MANUAL TOOL CHANGERS

Features & Benefits

**Quick Disconnect for 25mm/1.00 in. Tubes**
- Housing ........................................................................................................4
- Air/Electric Connections.................................................................................6
- Bayonet ........................................................................................................8
- Air/Electric Connections.................................................................................9

**Quick Disconnect for 40mm/1.50 in. Tubes**
- Housing ......................................................................................................10
- Air/Electric Connections...............................................................................13
- Bayonet ....................................................................................................19
- Air/Electric Connections.............................................................................20

**Quick Disconnect for 60mm/2.50 in. Tubes**
- Housing ......................................................................................................26
- Air/Electric Connections...............................................................................27
- Bayonet ....................................................................................................31
- Air/Electric Connections.............................................................................32

**Idle Station** ...........................................................................................37
**Change Tooling in a Snap**
Our manual (shown) or fully automatic Quick Disconnect Tool Changers allow you to quickly switch between various tooling in seconds. Optional integral air ports provide immediate power to your system, eliminates manual re-connection of air lines, and reduces machine downtime.

**Single Hand Handle Actuation**
To lock into place and release bayonet.

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**RDN/RDC Features**

*(Handle in release position)*

**Base and Flange mounting for RDN 10/40 Housing**

*(Handle in locking position)*

**Optional air port modules**
auto disconnect when handle is released

**RDN-40 Housing**
RDC-40/15 Bayonet
for Ø40mm/1.50"(in)
Tooling Boom/Tubes

**Internal urethane bumpers**
ensures a tight interface between the robot and tool sides

**Air & electrical connections**
stay properly sequenced when tool is removed.

**Additional electrical connectors available**
RDN-40 and RDH electrical connectors must be ordered separately from Housing/Bayonet.
Overview:
The internal surface of the bayonet is tapered to lock the tubing in the position during hi-torque operations. Tubing must be inserted the proper distance to completely engage the taper.

Procedure:

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDC-10-1</td>
<td>70mm [2.75 in]</td>
</tr>
<tr>
<td>CPI-RDC-25M-1</td>
<td>70mm [2.75 in]</td>
</tr>
<tr>
<td>CPI-RDC-15-1</td>
<td>102mm [4.00 in]</td>
</tr>
<tr>
<td>CPI-RDC-40-1</td>
<td>102mm [4.00 in]</td>
</tr>
<tr>
<td>CPI-RDC-25-2</td>
<td>152mm [6.00 in]</td>
</tr>
<tr>
<td>CPI-RDC-60-2</td>
<td>152mm [6.00 in]</td>
</tr>
<tr>
<td>CPI-RDC-25-2HT</td>
<td>171mm [6.75 in]</td>
</tr>
</tbody>
</table>

It is helpful to tap on the end of the tubing with a mallet until the tubing is seated firmly against the taper.
Features:
- 50.8mm [2.00 in.] Sq. Flange Mntg.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors
- Internal urethane rings eliminate vibration and seat the bayonet securely

Specifications:
Max. Static Product Load: 47 N\*m [35 ft-lb]
Material:
Body: Aluminum
Knuckles: Brass
Handle and Hooks: Steel
Inserts: Urethane
Weight: 0.63 kg [1.4 lb]

Dimensions

How To Order

CPI - RDN-10 - 1F - 4AS - 5E
“RDN-10” Ø25mm/1.00” Quick Disconnect Housing
“1F” Flange Type Mounting
“4AS” (3-Port Connector)
“5A” (5-Port Connector)
“5E” (5-Pin Connector) (Only available for “4AS” Option)

Dimensions and technical information are subject to change without notice.
**RDN-10 HOUSINGS**

Manual Tool Changers | Base Mount Style for RDC-10 Series Bayonets | Product Overview

---

**Specifications:**
- Max. Static Product Load: 47 N·m [35 ft-lb]
- Material:
  - Body: Aluminum
  - Knuckles: Brass
  - Handle and Hooks: Steel
  - Inserts: Urethane
- Weight: 0.82 kg [1.8 lb]

**Features:**
- 47.6mm x 82.6mm [1.88 in. x 3.25 in.] Base Mounting.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
- Internal urethane rings eliminate vibration and seat the bayonet securely.

---

**Dimensions**

---

**How To Order**

<table>
<thead>
<tr>
<th>Model</th>
<th>Mounting</th>
<th>Air Port Connection</th>
<th>Electrical Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>RDN-10</td>
<td>1B</td>
<td>5E</td>
</tr>
<tr>
<td>&quot;RDN-10&quot; Ø25mm/1.00&quot; Quick Disconnect Housing</td>
<td>&quot;1B&quot; Base Type Mounting</td>
<td>&quot;4AS&quot; (4-Port Connector)</td>
<td>&quot;5E&quot; (5-Pin Connector)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Only available for &quot;4AS&quot; Option)</td>
</tr>
</tbody>
</table>

---

Dimensions and technical information are subject to change without notice.
AIR MANIFOLDS
Manual Tool Changers | RDN-10 Disconnect Series | Dimensions

1A 3-Port Air Connection

REPLACEMENT PART
RDN-10-8

5A 5-Port Air Connection

REPLACEMENT PART
RDN-10-9

Dimensions and technical information are subject to change without notice
AIR MANIFOLDS WITH OR WITHOUT ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-10 Disconnect Series | Dimensions

4AS 4-Port Air Connection with Shutoff

REPLACEMENT PART
CPI-RDN-10-4AS

Air fittings
(4) Needed
RDN-AS-U18

5E 5-Pin Micro Electric Connection

See Page 17 for
Pin Configuration

REPLACEMENT PART
CPI-RDH-F5S-5MCM

Dimensions and technical information are subject to change without notice
**Features:**
- Used in conjunction with the Quick Disconnect Housing to provide efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the bayonet.

**Specifications:**
- Max. Static Product Load: 47 N**m** [35 ft-lb]
- Material:
  - Body: Aluminum
  - Pins: Steel
- Weight: 0.23 kg [0.5 lb]

**How To Order**

<table>
<thead>
<tr>
<th>Model</th>
<th>Boom/Tube (Ø)</th>
<th>Air Port Connection</th>
<th>Electrical Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>RDC</td>
<td>10</td>
<td>4AS</td>
</tr>
<tr>
<td>&quot;RDC&quot; Quick Disconnect Bayonet</td>
<td>&quot;10&quot; 1.00&quot;(in) &quot;25M&quot; 25mm</td>
<td>&quot;1&quot;  &quot;1A&quot;  &quot;5A&quot;  &quot;4AS&quot;  &quot;1-4AS&quot;</td>
<td>No Options (3-Port Connector) &quot;5E&quot; (5-Pin Connector) (Only available for &quot;4AS or 1-4AS&quot; Options)</td>
</tr>
</tbody>
</table>

**Dimensions**

**1A 3-Port Air Connection**

**Replacement Part**

RDC-10-3
AIR MANIFOLDS WITH OR WITHOUT ELECTRICAL CONNECTIONS
Manual Tool Changers | RDC-10/25 Series Bayonets | Dimensions

**5A 5-Port Air Connection**

REPLACEMENT PART
RDC-10-5

**4AS 4-Port Air Connection with Shutoff**

(2) Required
REPLACEMENT PART
RDC-10-4

**5E 5-Pin Micro Electric Connection**

See Page 23 for Pin Configuration
REPLACEMENT PART
CPI-RDB-M5P-5MCF
**Features:**
- 60.3mm [2.38 in.] Sq. Flange Mntg.
- Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
- Internal urethane rings eliminate vibration and seat the bayonet securely.

**Specifications:**
- **Max. Static Product Load:** 305 N*m [225 ft-lb]
- **Material:**
  - Body: Aluminum
  - Knuckles: Brass
  - Handle and Hooks: Steel
  - Inserts: Urethane
- **Weight:** 1.5 kg [3.3 lb]

**How To Order**

<table>
<thead>
<tr>
<th>Model</th>
<th>Mounting</th>
<th>Air Port Connection</th>
<th>Key Position</th>
<th>Electrical Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>RDN-40</td>
<td>S4</td>
<td>K2</td>
<td>MC</td>
</tr>
<tr>
<td></td>
<td>&quot;1F&quot;</td>
<td>&quot;S4&quot; (4-Port Internal)</td>
<td>&quot;K1 (1-4)&quot;</td>
<td>&quot;MC&quot; (Micro 5-Pin)</td>
</tr>
<tr>
<td></td>
<td>60.3</td>
<td>&quot;E4&quot; (4-Port External)</td>
<td>&quot;VWK (1-16)&quot;</td>
<td>&quot;MN&quot; (Mini 3-Pin)</td>
</tr>
<tr>
<td></td>
<td>101.6</td>
<td>&quot;E6&quot; (6-Port External)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>111.8</td>
<td>&quot;SE4&quot; (4-Port Int &amp; Ext)</td>
<td>(Leave blank for No Options)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Add for "E4" or "E6" Air Port Connection Only

Dimensions and technical information are subject to change without notice.
RDN-40 BASE MOUNT DISCONNECT HOUSINGS

Manual Tool Changers | Tri-Axis Rail Tooling Example

RDN/RDC Series

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDN-40-JB-E4-5MNM-HF-INS</td>
<td>Quick Disconnect Housing with 4-Port High Flow Air, 5-Pin Electric, Insulation</td>
</tr>
<tr>
<td>CPI-RDC-15-E4-5MNF-HF</td>
<td>Quick Disconnect Bayonet with 4-Port High Flow Air, 5-Pin Electric</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice
Specifications:
Max. Static Product Load: 305 N*m [225 ft-lb]
Material:
Body: Aluminum
Knuckles: Brass
Handle and Hooks: Steel
Inserts: Urethane
Weight: 1.4 kg [3.1 lb]

Features:
• 70mm x 95.3mm [2.75 in. x 3.75 in.] Base Mounting.
• Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
• Internal urethane rings eliminate vibration and seat the bayonet securely.

Optional External "E4" 4-Port Air Connection

Optional Internal "Kx" Key/"S4" 4-Port Air Connection

How To Order

Model  |  Mounting  | Air Port Connection  | Key Position  | Electrical Connection  | Add for "E4" or "E6" Air Port Connection Only
--- | --- | --- | --- | --- | ---
RDN-40 | 1B | S4 | K2 | MC | HF

“RDN-40" Ø40mm/1.50” Quick Disconnect Housing

“1B” Base Type Mounting

“S4”, “E4”, “E6” “SE4” (Leave blank for No Options)

“K (1-4)” “VWK (1-16)” (Leave blank for No Options)

“MC” (Micro 5-Pin)

“MN” (Mini 3-Pin)

Dimensions and technical information are subject to change without notice
TOOLING ERROR PROOF KEY AND AIR PORTS

Manual Tool Changers | RDN-40 Flange Mount Disconnect Housings | Dimensions

**S4** 4-Port Internal Air Connection for Base Style Mounting

**Kx** Locating Key for Base Style Mounting

**S4** and **Kx** Internal Key Position for Base Style Mounting

**REPLACEMENT PART**

RDN-40-10-IAB

**REPLACEMENT PART**

RDN-40-10-IKB

**BASE MOUNT RING**

(1) Needed

RDN-40-3-MR

---

Tooling Error Proof Key and Air Ports

Manual Tool Changers | RDN-40 Flange Mount Disconnect Housings | Dimensions

Dimensions and technical information are subject to change without notice
**TOOLING ERROR PROOF KEY AND AIR PORTS**

Manual Tool Changers | RDN-40 Flange Mount Disconnect Housings | Mounting

**S4 4-Port Internal Air Connection for Flange Style Mounting**

![Diagram](image1)

Dowels

(1) Needed

M6 x 25mm

Air fittings

(4) Needed

RDN-AS-U18

**Kx Locating Key for Flange Style Mounting**

![Diagram](image2)

Dowels

(1) Needed

M6 x 25mm

**S4 and Kx Internal Key Position for Flange Style Mounting**

![Diagram](image3)
TOOLING ERROR PROOF KEY POSITIONS

Manual Tool Changers | Key Position Callout Chart

VIEWED FROM FRONT OF HOUSING

<table>
<thead>
<tr>
<th>POSITION #1</th>
<th>POSITION #2</th>
<th>POSITION #3</th>
<th>POSITION #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOWEL IN HOLE A</td>
<td>DOWEL IN HOLE B</td>
<td>DOWEL IN HOLE C</td>
<td>DOWEL IN HOLE D</td>
</tr>
<tr>
<td>VWK1</td>
<td>VWK2</td>
<td>VWK3</td>
<td>VWK4</td>
</tr>
<tr>
<td>VWK5</td>
<td>VWK6</td>
<td>VWK7</td>
<td>VWK8</td>
</tr>
<tr>
<td>VWK9</td>
<td>VWK10</td>
<td>VWK11</td>
<td>VWK12</td>
</tr>
<tr>
<td>VWK13</td>
<td>VWK14</td>
<td>VWK15</td>
<td>VWK16</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.
### E4 4-Port External Air Connection

<table>
<thead>
<tr>
<th>ORDER OPTION</th>
<th>REPLACEMENT PART</th>
<th>“A”</th>
<th>“B”</th>
<th>“C”</th>
<th>“D”</th>
<th>“E”</th>
<th>“F”</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>“E4” (Standard High Flow)</td>
<td>CPI-RDN-40-4AS-HF</td>
<td>73.0</td>
<td>38.1</td>
<td>39.6</td>
<td>76.1</td>
<td>66.6</td>
<td>46.5</td>
<td>1.32 kg</td>
</tr>
<tr>
<td></td>
<td>CPI-RDN-40-4AS</td>
<td>69.9</td>
<td>34.9</td>
<td>31.0</td>
<td>67.5</td>
<td>59.5</td>
<td>44.4</td>
<td>1.31 kg</td>
</tr>
</tbody>
</table>

Air fittings
(4) Needed
RDN-AS-U18-Standard
RDN-AS-U14-High Flow

### E6 6-Port External Air Connection

<table>
<thead>
<tr>
<th>ORDER OPTION</th>
<th>REPLACEMENT PART</th>
<th>“A”</th>
<th>“B”</th>
<th>“C”</th>
<th>“D”</th>
<th>“E”</th>
<th>“F”</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>“E6” (Standard High Flow)</td>
<td>RDN-40-10-6P-HF</td>
<td>76.2</td>
<td>38.1</td>
<td>40.5</td>
<td>76.9</td>
<td>68.3</td>
<td>47.5</td>
<td></td>
</tr>
</tbody>
</table>

Air fittings
(6) Needed
RDN-AS-U18-Standard
RDN-AS-U14-High Flow
## ELECTRICAL CONNECTIONS

**Manual Tool Changers | RDN-40 Series Disconnect Housings | Dimensions**

### MC 5-Pin Micro Electric Connection

![Diagram of MC 5-Pin Micro Electric Connection]

<table>
<thead>
<tr>
<th>Pin Socket</th>
<th>5</th>
<th>4</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN #1</td>
<td>29.4</td>
<td>41.3</td>
<td></td>
</tr>
<tr>
<td>PIN #2</td>
<td>[1.12]</td>
<td>28.4</td>
<td></td>
</tr>
<tr>
<td>PIN #3</td>
<td>[1.75]</td>
<td>19.1</td>
<td></td>
</tr>
</tbody>
</table>

### MN 3-Pin Mini Electric Connection

![Diagram of MN 3-Pin Mini Electric Connection]

<table>
<thead>
<tr>
<th>Pin Socket</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIN #1</td>
<td>29.4</td>
<td>34.8</td>
<td></td>
</tr>
<tr>
<td>PIN #2</td>
<td>[1.37]</td>
<td>28.4</td>
<td></td>
</tr>
<tr>
<td>PIN #3</td>
<td>[1.63]</td>
<td>41.3</td>
<td></td>
</tr>
</tbody>
</table>

### Part Number

<table>
<thead>
<tr>
<th>Component</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plug &amp; Strap</td>
<td>CPI-RDH-F5S-5MCM</td>
</tr>
<tr>
<td>Plug</td>
<td>RDH-F5S-5MCM</td>
</tr>
<tr>
<td>Strap</td>
<td>540-22005</td>
</tr>
</tbody>
</table>

Plugs and straps are available in various colors, including:
- PLUG COLOR: BLACK
- PLUG COLOR: GREEN
- PLUG COLOR: PINK
- PLUG COLOR: YELLOW

Dimensions and technical information are subject to change without notice.
**Features:**
- Used in conjunction with the Quick Disconnect Housing to provide efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the housing.
- Optional internal key positioning prevents bayonet from being inserted in the wrong orientation.

**Specifications:**
- Max. Static Product Load: 305 N·m [225 ft-lb]
- Material: Body: Aluminum
  Pins: Steel
- Weight: 0.69 kg [3.5 lb]

**Dimensions:**

**How To Order**

**Model** | **Boom/Tube (Ø) “D”** | **Air Port Connection** | **Key Position** | **Electrical Connection** | **Add for “E4” or “E6” Air Port Connection Only**
--- | --- | --- | --- | --- | ---
CPI | **RDC** Quick Disconnect Bayonet | | | | |
| | “1510” 1.00” (in) | “S4” (4-Port Internal) | “K (1-4)” | “MC” (Micro 5-Pin) | “HF” |
| | “15” 1.50” (in) | “E4” (4-Port External) | “VWK (1-16)” (Leave blank for No Options) | “MN” (Mini 3-Pin) (Leave blank for No Options) |
| | “40” 40mm | “E6” (6-Port External) | | |
| | | “SE4” (4-Port Int & Ext) | | |
**TOOLING ERROR PROOF KEYS**

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

**S4** 4-Port Internal Air Connection and **Kx** Locating Key

---

**REPLACEMENT PART**

RDC-40-4-IAB

**REPLACEMENT PART**

RDC-40-4-IKB

---

**S4** and **Kx** Internal Key Position

---

Dimensions and technical information are subject to change without notice
## TOOLING ERROR PROOF KEY POSITIONS

**Manual Tool Changers | RDC-40/150 Series Bayonets**

<table>
<thead>
<tr>
<th>ASSEMBLY #</th>
<th>KEY POSITION #</th>
<th>KEY BLOCK #</th>
<th>INSERT</th>
<th>POSITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDC-40-E4-VWK1-MC-HF</td>
<td>VWK1</td>
<td>RDC-40-4-IKB-16-KA1-4</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK2-MC-HF</td>
<td>VWK2</td>
<td>RDC-40-4-IKB-16-KB1-4</td>
<td>B</td>
<td>1</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK3-MC-HF</td>
<td>VWK3</td>
<td>RDC-40-4-IKB-16-KC1-4</td>
<td>C</td>
<td>1</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK4-MC-HF</td>
<td>VWK4</td>
<td>RDC-40-4-IKB-16-KD1-4</td>
<td>D</td>
<td>1</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK5-MC-HF</td>
<td>VWK5</td>
<td>RDC-40-4-IKB-16-KA1-4</td>
<td>A</td>
<td>2</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK6-MC-HF</td>
<td>VWK6</td>
<td>RDC-40-4-IKB-16-KB1-4</td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK7-MC-HF</td>
<td>VWK7</td>
<td>RDC-40-4-IKB-16-KC1-4</td>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK8-MC-HF</td>
<td>VWK8</td>
<td>RDC-40-4-IKB-16-KD1-4</td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK9-MC-HF</td>
<td>VWK9</td>
<td>RDC-40-4-IKB-16-KA1-4</td>
<td>A</td>
<td>3</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK10-MC-HF</td>
<td>VWK10</td>
<td>RDC-40-4-IKB-16-KB1-4</td>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK11-MC-HF</td>
<td>VWK11</td>
<td>RDC-40-4-IKB-16-KC1-4</td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK12-MC-HF</td>
<td>VWK12</td>
<td>RDC-40-4-IKB-16-KD1-4</td>
<td>D</td>
<td>3</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK13-MC-HF</td>
<td>VWK13</td>
<td>RDC-40-4-IKB-16-KA1-4</td>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK14-MC-HF</td>
<td>VWK14</td>
<td>RDC-40-4-IKB-16-KB1-4</td>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK15-MC-HF</td>
<td>VWK15</td>
<td>RDC-40-4-IKB-16-KC1-4</td>
<td>C</td>
<td>4</td>
</tr>
<tr>
<td>CPI-RDC-40-E4-VWK16-MC-HF</td>
<td>VWK16</td>
<td>RDC-40-4-IKB-16-KD1-4</td>
<td>D</td>
<td>4</td>
</tr>
</tbody>
</table>

**Tooling Error Proof Key Positions**

- **INSERT “A”**
  - VWK1
  - VWK5
  - VWK9
  - VWK13

- **INSERT “B”**
  - VWK2
  - VWK6
  - VWK10
  - VWK14

- **INSERT “C”**
  - VWK3
  - VWK7
  - VWK11
  - VWK15

- **INSERT “D”**
  - VWK4
  - VWK8
  - VWK12
  - VWK16

Dimensions and technical information are subject to change without notice.
EXTERNAL AIR MANIFOLDS

Manual Tool Changers | RDC-40/150 Series Bayonets | Dimensions

4-Port External Air Connection

ORDER OPTION | REPLACEMENT PART
--- | ---
“E4” (Standard High Flow) (Replacement for “E4” Legacy Applications only) | CPI-RDC-40-4-HF, CPI-RDC-40-4

<table>
<thead>
<tr>
<th>“A”</th>
<th>“B”</th>
<th>“C”</th>
<th>“D”</th>
<th>“E”</th>
<th>“F”</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.75</td>
<td>1.38</td>
<td>1.56</td>
<td>3.00</td>
<td>2.62</td>
<td>1.83</td>
<td>2.90 lb</td>
</tr>
<tr>
<td>69.9</td>
<td>34.9</td>
<td>39.6</td>
<td>76.1</td>
<td>66.6</td>
<td>46.5</td>
<td>1.32 kg</td>
</tr>
<tr>
<td>2.63</td>
<td>1.30</td>
<td>1.22</td>
<td>2.66</td>
<td>2.34</td>
<td>1.75</td>
<td>2.89 lb</td>
</tr>
<tr>
<td>66.7</td>
<td>32.9</td>
<td>31.0</td>
<td>67.5</td>
<td>59.5</td>
<td>44.4</td>
<td>1.31 kg</td>
</tr>
</tbody>
</table>

6-Port External Air Connection

ORDER OPTION | REPLACEMENT PART
--- | ---
(Replacement for “E6” Legacy Applications only) | RDC-40-4-6PA, RDC-40-E6-HF

<table>
<thead>
<tr>
<th>“A”</th>
<th>“B”</th>
<th>“C”</th>
<th>“D”</th>
<th>“E”</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.61</td>
<td>1.31</td>
<td>2.59</td>
<td>2.34</td>
<td>1.75</td>
</tr>
<tr>
<td>66.3</td>
<td>33.4</td>
<td>65.9</td>
<td>59.6</td>
<td>44.5</td>
</tr>
<tr>
<td>2.75</td>
<td>1.38</td>
<td>3.12</td>
<td>2.62</td>
<td>1.83</td>
</tr>
<tr>
<td>69.9</td>
<td>34.9</td>
<td>79.2</td>
<td>66.5</td>
<td>46.5</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.
**ELECTRICAL CONNECTORS**

**MC 5-Pin Micro Electric Connection**

![Diagram of 5-Pin Micro Electric Connection]

- **Socket Pin**
  - PIN #1
  - PIN #2
  - PIN #3
  - PIN #4
  - PIN #5

- **Replacement Part**
  - CPI-RDB-M5P-5MCF

**MN 3-Pin Mini Electric Connection**

![Diagram of 3-Pin Mini Electric Connection]

- **Socket Pin**
  - PIN #1
  - PIN #2
  - PIN #3

- **Replacement Part**
  - CPI-TTB-M3P-3B3

Dimensions and technical information are subject to change without notice.
MNF 5-Pin Mini Electric Connection

10-Pin Electric Connection

REPLACEMENT PART
CPI-RDC-40-5-10
If the handle of the Quick Disconnect Housing interferes with other equipment, it can be inverted and accessed from below the housing. In the inverted position, the hooks and housing remain in the upright position.

1. Loosen the set screw at the base of the handle in each knuckle.

2. Unscrew the button head screw from each knuckle, then remove the handle. (See Figure 1)

3. Slide knuckles and hooks off the main body of the housing. (See Figure 1)

4. Slide hook off each knuckle.

5. Remove the roll pin in each knuckle and insert a 3/16 x 5/16 pin into the hole for the inverted handle position, as shown. (See Figure 2)

6. Rotate each knuckle 180° from previous position and reinstall the hooks. Return the knuckle/hook sub-assembly to the housing.

7. Reinstall handle in the inverted position and tighten set screws. (See Figure 3)

To order RDN-25 housing with handle in Inverted Position, add “-INV” to the end of order number.
Features:
• 89mm [3.50 in.] Sq. Flange Mtng.
• Steel handle actuation allows quick and accurate installation, pulling the bayonet into a fixed position within the housing. This action also engages optional air and electric connectors.
• Internal urethane rings eliminate vibration and seat the bayonet securely.

Specifications:
Max. Static Product Load: 949 N·m [700 ft-lb]
Material:
Body: Aluminum
Knuckles: Brass
Handle and Hooks: Steel
Inserts: Urethane
Weight: 4.00 kg [8.90 lb]

Dimensions

How To Order

Model     Air Port Connection     Electrical Mounting
CPI - RDN-25-6 "A3-O0-S3" (0)Open-(3)Shutoff "A6-O0-S6" (0)Open-(6)Shutoff EL10
"A3-O1-S2" (1)Open-(2)Shutoff "A6-O1-S5" (1)Open-(5)Shutoff
"A3-O2-S1" (2)Open-(1)Shutoff "A6-O2-S4" (2)Open-(4)Shutoff
"A3-O3-S0" (3)Open-(0)Shutoff "A6-O3-S3" (3)Open-(3)Shutoff
"A6-O4-S2" (4)Open-(2)Shutoff
"A6-O5-S1" (5)Open-(1)Shutoff
"A6-O6-S0" (6)Open-(0)Shutoff

Mounting for Large Connectors
(Leave blank for Standard Mounting)
AIR PORTS AND ELECTRICAL CONNECTIONS

Manual Tool Changers | RDN-25 Flange Mount Disconnect Housings | Dimensions

**A3** 3-Port Internal Air Connection with Shutoff Option

**A6** 6-Port Internal Air Connection with Shutoff Option

**EL10** Mounting for Large Electric Connection

---

Dimensions and technical information are subject to change without notice
5 Pin Connectors for Housing - Standard Pin Configurations

- **3-Pin to 5-Pin Connector**
  - **A-Side**: 3-Pin, Single Key
  - **B-Side**: 5-Pin, Male Plug, Female Socket

- **4-Pin to 5-Pin Connector**
  - **A-Side**: 4-Pin, Single Key
  - **B-Side**: 5-Pin, Male Plug, Female Socket

- **5-Pin to 5-Pin Connector**
  - **A-Side**: 5-Pin, Single Key
  - **B-Side**: 5-Pin, Male Plug, Female Socket

**Model Numbers**

- **CPI-RDH-F5S-3B3**
- **CPI-RDH-F5S-4B4**
- **CPI-RDH-F5S-5B5**
**ELECTRICAL CONNECTIONS**

*Manual Tool Changers | RDN-25 Series Disconnect Housings | Dimensions*

---

### 10 Pin Configuration

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDH-F10S-A10</td>
<td>10-Pin</td>
<td>10-Pin, Male Plug, Female Socket</td>
</tr>
<tr>
<td>CPI-RDH-F10S-B10</td>
<td>10-Pin</td>
<td></td>
</tr>
</tbody>
</table>

---

**CONNECTION**

(See pin configuration)

Dimensions and technical information are subject to change without notice.
**16 Pin Configuration**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDH-F16S-A19</td>
<td>19-Pin</td>
<td>16-Pin, Male Plug, Female Socket</td>
</tr>
<tr>
<td>CPI-RDH-F16S-A14</td>
<td>14-Pin</td>
<td></td>
</tr>
</tbody>
</table>

**19 Pin Configuration**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDH-F19S-A19</td>
<td>19-Pin</td>
<td>19-Pin, Male Plug, Female Socket</td>
</tr>
<tr>
<td>CPI-RDH-F19S-B19</td>
<td>19-Pin</td>
<td></td>
</tr>
</tbody>
</table>
**RDC SERIES BAYONETS**

Manual Tool Changers | 2.50”/60mm Diameter Booms | Product Overview

**Features:**
- Used in conjunction with the Quick Disconnect Housing to provide an efficient mode of changing tools manually.
- (2) Hardened alignment pins allows quick and accurate installation into the housing.
- Optional “EL10” machined surface for large electrical connectors.

**Specifications:**

- **Max. Static Product Load:** 678 N·m [500 ft-lb]
- **Material:**
  - Body: Aluminum
  - Pins: Steel
- **Weight:** 1.6 kg [3.5 lb]

**Dimensions**

**How To Order**

<table>
<thead>
<tr>
<th>Model</th>
<th>Boom/Tube (Ø) “D”</th>
<th>Version</th>
<th>Air Port Connection</th>
<th>Electrical Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDC</td>
<td>“25” 2.50” (in)</td>
<td>2</td>
<td>A3</td>
<td>EL10</td>
</tr>
<tr>
<td></td>
<td>“60” 60mm</td>
<td></td>
<td>“A3” 3-Port</td>
<td>Mounting for Large Connectors (Leave blank for Standard Mounting)</td>
</tr>
</tbody>
</table>

“RDC” Quick Disconnect Bayonet

“RDC” 3-Port

Version 2

“A6” 6-Port

**Dimensions and technical information are subject to change without notice**
**RDC SERIES BAYONETS**

Manual Tool Changers | 2.50”/60mm Diameter High Torque Booms | Product Overview

**Features:**
- Extended clamp area increases the holding surface and torque capacity for high speed applications.
- (2) Hardened alignment pins allows quick and accurate installation into the bayonet.
- Optional “EL10” machined surface for large electrical connectors.

**Specifications:**
- **Max. Static Product Load:** 949 N*m [700 ft-lb]
- **Material:**
  - Body: Aluminum
  - Pins: Steel
- **Weight:** 2.1 kg [4.7 lb]

---

**Dimensions**

**How To Order**

**CPI** — **Model** — **Boom/Tube (Ø)”D”** — **Version** — **Air Port Connection** — **Electrical Mounting**

<table>
<thead>
<tr>
<th>CPI</th>
<th>Model</th>
<th>Boom/Tube (Ø)”D”</th>
<th>Version</th>
<th>Air Port Connection</th>
<th>Electrical Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDC</td>
<td>25</td>
<td>2.50”(in) 60mm</td>
<td>2HT</td>
<td>A3</td>
<td>EL10</td>
</tr>
<tr>
<td>A3</td>
<td>60</td>
<td>2.50”(in) 60mm</td>
<td>2HT</td>
<td>A6</td>
<td>EL10</td>
</tr>
</tbody>
</table>

“RDC” Quick Disconnect Bayonet

Mounting for Large Connectors (Leave blank for Standard Mounting)

---

Dimensions and technical information are subject to change without notice
AIR PORTS AND ELECTRICAL CONNECTIONS

Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions

**A3** 3-Port/A6 6-Port Internal Air Connection

![“A3” 3-Port Internal Air Connection](image)

![“A6” 6-Port Internal Air Connection](image)

**REPLACEMENT PART**

- CPI-BC-250-3-U38 (3/8 NPT ports)
- CPI-BC-60-3-G38 (G3/8 ports)

**REPLACEMENT PART**

- CPI-BC-250-6-U18 (1/8 NPT ports)
- CPI-BC-60-6-G18 (G1/8 ports)

**EL10** Mounting for Large Electric Connection

![EL10 Mounting for Large Electric Connection](image)

M5x0.8 THREAD

**ELECTRICAL CONNECTOR OPTIONS ORDERED SEPARATELY**

- [2.62] 66.6
- [.90] 22.9
- [1.97] 50.0
- [.91] 23.0
- [1.81] 46.0
- [2.8] 7.0
- [.63] 16.0
- [1.63] 41.4

Dimensions and technical information are subject to change without notice.
5 Pin Connectors for Bayonet (Tool Side)- Standard Pin Configurations

A-Side Socket
- SOCKET #1
- SOCKET #2
- SOCKET #3
- PIN #1
- PIN #2
- PIN #3
- N / A
- N / A

B-Side Pin
- PIN #1
- PIN #2
- PIN #3
- PIN #4
- N / A

3-Pin to 5-Pin Connector
- A-Side 3-Pin, Single Key
- B-Side 5-Pin, Male Pin, Female Plug

4-Pin to 5-Pin Connector
- A-Side 4-Pin, Single Key
- B-Side 5-Pin, Male Pin, Female Plug

5-Pin to 5-Pin Connector
- A-Side 5-Pin, Single Key
- B-Side 5-Pin, Male Pin, Female Plug

MODEL NUMBER
- CPI-RDB-M5P-3B3
- CPI-RDB-M5P-4B4
- CPI-RDB-M5P-5B5

Dimensions and technical information are subject to change without notice.
## ELECTRICAL CONNECTIONS

**Manual Tool Changers | RDC-25/60 Series Bayonets | Dimensions**

### 10 Pin Configuration

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDB-M10P-A10</td>
<td>10-Pin</td>
<td>10-Pin, Male Pin, Female Plug</td>
</tr>
<tr>
<td>CPI-RDB-M10P-B10</td>
<td>10-Pin</td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions

- **M5 FASTENERS (2) PLACES**
  - [2.68] 68.1
  - [1.75] 44.5
  - [1.97] 50.0
  - [1.26] 32.0

- **CONNECTOR (SEE PIN CONFIGURATION)**
  - [.83] 21.1
  - [1.75] 44.5
  - [1.54] 39.1
  - [.28] 7.0

- **Socket**
  - CPI-RDB-M10P-A10
  - CPI-RDB-M10P-B10

- **Pin**
  - CPI-RDB-M5P-B5
  - CPI-RDB-M4P-B4

---

Dimensions and technical information are subject to change without notice.
### 16 Pin Configuration

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDB-M16P-A19</td>
<td>19-Pin</td>
<td>16-Pin, Male Pin, Female Plug</td>
</tr>
<tr>
<td>CPI-RDB-M16P-A14</td>
<td>14-Pin</td>
<td></td>
</tr>
</tbody>
</table>

### 19 Pin Configuration

<table>
<thead>
<tr>
<th>Model Number</th>
<th>A-Side</th>
<th>B-Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI-RDB-M19P-A19</td>
<td>19-Pin</td>
<td>19-Pin, Male Pin, Female Plug</td>
</tr>
<tr>
<td>CPI-RDB-M19P-B19</td>
<td>19-Pin</td>
<td></td>
</tr>
</tbody>
</table>

**Electrical Connections**

**Dimensions and technical information are subject to change without notice**
IDLE STATION

Automation Adaptors | (1) RDN-25-6 Disconnect Housings with Ability to be Fixed to Bolster | Dimensions

Dimensions and technical information are subject to change without notice
LOCKING PINS IDLE STATIONS

Automation Adaptors | Locking Pin | Operating Procedure

Stored Position

Engaged Position