



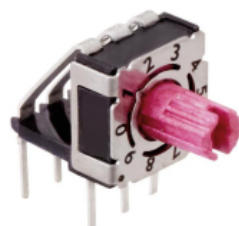
**PTR HARTMANN**

A Phoenix Mecano Company

## Technical data // P36THR 1 03 L508 -

Rotary Code Switch

Angular 5.08 mm pitch | Through Hole Reflow



### Highlights

- Solid PCB pins
- Contacts with abrasion resistant hard gold plating
- Central C-contact
- Extra sealed design with high temperature resistance
- Switches are solder and flux sealed and washable
- 100 % electronic inspection and testing
- 90° turned zero position available

### Mechanical Data

|                              |                                     |
|------------------------------|-------------------------------------|
| Type                         | vertical                            |
| Fixation mode                | THR                                 |
| Height                       | 7.7 mm                              |
| Length                       | 8.4 mm                              |
| Width                        | 7.4 mm                              |
| Pin connection               | 3+3                                 |
| Torque                       | 1.2 ± 0.2 Ncm                       |
| Mechanical lifetime          | 25.000 steps                        |
| Positions per rotation       | 10   16 - more versions on request  |
| Perm. ambient temperature    | -50 °C ... +125 °C                  |
| Perm. storage temperature    | -55 °C ... +135 °C                  |
| Degree of protection         | comparable IP67                     |
| Sealing                      | O-Ring                              |
| Humidity                     | 21 days at 40 °C, 93 %RH            |
| THR through holes            | plated through                      |
| THR PCB hole diameter        | 0.8 mm                              |
| Outside diameter plated land | 1.8 mm                              |
| Sinus-vibration testing      | acc. IEC 68-2-6                     |
| Frequency range              | 10 Hz ... 500 Hz ... 10 Hz, sliding |
| Amplitude                    | 6.0 mm                              |
| Acceleration                 | 10.0 g                              |
| Shock testing                | acc. IEC 68-2-27                    |

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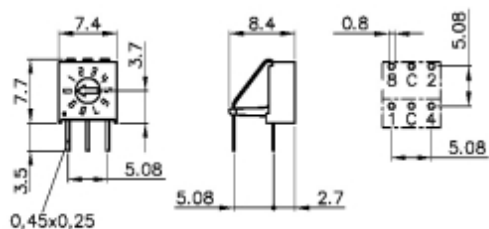
### Mechanical Data

|                              |                                                |
|------------------------------|------------------------------------------------|
| Shock acceleration amplitude | 50.0 g                                         |
| Duration of nominal shock    | 11.0 ms                                        |
| Directions                   | 6 ( $\pm x$ , $\pm y$ , $\pm z$ ) 3 times each |
| Reflow soldering             | JEDEC J-STD-020 E                              |
| Wave soldering               | Double Wave acc. DIN EN 61760-1:2006           |
| Iron soldering               | 4 s / 350 °C                                   |

### Electrical Data

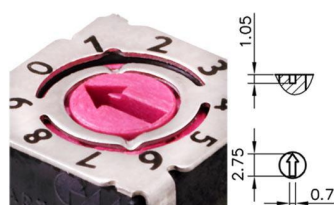
|                       |                         |
|-----------------------|-------------------------|
| Operating voltage     | $\leq 42.0$ V           |
| Standby current       | $\leq 0.4$ A            |
| Contact load, dynamic | $\leq 0.1$ A            |
| Minimum load          | 1.0 $\mu$ A 20.0 mVDC   |
| Test voltage          | 250.0 V 50 Hz / 1.0 min |
| Contact resistance    | $< 80.0$ mOhm           |
| Insulation resistance | $> 100.0$ MOhm          |

### Technical Drawing



### Configuration

Actuators



Arrow-shaped slot

Technical data

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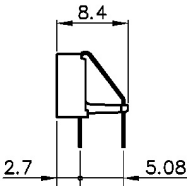
Codes

Code 03 -  
Hexadecimal

| Position | Terminals |   |   |   |   | Marking |
|----------|-----------|---|---|---|---|---------|
|          | C         | 1 | 2 | 4 | 8 |         |
| 0        | •         |   |   |   |   | 0       |
| 1        | •         | • |   |   |   | 1       |
| 2        | •         |   | • |   |   | 2       |
| 3        | •         | • | • |   |   | 3       |
| 4        | •         |   |   | • |   | 4       |
| 5        | •         | • |   | • |   | 5       |
| 6        | •         |   | • | • |   | 6       |
| 7        | •         | • | • | • |   | 7       |
| 8        | •         |   |   |   | • | 8       |
| 9        | •         | • |   |   | • | 9       |
| 10       | •         |   | • |   | • | A       |
| 11       | •         | • | • |   | • | B       |
| 12       | •         |   |   | • | • | C       |
| 13       | •         | • |   | • | • | D       |
| 14       | •         |   | • | • | • | E       |
| 15       | •         | • | • | • | • | F       |

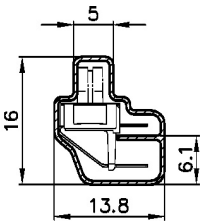
Hexadecimal, 16

Contact pins



left angular 5.08 mm

Packing



Tube