Shot Pin Cylinder
Size: \( \varnothing 57, \varnothing 71 \)

**High Precision**

With rod extended:
- **Deflection of \( \pm 0.1 \) mm or less**
  (With \( 71 \) mm bore, \( 50 \) mm stroke)
- **Non-rotational accuracy \( \pm 0.1 \) mm or less**
  (\( 71 \) mm bore, with \( 17.25 \) N\( \cdot \)m load applied in the rotating direction.)

**Positioning Repeatability**

- **Positioning accuracy \( \pm 0.05 \) mm**
- **Distance accuracy \( \pm 0.1 \) mm**

**High Output**

(\( 71 \) mm bore, \( 0.6 \) MPa pressure)
- **Retract force** \( 1764 \) N
- **Extending force** \( 2362 \) N

**Mounting Based on NAAMS Standard** (\( 71 \) mm bore)

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CKZP Series

INFORMATION 15-E669
**Rod extended**

Deflection: ±0.1 mm or less

<table>
<thead>
<tr>
<th>Bore size</th>
<th>Stroke [mm]</th>
<th>Lateral load F [N]</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>25, 50</td>
<td>340</td>
</tr>
<tr>
<td>71</td>
<td>25, 50</td>
<td>450</td>
</tr>
</tbody>
</table>

*α is the value at the piston rod end.

**Built-in coil scraper and Lube-retainer**

**Selectable proximity switches**

- TURCK
- P&F

**Adjustable connector angle**

- CKZP57L: 45°, 90°
- CKZP71: 0°, 45°, 90°

**Ports**

G and NPT ports available

**Non-rotational accuracy**

±0.1 mm or less

<table>
<thead>
<tr>
<th>Bore size</th>
<th>Lateral load F</th>
<th>Offset distance L [mm]</th>
<th>Non-rotational accuracy β</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>120 N</td>
<td>50 mm</td>
<td>±0.1 mm</td>
</tr>
<tr>
<td>71</td>
<td>230 N</td>
<td>75 mm</td>
<td>±0.1 mm</td>
</tr>
</tbody>
</table>

*F and β are values at the offset L position.

**Allowable lateral load graph**

- CKZP57L
- CKZP71

When using the CKZP71
**Shot Pin Cylinder**

**CKZP Series**

φ57, φ71

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### How to Order

- **Bore size**:
  - 57 mm equiv.
  - 71 mm

- **Port thread types**:
  - TF
  - G
  - TN
  - NPT

- **Switch output display**:
  - Retracted: Yellow
  - Extended: Red

- **Proximity switch**:
  - T: TURCK
  - P: P&F

- **Stroke**:
  - 25 mm
  - 50 mm

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### Proximity Switch Specifications

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>TURCK</th>
<th>P&amp;F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply voltage</td>
<td>10 to 30 VDC</td>
<td>10 to 30 VDC</td>
</tr>
<tr>
<td>Output</td>
<td>N.O., PNP</td>
<td>N.O., PNP</td>
</tr>
<tr>
<td>Continuous load current</td>
<td>200 mA</td>
<td>100 mA</td>
</tr>
<tr>
<td>Response frequency</td>
<td>30 Hz</td>
<td>25 Hz</td>
</tr>
<tr>
<td>Housing material</td>
<td>Plastic, PA</td>
<td>PA6, PBT</td>
</tr>
<tr>
<td>Power supply indicator</td>
<td>Green</td>
<td>Green</td>
</tr>
</tbody>
</table>

* The switch specifications will differ depending on the manufacturer engineering information.

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### Specifications

<table>
<thead>
<tr>
<th>Bore size</th>
<th>57</th>
<th>71</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fluid</strong></td>
<td>Air</td>
<td>Air</td>
</tr>
<tr>
<td><strong>Operating pressure range</strong></td>
<td>0.3 to 0.7 MPa</td>
<td>0.3 to 0.7 MPa</td>
</tr>
<tr>
<td><strong>Ambient and fluid temperature</strong></td>
<td>−10 to 60°C (No freezing)</td>
<td>−10 to 60°C (No freezing)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 mm stroke</td>
<td>3.1 kg</td>
<td>4.8 kg</td>
</tr>
<tr>
<td>50 mm stroke</td>
<td>3.4 kg</td>
<td>5.1 kg</td>
</tr>
</tbody>
</table>

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### Theoretical Output

**Wiring Diagram (PNP Connection Circuit)**

* Applicable to both TURCK and P&F switches.
* Please contact SMC for NPN switches.

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* SMC
CKZP Series

Dimensions

CKZP57L-

View A-A

- 2 x ø8 F7 depth 16
- 4 x M10 depth 16 (Helisert)

CKZP71-

View A-A

- 2 x ø8 F7 depth 20
- 4 x M10 depth 20 (Helisert)

Safety Instructions: Be sure to read the “Handling Precautions for SMC Products” (M-E03-3) and “Operation Manual” before use.