TO DETERMINE THE MAXIMUM WEIGHT FOR THIS PART POSITIONER, DETERMINE YOUR DISTANCE FROM THE CENTER OF MASS OF THE TOOLING TO THE PIVOT POINT IN INCHES. THEN DIVIDE 2,200in-lbf BY THAT DISTANCE. THIS WILL RESULT IN THE MAXIMUM ALLOWABLE WEIGHT IN POUNDS.

2,200in-lbf = MAX WEIGHT in POUNDS

★ NOTE: 15.2mm [0.6"] PRIOR TO THE END OF VERTICAL LIFT, PLATE BEGINS TIPPING MOTION

20.00 [0.787] KEY X 60.0 LG

OPTIONAL SHROUD

301.5 [11.87]
294.5 [11.59] FOR "B" MOUNT

290.6 [11.44] FOR 45° (SUBTRACT 10.0 [0.39] FOR EVERY 5°)

2X 3/4" NPT PORTS

4X Ø16.0 P.F.  [24.0]

8X M16x2 - TAP [35.0]

4X M16x2 - TAP [24.0]

2X M16x2 - TAP [32.0]

PIVOT POINT

MOUNT "B"

MOUNT "A"

P3

P4

218 [8.6]  170.00 [6.693]

45° MAX TIP

180.00 [7.087]

15.0 [0.59]

35.0 [1.38]

368 [15.3] RETRACTED

10.0 [0.39]

45.00 [1.772] CENT

45.00 [1.772]

125.00 [4.921] CENT

150.00 [5.91] FOR "B" MOUNT

47 [1.8]

18.00 [0.709]

6" BORE AIR CYLINDER

4X M16x2 - TAP [290.6 [11.44]

FOR 45° (SUBTRACT 10.0 [0.39] FOR EVERY 5°)

ONLY ONE CYLINDER SWITCH TO BE MOUNTED.

AVAILABLE CYLINDER SWITCH (LX) SHOWN IN POSITION 1

PROVISIONS FOR CYLINDICATOR (CUSTOMER SUPPLIED)

CYLINDICATOR READ DEPTH 2.062"

UNITS ARE MILLIMETERS (i.e., X.XXmm [x.xxx"

DO NOT SCALE DRAWING

LOADING CAPACITY:
THIS EJECTOR UNIT AT 60psi HAS A VERTICAL LIFTING CAPACITY OF 1000lbs WITH A MAX RECOMMENDED WORKING TORQUE OF 2200in-lbs, RELATIVE TO THE PIVOT POINT. THE LIFT FORCE AND TORQUES ARE DIRECTLY PROPORTIONAL TO THE AIR PRESSURE.

NOTE: 15.2mm [0.6"] PRIOR TO THE END OF VERTICAL LIFT, PLATE BEGINS TIPPING MOTION

* Loading Capacity:
- Vertical lift capacity: 1000 lbs at 60 psi
- Recommended working torque: 2200 in-lbs, relative to the pivot point
- Lift force and torques are directly proportional to the air pressure.

** Switch Note:**
- Cylindicator read depth: 2.062"

** Loading Capacity Calculation:**
To determine the maximum weight for this part positioner, determine your distance from the center of mass of the tooling to the pivot point in inches. Then divide 2,200 in-lbf by that distance. This will result in the maximum allowable weight in pounds.

- Example: Distance from center of mass to pivot point = 15.2 mm [0.6"]
  - Maximum weight: 2,200 in-lbf / 15.2 mm [0.6"] = 144.44 lbs

** Units:**
- Dimensions are in millimeters (i.e., X.XXmm [x.xxx"
- Do not scale drawing
### WORLD SWITCHES

<table>
<thead>
<tr>
<th>Switch Option</th>
<th>S01 Sensor Position - &quot;E&quot;xtended &quot;R&quot;etracted</th>
<th>Manufacturer’s Part Number</th>
<th>Mfr.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>E or R</td>
<td>Ni2-Q6.5-AP6-0.1-FS 4.4X3/S304</td>
<td>Turck</td>
<td>3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect</td>
</tr>
<tr>
<td>B</td>
<td>E or R</td>
<td>Ni2-Q6.5-ADZ32-0.1-FSB 5.4X4/S304</td>
<td>Turck</td>
<td>4-Wire, 5-Pin, AC/DC 1/2-20 (N.O.) Quick Disconnect</td>
</tr>
<tr>
<td>C</td>
<td>E or R</td>
<td>Ni2-Q6.5-AN6-0.1-FS 4.4X3/S304</td>
<td>Turck</td>
<td>3-Wire, 4-Pin, DC M12 X 1 (NPN) Quick Disconnect</td>
</tr>
<tr>
<td>D</td>
<td>E or R</td>
<td>NBN2-F581-100S6-E8-V1</td>
<td>Pepper &amp; Fuchs</td>
<td>3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect</td>
</tr>
<tr>
<td>E</td>
<td>E or R</td>
<td>BES-Z02KR2-PSC20F-P100-S04-V</td>
<td>Balluff</td>
<td>3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect</td>
</tr>
<tr>
<td>H</td>
<td>E or R</td>
<td>Ni2-Q6.5-0.1M-BDS-2AP6X3-H1141/S34</td>
<td>Turck</td>
<td>3-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect</td>
</tr>
<tr>
<td>J</td>
<td>E or R</td>
<td>IN5374</td>
<td>Efector</td>
<td>4-Wire, 4-Pin, DC M12 X 1 (PNP) Quick Disconnect</td>
</tr>
</tbody>
</table>

### CYLINDER SWITCHES

<table>
<thead>
<tr>
<th>Switch Option</th>
<th>Manufacturer’s Part Number</th>
<th>Mfr.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>L3</td>
<td>SWITCH L3</td>
<td>Welker</td>
<td>4-Wire, 4-Pin, DC (PNP) M12 X 1 Quick Disconnect</td>
</tr>
<tr>
<td></td>
<td>L3 switch is weld field immune, comparable to World Switches. L3 is a dual sensor, single connector switch: 1 switch required per cylinder</td>
<td>Welker</td>
<td>4-Wire, 4-Pin, DC (PNP) M12 X 1 Quick Disconnect</td>
</tr>
<tr>
<td>L5</td>
<td>MK5113</td>
<td>Ifm Efector</td>
<td>3-Wire, 4-Pin, DC (NPN) M12 X 1 Quick Disconnect</td>
</tr>
<tr>
<td></td>
<td>Single sensor, single connector switch: 2 switches required per cylinder</td>
<td>Ifm Efector</td>
<td>3-Wire, 4-Pin, DC (NPN) M12 X 1 Quick Disconnect</td>
</tr>
</tbody>
</table>

Standard Switch Option - All other options may affect price and delivery