity (TE) features, the stability of a cermet resistive element, and an attractive price. The range satisfies many applications in industrial and professional equipment. Components are available with top, underside, side, finger, auto and skeleton adjustments. The 409 is widely used in power supplies, telecommunications, medical instrumentation and the automotive industry.

### Characteristics - Electrical

|                                  |  |
|----------------------------------|--|
| <b>Resistance Range:</b>         | 100R to 1M (Linear)                    |
| <b>Resistance Values:</b>        | 1, 2, 5 in each decade                 |
| <b>Resistance Tolerance:</b>     | ± 20%                                  |
| <b>End Resistance:</b>           | 2% Nominal                             |
| <b>Wiper Current:</b>            | 50mA maximum                           |
| <b>Power Rating:</b>             | 0.5W at 70°C derating to zero at 100°C |
| <b>Limiting Element Voltage:</b> | 200V DC or AC RMS maximum              |
| <b>Rotational Noise (CRV):</b>   | 3% maximum                             |
| <b>Temperature Coefficient:</b>  | ±250ppm/°C                             |

### Characteristics - Mechanical

|                               |                |
|-------------------------------|----------------|
| <b>End Stop:</b>              | 50 mNm minimum |
| <b>Starting Torque:</b>       | 30 mNm maximum |
| <b>Mechanical Adjustment:</b> | 260° nominal   |
| <b>Operational Life:</b>      | 100 turns      |

### Characteristics - Environmental

|                           |                          |
|---------------------------|--------------------------|
| <b>Temperature Range:</b> | - 25°C to + 100°C        |
| <b>Load Life at 70°C:</b> | ΔR < 5% after 1000 hours |
| <b>Sealing:</b>           | Dust Proof               |
| <b>Climatic Category:</b> | 25/100/21                |

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### Dimensions 409H



### 409V



### How to Order

| 409         | H  | A   | 104   | M         |
|-------------|--|---|---|-----------|
| Common Part | Adjustment Style                           | Head Style  | Resistance Value  | Tolerance |
| 409         | H - Top / Bottom Adjust<br>V - Side Adjust | A - Phillips Slot<br>R - Auto Adjust<br>S - Finger Adjust<br>T - Minus Slot<br>X - Skeleton | The first two digits are significant figures of resistance value and the third denotes the number of zeros following.<br><br>e.g. 100R: 101<br>1K0: 102<br>10K: 103 | M - -20%  |

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