Air Cylinder/Double Force Type Type

Size: 57

This product is capable of providing double the force of the MB series, without changing the width, due to the adoption of a rectangular piston.

* Comparison with tandem cylinders satisfying the following conditions: a cylinder of the same width with double the theoretical output.
* The width of the MB standard model and the MB tandem cylinder are the same.

Compared with the existing tandem type cylinder -XC12 (double force), ø40, 50 mm stroke

Overall length 47% reduction 335 mm ➞ 179 mm

Weight 20% reduction 1500 g ➞ 1200 g

Small auto switches can be mounted on 4 surfaces.
(Tie-rod mounting)
Applicable auto switch: D-M9

Air cushion adjustment is not required due to the non-adjustable air cushion.
The built-in rubber bumper reduces the metal noise that occurs when the piston stops.

Cover shape that prevents foreign matter accumulation

MB-X3157
### Specifications

<table>
<thead>
<tr>
<th>Size</th>
<th>57 (Equiv. ø40 x 2 piston area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action</td>
<td>Double acting, Single rod</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>0.7 MPa *1</td>
</tr>
<tr>
<td>Min. operating pressure</td>
<td>0.05 MPa</td>
</tr>
<tr>
<td>Ambient and fluid temperatures</td>
<td>5 to 60°C</td>
</tr>
<tr>
<td>Lubrication</td>
<td>Not required (Non-lube)</td>
</tr>
<tr>
<td>Piston speed</td>
<td>50 to 300 mm/s *1</td>
</tr>
<tr>
<td>Stroke length tolerance</td>
<td>0.0 mm</td>
</tr>
<tr>
<td>Cushion</td>
<td>Non-adjustable air cushion + rubber bumper</td>
</tr>
<tr>
<td>Port size</td>
<td>Rc1/8</td>
</tr>
<tr>
<td>Stroke</td>
<td>50 to 250 mm (25 mm increments)</td>
</tr>
<tr>
<td>Mounting</td>
<td>None (Basic type only)</td>
</tr>
<tr>
<td>Allowable kinetic energy</td>
<td>2.0 J</td>
</tr>
</tbody>
</table>

*Depending on the system configuration selected, the specified speed may not be satisfied.*

*1 Maximum operating pressure and piston speed are different from the existing product (MB series).*

### Standard Strokes

<table>
<thead>
<tr>
<th>Size</th>
<th>Standard stroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>50, 75, 100, 125, 150, 175, 200, 225, 250</td>
</tr>
</tbody>
</table>

### Theoretical Output

<table>
<thead>
<tr>
<th>Size</th>
<th>Rod operating direction</th>
<th>Piston area [mm²]</th>
<th>Operating air pressure [MPa]</th>
</tr>
</thead>
<tbody>
<tr>
<td>57</td>
<td>IN</td>
<td>2262</td>
<td>0.2 452 678 905 1131 1357 1583</td>
</tr>
<tr>
<td></td>
<td>OUT</td>
<td>2516</td>
<td>0.2 503 755 1006 1258 1510 1761</td>
</tr>
</tbody>
</table>

* Theoretical output [N] = Pressure [MPa] x Piston area [mm²]

### Dimensions

#### Auto switch bracket dimensions

- Auto switch mounting position: Port surface
- Auto switch mounting position: Side surface

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