The Price Alternative

Series OCN
NFPA Large
Bore Cylinder

- NFPA mounting in accordance to ANSI T3.6.7 R2-1996.
- Lubed for life
- 32°F to 140°F (-5°C to 60°C)
- Standard magnetic piston
- Standard cushions on both ends
- 3 million + cycles
- Bore sizes from 1-½” to 4” diameter

CPOCN01A
SERIES

OCN

MS4 1

1-½ x 1 - ST  K2

STROKE

Bore Size

Design No.

1 = Imperial

Switch Bundle (Optional)

Cable Type

D = DC Reed
N = DC Solid State NPN - Sink
P = DC Solid State PNP - Source
K = Quick Connect

Notes:

1) Switch bundle option includes 2 switches
2) Switch bundle available with actuator only
3) Switches available in quick connect only
4) Magnets standard for switch sensing
5) Switches are not weld field resistant

Switch Circuitry

Mounting

K = Quick Connect

D = DC Reed
N = DC Solid State NPN - Sink
P = DC Solid State PNP - Source

Switches available in quick connect only

MOUNTING

Standard Stroke Lengths

[| Port Size | Seals | Pressure | Temperature | Velocity |
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>3/8 NPT</td>
<td>Urethane</td>
<td>20 psi to 150 psi</td>
<td>32°F to 140°F</td>
<td>2&quot;/sec to 20&quot;/sec</td>
</tr>
</tbody>
</table>

Specifications

Port Size | OCN Bore Sizes (in)
--- | ---
1-½ 2 3-¼ 4
3/8 NPT 1/2 NPT

1-½

1 2 3 4 5 6 8 10 12 14 16 18 20 24*

2

1 2 3 4 5 6 8 10 12 14 16 18 20 24*

2-½

1 2 3 4 5 6 8 10 12 14 16 18 20 24*

3-¼

1 2 3 4 5 6 8 10 12 14 16 18 20 24*

4

1 2 3 4 5 6 8 10 12 14 16 18 20 24*

Bore Size

<table>
<thead>
<tr>
<th>BORE SIZE (in)</th>
<th>A</th>
<th>BD</th>
<th>C</th>
<th>E</th>
<th>EE</th>
<th>G</th>
<th>J</th>
<th>KK</th>
<th>LB</th>
<th>MM</th>
<th>P</th>
<th>RM</th>
<th>RT</th>
<th>WF</th>
<th>Y</th>
<th>ZB</th>
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</thead>
<tbody>
<tr>
<td>1-½</td>
<td>0.75</td>
<td>1.43</td>
<td>0.375</td>
<td>2</td>
<td>3/8</td>
<td>1.26</td>
<td>1.1</td>
<td>7/16</td>
<td>3.625</td>
<td>0.625</td>
<td>2.36</td>
<td>1.125</td>
<td>1/4-28</td>
<td>1.00</td>
<td>1.71</td>
<td>4.750</td>
</tr>
<tr>
<td>2</td>
<td>0.75</td>
<td>1.84</td>
<td>0.375</td>
<td>2.5</td>
<td>3/8</td>
<td>1.26</td>
<td>1.06</td>
<td>7/16</td>
<td>3.625</td>
<td>0.625</td>
<td>2.40</td>
<td>1.125</td>
<td>5/16-24</td>
<td>1.00</td>
<td>1.71</td>
<td>4.750</td>
</tr>
<tr>
<td>2-½</td>
<td>0.75</td>
<td>2.19</td>
<td>0.375</td>
<td>3</td>
<td>3/8</td>
<td>1.3</td>
<td>1.06</td>
<td>7/16</td>
<td>3.75</td>
<td>0.625</td>
<td>2.48</td>
<td>1.125</td>
<td>5/16-24</td>
<td>1.00</td>
<td>1.75</td>
<td>4.875</td>
</tr>
<tr>
<td>3-¼</td>
<td>1.125</td>
<td>2.76</td>
<td>0.500</td>
<td>3.75</td>
<td>1/2</td>
<td>1.57</td>
<td>1.18</td>
<td>3/4-16</td>
<td>4.25</td>
<td>1.00</td>
<td>2.72</td>
<td>1.5</td>
<td>3/8-24</td>
<td>1.375</td>
<td>2.34</td>
<td>5.828</td>
</tr>
<tr>
<td>4</td>
<td>1.125</td>
<td>3.32</td>
<td>0.500</td>
<td>4.5</td>
<td>1/2</td>
<td>1.57</td>
<td>1.18</td>
<td>3/4-16</td>
<td>4.25</td>
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All dimensions are reference only unless specifically tolerated.
All dimensions are inches.
**Mounting Options**

**Optimax OCN NFPA Large Bore Cylinder**

### MS4 (Standard)

- **Mounting Dimensions**
  - Bore Size (in) | EH | NT | TK | TN | XT | SN
  - 1-½ | 1.00 | 1/4-20 | 0.281 | 0.63 | 1.938 | 2.25
  - 2 | 1.25 | 5/16-18 | 0.438 | 0.88 | 1.938 | 2.25
  - 2-½ | 1.50 | 3/8-16 | 0.594 | 1.25 | 1.938 | 2.375
  - 3-¼ | 1.88 | 1/2-13 | 0.625 | 1.50 | 2.438 | 2.625
  - 4 | 2.25 | 1/2-13 | 0.625 | 2.06 | 2.438 | 2.625

### MS1

- **Mounting Dimensions**
  - Bore Size (in) | AB | AH | AO | AT | SA | SA | XA
  - 1-½ | 0.375 | 1.188 | 0.438 | 0.125 | 1.25 | 6.00 | 5.625
  - 2 | 0.375 | 1.438 | 0.563 | 0.125 | 1.75 | 6.00 | 5.625
  - 2-½ | 0.375 | 1.625 | 0.563 | 0.125 | 2.25 | 6.125 | 5.750
  - 3-¼ | 0.500 | 1.938 | 0.750 | 0.172 | 2.75 | 7.375 | 6.875
  - 4 | 0.500 | 2.25 | 0.750 | 0.234 | 3.5 | 7.375 | 6.875

### MP1 (Pin sold separately)

- **Mounting Dimensions**
  - Ø CD +0.004/-0.002
  - Ø DM

### MP2 (Pin sold separately)

- **Mounting Dimensions**
  - Ø CD +0.004/-0.002
  - CB2 +0.012/-0.008

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**All Dimensions are Reference Only Unless Specifically Toleranced. All Dimensions Are Inches.**

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(800) 624-8511
www.phdinc.com

CPOCN01A
### MOUNTING OPTIONS

**MF1**

**BORE SIZE (in) | E | FB | R | TF | UF | W | WF | ZB**
---|---|---|---|---|---|---|---|---|
1-½ | 2.0 | 0.25 | 1.43 | 2.75 | 3.38 | 0.63 | 1.00 | 4.75 |
2 | 2.5 | 0.31 | 1.84 | 3.38 | 4.13 | 0.63 | 1.00 | 4.75 |
2-¼ | 3.0 | 0.31 | 2.19 | 3.88 | 4.63 | 0.63 | 1.00 | 4.875 |
3-¼ | 3.75 | 0.38 | 2.76 | 4.68 | 5.50 | 0.75 | 1.375 | 5.828 |
4 | 4.5 | 0.38 | 3.32 | 5.44 | 6.25 | 0.75 | 1.375 | 5.828 |

**MF2**

**BORE SIZE (in) | E | FB | R | TF | UF | FL | ZF**
---|---|---|---|---|---|---|---|
1-½ | 2.0 | 0.25 | 1.43 | 2.75 | 3.38 | 0.375 | 5.00 |
2 | 2.5 | 0.31 | 1.84 | 3.38 | 4.13 | 0.375 | 5.00 |
2-¼ | 3.0 | 0.31 | 2.19 | 3.88 | 4.63 | 0.375 | 5.13 |
3-¼ | 3.75 | 0.38 | 2.76 | 4.68 | 5.50 | 0.625 | 6.25 |
4 | 4.5 | 0.38 | 3.32 | 5.44 | 6.25 | 0.625 | 6.65 |

**MT4**

**BORE SIZE (in) | BD | E | TD | TM | TL | UW | XD | XV**
---|---|---|---|---|---|---|---|---|
1-½ | 1.04 | 2.11 | 1.00 | 2.50 | 1.00 | 2.28 | 4.84 | 3.20 |
2 | 1.04 | 2.60 | 1.00 | 3.00 | 1.00 | 2.60 | 5.03 | 3.92 |
2-¼ | 1.10 | 3.09 | 1.00 | 3.50 | 1.00 | 3.23 | 5.23 | 3.97 |
3-¼ | 1.18 | 3.70 | 1.00 | 4.50 | 1.00 | 4.17 | 6.16 | 4.19 |
4 | 1.22 | 4.49 | 1.00 | 5.25 | 1.00 | 4.88 | 6.18 | 4.19 |

### ACCESSORIES

**ROD EYE**

**ROD CLEVIS**

**CLEVIS PIN**

**ALL DIMENSIONS ARE REFERENCE ONLY UNLESS SPECIFICALLY TOLERANCED.**

**ALL DIMENSIONS ARE INCHES.**