**RMP RETRACTING MICRO PIN**

- CUSTOMER-REPLACEABLE PIN
- ROUND PINS ONLY, NO ANTI-ROTATE
- 6mm PIN ENGAGEMENT, 15mm STROKE
- RAP COUPLER

12mm MAX DIAMETER PIN FULLY RETRACTS INTO BACKUP

NAAMS 8mm DOWEL WITH M8 TAP & THRU MULTI-SIDED MOUNTING

LIGHTWEIGHT ALUMINUM BODY

1/8" NPT OR G1/8 PORTS

WELD-FIELD IMMUNE* SOLID STATE SWITCH (INCLUDED)

CLAMPING BACKUP

NAAMS COMPATIBLE COMPACT 2-WAY OR 3-WAY SHIMMING

*Note that some mid and low frequency DC resistance applications (i.e. aluminum resistance welding applications) may cause a fault. In these applications, it is recommended that the sensor be ignored/bypassed during the welding cycle.
### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>R</th>
<th>M</th>
<th>P</th>
<th>L</th>
<th>3</th>
</tr>
</thead>
</table>

**Pin Diameter**
- XXXX Pin Diameter (i.e. 8.00mm Pin = 0800)
  - 0000 Pin Blank

**Backup**
- X No Backup
- B With Backup

**Actuator**
- N NPT port cylinder
- G G Port Cylinder

### REPLACEMENT PIN KIT ORDERING

KIT INCLUDES PIN, WIPER, INNER SEAL, PISTON SEAL, AND PLUG SEAL

<table>
<thead>
<tr>
<th>R</th>
<th>M</th>
<th>P</th>
<th>L</th>
<th>B</th>
<th>K</th>
</tr>
</thead>
</table>

**Pin Diameter**
- XXXX Pin Diameter: 3.00-12.00mm
  - Example: 8.00mm = 0800
  - 0000 Pin Blank

### APPLICATIONS

Retracting Micro Pins are for small, lightweight parts with minimal side load.

**Buyoffs must include hole size and tolerance. No flow controls required or recommended.**

**Good applications:**
- Metal <1.5mm thick
- Vertical applications with small parts, pin pointing up
- Multiple metal with one hole being 2-way or clearance
- End effectors: closures, door, hood, deck lid, seating lines
- Non-automotive industries
- Load to extended pin, not a repositioning device

**Bad applications:**
- Multiple metal with same hole size
- Vertical applications with pin pointing down
- Horizontal applications with heavy parts or where the pinned part becomes part of heavy assembly
- Applications that will produce side loads >20 lbf on pin
GENERAL DIMENSIONS

DESIGNER'S NOTE: SHIMMING RECOMMENDED FOR X, Y, AND Z

OVERALL HEIGHT VARIES WITH PIN DIAMETER

PIN BLANK
MATERIAL: A2 STEEL
RECOMMEND HARDENING TO Rc 55 MIN AFTER MACHINING

UNIT WEIGHT: 1.3 LBS

ENGINEERED PRODUCTS
800-229-0890 www.welkerproducts.com

SHOWN WITH BACKUP

NO BACKUP WITH PLATE

M8x1.25 TAP

UNIT WEIGHT: 1.3 LBS

ENGINEERED PRODUCTS
800-229-0890 www.welkerproducts.com

PIN BLANK
MATERIAL: A2 STEEL
RECOMMEND HARDENING TO Rc 55 MIN AFTER MACHINING

UNIT WEIGHT: 1.3 LBS

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PIN BLANK
MATERIAL: A2 STEEL
RECOMMEND HARDENING TO Rc 55 MIN AFTER MACHINING

UNIT WEIGHT: 1.3 LBS

ENGINEERED PRODUCTS
800-229-0890 www.welkerproducts.com
PIN & SEAL REPLACEMENT

1. DISCONNECT AIR LINES TO UNIT.
2. REMOVE M4 SCREWS & LOCK WASHERS SECURING PLUG TO UNIT BODY.
3. REMOVE PLUG.
4. BACK PIN AND PISTON OUT OF UNIT AND REMOVE.
5. SLIDE PIN OUT FROM SLOT IN PISTON.
6. REPLACE PLUG SEAL & PISTON SEAL, APPLYING MAGNALUBE OR EQUIVALENT.
7. REMOVE M5 BACKUP SCREWS & LOCKWASHERS. REMOVE BACKUP, IF PRESENT.
8. REMOVE WIPER, NOTING ORIENTATION. REMOVE INNER SEAL.
9. APPLY MAGNALUBE OR EQUIVALENT TO PISTON, PIN, SEALS AND BODY BORE.
10. INSTALL NEW SEAL, WIPER. INSTALL NEW PIN TO SLOT IN PISTON.
11. REASSEMBLE UNIT.
12. APPLY REMOVEABLE THREAD ADHESIVE TO SCREWS. TORQUE TO SHOWN.

<table>
<thead>
<tr>
<th>Tightening Torques for Metric Bolts (installed dry)</th>
<th>Steel</th>
<th>Aluminum</th>
</tr>
</thead>
<tbody>
<tr>
<td>M4</td>
<td>5 Nm</td>
<td>2.5 Nm</td>
</tr>
<tr>
<td>M5</td>
<td>10 Nm</td>
<td>5 Nm</td>
</tr>
<tr>
<td>M6</td>
<td>19 Nm</td>
<td>9.5 Nm</td>
</tr>
<tr>
<td>M8</td>
<td>45 Nm</td>
<td>22.5 Nm</td>
</tr>
<tr>
<td>M10</td>
<td>89 Nm</td>
<td>44.5 Nm</td>
</tr>
<tr>
<td>M12</td>
<td>156 Nm</td>
<td>78 Nm</td>
</tr>
</tbody>
</table>

(ENGINEERED PRODUCTS)
800-229-0890  www.welkerproducts.com