

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

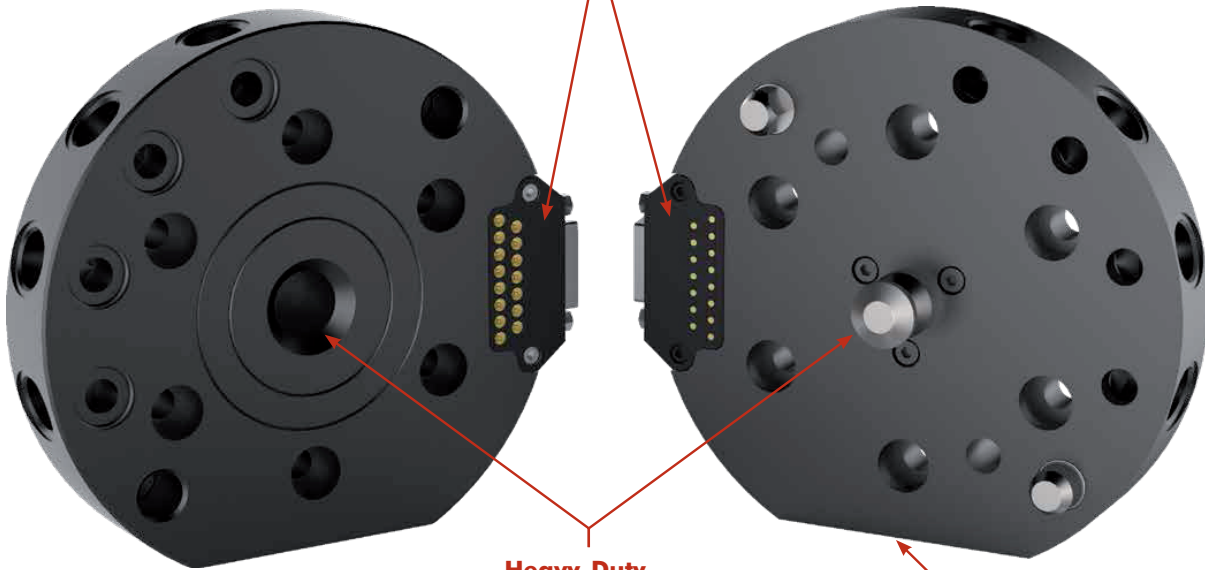
Self lubricating dynamic seals

Offboard I/O Block

with heavy-duty pins offer reliable contact points

Robot Side

Tool Side



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

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)

Mounting Information



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



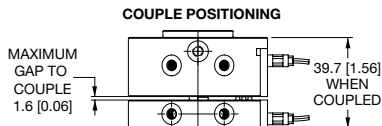
Tool Half Adaptor
has counterbored holes for mounting and two dowel pins for hole location (size 30 has pilot boss)

Dimensions and technical information are subject to change without notice

QC/TP SERIES

Automatic Tool Changers | Technical Information

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

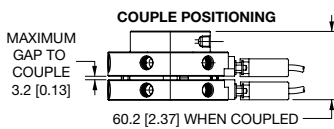


QC-30/TP-30



QC-30 Robot Adaptor Module **TP-30** Tool Adaptor Module

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

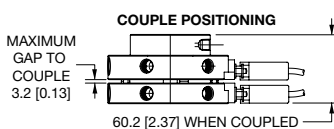


QC-60/TP-60



QC-60 Robot Adaptor Module **TP-60** Tool Adaptor Module

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

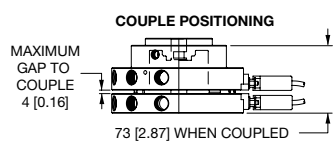


QC-60-10P/TP-60-10P



QC-60-10P Robot Adaptor Module **TP-60-10P** Tool Adaptor Module

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



QC-150/TP-150



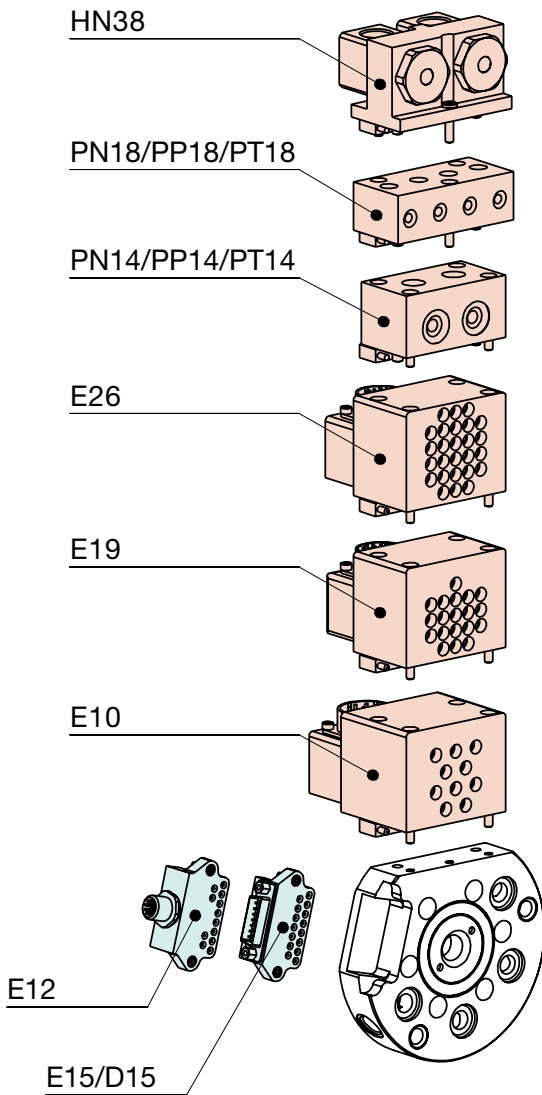
QC-150 Robot Adaptor Module **TP-150P** Tool Adaptor Module

Dimensions and technical information are subject to change without notice

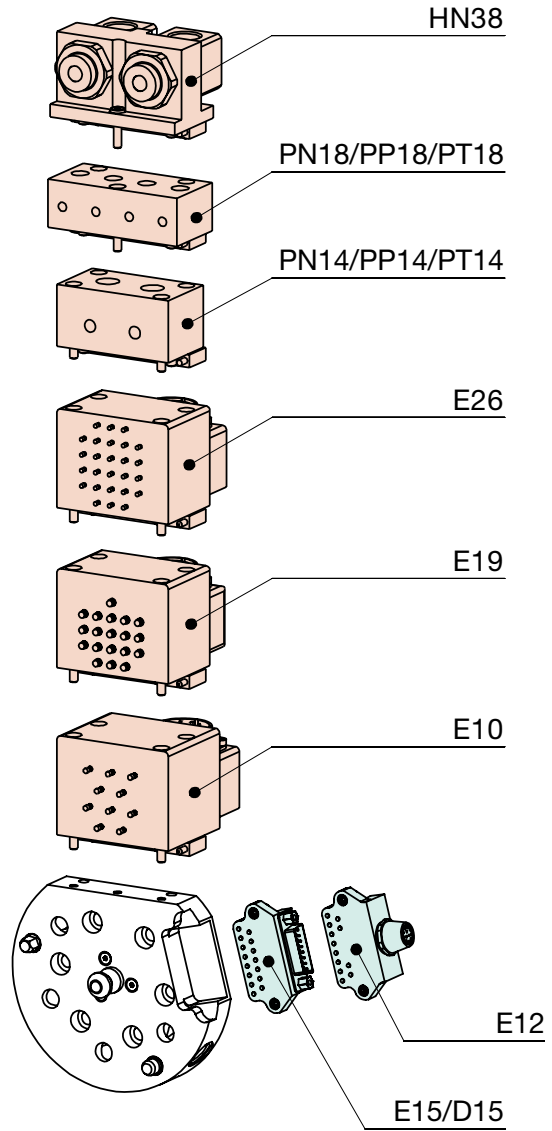
QC/TP SERIES

Automatic Tool Changers | Module Usage Illustrations

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



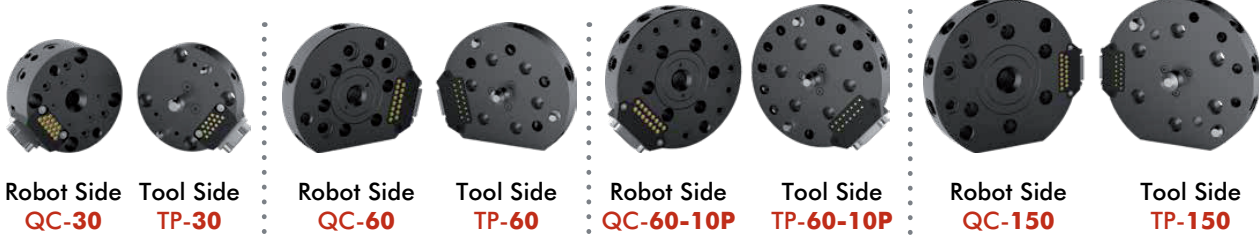
TP Series
Tool Adaptor Module
with Optional Modules
(Tool Side)



Dimensions and technical information are subject to change without notice

QC/TP SERIES

Automatic Tool Changers | How to Order



Base Model	Model Size	Port Options (QC-only)	I/O Block	Optional Modules*	10-Port (QC/TP-60 only)																						
QC	60	M	E15	PN18	10P																						
QC Robot Side	30 60 150 <small>(See Page TC-QCTP-2 for Specifications)</small>	Blank 1/8 NPT M 1/8 BSPP A 1/8 BSPT	0 No I/O Block E15 15-pin, Sub-D D15 (2) X E15 (QC/TP-30 only) E12 12-pin, Turck	<table border="1"> <thead> <tr> <th>Order Code</th> <th>Optional Modules</th> </tr> </thead> <tbody> <tr> <td>E26</td> <td>26-PIN 5A Module</td> </tr> <tr> <td>E19'</td> <td>19-PIN 5A Module</td> </tr> <tr> <td>E10</td> <td>10-PIN 13A Module</td> </tr> <tr> <td>PN18</td> <td>4X 1/8 NPT Pneumatic Port</td> </tr> <tr> <td>PP18</td> <td>4X 1/8 BSPP Pneumatic Port</td> </tr> <tr> <td>PT18</td> <td>4X 1/8 BSPT Pneumatic Port</td> </tr> <tr> <td>PN14</td> <td>2X 1/4 NPT Pneumatic Port</td> </tr> <tr> <td>PP14</td> <td>2X 1/4 BSPP Pneumatic Port</td> </tr> <tr> <td>PT14</td> <td>2X 1/4 BSPT Pneumatic Port</td> </tr> <tr> <td>HN38</td> <td>2X 3/8 NPT Fluid Port</td> </tr> </tbody> </table>	Order Code	Optional Modules	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	
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HN38	2X 3/8 NPT Fluid Port																										

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

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)

Dimensions and technical information are subject to change without notice

QC-30 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

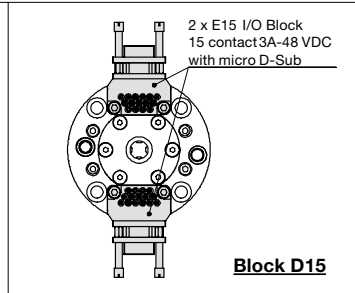
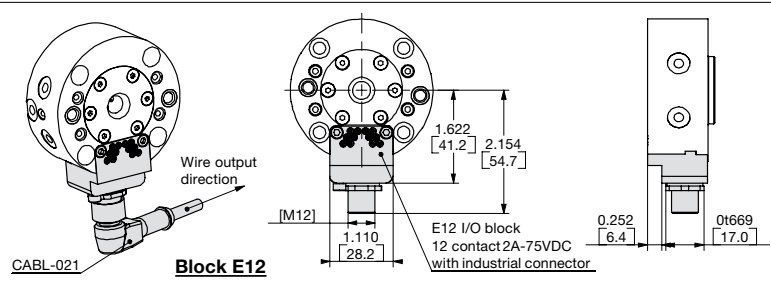
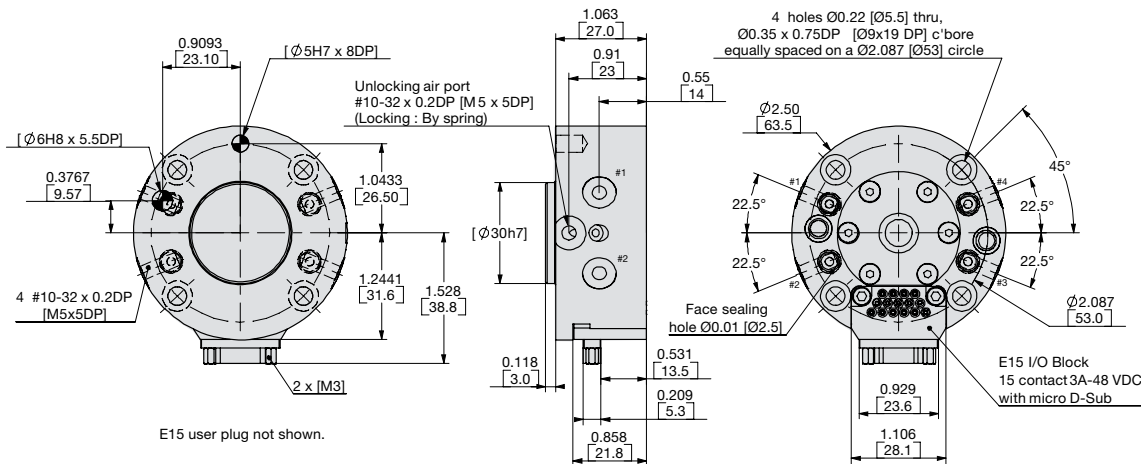
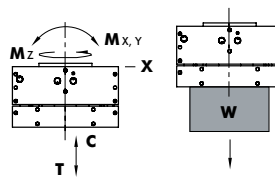


QC-30 Specification:

- Max. Payload: 13.6 Kg [30 lbs]
- Weight: 0.23 Kg [0.50 lbs]
- Bore \varnothing : 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 (**M_x/M_y/M_z**): 22.6 Nm [200 in-lb]



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

				IMPERIAL ([IN.])	METRIC (MM)
DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE	THIRD ANGLE PROJECTION	ALL DOWEL HOLES ARE SF (SLIP FIT). LOCATIONAL TOLERANCE ±.0005" OR [±.013MM]	METRIC THREADS COURSE PITCH	0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	[0] = [±.25] [0.0] = [±.13] [0.00] = [±.013]

Dimensions and technical information are subject to change without notice

TP-30 (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

TP-30 Specification:

Max. Payload: 13.6 Kg [30 lbs]

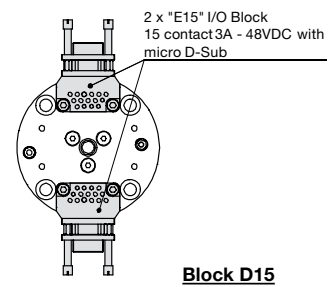
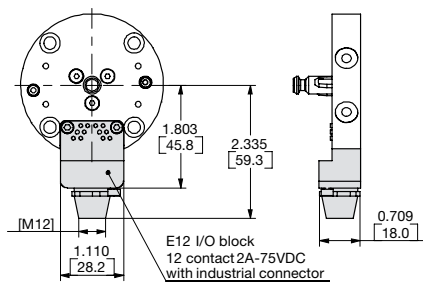
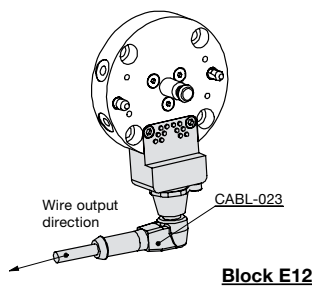
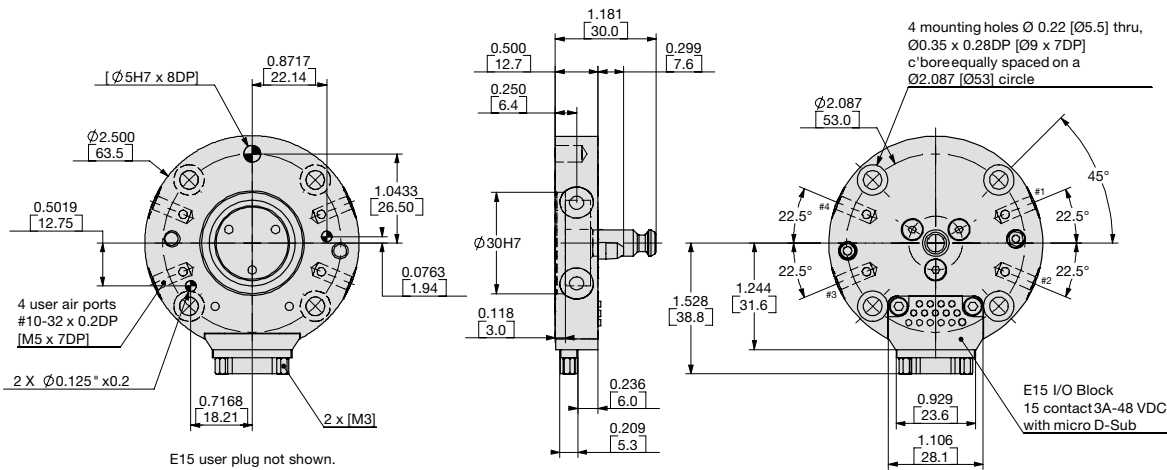
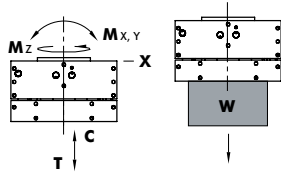
Weight: 0.11 Kg [0.25 lbs]

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]



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DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE	THIRD ANGLE PROJECTION	ALL DOWEL HOLES ARE SF (SLIP FIT). LOCATIONAL TOLERANCE ±.0005" OR [±.013MM]	METRIC THREADS COURSE PITCH	0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	[0] = [±.25] [0.0] = [±.13] [0.00] = [±.013]

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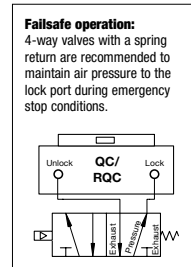
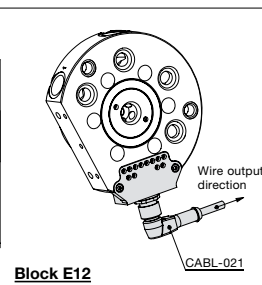
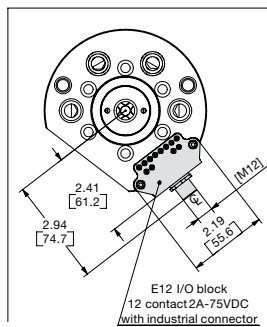
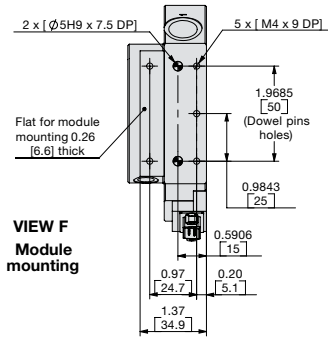
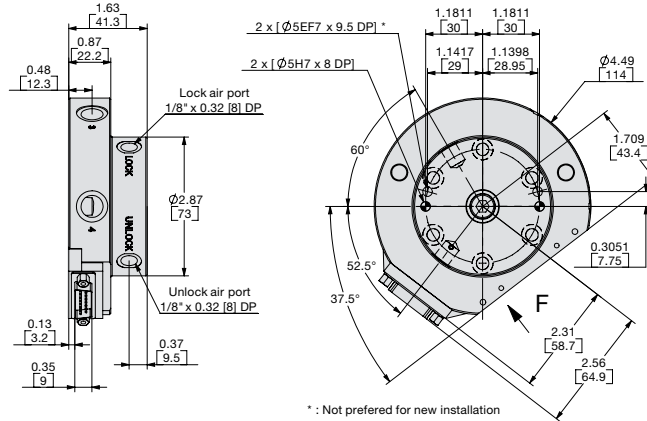
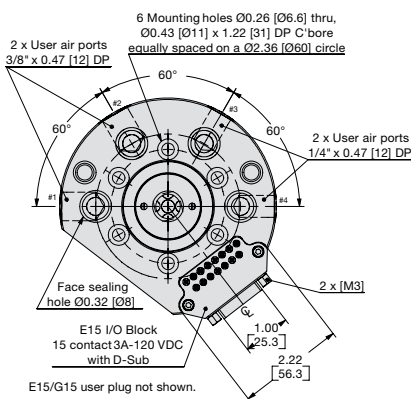
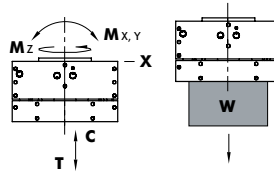
QC-60 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions



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 (**M_x/M_y/M_z**): 88.1 Nm [780 in-lb]



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 DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE	 THIRD ANGLE PROJECTION	 ALL DOWEL HOLES ARE SF (SLIP FIT), LOCAL TOLERANCE ±.0005" OR [±.013MM]	 METRIC THREADS COURSE PITCH	IMPERIAL ([IN.]) 0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	METRIC (MM) [0] = [±.25] [0.0] = [±.13] [0.00] = [±.013]
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Dimensions and technical information are subject to change without notice

TP-60 (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

TP-60 Specification:

Max. Payload: 27 Kg [60 lbs]

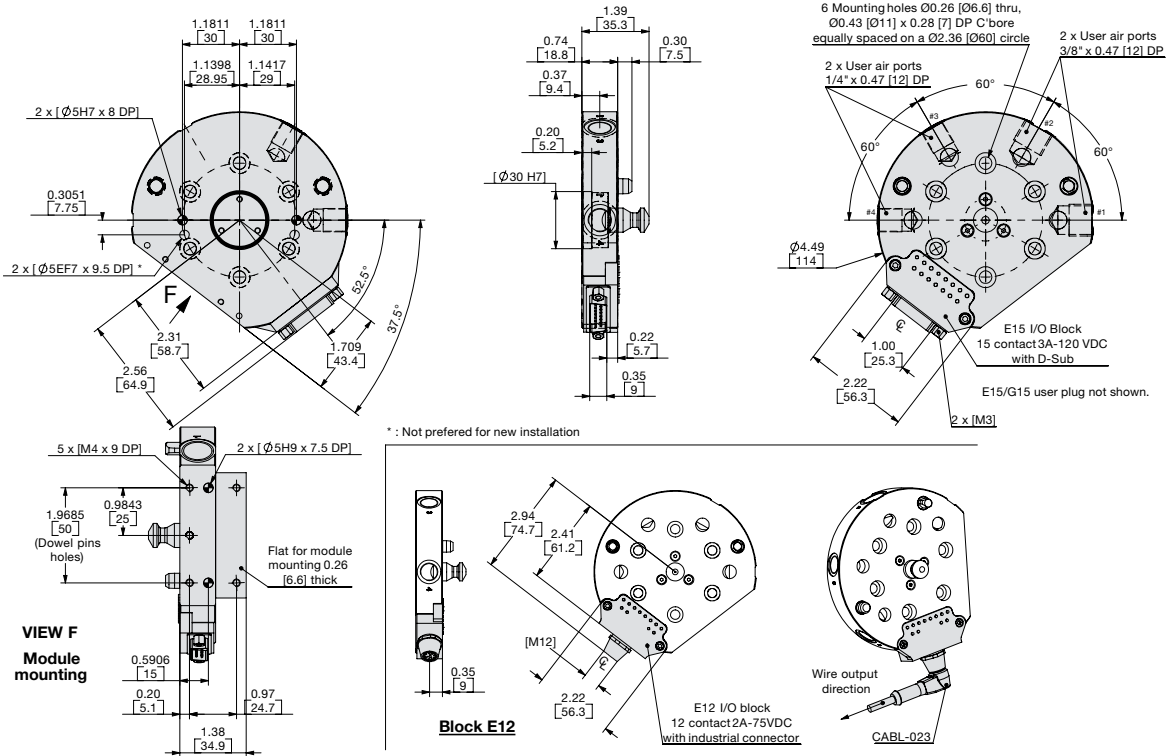
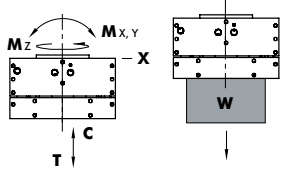
Weight: 0.41 Kg [0.90 lbs]

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]



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				IMPERIAL ([IN.])	METRIC (MM)
DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE	THIRD ANGLE PROJECTION	ALL DOWEL HOLES ARE SF (SLIP FIT), LOCATIONAL TOLERANCE ±.0005" OR [±.013MM]	METRIC THREADS COURSE PITCH	0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	[0] = [±.25] [0.0] = [±.13] [0.00] = [±.013]

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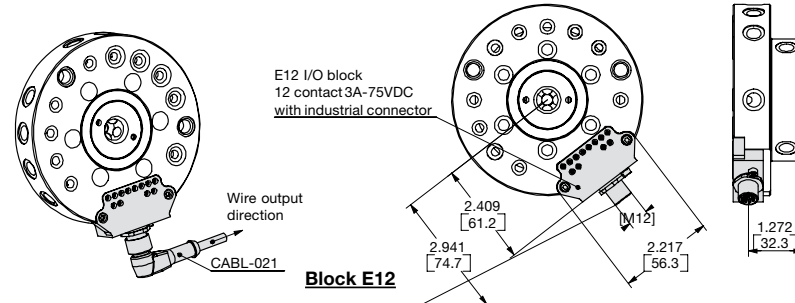
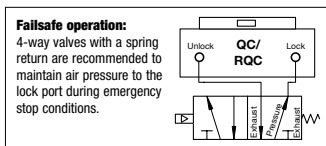
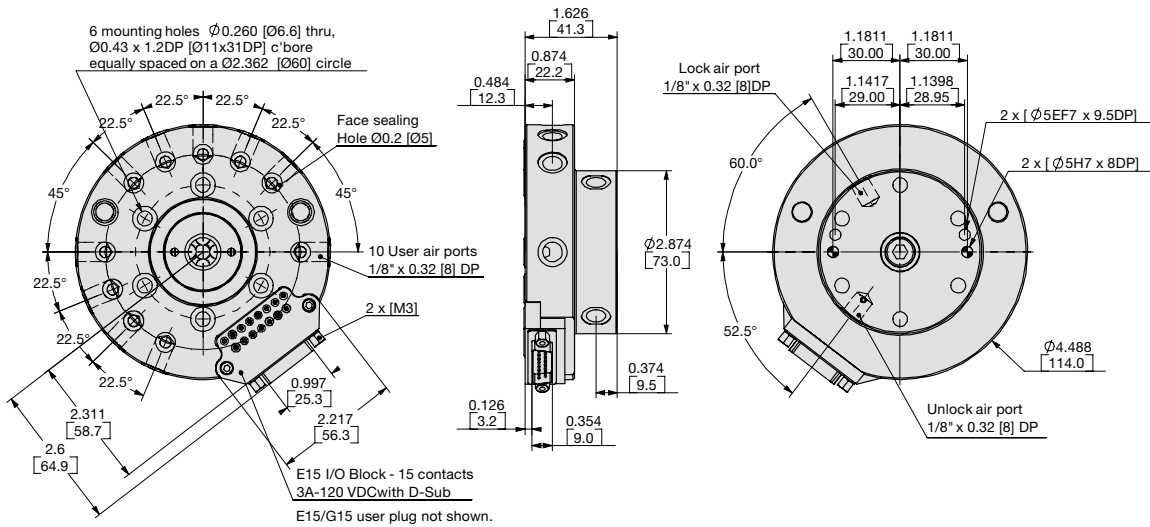
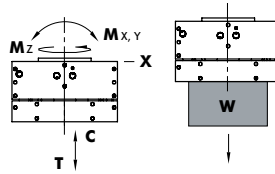
QC-60-10P (ROBOT SIDE)

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 (**M_x/M_y/M_z**): 88.1 Nm [780 in-lb]



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Dimensions and technical information are subject to change without notice

TP-60-10P (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

TP-60-10P Specification:

Max. Payload: 27 Kg [60 lbs]

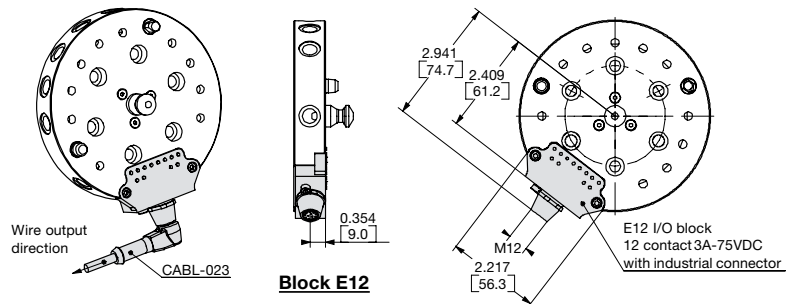
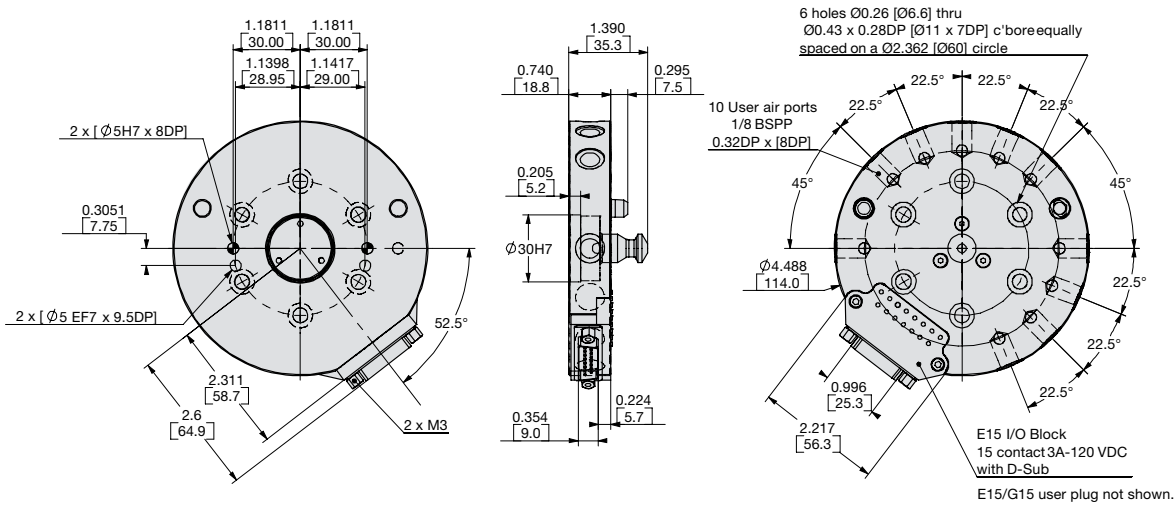
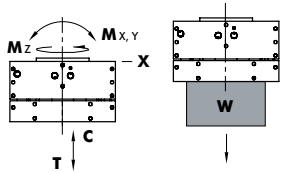
Weight: 0.41 Kg [0.90 lbs]

Loading Capacity

Max. Tensile **T**: 445 N [100 lb]

Max. Compressive **C**: 534 N [120 lb]

Max. Moment (**Mx/My/Mz**): 88.1 Nm [780 in-lb]



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

IMPERIAL ([IN.])	METRIC (MM)
0.00 = ± 01	[0] = [± 25]
0.000 = ± 005	[0.0] = [± 13]
0.0000 = ± 0005	[0.00] = [± 013]

DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE
 THIRD ANGLE PROJECTION
 ALL DOWEL HOLES ARE SF (SLIP FIT), LOCATIONAL TOLERANCE ±.0005" OR [±.013MM]
 METRIC THREADS COURSE PITCH

Dimensions and technical information are subject to change without notice

QC-150 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

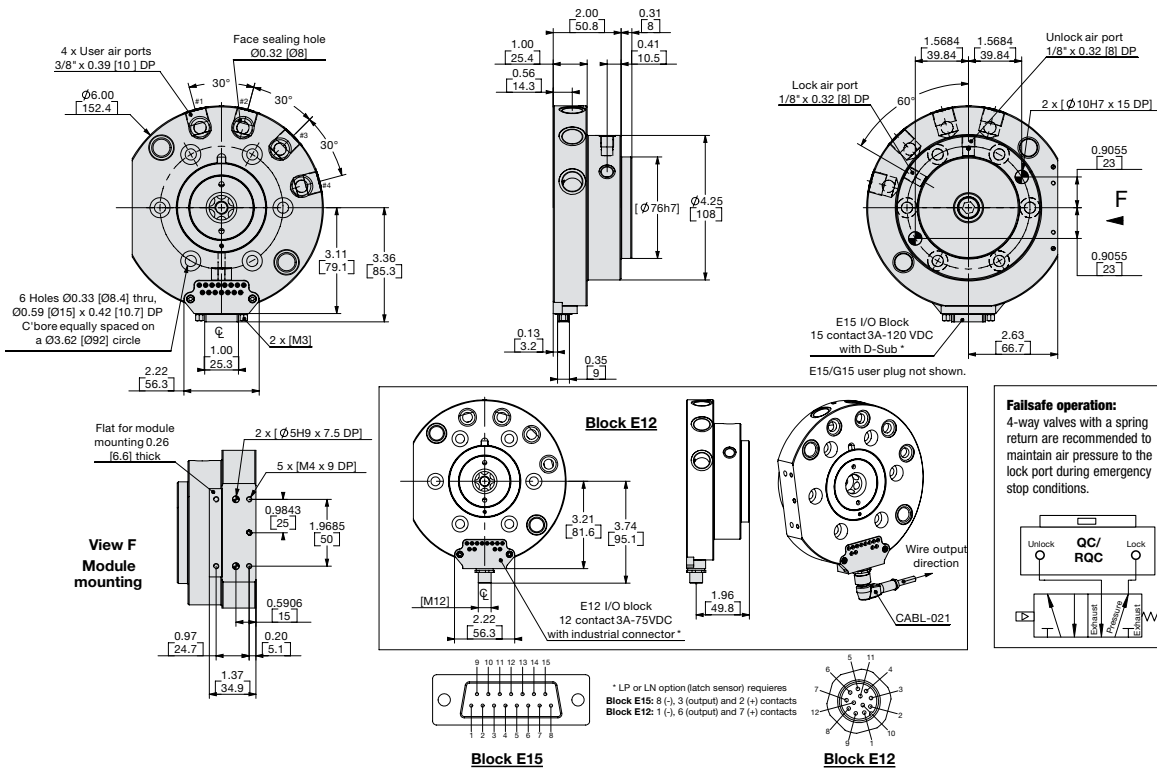
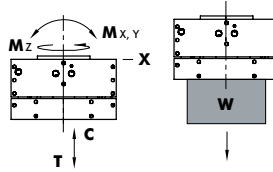


QC-150 Specification:

- 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 (**M_x/M_y/M_z**): 215 Nm [1900 in-lb]



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IMPERIAL ([IN.])	METRIC (MM)
0.00 = ±.01	[0] = [±.25]
0.000 = ±.005	[0.0] = [±.13]
0.0000 = ±.0005	[0.00] = [±.013]

Dimensions and technical information are subject to change without notice

TP-150 (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

TP-150 Specification:

Max. Payload: 68 Kg [150 lbs]

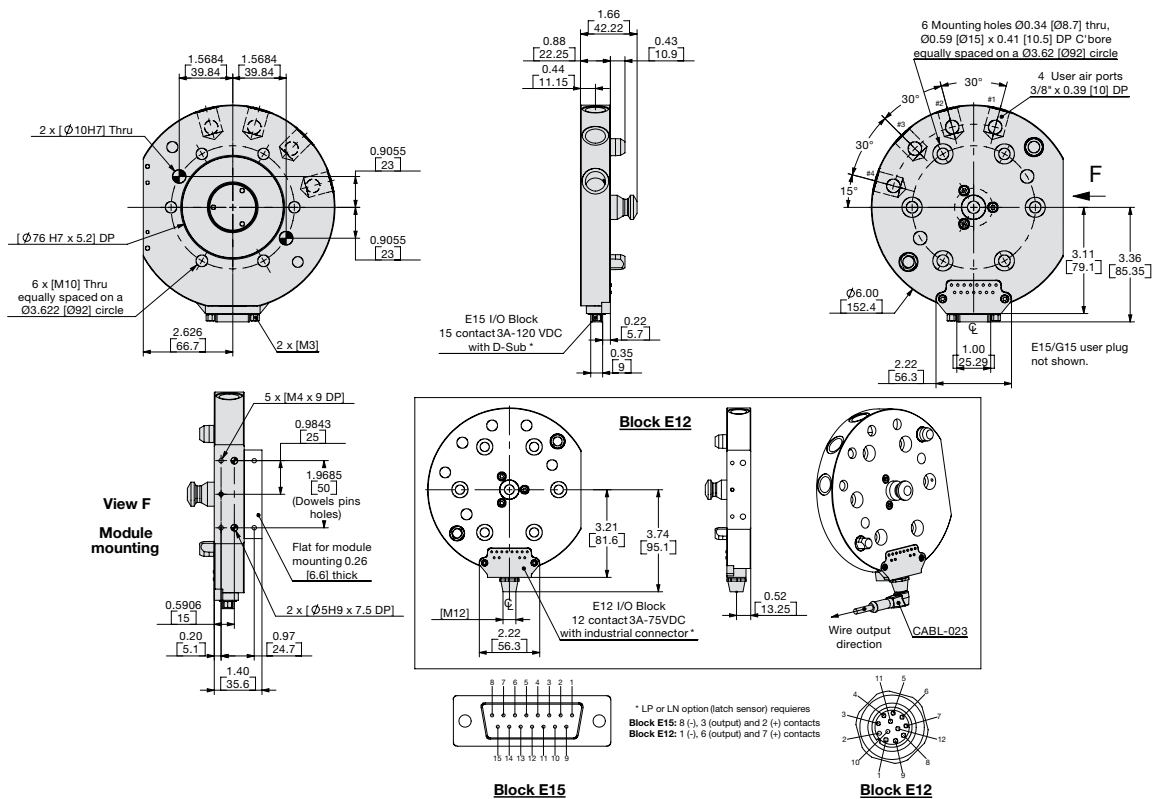
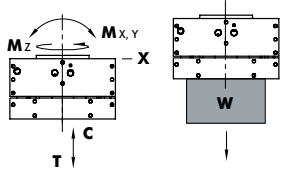
Weight: 1.0 Kg [2.3 lbs]

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]



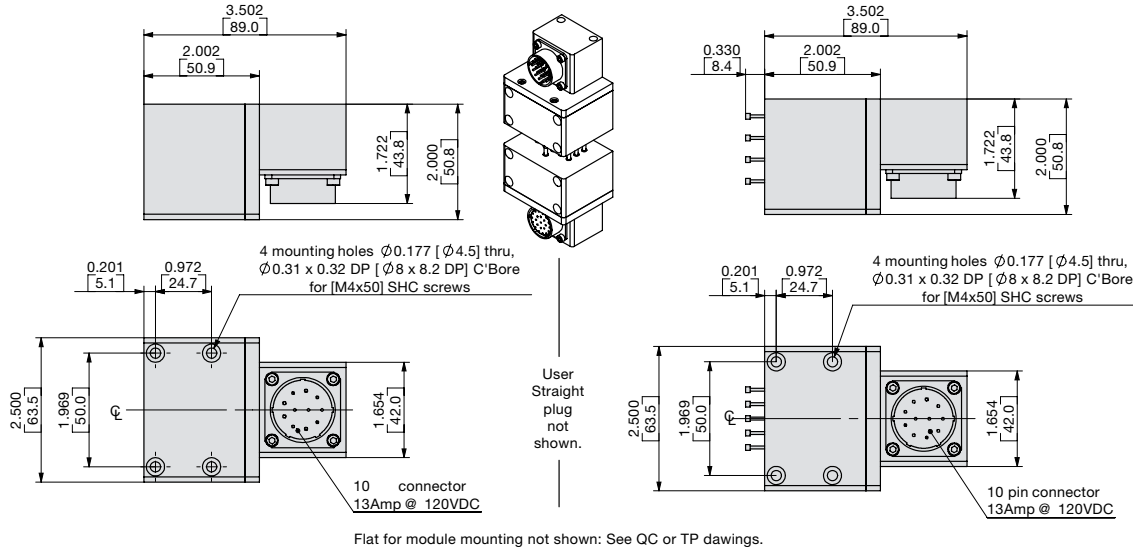
UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

				IMPERIAL ([IN.])	METRIC (MM)
DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE	THIRD ANGLE PROJECTION	ALL DOWEL HOLES ARE SF (SLIP FIT), LOCAL TOLERANCE ±.0005" OR [±.013MM]	METRIC THREADS COURSE PITCH	0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	[0] = [±.25] [0.0] = [±.13] [0.00] = [±.013]

Dimensions and technical information are subject to change without notice

QC/TP SERIES

Automatic Tool Changers | Dimensions | 10-Pin Module 5Amp @ 120VDC Electric Module

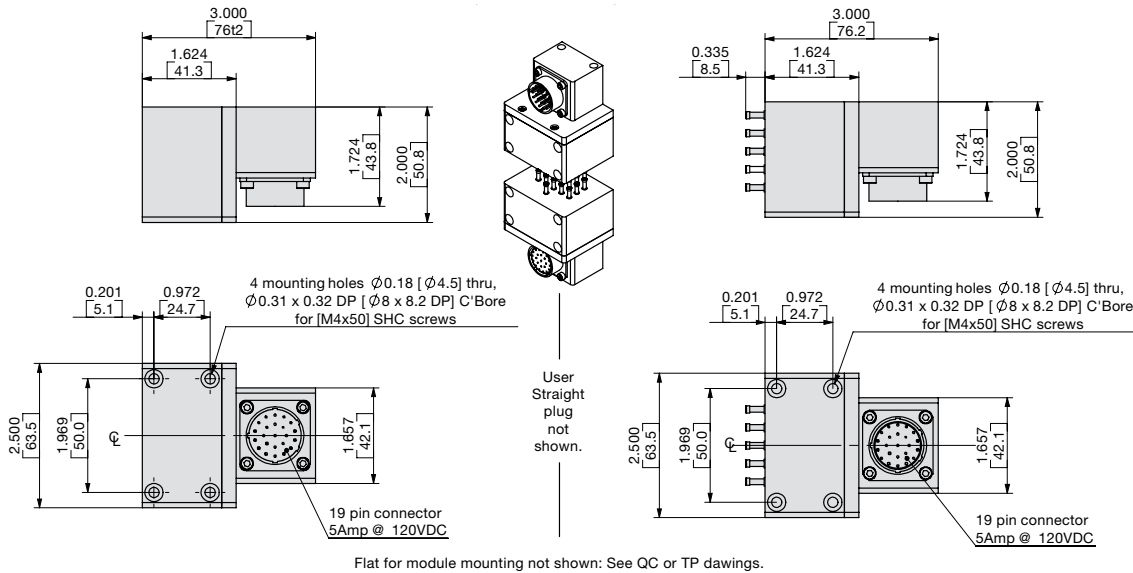


Model	Module	Robot Side	Tool Side	*Accessory
QC/TP60	E10	KE10-QC60	KE10-TP60	ELCT-041 (Female)
QC/TP150	E10	KE10-QC150	KE10-TP150	ELCT-042 (Male)

*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)

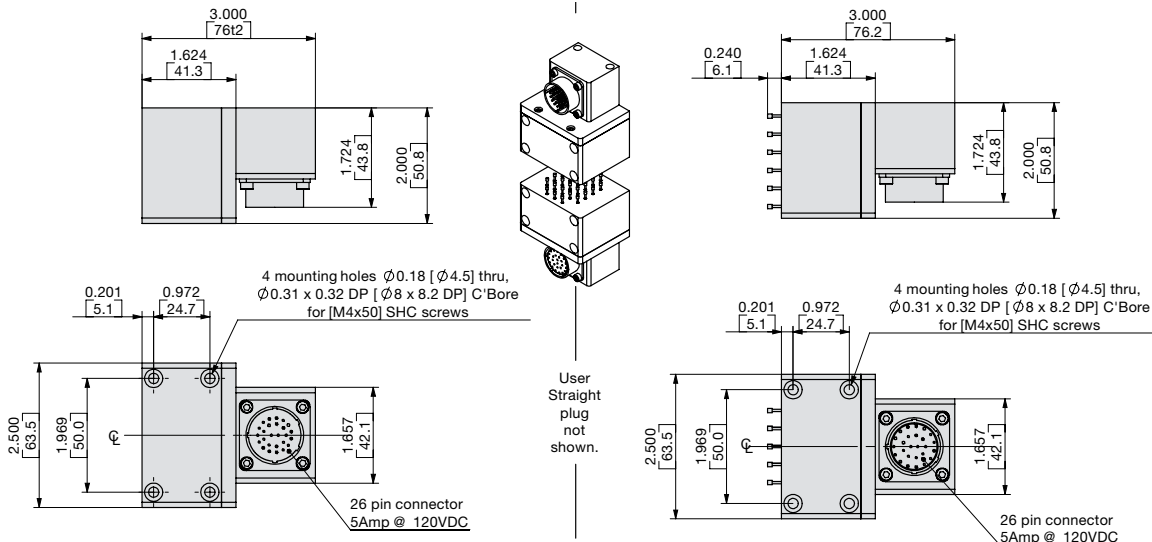
*Straight Plug, (w/o Cable), Solder Type, Cable Clamp

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

Dimensions and technical information are subject to change without notice

QC/TP SERIES

Automatic Tool Changers | Dimensions | 26-Pin Module 5Amp @ 120VDC Electric Module



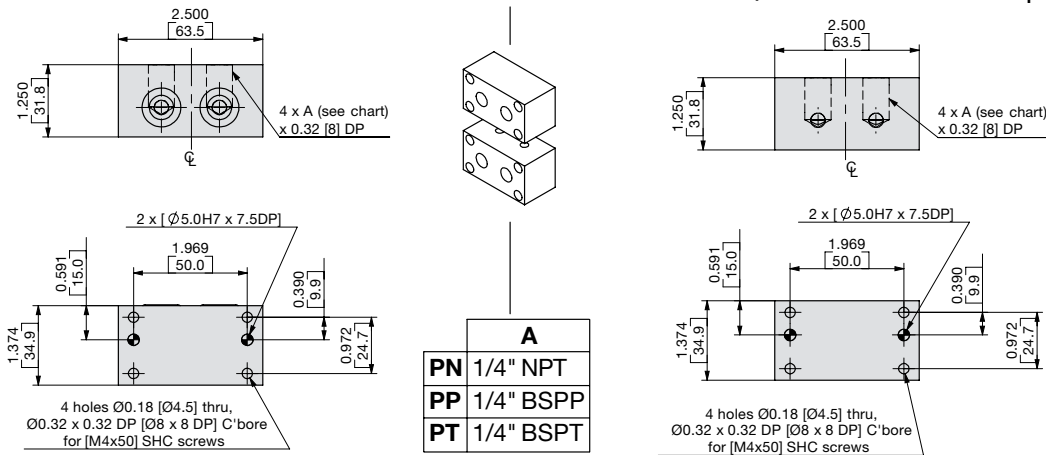
Flat for module mounting not shown: See QC or TP drawings.

Model	Module	Robot Side	Tool Side	*Accessory
QC/TP60	E26	KE26-QC60	KE26-TP60	ELCT-045 (Female)
QC/TP150	E26	KE26-QC150	KE26-TP150	ELCT-046 (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.

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



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

For **QC/TP-60**

Module	Robot Side	Tool Side
PN14	KPN14-QC60	KPN14-TP60
PP14	KPP14-QC60	KPP14-TP60
PT14	KPT14-QC60	KPT14-TP60
Seal Kit	SLKT-395	---

For **QC/TP-150**

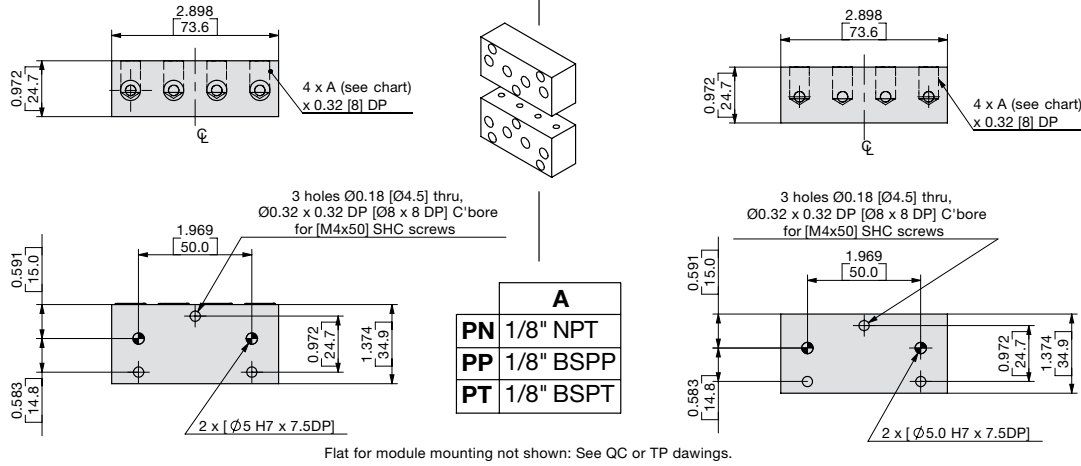
Module	Robot Side	Tool Side
PN14	KPN14-QC150	KPN14-TP150
PP14	KPP14-QC150	KPP14-TP150
PT14	KPT14-QC150	KPT14-TP150
Seal Kit	SLKT-395	---

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

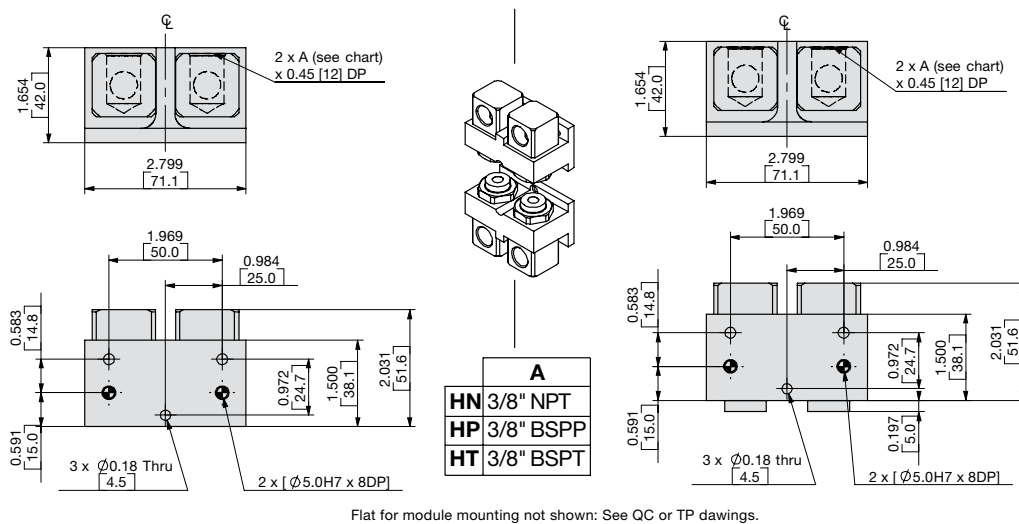


Maximum Working Pressure: 10 bar

For QC/TP-60			For QC/TP-150		
Module	Robot Side	Tool Side	Module	Robot Side	Tool Side
PN18	KPN18-QC60	KPN18-TP60	PN18	KPN18-QC150	KPN18-TP150
PP18	KPP18-QC60	KPP18-TP60	PP18	KPP18-QC150	KPP18-TP150
PT18	KPT18-QC60	KPT18-TP60	PT18	KPT18-QC150	KPT18-TP150
Seal Kit	SLKT-391	---	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

For QC/TP-60			For QC/TP-150		
Module	Robot Side	Tool Side	Module	Robot Side	Tool Side
HN38	KHN38-QC60	KHN38-TP60	HN38	KHN38-QC150	KHN38-TP150

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

Dimensions and technical information are subject to change without notice

QC/TP SERIES

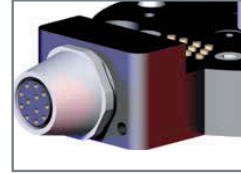
Automatic Tool Changers | Dimensions | Sub-D Conn and User Plug IO Block



15 Pin w/Sub-D Conn and User Plug w/o cable

Model	Module	Robot Side	Tool Side
QC/TP30	E15	KE15-QC30	KE15-TP30
QC/TP60	E15	KE15-QC60	KE15-TP60
QC/TP150	E15	KE15-QC150	KE15-TP60

See individual datasheets for dimensions.



12 Pin w/Turck M12 Conn w/o Cordset

Model	Module	Robot Side	Tool Side
QC/TP30	E12	KE12-QC30	KE12-TP30
QC/TP60	E12	KE12-QC60	KE12-TP60
QC/TP150	E12	KE12-QC150	KE12-TP60

See individual datasheets for dimensions.

Dimensions and technical information are subject to change without notice