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

**RDN/RDC Features**

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

- **RDN-10 Housing**
  RDC-10/25M Bayonet
  for Ø25mm/1.00"(in)
  Tooling Boom/Tubes

- **RDN-25 Housing**
  RDC-60/25 Bayonet
  for Ø60mm/2.50"(in)
  Tooling Boom/Tubes

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

- **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\(\text{m}\) [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

<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>1F</td>
<td>4AS</td>
</tr>
<tr>
<td>“RDN-10” Ø25mm/1.00” Quick Disconnect Housing</td>
<td>“1F” Flange Type Mounting</td>
<td>“4AS” (4-Port Connector)</td>
<td>“5E” (5-Pin Connector)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Leave blank for No Options)</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.94</td>
<td>49.2</td>
</tr>
<tr>
<td>1.50</td>
<td>38.1</td>
</tr>
<tr>
<td>4.45</td>
<td>R 112.9</td>
</tr>
<tr>
<td>2.63</td>
<td>66.7</td>
</tr>
<tr>
<td>2.50</td>
<td>63.5</td>
</tr>
<tr>
<td>3.69</td>
<td>93.7</td>
</tr>
<tr>
<td>3.29</td>
<td>83.6</td>
</tr>
<tr>
<td>3.88</td>
<td>98.4</td>
</tr>
<tr>
<td>0.38</td>
<td>9.5</td>
</tr>
<tr>
<td>0.34</td>
<td>Ø8.7</td>
</tr>
<tr>
<td>1.88</td>
<td>47.6</td>
</tr>
<tr>
<td>3.25</td>
<td>82.6</td>
</tr>
</tbody>
</table>

**How To Order**

- **Model**: RDN-10
- **Mounting**: 1B
- **Air Port Connection**: 4AS
- **Electrical Connection**: 5E

“RDN-10” Ø25mm/1.00” Quick Disconnect Housing

“1B” Base Type Mounting

“A” (3-Port Connector)

“5A” (5-Port Connector)

“4AS” (4-Port Connector) (Leave blank for No Options)

“5E” (5-Pin Connector) (Only available for “4AS” Option)
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

REPLACEMENT PART
CPI-RDH-F5S-5MCM

See Page 17 for Pin Configuration

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]

**Dimensions**

**How To Order**

<table>
<thead>
<tr>
<th>CPI</th>
<th>Model</th>
<th>Boom/Tube (Ø) “D”</th>
<th>Air Port Connection</th>
<th>Electrical Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>3-Port Air Connection</td>
<td>No Options</td>
<td>“5E” (5-Pin Connector)</td>
<td>(Only available for “4AS or 1-4AS” Options)</td>
</tr>
</tbody>
</table>
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

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: 1.5 kg [3.3 lb]

**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.

**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.

**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” (4-Port Internal)</td>
<td>“K1 (1-4)”</td>
<td>“MC” (Micro 5-Pin)</td>
</tr>
<tr>
<td></td>
<td>“1F”</td>
<td>“E4” (4-Port External)</td>
<td>“VWK (1-16)”</td>
<td>“MN” (Mini 3-Pin)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“E6” (6-Port External)</td>
<td></td>
<td>(Leave blank for No Options)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“SE4” (4-Port Int &amp; Ext)</td>
<td></td>
<td>(Leave blank for No Options)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Leave blank for No Options)</td>
</tr>
</tbody>
</table>
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>
**RDN-40 Disconnect Housings**

Manual Tool Changers | Base Mount Housing for RDC-40/150 Series Bayonets | Product Overview

**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.

---

**Dimensions, How To Order**

**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><strong>CPI</strong></td>
<td><strong>RDN-40</strong></td>
<td>1B</td>
<td><strong>S4</strong></td>
<td><strong>K2</strong></td>
</tr>
<tr>
<td>&quot;RDN-40&quot;</td>
<td>1B</td>
<td>Base Type Mounting</td>
<td>&quot;S4&quot;</td>
<td>&quot;VWK (1-16)&quot; (Leave blank for No Options)</td>
</tr>
<tr>
<td>Ø40mm/1.50&quot; Quick Disconnect Housing</td>
<td></td>
<td></td>
<td>&quot;E4&quot;</td>
<td>&quot;K (1-4)&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;E6&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>&quot;SE4&quot;</td>
<td></td>
</tr>
</tbody>
</table>

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

**BASE MOUNT RING**

- (1) Needed
- **RDN-40-3-MR**

**Dowels**

- (1) Needed
- **M6 x 25mm**

**Air fittings**

- (4) Needed
- **RDN-SAS-U18**

**REPLACEMENT PART**

- **RDN-40-10-IAB**

**Dowels**

- (1) Needed
- **M6 x 25mm**

**REPLACEMENT PART**

- **RDN-40-10-IKB**

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

Dowels
(1) Needed
M6 x 25mm

Air fittings
(4) Needed
RDN-AS-U18

**Kx** Locating Key for Flange Style Mounting

Dowels
(1) Needed
M6 x 25mm

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

*Dimensions and technical information are subject to change without notice*
# 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>VWK1</td>
<td>VWK5</td>
<td>VWK13</td>
</tr>
<tr>
<td>Dowel in Hole B</td>
<td>VWK2</td>
<td>VWK6</td>
<td>VWK10</td>
</tr>
<tr>
<td>Dowel in Hole C</td>
<td>VWK3</td>
<td>VWK7</td>
<td>VWK11</td>
</tr>
<tr>
<td>Dowel in Hole D</td>
<td>VWK4</td>
<td>VWK8</td>
<td>VWK12</td>
</tr>
</tbody>
</table>

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

**ORDER OPTION** | **REPLACEMENT PART** | **“A”** | **“B”** | **“C”** | **“D”** | **“E”** | **“F”** | **WEIGHT**
--- | --- | --- | --- | --- | --- | --- | --- | ---
“E4” (Standard High Flow) (Replacement for “E4” Legacy Applications only) | CPI-RDN-40-4AS-HF | 73.0 | 38.1 | 39.6 | 76.1 | 66.6 | 46.5 | 0.23 kg
 | CPI-RDN-40-4AS | 69.9 | 34.9 | 31.0 | 67.5 | 59.5 | 44.4 | 0.10 kg

### E6 6-Port External Air Connection

**ORDER OPTION** | **REPLACEMENT PART** | **“A”** | **“B”** | **“C”** | **“D”** | **“E”** | **“F”** | **WEIGHT**
--- | --- | --- | --- | --- | --- | --- | --- | ---
“E6” (Standard High Flow) (Replacement for “E6” Legacy Applications only) | CPI-RDN-40-10-6P-HF | 76.2 | 38.1 | 40.5 | 76.9 | 68.3 | 47.5 | 0.25 kg
 | RDN-40-10-6AS | 69.9 | 34.9 | 31 | 67.5 | 59.5 | 44.4 | 0.17 kg

Dimensions and technical information are subject to change without notice.
ELECTRICAL CONNECTIONS
Manual Tool Changers | RDN-40 Series Disconnect Housings | Dimensions

MC 5-Pin Micro Electric Connection

MN 3-Pin Mini Electric Connection

Part Number
Plug & Strap CPI-RDH-F5S-5MCM
Plug RDH-F5S-5MCM
Strap 540-22005

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

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

5-Pin Mini Electric Connection

CPI-RDN-40-F5S-3MNM

CPI-RDN-40-F5S-4MNM

CPI-RDN-40-F5S-5MNM

PLUG COLOR: BLACK

PLUG COLOR: GREEN

PLUG COLOR: YELLOW

Strap not included

10-Pin Amphenol

Dimensions and technical information are subject to change without notice
**RDC SERIES BAYONET**
Manual Tool Changers | 40mm / 1.50" Diameter Booms | Product Overview

**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]

---

**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**

<table>
<thead>
<tr>
<th>Model</th>
<th>Boom/Tube (Ø) “D”</th>
<th>Air Port Connection</th>
<th>Key Position</th>
<th>Electrical Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI RDC</td>
<td>40</td>
<td>S4</td>
<td>K1</td>
<td>MC</td>
</tr>
<tr>
<td>“RDC” Quick Disconnect Bayonet</td>
<td>“1510” 1.00” (in)</td>
<td>“S4” (4-Port Internal)</td>
<td>“K (1-4)” (1-16)</td>
<td>“MC” (Micro 5-Pin)</td>
</tr>
<tr>
<td>“15” 1.50” (in)</td>
<td>“E4” (4-Port External)</td>
<td>(Leave blank for No Options)</td>
<td>“MN” (Mini 3-Pin)</td>
<td></td>
</tr>
<tr>
<td>“40” 40mm</td>
<td>“E6” (6-Port External)</td>
<td>(Leave blank for No Options)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add “-1” after Boom/Tube (Ø) for No Options</td>
<td>“SE4” (4-Port Int &amp; Ext)</td>
<td>(Leave blank for No Options)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Dimensions and technical information are subject to change without notice
TOOLING ERROR PROOF KEYS

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

S4 4-Port Internal Air Connection and Kx Locating Key

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>

**Diagram:**

- **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 Extenal Air Connection

(2) Required

<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) (Replacement for “E4” Legacy Applications only)</td>
<td>CPI-RDC-40-4-HF</td>
<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></td>
<td>CPI-RDC-40-4</td>
<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></td>
<td></td>
<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></td>
<td></td>
<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

<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>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Replacement for “E6” Legacy Applications only)</td>
<td>RDC-40-4-6PA</td>
<td>[2.61]</td>
<td>[1.31]</td>
<td>[2.59]</td>
<td>[2.34]</td>
<td>[1.75]</td>
<td>44.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>66.3</td>
<td>33.4</td>
<td>65.9</td>
<td>59.6</td>
<td>44.5</td>
<td>46.5</td>
</tr>
<tr>
<td>“E6” (Standard High Flow)</td>
<td>RDC-40-E6-HF</td>
<td>[2.75]</td>
<td>[1.38]</td>
<td>[3.12]</td>
<td>[2.62]</td>
<td>[1.83]</td>
<td>44.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69.9</td>
<td>34.9</td>
<td>79.2</td>
<td>66.5</td>
<td>44.5</td>
<td>46.5</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.

EE-MTC | 22
**ELECTRICAL CONNECTORS**

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

**MC 5-Pin Micro Electric Connection**

![Diagram of 5-Pin Micro Electric Connection]

**MN 3-Pin Mini Electric Connection**

![Diagram of 3-Pin Mini Electric Connection]
ELECTRICAL CONNECTORS

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

**MNF 5-Pin Mini Electric Connection**

CPI-RDC-40-M5P-3MNF

CPI-RDC-40-M5P-4MNF

CPI-RDC-40-M5P-5MNF

**10-Pin Electric Connection**

CPI-RDC-40-5-10

**Replacement Part**

Dimensions and technical information are subject to change without notice
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 180º 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**

<table>
<thead>
<tr>
<th>Model</th>
<th>Air Port Connection</th>
<th>Electrical Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPI</td>
<td>RDN-25-6</td>
<td>EL10</td>
</tr>
<tr>
<td>“RDN-25-6” Ø60mm/2.50” Quick Disconnect Housing</td>
<td>A3 (3 Port) or A6 (6-Port) “O(x)” = (Qty) of Open Ports / “S(x)” = (Qty) of Shutoff Ports</td>
<td>Mounting for Large Connectors (Leave blank for Standard Mounting)</td>
</tr>
<tr>
<td>“A3-O0-S3” (0)Open-(3)Shutoff</td>
<td>“A3-O1-S2” (1)Open-(2)Shutoff</td>
<td>“A6-O0-S6” (0)Open-(6)Shutoff</td>
</tr>
<tr>
<td>“A3-O1-S2” (1)Open-(2)Shutoff</td>
<td>“A6-O1-S5” (1)Open-(5)Shutoff</td>
<td>“A6-O2-S4” (2)Open-(4)Shutoff</td>
</tr>
<tr>
<td>“A3-O2-S1” (2)Open-(1)Shutoff</td>
<td>“A6-O2-S4” (2)Open-(4)Shutoff</td>
<td>“A6-O3-S3” (3)Open-(3)Shutoff</td>
</tr>
<tr>
<td>“A3-O3-S0” (3)Open-(0)Shutoff</td>
<td>“A6-O4-S2” (4)Open-(2)Shutoff</td>
<td>“A6-O4-S2” (4)Open-(2)Shutoff</td>
</tr>
<tr>
<td>“A6-O5-S1” (5)Open-(1)Shutoff</td>
<td>“A6-O5-S1” (5)Open-(1)Shutoff</td>
<td>“A6-O6-S0” (6)Open-(0)Shutoff</td>
</tr>
<tr>
<td>“A6-O6-S0” (6)Open-(0)Shutoff</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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

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

![Diagram of 3-Port Internal Air Connection with Shutoff Option]

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

![Diagram of 6-Port Internal Air Connection with Shutoff Option]

**EL10 Mounting for Large Electric Connection**

![Diagram of EL10 Mounting for Large Electric Connection]

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

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

![Image of electrical connector]

### 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>

### Dimensions

- **M5 Fasteners (2) Places**: [3.05] (3.05 mm) [2.25] (2.25 mm) [77.5] (77.5 mm)
- **Connector (See Pin Configuration)**: [0.89] (0.89 mm) [2.25] (2.25 mm) [22.6] (22.6 mm)
- **Socket Pin Configuration**: [1.78] (1.78 mm) [45.2] (45.2 mm) [1.34] (1.34 mm) [34.0] (34.0 mm)
- **Dimensions and technical information are subject to change without notice**

---

**CPI-RDH-F10S-B10**

**CPI-RDH-F10S-A10**

**CPI-RDB-M10P-B10**

**CPI-RDB-M10P-A10**

**CPI-RDB-M19P-A19**

**CPI-RDB-M19P-B19**

**CPI-RDF-M19P-A19**

**CPI-RDF-M19P-B19**

---

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>

![Diagram of connector configurations](image)

**M5 FASTENERS (2) PLACES**

**CONNECTOR (SEE PIN CONFIGURATION)**
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

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

“RDC” Quick Disconnect Bayonet

“RDC” 3-Port

“25” 2.50" (in)

“260” 60mm

“2” Version 2

“A3” 3-Port

“A6” 6-Port

Mounting for Large Connectors

(Leave blank for Standard Mounting)

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

<table>
<thead>
<tr>
<th>CPI</th>
<th>Model</th>
<th>Boom/Tube (Ø)</th>
<th>Version</th>
<th>Air Port Connection</th>
<th>Electrical Mounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>RDC</td>
<td>25</td>
<td>“25” 2.50&quot;(in)</td>
<td>2HT</td>
<td>A3 “A3” 3-Port</td>
<td>EL10 Mounting for Large Connectors (Leave blank for Standard Mounting)</td>
</tr>
<tr>
<td>“RDC”</td>
<td>“60” 60mm</td>
<td>“2HT” Version 2 Hi-Torque</td>
<td></td>
<td>“A6” 6-Port</td>
<td></td>
</tr>
</tbody>
</table>

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

“A6” 6-Port Internal Air Connection

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

M5x0.8 THREAD

ELECTRICAL CONNECTOR OPTIONS ORDERED SEPARATELY

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

**A-Side**
- Socket
- 3-Pin, Single Key
- 5-Pin, Male Pin, Female Plug

**B-Side**
- Pin

**Socket Configurations**
- PIN #1
- PIN #2
- PIN #3
- N/A
- 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

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

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

---

**Socket**

<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,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female Plug</td>
</tr>
<tr>
<td>CPI-RDB-M10P-B10</td>
<td>10-Pin</td>
<td></td>
</tr>
</tbody>
</table>

---

**Connector**

(SEE PIN CONFIGURATION)

---

**Dimensions and technical information are subject to change without notice**
## Electrical Connections

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

<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>16-Pin</td>
<td>19-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>

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

**MODEL NUMBER** | **WEIGHT**
--- | ---
CPI-BLC-100-15-6 | 5.50 kg [12.12 lb]
OPTIONAL JUNCTION OR DISTRIBUTION BOX

MANUAL QUICK DISCONNECT HOUSING RDN-25-6 (3 PLACES)

MODEL NUMBER WEIGHT
CPI-INS-ASSY  182.67 kg [402.73 lb]

Dimensions and technical information are subject to change without notice.