Enabling the Electronics Revolution

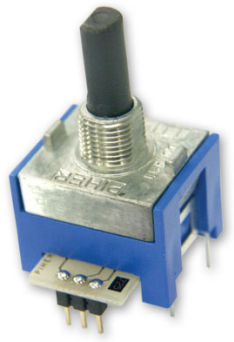
PIHER sensing systems
an Amphenol® company

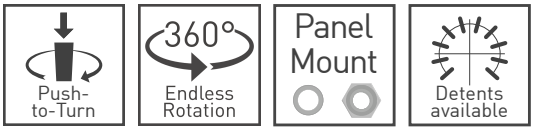
# DCM-PTT

## Push-to-Turn Panel Control

The DCM-PTT Push-to-Turn control offers sturdiness, performance and adaptability where frequent human-machine-interface adjustment is required. The push-to-turn functionality offers additional safety by preventing accidental switch-on. Its robust design allows for employment of different mechanisms, such as a selecting a program/function in your dishwasher or setting the temperature of a cook top. Typical applications include consumer electronics, ovens and other kitchen appliances, white and brown goods, automotive HVACR and personal care control panels.

Detent number, connectors, mounting flanges, tact switch function and other features can be studied on request.






### KEY FEATURES

- Different output choices:
  - absolute analog potentiometer
  - incremental encoder pulse
  - rotary switch
- Push-to-Turn functionality
- Detents for tactile feedback
- Excellent performance (5% linearity)
- Plastic or metal shafts
- Endless Rotation (360°) or mechanical end-stop
- Wide electrical angle (up to 340°)
- Long product life (25,000 cycles)

**On request**

- Laser trimming
- Connectors

| MECHANICAL SPECIFICATIONS | |
|---|---|
| Mechanical rotation angle | 360° |
| Electrical rotation angle | 280° ±10°<br>340° ±10° |
| Detents | 2<br>4 |
| Torque<br>Rotational<br>Detent | <br>≤50 mN.n<br>900 to 1,500 gf.cm |
| Life | 25,000 |

Other specifications available on request

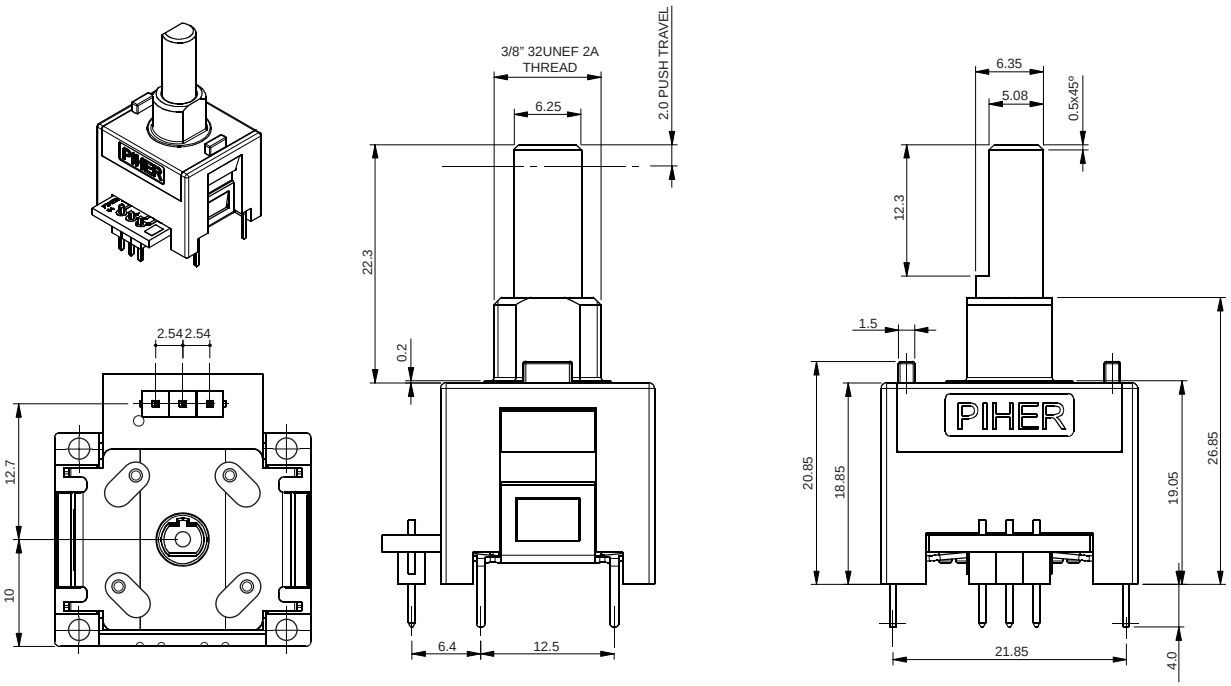
| ELECTRICAL SPECIFICATIONS | |
|---|---|
| Taper | Linear |
| Resistance Value | 10 kΩ |
| Tolerance | ± 30% / ± 20% |
| Max. Voltage | 38 VDC |
| Nominal power | 0.15 W at 50°C (122°F) |
| Linearity | ± 5% |
| Operating temperature | -40°C to +120°C (-13°F to + 158°F) |

Other specifications available on request

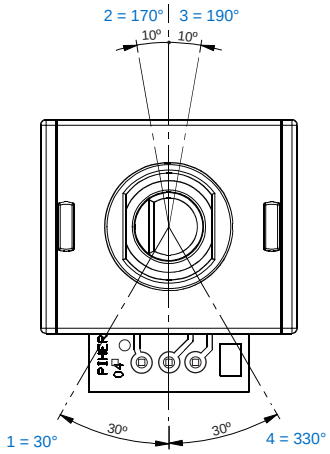
# DCM-PTT

## Push-to-Turn Panel Control

### DIMENSIONS (IN MM)

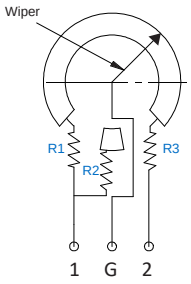



### DETENT CONFIGURATION




The detents are stops during the rotational travel that not only add a "click" sensation of position, but also offer enormous saving in both cost and space. PIHER can provide special stepped outputs or 'constant voltage zones' for these detent positions and custom torques on request.

### INTERNAL SCHEME

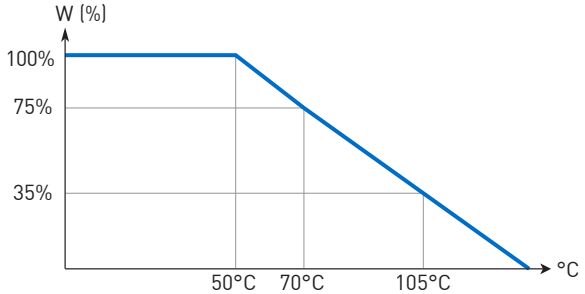



R total = 10 Kohm ±% tolerance

R1 = 50 - 150 Ohm

Custom output functions available on request.

### POWER RATING CURVE




Custom output functions available on request.

# DCM-PTT

## Push-to-Turn Panel Control

*One Stop Shop*

*Multiple Advantages*

Engineering design-in support

Output customization

Cable harness and connector assembly

One-stop solution provider for different sensing technologies

Hall-effect | TMR | Resistive | Inductive | Printed electronics

Global footprint

Manufacturing capabilities for high and low volume programs

Diverse portfolio of standard and customized sensors: Tilt, Position, Speed and Current.

## OUR ADVANTAGE

- Leading-edge innovative position sensing solutions
  - Contactless (Hall-effect and Inductive Technology)
  - Contacting (Potentiometers, Printed Electronics)
- Engineering design-in support
- All our products can be customized to fit target application and customer requirement
- Capability to move seamlessly from development to true high-volume production
- A global footprint with global engineering and commercial support
- One-stop shop not limited to position sensors (temperature, pressure, gas,...) through group collaboration
- Flexibility and entrepreneurship of a medium-sized company with the backing of Amphenol Corporation

RoHS REACH compliant

Please always use the latest updated datasheets and 3D models published on our website.



**CONTACT**

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Rev.19012022 