ROTARY SWITCHES

TYPICAL APPLICATIONS

For more than 20 years PIHER has been manufacturing rotary switches for all types of applications. Cost-effective and highly customisable products with our huge experience in adapting them to customers’ needs when necessary. We have the best solution for all your rotary switching needs. Our products are widely used in Automotive, Consumer and Multimedia applications due to their excellent performance and quality/price ratio. ISO TS1649, ISO14001, ISO 9001, Lead-Free compliance and hundreds of satisfied customers are the best presentation card. Here we are presenting to you our Rotary Switches based on our PT series. We strongly recommend you to visit www.piher.net for our S15 and T-21 rotary switches and our full product range that includes Potentiometers, Encoders and Position Sensors.

GENERAL SPECIFICATIONS

- Power Rating: 24V / 15mA
- ON position resistance: ≤ 5 Ω
- Insulation Resistance: ≥ 30 MΩ

10mm Rotary Switch (based on PT-10)

Positioning (Std. Position = CCW)

P.M. 50% ±20°

INITIAL CCW

P.F. FINAL CW

FEATURES

- Carbon resistive element.
- IP54 protection according to IEC 60529.
- Polyester substrate.
- Also upon request:
  • Wiper positioned at 50% or fully clockwise
  • Supplied in magazines for automatic insertion
  • Long life model PT-10...E (10K cycles)
  • Self extinguishable plastic (VL94V0)
  • Cost-effective steel leads
- Pb-Free according to ELV 2000/53/EC / RoHS 2002/95/EC

STANDARD CONFIGURATIONS

(Rotor at Final Position)

A = Initial
S = Wiper
E = Final

www.piher.net
D48 Switch code (Housing colour: green)

A80 Switch code

A = Initial S = Wiper E = Final

Mechanical rotation angle: 45°±5°

Mechanical rotation angle: 235°±5°

HOW TO ORDER

STANDARD

PT 10 L H01 CON互MATOR - 000 A80

Series

PT-10

Rotors

G L M K X W Y Z R

(See note 1)

Code Mounting Method Switch code Life Detents Shaft/Thum. Shaft/rotor colour Terminals base material
H01 H2.5 A80 E= Long life See PT's with detents data sheet RO = Red NE = Black VE = Green AM = Yellow AZ = Blue MA = Brown GR = Grey CR = Cream S = steel
H05 H5
H02 H2.5P
H10 H5P
V10 V
V11 VP
V13 VJ

(See note 2)

(See note 3)

(See note 4)

(See note 5)

(See note 6)

(See note 7)

NOTES:

1. “Z” adjustment only available on “H” versions. Rotor “G” only available in purple (shaft/rotor colour “VI”).
2. Terminals styles: “P” & “J” are crimped terminals. V=Vertical adjust; H=Horizontal Adjust
3. Life A80... 50 cycles
   D48... Standard: 500 cycles; Long Life: 10K cycles
4. Magazines: not available with the H10, V05 and V13 models, nor with adjustment types X, W, Y, Z.
   Magazines also not available with D48 switch code H versions.
5. Non flammable: housing, rotor and shaft.
6. Colour shaft/rotor:
   Potentiometer without shaft: only rotor
   Potentiometer with shaft: only shaft
   Cream colour only available in standard plastic.
7. PM not available for D48

Please see PT-10 datasheet for further information (www.piher.net)

NOTE: The information contained here should be used for reference purposes only.
10mm Rotary Switch (based on PTC-10)

Positioning (Std. Position = CCW)

P.M. 50% ± 20°

INITIAL CCW

P.F. FINAL CW

FEATURES

- Cermet resistive element.
- IP54 protection according to IEC 60529.
- Plastic material according to UL94V-0
- Alumina substrate.
- Also upon request:
  - Wiper positioned at 50% or fully clockwise.
  - Supplied in magazines for automatic insertion.
  - Long life model for low cost control pot. applications
  - Customisation according to customer’s needs.
  - Mechanical detents
  - Cost-effective steel leads
- Pb-Free according to ELV 2000/53/EC / RoHS 2002/95/EC

STANDARD CONFIGURATION

HOW TO ORDER

PTC-10 | L | H01 | 000 | - | ---- |

<table>
<thead>
<tr>
<th>Series</th>
<th>Code</th>
<th>Mounting Method</th>
</tr>
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<tbody>
<tr>
<td>PTC-10</td>
<td>H01</td>
<td>H2.5</td>
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<tr>
<td></td>
<td>H05</td>
<td>H5</td>
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<tr>
<td></td>
<td>H02</td>
<td>H2.5P</td>
</tr>
<tr>
<td></td>
<td>H10</td>
<td>H5P</td>
</tr>
<tr>
<td></td>
<td>V05</td>
<td>V</td>
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<td>VP</td>
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<td></td>
<td>V13</td>
<td>VJ</td>
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(See note 1)

<table>
<thead>
<tr>
<th>Life</th>
<th>Magazine</th>
<th>Shaft / rotor colour</th>
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<tbody>
<tr>
<td>E= Long life (See note 3)</td>
<td>T (See note 4)</td>
<td>RO= Red NE= Black VE= Green AM= Yellow AZ= Blue MA= Brown GR= Grey NA= Orange</td>
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<table>
<thead>
<tr>
<th>Detents</th>
<th>Shaft / Thum</th>
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<tbody>
<tr>
<td>See PT’s with detents data sheet (<a href="http://www.piher.net">www.piher.net</a>)</td>
<td>01 = Fig. 1 02 = Fig. 2 ····· 17 = Fig. 17</td>
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<table>
<thead>
<tr>
<th>Shaft / rotor colour</th>
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<td>RO= Red NE= Black VE= Green AM= Yellow AZ= Blue MA= Brown GR= Grey NA= Orange</td>
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<table>
<thead>
<tr>
<th>Terminals base material</th>
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<tr>
<td>S = steel</td>
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<table>
<thead>
<tr>
<th>Wiper position</th>
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<tbody>
<tr>
<td>PM = 50% PF = Final</td>
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</tbody>
</table>

NOTES:

1. “Z” adjustment only available on “H” versions. Rotor “G” only available in purple (shaft/rotor colour “VI”).
2. Terminal styles: “P” & “J” are crimped terminals. V=Vertical adjust; H=Horizontal Adjust
3. Life: Standard 100 cycles
   - Long life 10K cycles
4. Magazines: not available with the H10, V05 and V13 models, nor with adjustment types X, W, Y, Z.
   - Non flammable: housing, rotor and shaft.
5. Colour shaft/rotor:
   - Potentiometer without shaft: only rotor
   - Potentiometer with shaft: only shaft

Please see PTC-10 datasheet for further information (www.piher.net)

NOTE: The information contained here should be used for reference purposes only.
15mm Rotary Switch (based on PTC-15)

Positioning (Std. Position = CCW)

P.M.
50% ±20°

INITIAL
CCW

P.F.
FINAL CW

FEATURES

- Cermet resistive element.
- IP54 protection according to IEC 60529.
- Plastic material according to UL94V-0
- Alumina substrate.
- Also upon request:
  - Wiper positioned at 50% or fully clockwise.
  - Supplied in magazines for automatic insertion.
  - Long life model for low cost control pot. applications
  - Customisation according to customer’s needs.
  - Mechanical detents
  - Cost-effective steel leads
- Pb-Free according to ELV 2000/53/EC / RoHS 2002/95/EC

STANDARD CONFIGURATION

HOW TO ORDER

<table>
<thead>
<tr>
<th>PTC-15</th>
<th>L</th>
<th>H01</th>
<th>000</th>
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<td>H10</td>
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<td>V02</td>
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<td>V22</td>
<td>VAP</td>
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<td>V15P</td>
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(See note 1)

| Regression | (
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<tr>
<td>Rotors</td>
<td>F</td>
<td>G</td>
<td>L</td>
<td>M</td>
<td>N</td>
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(See note 2)

<table>
<thead>
<tr>
<th>Long Life</th>
<th>Shaft Thum.</th>
<th>Wiper position</th>
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<tbody>
<tr>
<td>E= Long life (See note 3)</td>
<td>01 – Fig. 1</td>
<td>PM = 50%</td>
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<td>28 – Fig. 28</td>
<td>PF = Final</td>
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<table>
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<th>Shaft/rotor colour</th>
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<tr>
<td>RO= Red</td>
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<td>AM= Yellow</td>
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<td>AZ= Blue</td>
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<tr>
<td>MA= Brown</td>
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<tr>
<td>GR= Grey</td>
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<td>NA= Orange</td>
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(See note 4)

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<th>Detents</th>
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<td>See PT’s with detents data sheet (<a href="http://www.piher.net">www.piher.net</a>)</td>
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(See note 2)

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<th>Torque</th>
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<td>L = Low</td>
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<tr>
<td>S = Steel</td>
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</table>

(See note 6)

NOTES:

1. "Z" adjustment only available on "H" versions. Standard colour for the "T" rotor: Orange
2. Terminals styles: "P" are crimped terminals. V=Vertical adjust; H=Horizontal Adjust
3. Life: Standard 100 cycles
   - Long life: 10K cycles
4. Colour shaft/rotor:
   - Potentiometer without shaft: only rotor
   - Potentiometer with shaft: only shaft
5. Low torque: ≤1.5Nm. No detent option available for low torque models.

For more information please contact your nearest Piher supplier.

Please see PTC-15 datasheet for further information (www.piher.net)

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