RQC/RTP SERIES

Automatic Tool Changers | Features and Benefits

Additional Optional Air, Fluid, Electrical Modules are Available.
Air and fluid ports modules are available in NPT, BSPP, and BSPT (See Page TC-RQTP-17)

Locking Mechanisms
Made from hardened stainless steel, they provide a low stress, highly rigid locking capability

Latch/Unlatch Switch
RQC’s are pre-equipped for latch, unlatch (all sizes) and part presence sensing (sizes 800 & 1200 only)
Dry contact or inductive sensors with or w/o connectors are available

Optional 19 Pin I/O Module
Spring loaded contacts are recessed for a better protection
V- Seal provides moisture resistance

Optional 6 Port Pneumatic Module

Optional (4) Self-Sealing Air Ports Module
(sizes 800 & 1200 only)

Robot Half Adaptor has counterbored holes for mounting with a dowel pin hole, a raised boss for location, and features a ISO9409-1 mounting pattern

Tool Half Adaptor has tapped holes, two dowel pin holes for accurate location of payload, and features a ISO9409-1 mounting pattern

Back Side of Robot Half Adaptor

Dimensions and technical information are subject to change without notice
**RQC-200/RTP-200**

- Combined Weight: 3 Kg [6.7 lb]
- Max. Payload: 90 Kg [200 lb]
- Max. Moment: 810 Nm [7200 in-lb]

**RQC-400/RTP-400**

- Combined Weight: 4.7 Kg [10.4 lb]
- Max. Payload: 180 Kg [400 lb]
- Max. Moment: 1580 Nm [14000 in-lb]

**RQC-800/RTP-800**

- Combined Weight: 7.1 Kg [15.8 lb]
- Max. Payload: 360 Kg [800 lb]
- Max. Moment: 2490 Nm [22000 in-lb]

**RQC-1200/RTP-1200**

- Combined Weight: 8.3 Kg [18.4 lb]
- Max. Payload: 550 Kg [1200 lb]
- Max. Moment: 3390 Nm [30000 in-lb]

**RQC-2400/RTP-2400**

- Combined Weight: 30 Kg [66.1 lb]
- Max. Payload: 1089 Kg [2400 lb]
- Max. Moment: 7000 Nm [61955 in-lb]
RQC-200/RTP-200

Automatic Tool Changers | Module Usage Illustrations

**RQC-200**

Robot Adaptor Module
with Optional Modules
(Robot Side)

**RTP-200**

Tool Adaptor Module
with Optional Modules
(Tool Side)

---

**Dimensions and technical information are subject to change without notice.**
### RQC-200/RTP-200

#### Automatic Tool Changers | Ordering Information

<table>
<thead>
<tr>
<th>Base Model</th>
<th>Model Size</th>
<th>Port Options (RQC-only)</th>
<th>Sensing (RQC-only)</th>
<th>Side A MODULES</th>
<th>Side B MODULES</th>
<th>Side C MODULES</th>
<th>Side D MODULES</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQC</td>
<td>200</td>
<td>1/8 NPT N</td>
<td>L0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RTP</td>
<td>200</td>
<td>1/8 BSPP M</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### Optional Electrical, Air and Vacuum Modules can be ordered with Base Model

See below for Module Description (See Pg. TC-RQTP-3 for Illustrated Module Config.)

<table>
<thead>
<tr>
<th>Side A</th>
<th>Side B</th>
<th>Side C</th>
<th>Side D</th>
<th>Order Code</th>
<th>Optional Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>•</td>
<td></td>
<td>•</td>
<td>0</td>
<td>No Module</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>E19†***</td>
<td>19 pin, 3 Amp, 48 VDC Module w/Turck M12 Conn, w/o Cordset</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>G19†***</td>
<td>19 pin, 5 Amp, 120 VDC Module w/Industrial User Conn., w/o Cable</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>FN</td>
<td>6X 1/8” NPT Air Ports Module, Face Seal, 10 Bar</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>FP</td>
<td>6X 1/8” BSPP Air Ports Module, Face Seal, 10 Bar</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>FT</td>
<td>6X 1/8” BSPT Air Ports Module, Face Seal, 10 Bar</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>VN</td>
<td>2X 3/4” Vacuum + 4 X 1/4” Air NPT Ports Module, Face Sealing</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>VP</td>
<td>2X 3/4” Vacuum + 4 X 1/4” Air BSPP Ports Module, Face Sealing</td>
</tr>
<tr>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>VT</td>
<td>2X 3/4” Vacuum + 4 X 1/4” Air BSPT Ports Module, Face Sealing</td>
</tr>
</tbody>
</table>

†Cordset or plug are sold separately. ***Not compatible with CD, CP or CN sensing option on Side C.

**NOTE:** Only (1) module can be mounted per side. Modules usage is based on the size of the Base Model and which side the module can be mounted.

Dimensions and technical information are subject to change without notice.
Specifiication:
Max. Payload W: 90 Kg [200 lb]
Weight: 2 Kg [4.41 lb]
Cylinder Bore: Ø53 mm [2.09 in]
Displacement: 41.3 cm³ [2.52 in³]

Loading Capacity:
Max. Tensile T: 1330 N [300 lb]
Max. Compressive C: 1780 N [400 lb]
Max. Moment (Mx/My/Mz): 810 Nm [7200 in-lb]

FAILSAFE OPERATION:
4-WAY VALVES WITH A SPRING RETURN ARE RECOMMENDED TO MAINTAIN AIR PRESSURE TO THE LOCK PORT DURING EMERGENCY STOP CONDITIONS.

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW
**Specification:**
Max. Payload $W$: 180 Kg [400 lb]
Weight: 1 Kg [2.2 lb]

**Loading Capacity:**
Max. Tensile $T$: 1330 N [300 lb]
Max. Compressive $C$: 1780 N [400 lb]
Max. Moment ($M_x/M_y/M_z$): 810 Nm [7200 in-lb]

---

**Dimensions and technical information are subject to change without notice**
RQC-400, 800, 1200 / RTP-400, 800, 1200

Automatic Tool Changers | Module Usage Illustrations

**RQC-400**
Robot Adaptor Module
with Optional Modules
(Robot Side)

**RTP-400**
Tool Adaptor Module
with Optional Modules
(Tool Side)

**RQC-800/RQC-1200**
Robot Adaptor Module
with Optional Modules
(Robot Side)

**RTP-800/RTP-1200**
Tool Adaptor Module
with Optional Modules
(Tool Side)

NOTE: Only (1) module can be mounted per side (except 2E19, 2G19 which are composed of (2) modules)

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

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT-048</td>
<td>90° Female Plug, w/o Cable, Solder Type, Cable Clamp for G19 (RQC Only)</td>
</tr>
<tr>
<td>ELCT-049</td>
<td>90° Male Plug, w/o Cable, Solder Type, Cable Clamp for G19 (RTP Only)</td>
</tr>
<tr>
<td>CABL-028</td>
<td>90° Female M12 Cordset with 2M Cable for CP, CN, and CD (RQC Only)</td>
</tr>
<tr>
<td>CABL-029</td>
<td>90° Male M12 Cordset with 4M Cable for E19 (RQC Only)</td>
</tr>
<tr>
<td>OSRK-004</td>
<td>PNP Inductive Sensor Repair Kit (RQC Only)</td>
</tr>
<tr>
<td>OSRK-005</td>
<td>NPN Inductive Sensor Repair Kit (RQC Only)</td>
</tr>
<tr>
<td>OSRK-006</td>
<td>Dry Contact Sensor Repair Kit (RQC Only)</td>
</tr>
</tbody>
</table>

### PNEUMATIC ACCESSORIES

<table>
<thead>
<tr>
<th>Module Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLKT-402</td>
<td>RQC-400 Standard Seal Repair Kit</td>
</tr>
<tr>
<td>SLKT-403</td>
<td>RQC-800 Standard Seal Repair Kit</td>
</tr>
<tr>
<td>SLKT-404</td>
<td>RQC-1200 Standard Seal Repair Kit</td>
</tr>
</tbody>
</table>

### Optional Modules

<table>
<thead>
<tr>
<th>Optional Modules</th>
<th>Side A</th>
<th>Side B</th>
<th>Side C</th>
<th>Side D</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 pin, 3 Amp, 48 VDC Module w/Turck M12 Conn, w/o Cordset</td>
<td>E19†</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2X 19 pin, 3 Amp, 48 VDC Module w/Turck M12 Conn, w/o Cordset</td>
<td>2E19***</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19 pin, 5 Amp, 120 VDC Module w/Industrial User Conn., w/o Cable</td>
<td>G19</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2X 19 pin, 5 Amp, 120 VDC Module w/Industrial User Conn., w/o Cable</td>
<td>2G19***</td>
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<td>0</td>
<td>0</td>
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<tr>
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<td>E19†</td>
<td>0</td>
<td>0</td>
<td>0</td>
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<tr>
<td>2X 19 pin, 3 Amp, 48 VDC Module w/Turck M12 Conn, w/o Cordset</td>
<td>2E19***</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19 pin, 5 Amp, 120 VDC Module w/Industrial User Conn., w/o Cable</td>
<td>G19</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2X 19 pin, 5 Amp, 120 VDC Module w/Industrial User Conn., w/o Cable</td>
<td>2G19***</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### AUTOMATIC TOOL CHANGERS | ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Base Model</th>
<th>Model Size</th>
<th>Port Options (RQC-only)</th>
<th>Sensing (RQC-only)</th>
<th>Side A Modules</th>
<th>Side B Modules</th>
<th>Side C Modules</th>
<th>Side D Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQC</td>
<td>400</td>
<td>1/8 NPT</td>
<td>L0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>RTP</td>
<td>400/800/1200</td>
<td>1/8 BSPP</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

### NOTE:

- Only (1) module can be mounted per side. (Except 2E19 and 2G19, which are composed of (2) modules).
- Modules usage is based on the size of the Base Model and which side the module can be mounted.

### Electrical and pneumatic accessories are ordered separately.

Please note some electrical accessories can only be used with certain modules for either RQC or RTP "Base Models".

For pneumatic accessories, size of "Base Model" is considered.

Dimensions and technical information are subject to change without notice.
**RQC-400 (ROBOT SIDE)**

Automatic Tool Changers | Technical Specifications | Dimensions

**Specification:**
- Max. Payload \( W \): 180 Kg [400 lb]
- Weight: 3.6 Kg [7.94 lb]
- Cylinder Bore: \( \varnothing 73 \text{mm} [2.87\text{in}] \)
- Displacement: 80.9 cm\(^3\) [4.93in\(^3\)]

**Loading Capacity:**
- Max. Tensile \( T \): 2670 N [600 lb]
- Max. Compressive \( C \): 3560 N [800 lb]
- Max. Moment (\(M_x/M_y/M_z\)): 1580 Nm [14000 in-lb]

Dimensions and technical information are subject to change without notice.

---

**FAILSAFE OPERATION:**
4-WAY VALVES WITH A SPRING RETURN ARE RECOMMENDED TO MAINTAIN AIR PRESSURE TO THE LOCK PORT DURING EMERGENCY STOP CONDITION.

---

**UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW**

<table>
<thead>
<tr>
<th><strong>DIMENSIONS</strong></th>
<th><strong>IMPERIAL ([IN.])</strong></th>
<th><strong>METRIC ([MM])</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>( \pm .000 = \pm .01 )</td>
<td>( \pm .000 = \pm .005 )</td>
<td>( \pm .000 = \pm .005 )</td>
</tr>
</tbody>
</table>

---

TC-RQTP | 9
Dimensions and technical information are subject to change without notice.
**Specification:**
Max. Payload **W**: 180 Kg [400 lb]
Weight: 1.1 Kg [2.43 lb]

**Loading Capacity:**
Max. Tensile **T**: 2670 N [600 lb]
Max. Compressive **C**: 3560 N [800 lb]
Max. Moment \((M_x/M_y/M_z)\): 1580 Nm [14000 in-lb]

---

**UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW**

- **DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE**
- **THIRD ANGLE PROJECTION**
- **ALL HOLE HOLES ARE SF (SLIP FIT)**
- **LOCATIONAL TOLERANCE = .0005" OR [.01MM]**
- **METRIC THREADS COURSE PITCH**
- **IMPERIAL ([IN.])**
- **METRIC ([MM])**

**M8**

**M5**

**ISO9409-1-A100 MOUNTING PATTERN**

- **SIDE C**
  - [0.35] [9]
  - [0.0787]
  - [0.1377] 2 DEEP

- **SIDE B**
  - IDENTICAL TO SIDE D
  - [0.35] [9]

- **SIDE D**
  - IDENTICAL TO SIDE B
  - [3.94] [Ø100]

**SIDE A**

- [2.54] [Ø63H7]
- [3.54] [Ø100.00] 9 DEEP

---

**Automatic Tool Changers | Technical Specifications | Dimensions**

**TC-RQTP**

Dimensions and technical information are subject to change without notice
RQC-800, RQC-1200 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

**RQC-800 Specification:**
Max. Payload W: 360 Kg [800 lb]
Weight: 5.3 Kg [11.68 lb]
Cyl. Bore: Ø80mm [3.15in]
Displacement: 95.6 cm³ [5.83in³]

**Loading Capacity:**
Max. Tensile T:
5340 N [1200 lb]
Max. Compressive C:
7120 N [1600 lb]
Max. Moment (Mx/My/Mz):
2490 Nm [22000 in-lb]

**RQC-1200 Specification:**
Max. Payload W: 550 Kg [1200 lb]
Weight: 6.4 Kg [14.11 lb]
Cyl. Bore: Ø95mm [3.74in]
Displacement: 153.7 cm³ [9.38in³]

**Loading Capacity:**
Max. Tensile T:
8000 N [1800 lb]
Max. Compressive C:
10700 N [2400 lb]
Max. Moment (Mx/My/Mz):
3390 Nm [30000 in-lb]

**Dimensions and technical information are subject to change without notice.**
**RTP-800, RTP-1200 (TOOLING SIDE)**

**RTP-800 Specification:**
Max. Payload **W**: 360 Kg [800 lb]
Weight: 1.8 Kg [3.97 lb]

**Loading Capacity:**
Max. Tensile **T**: 5340 N [1200 lb]
Max. Compressive **C**: 7120 N [1600 lb]
Max. Moment (**Mx/**My/**Mz**): 2490 Nm [22000 in-lb]

**RTP-1200 Specification:**
Max. Payload **W**: 550 Kg [1200 lb]
Weight: 1.9 Kg [4.19 lb]

**Loading Capacity:**
Max. Tensile **T**: 8000 N [1800 lb]
Max. Compressive **C**: 10700 N [2400 lb]
Max. Moment (**Mx/**My/**Mz**): 3390 Nm [30000 in-lb]

---

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

**Model Number**

<table>
<thead>
<tr>
<th></th>
<th>&quot;A&quot;</th>
<th>&quot;B&quot;</th>
<th>&quot;C&quot;</th>
<th>&quot;D&quot;</th>
<th>&quot;E&quot;</th>
<th>&quot;F&quot;</th>
<th><strong>Weight</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RTP-800</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>RTP-800</td>
<td>[6.69]</td>
<td>[6.2992]</td>
<td>[2.56]</td>
<td>[1.10]</td>
<td>[0.22]</td>
<td>[0.39]</td>
<td>[4.00 lb]</td>
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<tr>
<td></td>
<td>170.0</td>
<td>160.0</td>
<td>64.94</td>
<td>27.94</td>
<td>5.5</td>
<td>10.0</td>
<td>1.8 kg</td>
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<tr>
<td>RTP-1200</td>
<td>[7.01]</td>
<td>[6.6142]</td>
<td>[2.71]</td>
<td>[1.25]</td>
<td>[0.13]</td>
<td>[0.30]</td>
<td>[2.90 lb]</td>
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<tr>
<td></td>
<td>178</td>
<td>168.0</td>
<td>68.75</td>
<td>31.75</td>
<td>3.25</td>
<td>7.5</td>
<td>1.32 kg</td>
</tr>
</tbody>
</table>

*Dimensions and technical information are subject to change without notice.*
RQC-2400/RTP-2400

Automatic Tool Changers | Module Usage Illustrations

RQC-2400
Robot Adaptor Module
with Optional Modules
(Robot Side)

USER PLUG NOT SHOWN

RTP-2400
Tool Adaptor Module
with Optional Modules
(Tool Side)

USER PLUG NOT SHOWN

Dimensions and technical information are subject to change without notice
Electrical and pneumatic accessories are ordered separately.

Please note some electrical accessories can only be used with certain modules for either RQC or RTP “Base Models”.

For pneumatic accessories, size of “Base Model” is considered.

Electrical Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELCT-048</td>
<td>90° Female Plug, w/o Cable, Solder Type, Cable Clamp for G19 (RQC Only)</td>
</tr>
<tr>
<td>ELCT-049</td>
<td>90° Male Plug, w/o Cable, Solder Type, Cable Clamp for G19 (RTP Only)</td>
</tr>
<tr>
<td>CABL-028</td>
<td>90° Female M12 Cordset with 2M Cable for CP, CN, and CD (RQC Only)</td>
</tr>
<tr>
<td>CABL-029</td>
<td>90° Female Cordset with 4M Cable for E19 (RQC Only)</td>
</tr>
<tr>
<td>CABL-031</td>
<td>90° Male Cordset with 2M Cable for E19 (RTP Only)</td>
</tr>
<tr>
<td>OSRK-004</td>
<td>PNP Inductive Sensor Repair Kit (RQC Only)</td>
</tr>
<tr>
<td>OSRK-005</td>
<td>NPN Inductive Sensor Repair Kit (RQC Only)</td>
</tr>
<tr>
<td>OSRK-006</td>
<td>Dry Contact Sensor Repair Kit (RQC Only)</td>
</tr>
</tbody>
</table>

Pneumatic Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLKT-XXX</td>
<td>RQC-2400 Standard Seal Repair Kit</td>
</tr>
</tbody>
</table>

Optional Air Modules can be ordered with Base Model. See below for Module Description.

Side A Order Code Optional Modules

<table>
<thead>
<tr>
<th>Side A</th>
<th>Order Code</th>
<th>Optional Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>0</td>
<td>No Module</td>
</tr>
<tr>
<td>•</td>
<td>FP</td>
<td>6X 1/8” BSPP Air Ports Module, Face Seal, 10 Bar</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.
RQC-2400 Specification:
Max. Payload \( W \): 1089Kg [2400 lb]
Weight: 22 Kg [48.5 lb]
Cyl. Bore: Ø80mm [3.15in]
Displacement: XXXcm³ [XXXin³]

Loading Capacity:
Max. Tensile \( T \):
16000 N [3597 lb]
Max. Compressive \( C \):
22000 N [4946 lb]
Max. Moment \( Mx/My/Mz \):
7000 Nm [91955 in-lb]

Dimensions and technical information are subject to change without notice.

Posibility of having two sizes fixing screws M12 or M16.
A centering ring allows two possibility centering dimension robot connection.

FAILSAFE OPERATION:
4-WAY VALVES WITH A SPRING RETURN ARE RECOMMENDED TO MAINTAIN AIR PRESSURE TO THE LOCK PORT DURING EMERGENCY STOP CONDITIONS.

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

Dimensions and technical information are subject to change without notice.
RTP-2400 Specification:
Max. Payload $W$: 1089Kg [2400 lb]
Weight: 8 Kg [17.64 lb]

Loading Capacity:
Max. Tensile $T$: 16000 N [3597 lb]
Max. Compressive $C$: 22000 N [4946 lb]
Max. Moment ($M_x/M_y/M_z$): 7000 Nm [91955 in-lb]

Dimensions and technical information are subject to change without notice.
RQC/RTP SERIES

Automatic Tool Changers | Technical Specifications | Dimensions

19 Pin Module 3 Amp - 48 VDC

Module kits above include:  
90° Plug Support (without cable), indexing sleeves and hardware.

19 Pin Module 5 Amp - 120 VDC

Module kits above include:  
90° Plug support (without cable), indexing sleeves and hardware.
Reserved Pin Numbers on E19/G19

<table>
<thead>
<tr>
<th>Sensor/SPwitch</th>
<th>RQC 200 &amp; 400</th>
<th>RQC 800 &amp; 1200</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP or LN (Inductive)</td>
<td>R: +10 - 30 VDC</td>
<td>R: +10 - 30 VDC</td>
</tr>
<tr>
<td>L: Common</td>
<td>L: Common</td>
<td></td>
</tr>
<tr>
<td>M: Lock</td>
<td>M: Lock</td>
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</tr>
<tr>
<td>N: Unlock</td>
<td>N: Unlock</td>
<td></td>
</tr>
</tbody>
</table>

LD (Dry Contact)

<table>
<thead>
<tr>
<th>Sensor/SPwitch</th>
<th>RQC 200 &amp; 400</th>
<th>RQC 800 &amp; 1200</th>
</tr>
</thead>
<tbody>
<tr>
<td>R: +10 - 30 VDC</td>
<td>R: +10 - 30 VDC</td>
<td></td>
</tr>
<tr>
<td>L: Common</td>
<td>L: Common</td>
<td></td>
</tr>
<tr>
<td>M: Lock</td>
<td>M: Lock</td>
<td></td>
</tr>
<tr>
<td>N: Unlock</td>
<td>N: Unlock</td>
<td></td>
</tr>
</tbody>
</table>

Lock/Unlock Tool Plate Presence Sensing Options (with inductive Sensors and Dry Contact Switches)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>“A”</th>
<th>“B”</th>
<th>“C”</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQC-200</td>
<td>[0.563]</td>
<td>[0.886]</td>
<td>[0.652]</td>
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<tr>
<td>RQC-400</td>
<td>[1.43]</td>
<td>[2.25]</td>
<td>[1.655]</td>
</tr>
<tr>
<td>RQC-800</td>
<td>[0.811]</td>
<td>[1.329]</td>
<td>[0.685]</td>
</tr>
<tr>
<td>RQC-1200</td>
<td>[20.6]</td>
<td>[33.7]</td>
<td>[17.4]</td>
</tr>
</tbody>
</table>

Sensing Accessories CP, CN, or CD by M12 Connector (3, 4, or 5 Pins) (See Below)

Dimensions and technical information are subject to change without notice.
RQC/RTP SERIES

Automatic Tool Changers | Technical Specifications | Dimensions

6 x 1/8” Air Ports Module | Face Seal (for RQC/RTP-200 & RQC/RTP-400)

6 x 1/4” Air Ports Module | Face Seal (for RQC/RTP-800 & RQC/RTP-1200)

Module kits above include: Couplings, indexing sleeves and hardware.
2 x 3/4” Vacuum Ports Module | Face Seal (for RQC/RTP-200 & RQC/RTP-400)

**ROBOT HALF**
- (4) M5 SHCS
- (2) X “A” (SEE TABLE)
- (2) INDEXING SLEEVES

**TOOL HALF**
- (3) M5 SHCS
- (2) X “A” (SEE TABLE)

**“A”**
- VN 3/4” NPT
- VP 3/4” BSPP
- VT 3/4” BSPT

**“B”**
- VN 1/4” NPT
- VP 1/4” BSPP
- VT 1/4” BSPT

Module kits above include: Couplings, indexing sleeves and hardware.

Dimensions and technical information are subject to change without notice.
6 x 1/4" Air Ports Module | Face Seal (for RQC/RTP-800 & RQC/RTP-1200)

Module kits above include: Couplings, indexing sleeves and hardware.

4 x 3/8" Fluid Ports Module | Non Spilling | Double Shut-Off (for RQC/RTP-800 & RQC/RTP-1200)

Module kits above include: Couplings, indexing sleeves and hardware.
Module kits above include: Couplings, indexing sleeves and hardware.

8 x 1/8” Air Ports Module | Face Seal (FN) (for RQC/RTP-2400)

Module kits above include: Couplings, indexing sleeves and hardware.
**QC/TP SERIES**

Automatic Tool Changers | Features and Benefits

- **Failsafe Operation**
  Failsafe locking spring keeps units coupled in the event of pressure loss

- **Durable Components**
  Locking components are made from hardened bearing & tool steels

- **Self Lubricating Seals**
  Self lubricating dynamic seals

- **Offboard I/O Block**
  with heavy-duty pins offer reliable contact points

- **Heavy-Duty Locking Mechanism**
  Improved rigidity for heavy-duty and in-process changing

- **Module Mounting Surface**
  Flat for optional pneumatic, fluid or electric module
  (See Page TC-QCTP-13)

- **Switches for**
  Couple/Uncouple/Ready-to-Couple
  Switch for latch (size 150 only)

**Mounting Information**

- **Robot Half Adaptor**
  has counterbored holes for mounting and two dowel pins for hole location (size 30 has pilot boss)

- **Tool Half Adaptor**
  has counterbored holes for mounting and two dowel pins for hole location (size 30 has pilot boss)
QC/TP SERIES

Automatic Tool Changers | Technical Information

**QC-30/TP-30**

- **Combined Weight:** 0.34 Kg [0.75 lbs]
- **Max. Payload:** 13.6 Kg [30 lbs]
- **Max. Moment:** 22.6 Nm [200 in-lbs]

**QC-60/TP-60**

- **Combined Weight:** 1.27 Kg [2.8 lbs]
- **Max. Payload:** 27 Kg [60 lbs]
- **Max. Moment:** 88.1 Nm [780 in-lbs]

**QC-60-10P/TP-60-10P**

- **Combined Weight:** 1.27 Kg [2.8 lbs]
- **Max. Payload:** 27 Kg [60 lbs]
- **Max. Moment:** 88.1 Nm [780 in-lbs]

**QC-150/TP-150**

- **Combined Weight:** 3.2 Kg [7.1 lbs]
- **Max. Payload:** 68 Kg [150 lbs]
- **Max. Moment:** 215 Nm [1900 in-lbs]

Dimensions and technical information are subject to change without notice.
QC/TP SERIES

Automatic Tool Changers | Module Usage Illustrations

**QC Series**
**Robot Adaptor Module**
with Optional Modules
(Robot Side)

**TP Series**
**Tool Adaptor Module**
with Optional Modules
(Tool Side)

Dimensions and technical information are subject to change without notice
**QC/TP Series**

Automatic Tool Changers | How to Order

<table>
<thead>
<tr>
<th>Base Model</th>
<th>Model Size</th>
<th>Port Options <em>(QC-only)</em></th>
<th>I/O Block</th>
<th>Optional Modules* <em>(10-Port)</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>QC</td>
<td>30</td>
<td>M</td>
<td>E15</td>
<td>PN18 10P</td>
</tr>
<tr>
<td>QC</td>
<td>60</td>
<td>M</td>
<td>E15</td>
<td>PN18 10P</td>
</tr>
<tr>
<td>QC</td>
<td>150</td>
<td>M</td>
<td>E15</td>
<td>PN18 10P</td>
</tr>
</tbody>
</table>

**Robot Side**

- QC-30
- QC-60
- QC-150

**Tool Side**

- TP-30
- TP-60
- TP-150

*QC/TP-30 and QC/TP-60-10P cannot be ordered with optional modules*

**Order Code Optional Modules** *(QC/TP-60 only)*

- **E26** 26-PIN 5A Module
- **E19** 19-PIN 5A Module
- **E10** 10-PIN 13A Module
- **PN18** 4X 1/8 NPT Pneumatic Port
- **PP18** 4X 1/8 BSPP Pneumatic Port
- **PT18** 4X 1/8 BSPT Pneumatic Port
- **PN14** 2X 1/4 NPT Pneumatic Port
- **PP14** 2X 1/4 BSPP Pneumatic Port
- **PT14** 2X 1/4 BSPT Pneumatic Port
- **HN38** 2X 3/8 NPT Fluid Port

**Dimensions and Technical Information are subject to change without notice**

**Electric and Pneumatic Accessories (Ordered Separately)**

**Electrical Accessories**

- **ELCT-047** Straight Female 12-pin D-Sub User Plug, w/o Cable, Solder Type for E15 *(QC/TP-60/150)*
- **CABL-021** 90° Female Cordset 4M for E12 *(QC-30/60/150)*
- **CABL-023** 90° Male Cordset 2M for E12 *(TP-30/60/150)*
- **CABL-024** Straight Male Cordset 1.2M for E15 *(QC/TP-30)*
- **OSRK-009** NPN Inductive Sensor Repair Kit *(QC-150 Only)*
- **OSRK-010** PNP Inductive Sensor Repair Kit *(QC-150 Only)*

**Pneumatic Accessories**

- **SLKT-387** Seal Repair Kit *(QC-30)*
- **SLKT-388** Face Seal Repair Kit *(QC-30)*
- **SLKT-389** Seal Repair Kit *(QC-60)*
- **SLKT-390** Face Seal Repair Kit *(QC-60/150)*
- **SLKT-392** Face Seal Repair Kit *(QC-60/10P)*
- **SLKT-393** Seal Repair Kit *(QC-150)*
**QC-30 (ROBOT SIDE)**

Automatic Tool Changers | Technical Specifications | Dimensions

**QC-30 Specification:**
- Max. Payload: 13.6 Kg [30 lbs]
- Weight: 0.23 Kg [0.50 lbs]
- Bore Ø: 25.4 mm [1.00 in]
- Displacement: 3.9 cm³ [0.24 in³]

**Loading Capacity**
- Max. Tensile T: 311 N [70 lb]
- Max. Compressive C: 445 N [100 lb]
- Max. Moment (Mₓ/Mᵧ/Mᶻ): 22.6 Nm [200 in-lb]

---

**Dimensions and Technical Information**

Dimensions and technical information are subject to change without notice.
TP-30 Specification:
Max. Payload: 13.6 Kg [30 lbs]
Weight: 0.11 Kg [0.25 lbs]

Loading Capacity
Max. Tensile T: 311 N [70 lb]
Max. Compressive C: 445 N [100 lb]
Max. Moment (Mx/My/Mz): 22.6 Nm [200 in-lb]
**QC-60 Specification:**
- Max. Payload: 27 Kg [60 lbs]
- Weight: 0.86 Kg [1.9 lbs]
- Bore Ø: 44.5 mm [1.75 in]
- Displacement: 9.2 cm³ [0.56 in³]

**Loading Capacity**
- Max. Tensile T: 445 N [100 lb]
- Max. Compressive C: 534 N [120 lb]
- Max. Moment (Mx/My/Mz): 88.1 Nm [780 in-lb]

**Failsafe operation:**
4-way valves with a spring return are recommended to maintain air pressure to the lock port during emergency stop conditions.

**Dimensions and technical information are subject to change without notice.**
**TP-60 Specification:**

Max. Payload: 27 Kg [60 lbs]
Weight: 0.41 Kg [0.90 lbs]

**Loading Capacity**

Max. Tensile T: 445 N [100 lb]
Max. Compressive C: 534 N [120 lb]
Max. Moment (Mx/My/Mz): 88.1 Nm [780 in-lb]

**VIEW F**

Module mounting

5 x [M4 x 9 DP]
2 x [2SH7 x 8 DP]

**VIEW F**

Flat for module mounting 0.26 [6.6] thick

**E12 I/O Block**

12 contact 2A-75VDC with industrial connector

**Block E12**

E12 I/O block 12 contact 2A-75VDC with industrial connector

**UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW**

Dimensions and technical information are subject to change without notice.
QC-60-10P (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

**QC-60-10P Specification:**
Max. Payload: 27 Kg [60 lbs]
Weight: 0.86 Kg [1.9 lbs]
Bore Ø: 44.5 mm [1.75 in]
Displacement: 9.2 cm³ [0.56 in³]

**Loading Capacity**
Max. Tensile T: 445 N [100 lb]
Max. Compressive C: 534 N [120 lb]
Max. Moment (Mx/My/Mz): 88.1 Nm [780 in-lb]

**Fail-safe operation:**
4-way valves with a spring return are recommended to maintain air pressure to the lock port during emergency stop conditions.

**Dimensions and technical information are subject to change without notice**
TP-60-10P Specification:
Max. Payload: 27 Kg [60 lbs]
Weight: 0.41 Kg [0.90 lbs]

Loading Capacity
Max. Tensile $T$: 445 N [100 lb]
Max. Compressive $C$: 534 N [120 lb]
Max. Moment ($M_x/M_y/M_z$): 88.1 Nm [780 in-lb]

Dimensions and technical information are subject to change without notice
QC-150 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

QC-150 Specification:
Max. Payload: 68 Kg [150 lbs]
Weight: 2.2 Kg [4.8 lbs]
Bore Ø: 66.8 mm [2.63 in]
Displacement: 25.4 cm³ [1.55 in³]

Loading Capacity
Max. Tensile T: 890 N [200 lb]
Max. Compressive C: 1334 N [300 lb]
Max. Moment (Mₓ/Mᵧ/Mₗ): 215 Nm [1900 in-lb]

Dimensions and technical information are subject to change without notice.
**TP-150 Specification:**
Max. Payload: 68 Kg [150 lbs]
Weight: 1.0 Kg [2.3 lbs]

**Loading Capacity**
Max. Tensile T: 890 N [200 lb]
Max. Compressive C: 1334 N [300 lb]
Max. Moment (Mx/My/Mz): 215 Nm [1900 in-lb]

---

Dimensions and technical information are subject to change without notice.

---

**TP-150 (TOOLING SIDE)**

Automatic Tool Changers | Technical Specifications | Dimensions

---

**TP-150 (TOOLING SIDE)**

Automatic Tool Changers | Technical Specifications | Dimensions

---

**TP-150 Specification:**
Max. Payload: 68 Kg [150 lbs]
Weight: 1.0 Kg [2.3 lbs]

**Loading Capacity**
Max. Tensile T: 890 N [200 lb]
Max. Compressive C: 1334 N [300 lb]
Max. Moment (Mx/My/Mz): 215 Nm [1900 in-lb]
10-Pin Module 5Amp @ 120VDC Electric Module

**Model**  | **Module**  | **Robot Side**  | **Tool Side**  | **Accessory**
--- | --- | --- | --- | ---
QC/TP60  | E10  | KE10-QC60  | KE10-TP60  | ELCT-041 (Female)
QC/TP150 | E10  | KE10-QC150 | KE10-TP150 | ELCT-042 (Male)

*Straight Plug, (w/o Cable), Solder Type, Cable Clamp

Module kits above include: Flat for module mounting, straight plug (without cable), locating pins and hardware.

19-Pin Module 5Amp @ 120VDC Electric Module

**Model**  | **Module**  | **Robot Side**  | **Tool Side**  | **Accessory**
--- | --- | --- | --- | ---
QC/TP60  | E19  | KE19-QC60  | KE19-TP60  | ELCT-043 (Female)
QC/TP150 | E19  | KE19-QC150 | KE19-TP150 | ELCT-044 (Male)

*Straight Plug, (w/o Cable), Solder Type, Cable Clamp

Module kits above include: Flat for module mounting, straight plug (without cable), locating pins and hardware.
Automatic Tool Changers | Dimensions | 26-Pin Module 5Amp @ 120VDC Electric Module

**2 X 1/4" Air Port Module | Face Seal**

26 pin connector
5Amp @ 120VDC

Flat for module mounting not shown: See QC or TP drawings.

<table>
<thead>
<tr>
<th>Model</th>
<th>Module</th>
<th>Robot Side</th>
<th>Tool Side</th>
<th>*Accessory</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC/TP60</td>
<td>E26</td>
<td>KE26-QC60</td>
<td>KE26-TP60</td>
<td>ELCT-045 (Female)</td>
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<tr>
<td>QC/TP150</td>
<td>E26</td>
<td>KE26-QC150</td>
<td>KE26-TP150</td>
<td>ELCT-046 (Male)</td>
</tr>
</tbody>
</table>

*Straight Plug, (w/o Cable), Solder Type, Cable Clamp

Module kits above include: Flat for module mounting, straight plug (without cable), locating pins and hardware.

---

**For QC/TP-60**

<table>
<thead>
<tr>
<th>Module</th>
<th>Robot Side</th>
<th>Tool Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN14</td>
<td>KPN14-QC60</td>
<td>KPN14-TP60</td>
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<tr>
<td>PP14</td>
<td>KPP14-QC60</td>
<td>KPP14-TP60</td>
</tr>
<tr>
<td>PT14</td>
<td>KPT14-QC60</td>
<td>KPT14-TP60</td>
</tr>
</tbody>
</table>

Seal Kit SLKT-395

---

**For QC/TP-150**

<table>
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<tr>
<th>Module</th>
<th>Robot Side</th>
<th>Tool Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN14</td>
<td>KPN14-QC150</td>
<td>KPN14-TP150</td>
</tr>
<tr>
<td>PP14</td>
<td>KPP14-QC150</td>
<td>KPP14-TP150</td>
</tr>
<tr>
<td>PT14</td>
<td>KPT14-QC150</td>
<td>KPT14-TP150</td>
</tr>
</tbody>
</table>

Seal Kit SLKT-395

Module kits include: Flat for module mounting, seals, locating pins and hardware.

Dimensions and technical information are subject to change without notice
**QC/TP SERIES**

Automatic Tool Changers | Dimensions | 4 X 1/8" Air Port Module | Face Seal

Maximum Working Pressure: 10 bar

**Module** | **Robot Side** | **Tool Side**
--- | --- | ---
PN18 | KPN18-QC60 | KPN18-TP60
PP18 | KPP18-QC60 | KPP18-TP60
PT18 | KPT18-QC60 | KPT18-TP60
Seal Kit | SLKT-391 | ---

Module kits include: Flat for module mounting, seals, locating pins and hardware.

---

2 X 3/8" Fluid Ports Module | Non-Spilling Double Shut-off

Maximum Working Pressure: 100 bar

**Module** | **Robot Side** | **Tool Side**
--- | --- | ---
HN38 | KHN38-QC60 | KHN38-TP60

Module kits include: Flat for module mounting couplings, locating pins and hardware.

---

Dimensions and technical information are subject to change without notice.
**15 Pin w/Sub-D Conn and User Plug w/o cable**

<table>
<thead>
<tr>
<th>Model</th>
<th>Module</th>
<th>Robot Side</th>
<th>Tool Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC/TP30</td>
<td>E15</td>
<td>KE15-QC30</td>
<td>KE15-TP30</td>
</tr>
<tr>
<td>QC/TP60</td>
<td>E15</td>
<td>KE15-QC60</td>
<td>KE15-TP60</td>
</tr>
<tr>
<td>QC/TP150</td>
<td>E15</td>
<td>KE15-QC150</td>
<td>KE15-TP150</td>
</tr>
</tbody>
</table>

See individual datasheets for dimensions.

**12 Pin w/Turck M12 Conn w/o Cordset**

<table>
<thead>
<tr>
<th>Model</th>
<th>Module</th>
<th>Robot Side</th>
<th>Tool Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>QC/TP30</td>
<td>E12</td>
<td>KE12-QC30</td>
<td>KE12-TP30</td>
</tr>
<tr>
<td>QC/TP60</td>
<td>E12</td>
<td>KE12-QC60</td>
<td>KE12-TP60</td>
</tr>
<tr>
<td>QC/TP150</td>
<td>E12</td>
<td>KE12-QC150</td>
<td>KE12-TP150</td>
</tr>
</tbody>
</table>

See individual datasheets for dimensions.

Dimensions and technical information are subject to change without notice.
RHC SERIES
Automatic Tool Changers | Features and Benefits

**Durable Finish**
Bodies have hard-coat anodize 60RC with Teflon® impregnation

**Quality Materials**
Each body is made of lightweight 7075-T6 aircraft quality aluminum

**Electrical Contacts**
(Sold Separately-
See “How to Order” Section for more info)

**Self Lubricating Seals**
Self lubricating dynamic seals

**Precision Cone Positioning**
Machine tool proven mating conical coupling

**Pneumatic Ports**
User pneumatic ports

**Robot Side**
Robot Half Adaptor mounts with screws from behind or through the front and locates with dowel pins for accuracy.

**Tool Side**
Tool Half Adaptor mounts payload with screws from behind or through the front and locates with dowel pins for accuracy. Protect cone surfaces from debris to insure proper positioning.

Mounting Information

Dimensions and technical information are subject to change without notice
## Base Model

<table>
<thead>
<tr>
<th>Size</th>
<th>Model</th>
<th>Metric</th>
<th>Adapter Module</th>
<th>Seals (for -R only)</th>
<th>Contacts (for RHC-3-R only)</th>
<th>Sensor</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-1</td>
<td>1</td>
<td>M</td>
<td>Blank</td>
<td>V</td>
<td>OHCC-009</td>
<td>P</td>
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<tr>
<td>RHC-2</td>
<td>1</td>
<td>M</td>
<td>Imperial</td>
<td>R</td>
<td>V</td>
<td>PNP Sensors</td>
</tr>
<tr>
<td>RHC-3</td>
<td>2</td>
<td>M</td>
<td>Robot Side</td>
<td>V</td>
<td>OHCC-009</td>
<td>NPN Sensors</td>
</tr>
<tr>
<td>RHC-4</td>
<td>3</td>
<td>M</td>
<td>Tool Side</td>
<td>V</td>
<td>OHCC-009</td>
<td>No Sensors</td>
</tr>
</tbody>
</table>

### Size

<table>
<thead>
<tr>
<th>Size</th>
<th>Max. Moment Nm</th>
<th>Max. Payload Kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-1</td>
<td>28 [250]</td>
<td>9 [20]</td>
</tr>
<tr>
<td>RHC-2</td>
<td>136 [1200]</td>
<td>59 [130]</td>
</tr>
<tr>
<td>RHC-3</td>
<td>1017 [9000]</td>
<td>136 Kg [300]</td>
</tr>
<tr>
<td>RHC-4</td>
<td>2825 [25000]</td>
<td>454 Kg [1000]</td>
</tr>
</tbody>
</table>

### Optional Contacts

- **Sensor Accessories**
  - **OSMK-064**: Replacement Sensor Mounting Kit (RHC-3-R)
  - **OISP-009**: Replacement Locked Position NPN Inductive Sensor with Hard Wired Cable (RHC-3-R)
  - **OISP-009**: Replacement Locked Position NPN Inductive Sensor with Hard Wired Cable (RHC-3-R)
  - **OSMK-063**: Replacement Sensor Mounting Kit (RHC-4-R)
  - **OISN-008**: Replacement Locked Position NPN Inductive Sensor with Hard Wired Cable (RHC-4-R)

- **Pneumatic Accessories**
  - **SLKT-028**: Standard Seal Repair Kit (RHC-1-R)
  - **SLKT-028V**: Viton Seal Repair Kit (RHC-1-R)
  - **SLKT-029**: Standard Seal Repair Kit (RHC-2-R)
  - **SLKT-029V**: Viton Seal Repair Kit (RHC-2-R)
  - **SLKT-030**: Standard Seal Repair Kit (RHC-3-R)
  - **SLKT-030V**: Viton Seal Repair Kit (RHC-3-R)
  - **SLKT-031**: Standard Seal Repair Kit (RHC-4-R)
  - **SLKT-031V**: Viton Seal Repair Kit (RHC-4-R)

Dimensions and technical information are subject to change without notice.
RHC-1-R Specification:
- Max. Payload (W): 9 Kg [20 lbs]
- Weight: 0.18 Kg [0.41 lbs]
- Bore Ø: 19 mm [0.75 in]
- Displacement: 4.18 cm³ [0.255 in³]

Loading Capacity
- Max. Tensile T: 890 N [200 lb]
- Max. Compressive C: 2224 N [500 lb]
- Max. Moment (Mx/My): 14 Nm [125 in-lb]
- Max. Moment (Mz): 28 Nm [250 in-lb]

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

<table>
<thead>
<tr>
<th>Model</th>
<th>Robot Side</th>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-1</td>
<td>OHCC-009</td>
<td>15 Pin D-Sub Contacts</td>
<td>15 Pin @ 3 AMPS</td>
</tr>
<tr>
<td></td>
<td>OHCC-001</td>
<td>26 Pin D-Sub Contacts</td>
<td>26 Pin @ 3 AMPS</td>
</tr>
</tbody>
</table>
RHC-1-T Specification:
Max. Payload (W): 9 Kg [20 lbs]
Weight: 0.09 Kg [0.22 lbs]

Loading Capacity
Max. Tensile (T): 890 N [200 lb]
Max. Compressive (C): 2224 N [500 lb]
Max. Moment (Mx/My): 14 Nm [125 in-lb]
Max. Moment (Mz): 28 Nm [250 in-lb]

Dimensions and technical information are subject to change without notice

<table>
<thead>
<tr>
<th>Model</th>
<th>Tool Side</th>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-1</td>
<td>OHCC-010</td>
<td>15 Pin D-Sub Contacts</td>
<td>15 Pin @ 3 AMPS</td>
</tr>
<tr>
<td></td>
<td>OHCC-002</td>
<td>26 Pin D-Sub Contacts</td>
<td>26 Pin @ 3 AMPS</td>
</tr>
</tbody>
</table>

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

Dimensions are symmetrical about centerline

THIRD ANGLE PROJECTION

METRIC THREADS:

IMPERIAL ([ IN.])

METRIC (MM)

0.00 = ±0.01
0.0000 = ±0.005
0.0000 = ±0.0005
[0.25] = [±.06]
[0.12] = [±.03]
[0.05] = [±.013]
RHC-2-R Specification:
- Max. Payload (W): 59 Kg [130 lbs]
- Weight: 0.44 Kg [0.99 lbs]
- Bore Ø: 28.57 mm [1.125 in]
- Displacement: 12.22 cm³ [0.746 in³]

Loading Capacity
- Max. Tensile T: 3336 N [750 lb]
- Max. Compressive C: 6672 N [1500 lb]
- Max. Moment (Mx/My): 90 Nm [800 in-lb]
- Max. Moment (Mz): 136 Nm [1200 in-lb]

**Model Robot Side Description Specification**

- **RHC-2**
  - OHCC-011: 15 Pin D-Sub Contacts
    - 15 Pin @ 3 AMPS
  - OHCC-003: 25 Pin D-Sub Contacts
    - 25 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice.
RHC-2-T (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

**RHC-2-T Specification:**
Max. Payload (W): 59 Kg [130 lbs]
Weight: 0.37 Kg [0.82 lbs]

**Loading Capacity**
Max. Tensile (T): 3336 N [750 lb]
Max. Compressive (C): 6672 N [1500 lb]
Max. Moment (Mx/My): 90 Nm [800 in-lb]
Max. Moment (Mz): 136 Nm [1200 in-lb]

---

**Dimensions and Technical Information:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Tool Side</th>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-2</td>
<td>OHCC-012</td>
<td>15 Pin D-Sub Contacts</td>
<td>15 Pin @ 3 AMPS</td>
</tr>
<tr>
<td></td>
<td>OHCC-004</td>
<td>25 Pin D-Sub Contacts</td>
<td>25 Pin @ 3 AMPS</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice
RHC-3-R (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

**RHC-3-R Specification:**
- **Max. Payload (W):** 136 Kg [300 lbs]
- **Weight:** 1.79 Kg [3.95 lbs]
- **Bore Ø:** 44.45 mm [1.750 in]
- **Displacement:** 44.34 cm³ [2.706 in³]

**Loading Capacity**
- **Max. Tensile (T):** 8896 N [2000 lb]
- **Max. Compressive (C):** 17793 N [4000 lb]
- **Max. Moment (Mx/My):** 678 Nm [6000 in-lb]
- **Max. Moment (Mz):** 1017 Nm [9000 in-lb]

**Model Robot Side Description Specification**

<table>
<thead>
<tr>
<th>Model</th>
<th>Robot Side</th>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>RHC-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OHCC-011</td>
<td></td>
<td>15 Pin D-Sub Contacts</td>
<td>15 Pin @ 3 AMPS</td>
</tr>
<tr>
<td>OHCC-003</td>
<td></td>
<td>25 Pin D-Sub Contacts</td>
<td>25 Pin @ 3 AMPS</td>
</tr>
<tr>
<td>OHCC-005</td>
<td></td>
<td>19 Pin Mil. Spec. Contacts</td>
<td>19 Pin @ 3 AMPS</td>
</tr>
<tr>
<td>OHCC-007</td>
<td></td>
<td>38 Pin Mil. Spec. Contacts</td>
<td>38 Pin @ 3 AMPS</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.
### RHC-3-T Specification:
- **Max. Payload (W):** 136 Kg [300 lbs]
- **Weight:** 1.29 Kg [2.85 lbs]

### Loading Capacity
- **Max. Tensile (T):** 8896 N [2000 lb]
- **Max. Compressive (C):** 17793 N [4000 lb]
- **Max. Moment (Mx/My):** 678 Nm [6000 in-lb]
- **Max. Moment (Mz):** 1017 Nm [9000 in-lb]

### Dimensions and Technical Information
- **Dimensions are symmetrical about centerline**
- **Third angle projection**
- **All dowel holes are 5/64” sup fit**
- **Locational tolerance ±0.0005” or 0.013mm**
- **Metric threads course pitch**
- **Imperial (in.)**
- **Metric (mm)**

**UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW**

### Model | Tool Side | Description | Specification
--- | --- | --- | ---
RHC-3 | OHCC-010 | 15 Pin D-Sub Contacts | 15 Pin @ 3 AMPS
| OHCC-002 | 25 Pin D-Sub Contacts | 25 Pin @ 3 AMPS
| OHCC-006 | 19 Pin Mil. Spec. Contacts | 19 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice.
**RHC-4-R Specification:**
- Max. Payload (W): 454 Kg [1000 lbs]
- Weight: 6.52 Kg [12.39 lbs]
- Bore Ø: 57.15 mm [2.250 in]
- Displacement: 85.52 cm³ [85.52 in³]

**Loading Capacity**
- Max. Tensile T: 35586 N [8000 lb]
- Max. Compressive C: 71171 N [16000 lb]
- Max. Moment (Mx/My): 2825 Nm [25000 in-lb]
- Max. Moment (Mz): 2825 Nm [25000 in-lb]

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**Model | Robot Side | Description | Specification**

| RHC-4 | OHCC-021 | 24 Pin Mil. Spec. Contacts | 24 Pin @ 3 AMPS |
RHC-4-T (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

**RHC-4-T Specification:**
- Max. Payload (W): 454 Kg [1000 lbs]
- Weight: 4.35 Kg [9.61 lbs]

**Loading Capacity**
- Max. Tensile (T): 35586 N [8000 lb]
- Max. Compressive (C): 71171 N [16000 lb]
- Max. Moment (Mx/My): 2825 Nm [25000 in-lb]
- Max. Moment (Mz): 2825 Nm [25000 in-lb]

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

**Model | Tool Side | Description | Specification**
--- | --- | --- | ---
RHC-4 | OHCC-027 | 24 Pin Mil. Spec. Contacts | 24 Pin @ 3 AMPS
OHCC-023 | 24 Wire Single Pigtai Inter | Connector
OHCC-022 | 24 Wire Double Pigtai Connector

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW