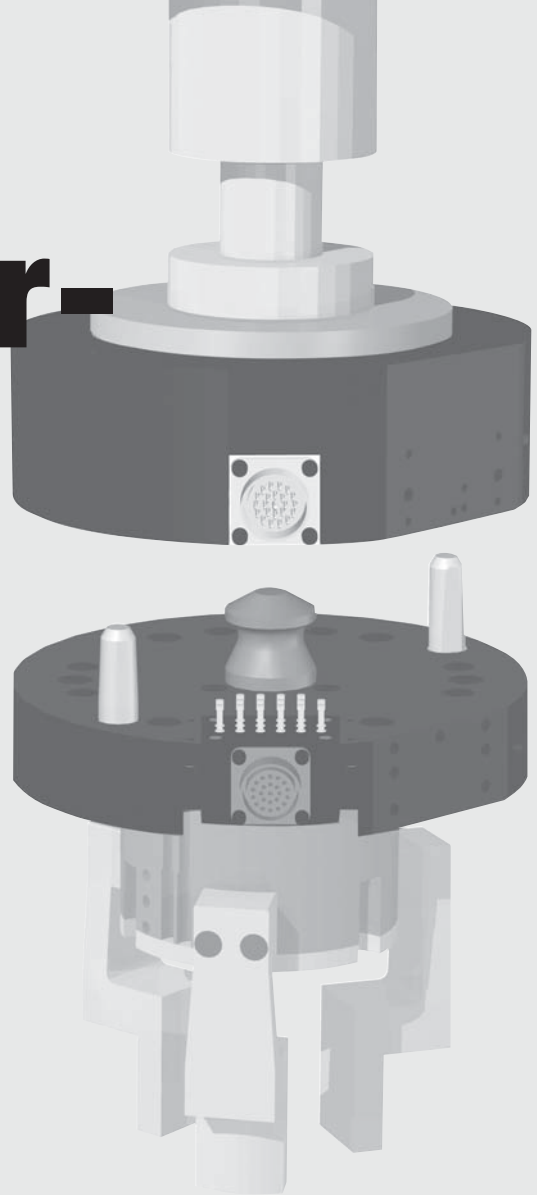


QC Series Tool Changer Medium Loads



• Robotic applications:

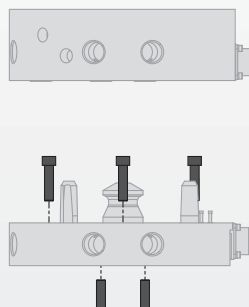
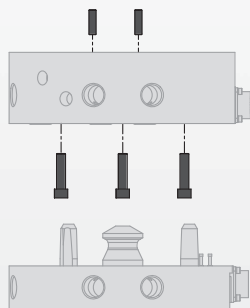
Perfect for those flexible/multiple tooling applications utilizing one Robot. This product was designed with exceptional repeatability, high rigidity & load capacity to make it ideal for any robotic application.

• Automation applications:

End effector tooling and interchangeable fixturing can be changed quickly and easily to accommodate many different styles of parts on the same assembly machine or machining center.

Mounting Information:

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



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

Technical Specifications:

Pneumatic Specifications	Imperial	Metric
Pressure Operating Range	40-100 psi	3-7 bar
Cylinder Type	Double Acting, Spring Assist	
Valve Required to Operate	4-way, 2-position (except QC-30)	

Air Quality Requirements	40 Micron or Better
Air Filtration	Not Necessary*
Air Lubrication	Low Moisture Content (dry)
Air Humidity	

Temperature Operating Range	-30°~180° F	-35°~80° C
Buna-N Seals (standard)		

Maintenance Specifications†	5 million cycles
Expected Life	10+ million cycles**
Normal Application w/ Preventative Maintenance	Yes
Field Repairable	Yes
Seal Repair Kits Available	Yes

† See Maintenance Section.
*Addition of lubrication will greatly increase service life

- Application Restrictions**
- Dirty or gritty environments
 - Machining operations generating chips
 - Environments with loose particulate

See Maintenance Section for:

Exploded views and spare parts list	6.18
Drawing sections and assembly procedures	6.19
QC Series cross-reference	6.20
Tool Changer terminology	6.56

Product Features

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

Offboard I/O Block

with heavy-duty pins offer reliable contact points

Switches for Couple/ Uncouple/ Ready-to-Couple

Switch for latch (size 150 only)

Module Mounting Surface

Flat for optional pneumatic, fluid or electric module

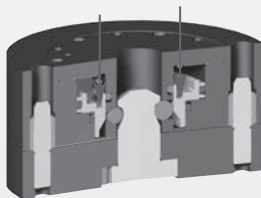
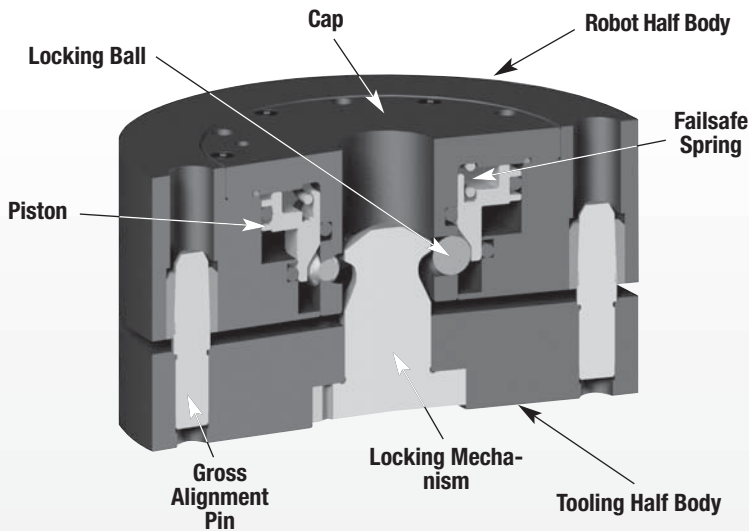
Heavy Duty Locking Mechanism

Improved rigidity for heavy-duty and in-process changing

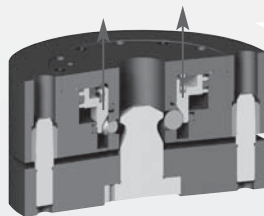
Self Lubricating Seals

Self lubricating dynamic seals

Operating Principle



Locked Position



Unlocked Position

- The tool half is inserted into the robot half.
- The robot half has a spring assisted double acting piston (QC-30 single acting only). When the piston is actuated the locking balls are driven under the locking mechanism. Thus locking the halves together.
- The fail-safe spring maintains the piston position in the event of pressure loss and the connected units must receive air pressure to de-couple.

Style-QC Robot Half

Size -30

Style:	QC-30
Max. Payload:	30 lbs. 13.6 Kg
Max. Moment:	200 in.-lbs. 22.6 Nm
Weight:	0.50 lbs. 0.23 Kg



See Page **6.4**

Style-TP Tool Half

Size -30

Style:	TP-30
Max. Payload:	30 lbs. 13.6 Kg
Max. Moment:	200 in.-lbs. 22.6 Nm
Weight:	0.25 lbs. 0.11 Kg



See Page **6.5**

Style-QC Robot Half

Size -60

Style:	QC-60
Max. Payload:	60 lbs. 27 Kg
Max. Moment:	780 in.-lbs. 88.1 Nm
Weight:	1.9 lbs. 0.86 Kg



See Page **6.6**

Style-TP Tool Half

Size -60

Style:	TP-60
Max. Payload:	60 lbs. 27 Kg
Max. Moment:	780 in.-lbs. 88.1 Nm
Weight:	0.90 lbs. 0.41 Kg



See Page **6.7**

Style-QC Robot Half

Size -60 10-Port

Style:	QC-60 10-Port
Max. Payload:	60 lbs. 27 Kg
Max. Moment:	780 in.-lbs. 88.1 Nm
Weight:	1.9 lbs. 0.86 Kg



See Page **6.8**

Style-TP Tool Half

Size -60 10-Port

Style:	TP-60 10-Port
Max. Payload:	60 lbs. 27 Kg
Max. Moment:	780 in.-lbs. 88.1 Nm
Weight:	0.90 lbs. 0.41 Kg



See Page **6.9**

Style-QC Robot Half

Size -150

Style:	QC-150
Max. Payload:	150 lbs. 68 Kg
Max. Moment:	1900 in.-lbs. 215 Nm
Weight:	4.8 lbs. 2.2 Kg



See Page **6.10**

Style-TP Tool Half

Size -150

Style:	TP-150
Max. Payload:	150 lbs. 68 Kg
Max. Moment:	1900 in.-lbs. 215 Nm
Weight:	2.3 lbs. 1.0 Kg

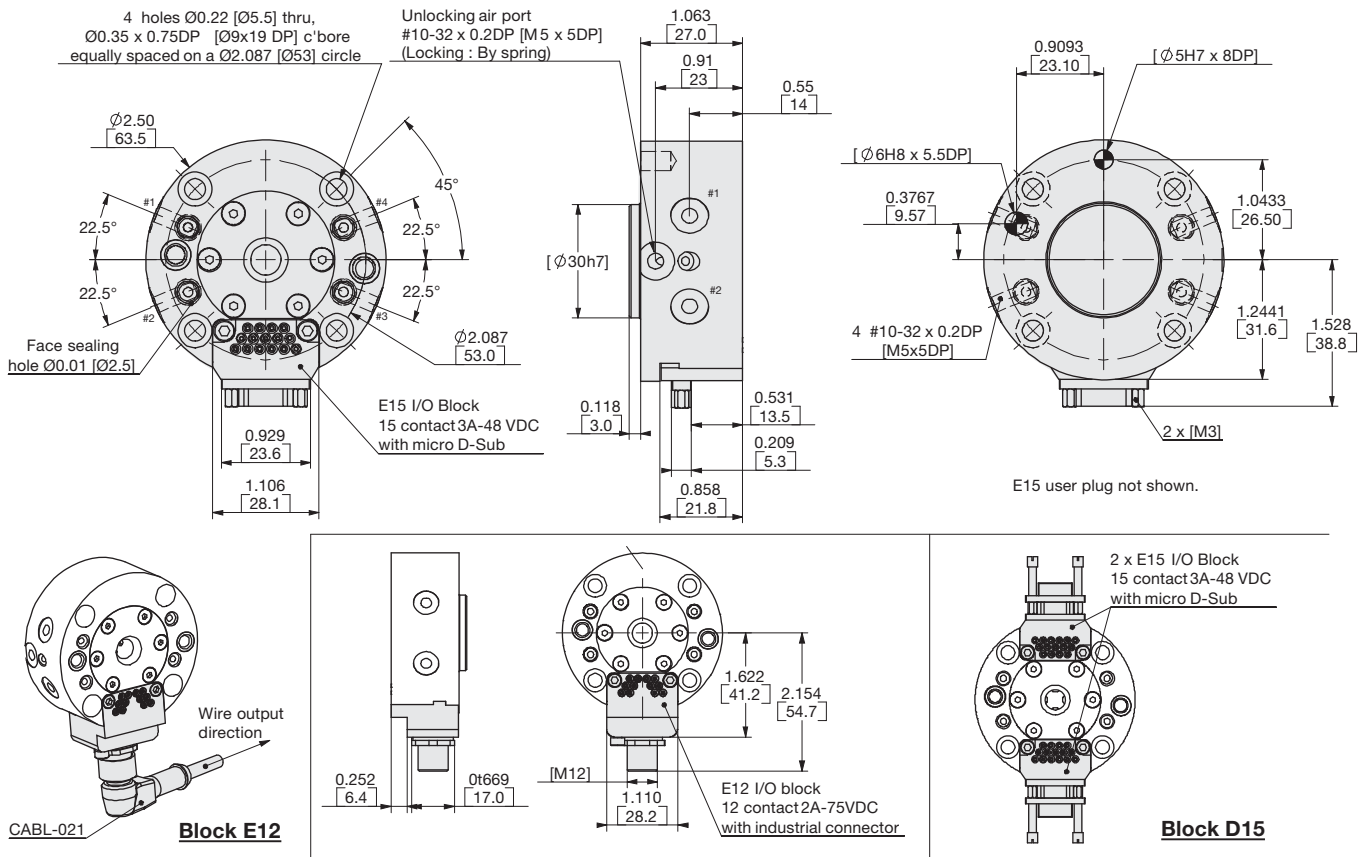


See Page **6.11**

Options and Accessories

See Page **6.12**

TOOL CHANGER QC-30 ROBOT ADAPTER MODULE



Specifications

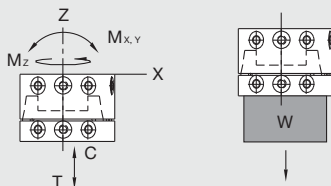
	QC-30	
Maximum Payload	30 lbs	13.6 Kg
Maximum Moment Rating	200 in.-lbs	22.6 Nm
Weight of QC Unit only	0.50 lbs	0.23 Kg
Weight of Coupled Units	0.75 lbs	0.34 Kg
Pressure Range (locked cylinder)....	40-100 psi	3-7 bar
Bore \varnothing	1.00 in	25.4 mm
Displacement	0.24 in ³	3.9 cm ³
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	± 0.025 mm
Valve required to actuate	3-way, 2-position	

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance ± 0.005 " or (± 0.13 mm)
Metric Threads Course Pitch	Imperial in. 0.00 = $\pm .01$ 0.000 = $\pm .005$ 0.0000 = $\pm .0005$	Metric [mm] [0.] = $\pm .25$ [0.0] = $\pm .13$ [0.00] = $\pm .013$

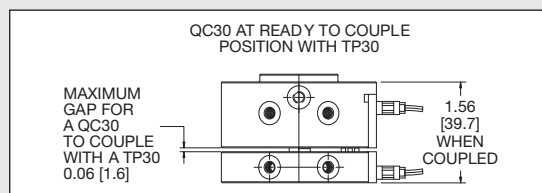
Loading Information

How to Order: (Order Accessories separately from Basic Model)



Loading Capacity

	Imperial	Metric
Maximum Tensile T	70 lbs.	311 N
Maximum Compressive C	100 lbs.	445 N
Maximum Moment M_x	200 in.-lbs.	22.6 Nm
Maximum Moment M_y	200 in.-lbs.	22.6 Nm
Maximum Moment M_z	200 in.-lbs.	22.6 Nm



BASIC MODEL

PORT

QC-30 - [] - []

SIZE

I/O BLOCK

PORT **BLANK** Imperial
M Metric

I/O BLOCK **E15** 15 Pin I/O Block with Micro D-Sub Connector, w/1.2M Cordset
D15 2X 15 Pin I/O Block with Micro D-Sub Conn, w/1.2M Cordset
E12 12 Pin I/O Block with Turck M12 Connector, w/o Cordset
0 without I/O Block

REPLACEMENT I/O MODULE ACCESSORIES

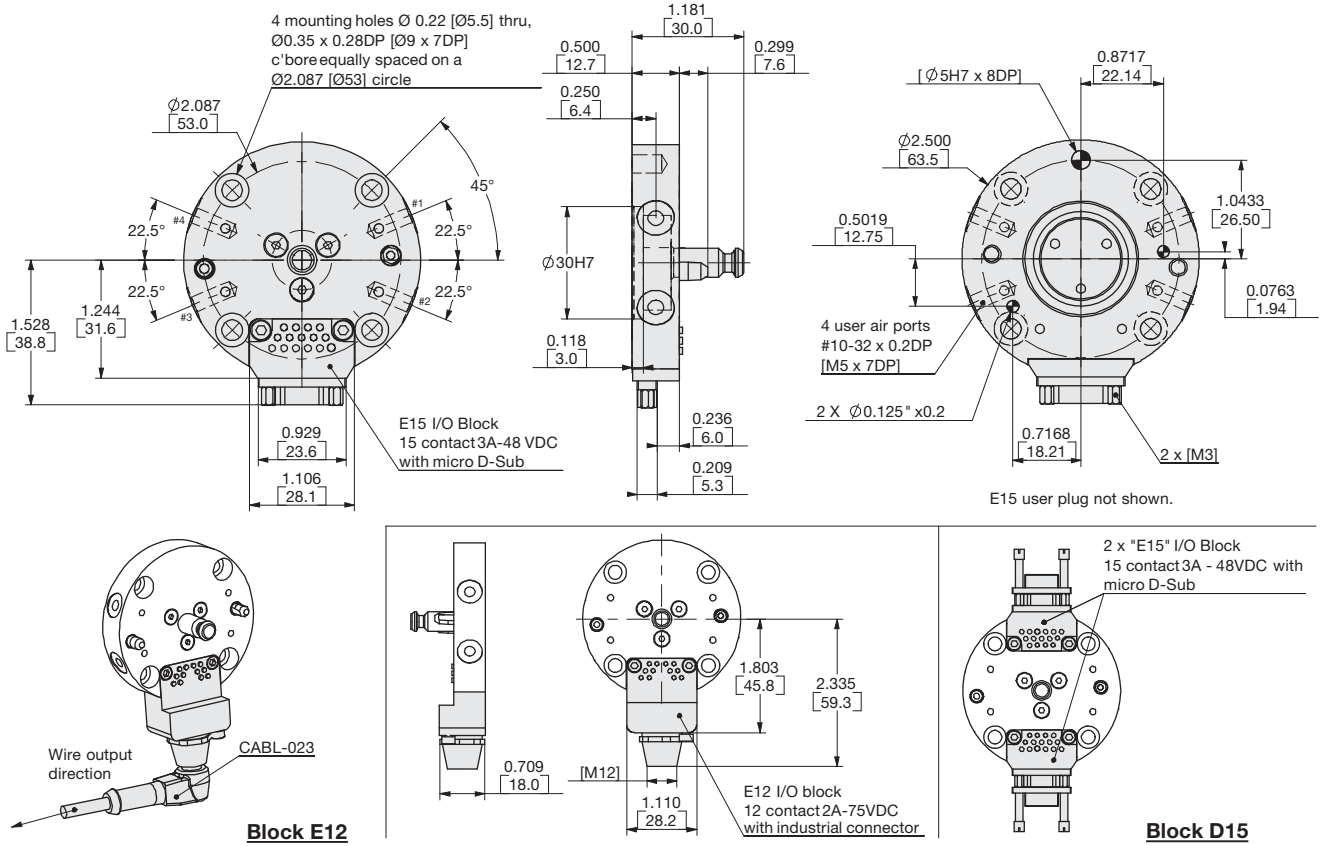
	ORDER #	QTY/UNIT
15 Pin I/O Block with Micro D-Sub Connector, w/1.2M Cordset	KE15-QC30	1
12 Pin I/O Block with Turck M12 Connector, w/o Cordset	KE12-QC30	1
Straight Male Cordset 1.2M for E15	CABL-024	1
90° Female Cordset 4M for E12	CABL-021	1

ADAPTER PLATES

Consult Factory

PNEUMATIC ACCESSORIES

Seal Repair Kit	SLKT-387	1
Face Seal Repair Kit	SLKT-388	1



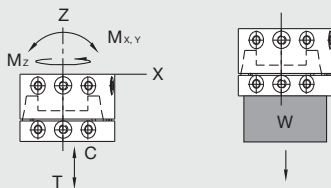
Specifications

	TP-30	
Maximum Payload	30 lbs	13.6 Kg
Maximum Moment Rating	200 in.-lbs	22.6 Nm
Weight of TP Unit only	0.25 lbs	0.11 Kg
Weight of Coupled Units	0.75 lbs	0.34 Kg
Temperature Range	-30° ~ -180° F	-35° ~ -80° C
Repeatability	± 0.001 in.	± 0.025 mm

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

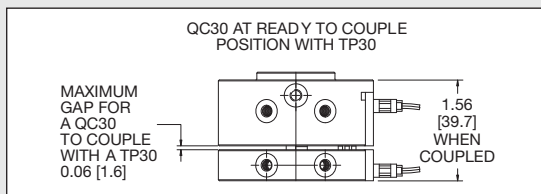
Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance ±.0005" or [±.013mm]
Metric Threads Course Pitch	Imperial in. 0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	Metric [mm] [0.] = [±.25] [0.0] = [±.13] [0.00] = [±.013]

Loading Information

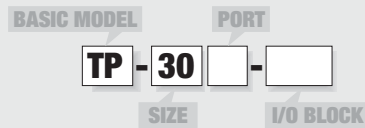


Loading Capacity

	Imperial	Metric
Maximum Tensile T	70 lbs.	311 N
Maximum Compressive C	100 lbs.	445 N
Maximum Moment M_x	200 in.-lbs.	22.6 Nm
Maximum Moment M_y	200 in.-lbs.	22.6 Nm
Maximum Moment M_z	200 in.-lbs.	22.6 Nm



How to Order: (Order Accessories separately from Basic Model)

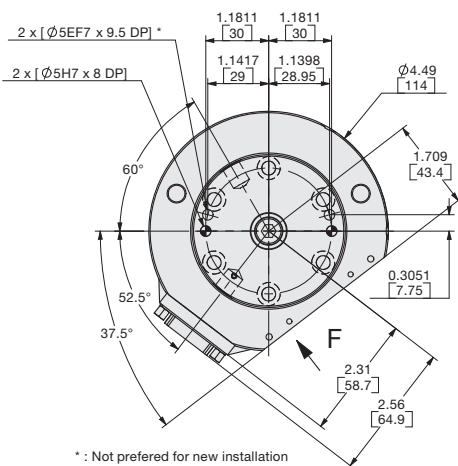


PORT	BLANK M	Imperial Metric
I/O BLOCK	E15	15 Pin I/O Block with Micro D-Sub Connector, w/1.2M Cordset
	D15	2X 15 Pin I/O Block with Micro D-Sub Conn, w/1.2M Cordset
	E12	12 Pin I/O Block with Turck M12 Connector, w/o Cordset
	0	without I/O Block

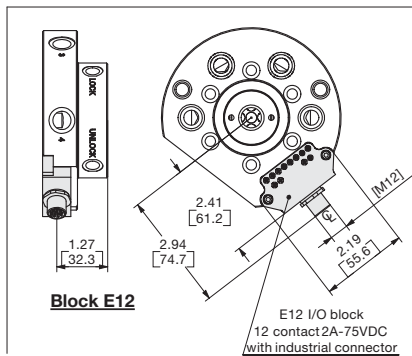
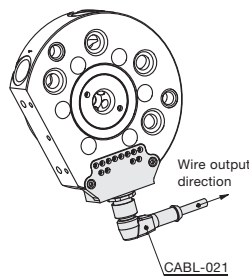
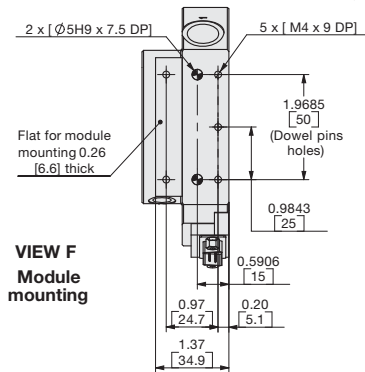
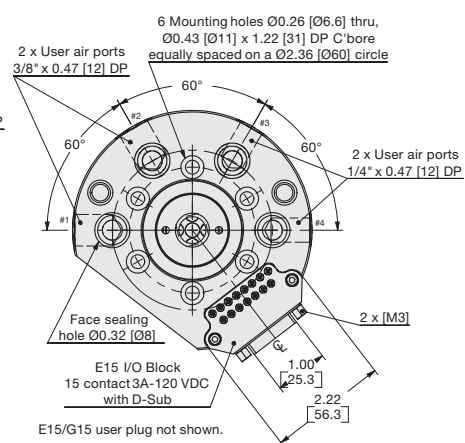
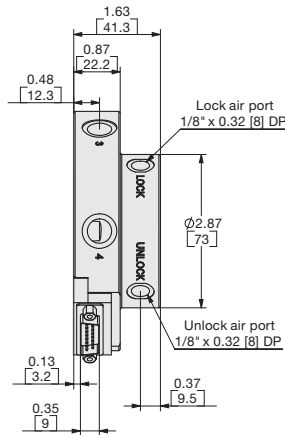
REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with Micro D-Sub Connector, w/1.2M Cordset	KE15-TP30	1
12 Pin I/O Block with Turck M12 Connector, w/o Cordset	KE12-TP30	1
Straight Male Cordset 1.2M for E15	CABL-024	1
90° Male Cordset 2M for E12	CABL-023	1

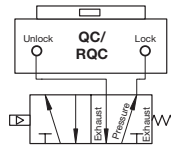
TOOL CHANGER QC-60 ROBOT ADAPTER MODULE



* : Not preferred for new installation



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



Specifications

QC-60

Maximum Payload	60 lbs	27 Kg
Maximum Moment Rating	780 in.-lbs	88.1 Nm
Weight of QC Unit only	1.9 lb	0.86 Kg
Weight of Coupled Units	2.8 lbs	1.27 Kg
Pressure Range (locked cylinder)	40-100 psi	3-7 bar
Bore Ø	1.75 in.	44.5 mm
Displacement	0.56 in ³	9.2 cm ³
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	±0.025 mm
Valve required to actuate	4-way, 2-position	

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

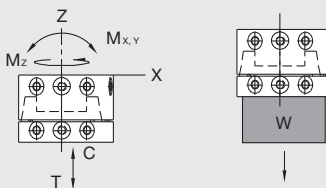
Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance ±.0005" or (±.013mm)
Metric Threads Course Pitch	Imperial in. 0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	Metric [mm] [0.] = (±.25) [0.0] = (±.13) [0.00] = (±.013)

Loading Information

How to Order: (Order Accessories separately from Basic Model)

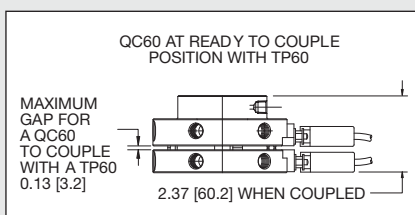
QC SERIES

6.6

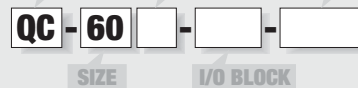


Loading Capacity

	Imperial	Metric
Maximum Tensile T	100 lbs.	445 N
Maximum Compressive C	120 lbs.	534 N
Maximum Moment M_x	780 in.-lbs.	88.1 Nm
Maximum Moment M_y	780 in.-lbs.	88.1 Nm
Maximum Moment M_z	780 in.-lbs.	88.1 Nm



BASIC MODEL PORT MODULE



PORT:
Blank NPT port
M BSPP ports
A BSPT ports

I/O BLOCK

E15 15 Pin I/O Block with D-Sub Connector and User Plug, without Cable
G15* 15 Pin I/O Block Non-Recessed, with D-Sub Connector and User Plug, without Cable
E12 12 Pin I/O Block w/Turck M12 Conn, w/o Cordset
0 without I/O Block

*For previous installations only. New Installations use E15.

REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable	KE15-QC60	1
15 Pin I/O Block Non-Recessed, with D-Sub Connector and User Plug, w/o Cable	KG15-QC60	1
12 Pin I/O Block with Turck M12 Connector, w/o Cordset	KE12-QC60	1
Straight Female D-Sub User Plug, w/o Cable, Solder Type for E15/G15	ELCT-047	1
90° Female Cordset 4M for E12	CABL-021	1

ADAPTER PLATES

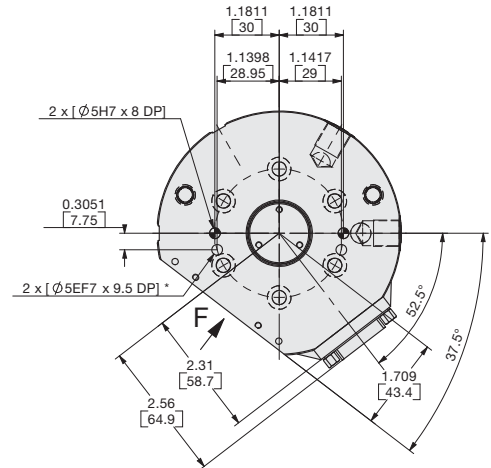
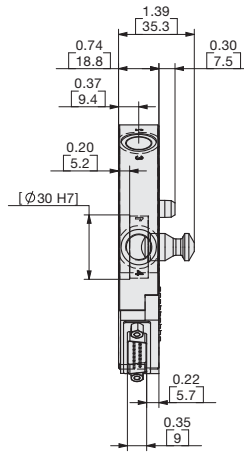
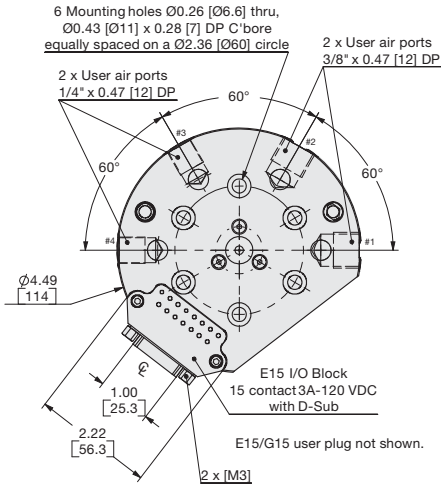
Consult Factory

PNEUMATIC ACCESSORIES

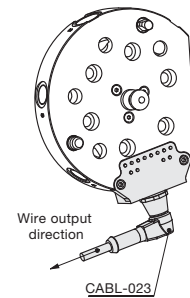
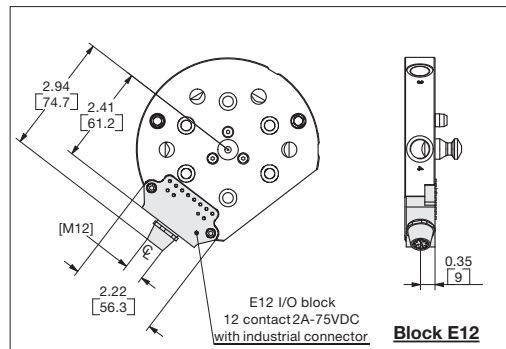
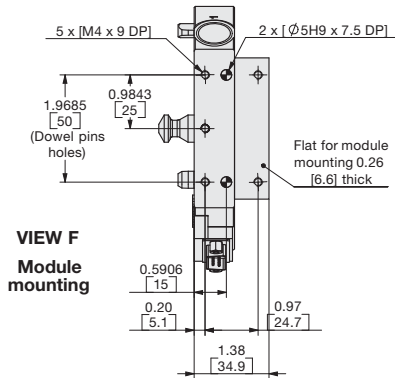
Seal Repair Kit	SLKT-389	1
Face Seal Repair Kit	SLKT-390	1



TOOL CHANGER TP-60 TOOLING ADAPTER MODULE



* : Not preferred for new installation



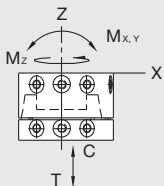
Specifications

	TP-60	
Maximum Payload	60 lbs	27 Kg
Maximum Moment Rating	780 in.-lbs	88 Nm
Weight of TP Unit only	0.90 lb	0.41 Kg
Weight of Coupled Units	2.8 lbs	1.27 Kg
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	± 0.025 mm

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

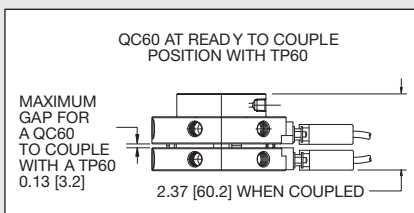
Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance ±.0005" or (±.013mm)
Metric Threads Course Pitch	Imperial in. 0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	Metric [mm] [0.] = (±.25) [0.0] = (±.13) [0.00] = (±.013)

Loading Information

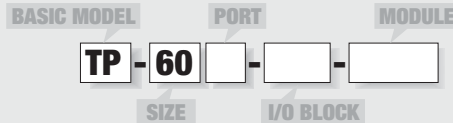


Loading Capacity

	Imperial	Metric
Maximum Tensile T	100 lbs.	445 N
Maximum Compressive C	120 lbs.	534 N
Maximum Moment M_x	780 in.-lbs.	88.1 Nm
Maximum Moment M_y	780 in.-lbs.	88.1 Nm
Maximum Moment M_z	780 in.-lbs.	88.1 Nm



How to Order: (Order Accessories separately from Basic Model)



PORT:
Blank NPT port
M BSPP ports
A BSPT ports

I/O BLOCK

- E15** 15 Pin I/O Block with D-Sub Connector and User Plug, without Cable
- G15*** 15 Pin I/O Block Non-Recessed, with D-Sub Connector and User Plug, without Cable
- E12** 12 Pin I/O Block w/Turck M12 Conn, w/o Cordset
- 0** without I/O Block

*For previous installations only. New Installations use E15.

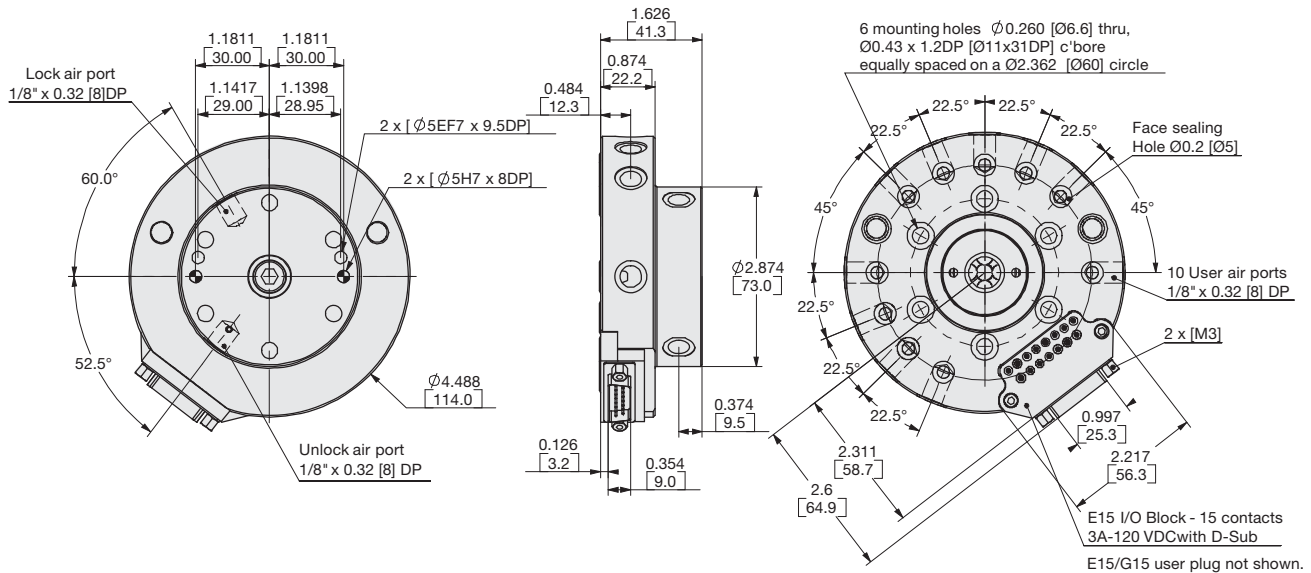
REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable	KE15-TP60	1
15 Pin I/O Block Non-Recessed, with D-Sub Connector and User Plug, w/o Cable	KG15-TP60	1
12 Pin I/O Block with Turck M12 Connector, w/o Cordset	KE12-TP60	1
Straight Female D-Sub User Plug, w/o Cable, Solder Type for E15/G15	ELCT-047	1
90° Male Cordset 2M for E12	CABL-023	1

MODULE:

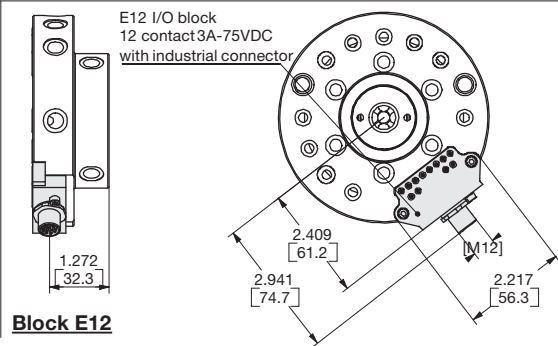
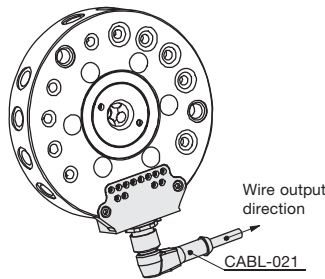
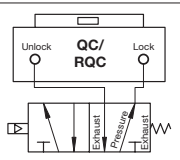
- E26** 26 pin, 5A Module w/Ind. User Connector
- E19** 19 pin, 5A Module w/Ind. User Connector
- E10** 10 pin, 13A Module w/Ind. User Connector
- PN18** 4X 1/8" NPT Pneumatic Ports, 10 bar
- PP18** 4X 1/8" BSPP Pneumatic Ports, 10 bar
- PT18** 4X 1/8" BSPT Pneumatic Ports, 10 bar
- PN14** 2X 1/4" NPT Pneumatic Ports, 10 bar
- PP14** 2X 1/4" BSPP Pneumatic Ports, 10 bar
- PT14** 2X 1/4" BSPT Pneumatic Ports, 10 bar
- HN38** 2X 3/8" NPT Fluid Ports, 100 bar

TOOL CHANGER QC-60 10-PORT ROBOT ADAPTER MODULE



Failsafe operation:

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



Specifications

	QC-60 10-PORT	
Maximum Payload	60 lbs	27 Kg
Maximum Moment Rating	780 in.-lbs	88.1 Nm
Weight of QC Unit only	1.9 lb	0.86 Kg
Weight of Coupled Units.....	2.8 lbs	1.27 Kg
Pressure Range (locked cylinder)....	40-100 psi	3-7 bar
Bore \varnothing	1.75 in.	44.5 mm
Displacement	0.56 in ³	9.2 cm ³
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	± 0.025 mm
Valve required to actuate	4-way, 2-position	

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

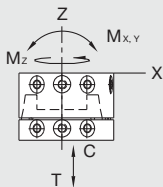
Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance $\pm 0.005"$ or [± 0.13 mm]
Metric Threads Course Pitch	Imperial in. 0.00 = $\pm .01$ 0.000 = $\pm .005$ 0.0000 = $\pm .0005$	Metric [mm] [0.] = [$\pm .25$] [0.0] = [$\pm .13$] [0.00] = [$\pm .013$]

QC SERIES

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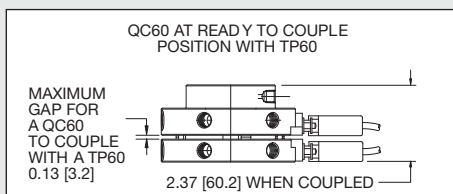
Loading Information

How to Order: (Order Accessories separately from Basic Model)



Loading Capacity

	Imperial	Metric
Maximum Tensile T	100 lbs.	445 N
Maximum Compressive C	120 lbs.	534 N
Maximum Moment M_x	780 in.-lbs.	88.1 Nm
Maximum Moment M_y	780 in.-lbs.	88.1 Nm
Maximum Moment M_z	780 in.-lbs.	88.1 Nm



BASIC MODEL

PORT

QC - 60 - - - 10P

SIZE

I/O BLOCK

PORT:

Blank NPT port
M BSPP ports
A BSPT ports

I/O BLOCK

E15 15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable
G15* 15 Pin I/O Block Non-Recessed, w/D-Sub Connector and User Plug, w/o Cable
E12 12 Pin I/O Block w/Turk M12 Connector, w/o Cordset
O without I/O Block

*For previous installations only. New Installations use E15.

REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable	KE15-QC60	1
15 Pin I/O Block Non-Recessed, w/D-Sub Connector, User Plug, w/o Cable	KG15-QC60	1
12 Pin I/O Block with Turk M12 Connector, w/o Cordset	KE12-QC60	1
Straight Female D-Sub User Plug, w/o Cable, Solder Type for E15/G15	ELCT-047	1
90° Female Cordset 4M for E12	CABL-021	1

ADAPTER PLATES

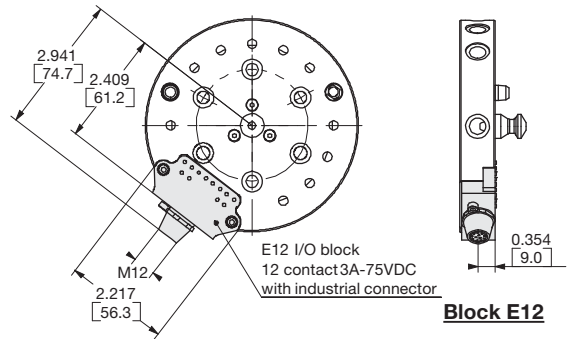
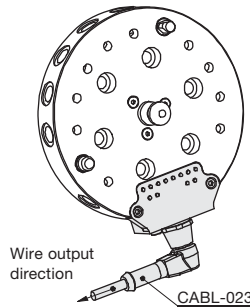
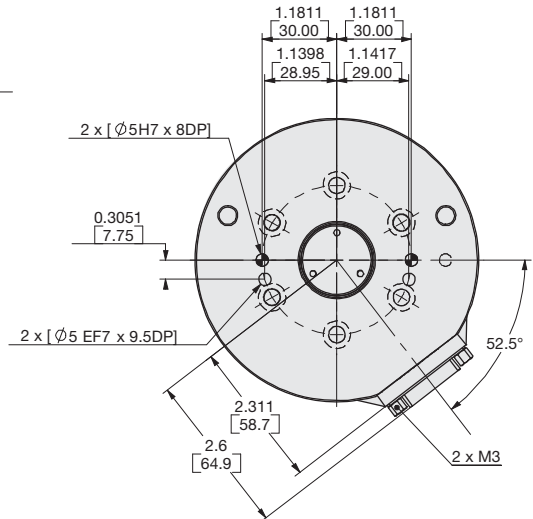
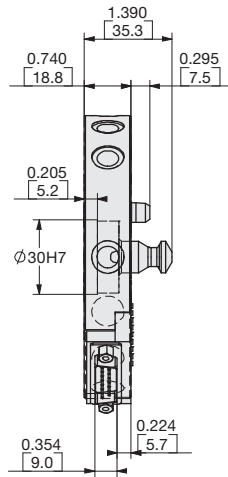
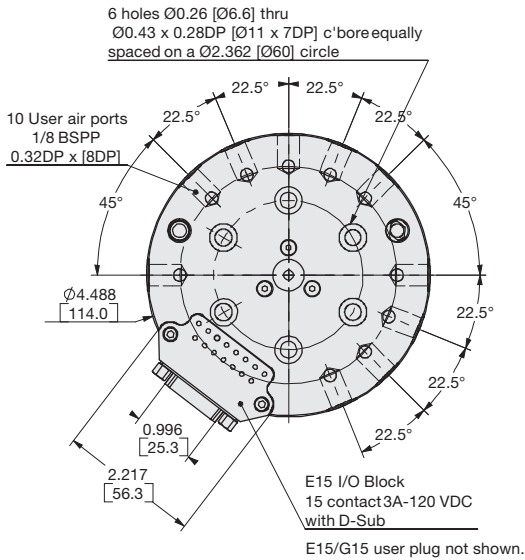
Consult Factory

PNEUMATIC ACCESSORIES

Seal Repair Kit	SLKT-389	1
Face Seal Repair Kit	SLKT-392	1



TOOL CHANGER TP-60 10-PORT TOOLING ADAPTER MODULE



Specifications

TP-60 10-PORT

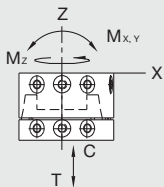
Maximum Payload	60 lbs	27 Kg
Maximum Moment Rating	780 in.-lbs	88 Nm
Weight of TP Unit only	0.90 lb	0.41 Kg
Weight of Coupled Units	2.8 lbs	1.27 Kg
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	± 0.025 mm

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

	Dimensions are symmetrical about centerline		Third Angle Projection		All Dowel Holes are SF (Slip Fit). Locational 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]

Loading Information

How to Order: (Order Accessories separately from Basic Model)



Loading Capacity

	Imperial	Metric
Maximum Tensile T	100 lbs.	445 N
Maximum Compressive C	120 lbs.	534 N
Maximum Moment M_x	780 in.-lbs.	88.1 Nm
Maximum Moment M_y	780 in.-lbs.	88.1 Nm
Maximum Moment M_z	780 in.-lbs.	88.1 Nm

BASIC MODEL

PORT

TP - 60 - - - **10P**

SIZE

I/O BLOCK

PORT:

Blank NPT port
M BSPP ports
A BSPT ports

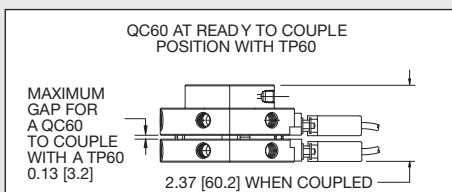
I/O BLOCK

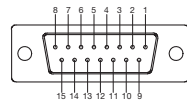
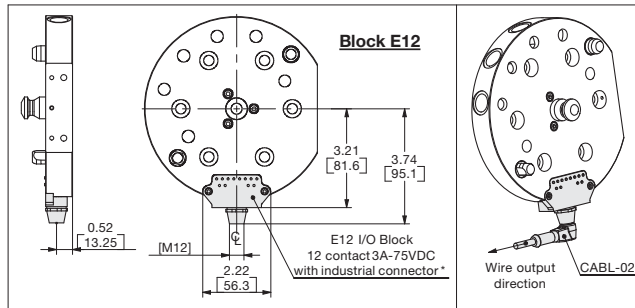
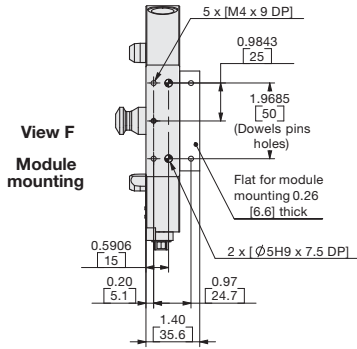
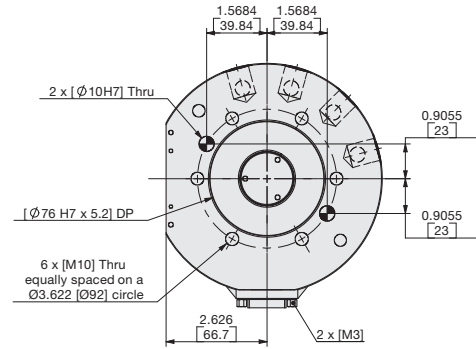
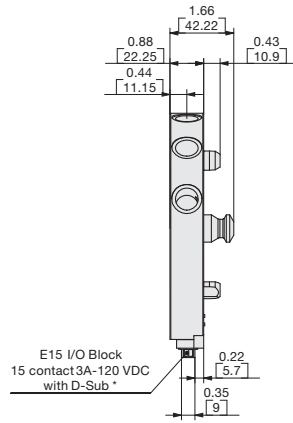
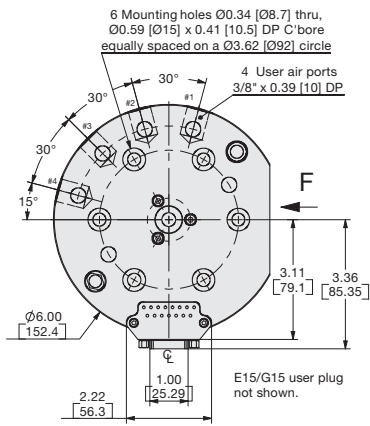
E15 15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable
G15* 15 Pin I/O Block Non-Recessed, w/D-Sub Connector and User Plug, w/o Cable
E12 12 Pin I/O Block w/Turk M12 Connector, w/o Cordset
O without I/O Block

*For previous installations only. New Installations use E15.

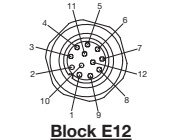
REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable	KE15-TP60	1
15 Pin I/O Block Non-Recessed, w/D-Sub Connector, User Plug, w/o Cable	KG15-TP60	1
12 Pin I/O Block with Turk M12 Connector, w/o Cordset	KE12-TP60	1
Straight Female D-Sub User Plug, w/o Cable, Solder Type for E15/G15	ELCT-047	1
90° Male Cordset 2M for E12	CABL-023	1





* LP or LN option (latch sensor) requires 1 (-), 6 (output) and 7 (+) contacts



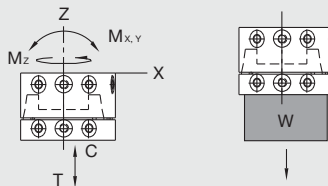
Specifications

	TP-150	
Maximum Payload	150 lbs	68 Kg
Maximum Moment Rating	1900 in.-lbs	215 Nm
Weight of TP Unit only	2.3 lb	1.0 Kg
Weight of Coupled Units	7.1 lbs	3.2 Kg
Temperature Range	-30°~180° F	-35°~80° C
Repeatability	± 0.001 in.	± 0.025 mm

UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

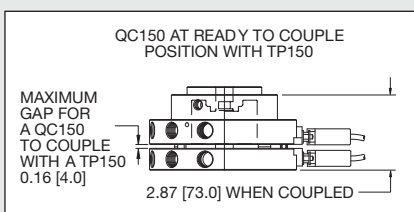
Dimensions are symmetrical about centerline	Third Angle Projection	All Dowel Holes are SF (Slip Fit). Locational Tolerance ±.0005" or (±.013mm)
Metric Threads	Imperial in.	Metric [mm]
Course Pitch	0.00 = ±.01 0.000 = ±.005 0.0000 = ±.0005	[.] = [±.25] [0.] = [±.13] [0.00] = [±.013]

Loading Information



Loading Capacity

	Imperial	Metric
Maximum Tensile T	200 lbs.	890 N
Maximum Compressive C	300 lbs.	1334 N
Maximum Moment M_x	1900 in.-lbs.	214 Nm
Maximum Moment M_y	1900 in.-lbs.	214 Nm
Maximum Moment M_z	1900 in.-lbs.	214 Nm



How to Order: (Order Accessories separately from Basic Model)



PORT:

- Blank NPT port
- M BSPP ports
- A BSPT ports

I/O BLOCK

- E15 15 Pin I/O Block with D-Sub Connector and User Plug, without Cable
- G15* 15 Pin I/O Block Non-Recessed, with D-Sub Connector and User Plug, without Cable
- E12 12 Pin I/O Block w/Turck M12 Conn, w/o Cordset
- 0 without I/O Block

*For previous installations only. New Installations use E15.

MODULE:

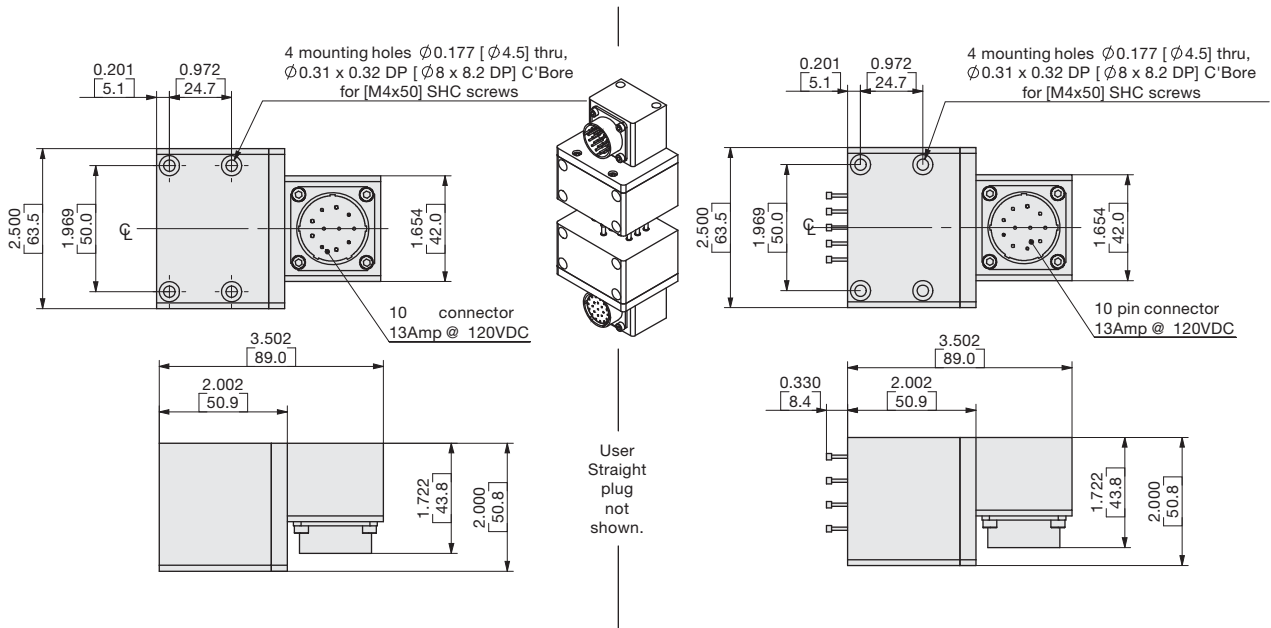
- E26 26 pin, 5A Module w/Ind. User Connector
- E19 19 pin, 5A Module w/Ind. User Connector
- E10 10 pin, 13A Module w/Ind. User Connector
- PN18 4X 1/8" NPT Pneumatic Ports, 10 bar
- PP18 4X 1/8" BSPP Pneumatic Ports, 10 bar
- PT18 4X 1/8" BSPT Pneumatic Ports, 10 bar
- PN14 2X 1/4" NPT Pneumatic Ports, 10 bar
- PP14 2X 1/4" BSPP Pneumatic Ports, 10 bar
- PT14 2X 1/4" BSPT Pneumatic Ports, 10 bar
- HN38 2X 3/8" NPT Fluid Ports, 100 bar

REPLACEMENT I/O MODULE ACCESSORIES

	ORDER #	QTY/UNIT
15 Pin I/O Block with D-Sub Connector and User Plug, w/o Cable	KE15-TP60	1
15 Pin I/O Block Non-Recessed, w/D-Sub Connector, User Plug, w/o Cable	KG15-TP60	1
12 Pin I/O Block with Turck M12 Connector, w/o Cordset	KE12-TP60	1
Straight Female D-Sub User Plug, w/o Cable, Solder Type for E15/G15	ELCT-047	1
90° Male Cordset 2M for E12	CABL-023	1

10 Pin Module 13Amp @ 120VDC (E10)

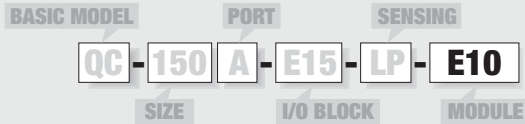
For QC/TP-60 & QC/TP-150



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

ROBOT HALF MODULES:

How to Order Modules:



MODULE FOR QC-60

PREMOUNTED	SEPARATE	
E10	KE10-QC60	10 pin 13A Module with Industrial User Connector, without Cable

MODULE FOR QC-150

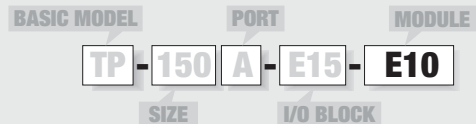
PREMOUNTED	SEPARATE	
E10	KE10-QC150	10 pin 13A Module with Industrial User Connector, without Cable

ACCESSORIES:

ELCT-041	Straight female plug (w/o cable), solder type, cable clamp
-----------------	--

TOOL HALF MODULES:

How to Order Modules:



MODULE FOR TP-60

PREMOUNTED	SEPARATE	
E10	KE10-TP60	10 pin 13A Module with Industrial User Connector, without Cable

MODULE FOR TP-150

PREMOUNTED	SEPARATE	
E10	KE10-TP150	10 pin 13A Module with Industrial User Connector, without Cable

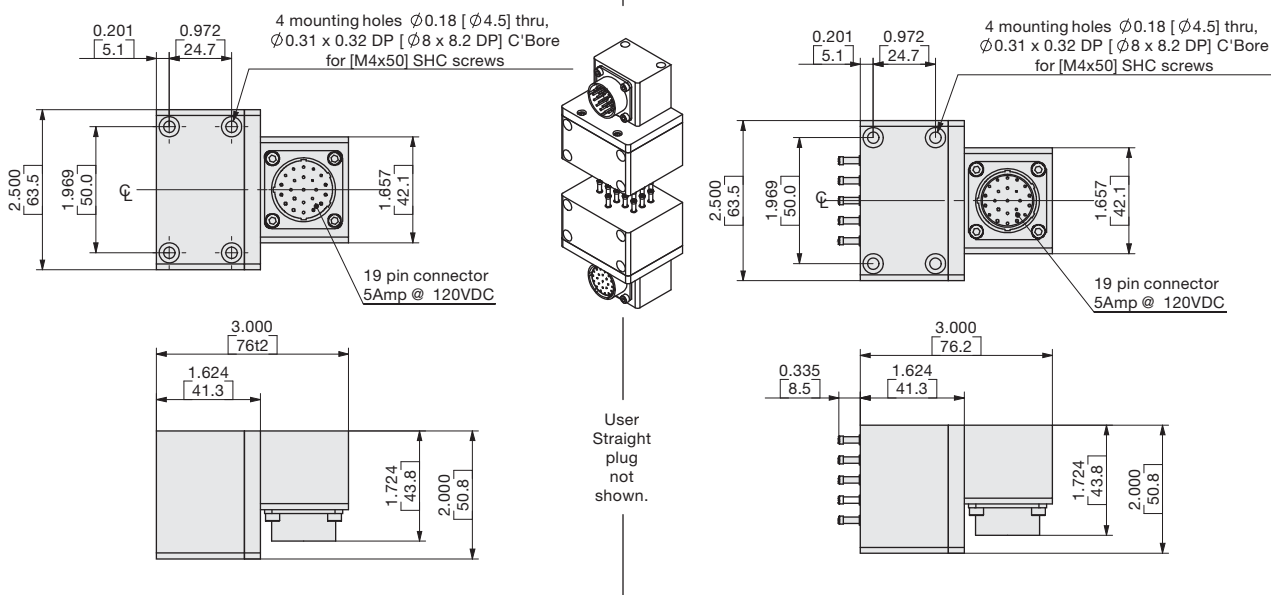
ACCESSORIES:

ELCT-042	Straight male 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 (E19)

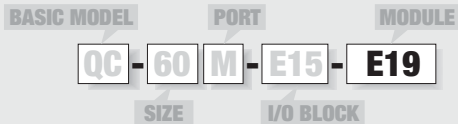
For QC/TP-60 & QC/TP-150



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

ROBOT HALF MODULES:

How to Order Modules:



MODULE FOR QC-60

PREMOUNTED SEPARATE

E19	KE19-QC60	19 pin 5A Module with Industrial User Connector, without Cable
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MODULE FOR QC-150

PREMOUNTED SEPARATE

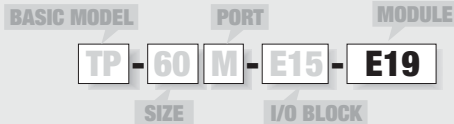
E19	KE19-QC150	19 pin 5A Module with Industrial User Connector, without Cable
------------	-------------------	--

ACCESSORIES:

ELCT-043	Straight female plug (w/o cable), solder type, cable clamp
-----------------	--

TOOL HALF MODULES:

How to Order Modules:



MODULE FOR TP-60

PREMOUNTED SEPARATE

E19	KE19-TP60	19 pin 5A Module with Industrial User Connector, without Cable
------------	------------------	--

MODULE FOR TP-150

PREMOUNTED SEPARATE

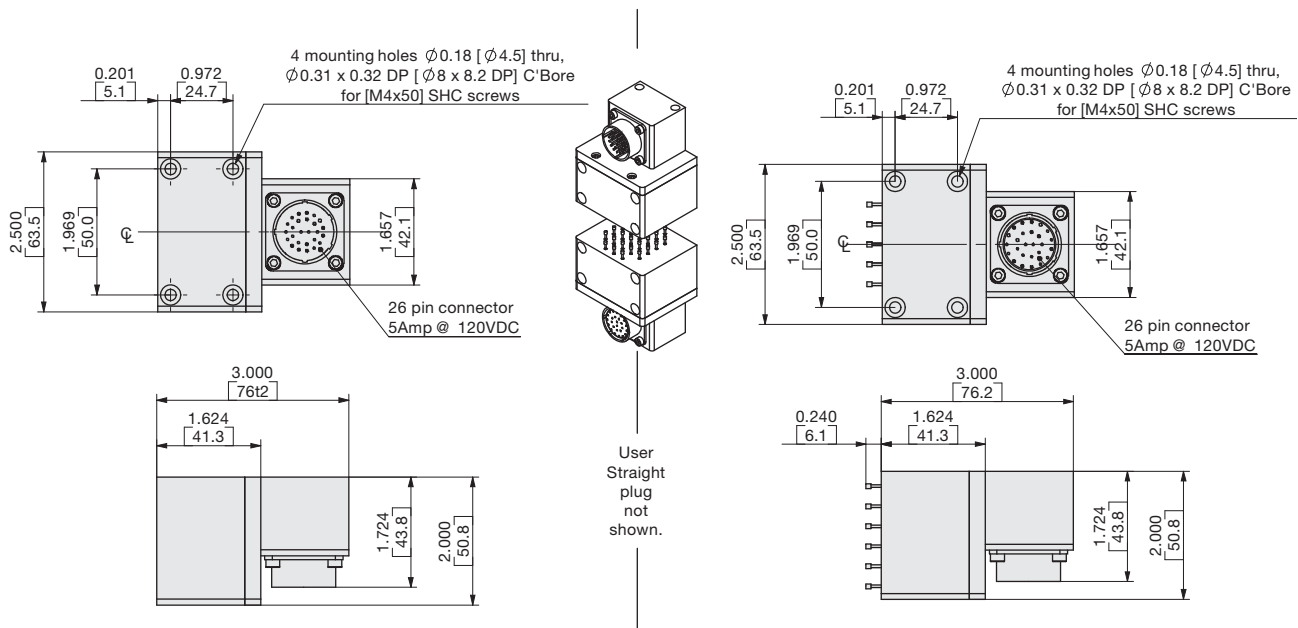
E19	KE19-TP150	19 pin 5A Module with Industrial User Connector, without Cable
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ACCESSORIES:

ELCT-044	Straight male plug (w/o cable), solder type, cable clamp
-----------------	--

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

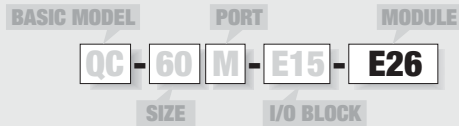
19 Pin Module 5Amp @ 210VDC (E19) For QC/TP-60 & QC/TP-150



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

ROBOT HALF MODULES:

How to Order Modules:



MODULE FOR QC-60

PREMOUNTED	SEPARATE	
E26	KE26-QC60	26 pin 5A Module with Industrial User Connector, without Cable

MODULE FOR QC-150

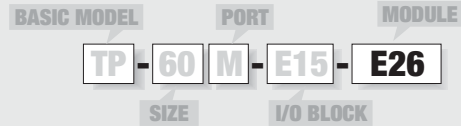
PREMOUNTED	SEPARATE	
E26	KE26-QC150	26 pin 5A Module with Industrial User Connector, without Cable

ACCESSORIES:

ELCT-045	Straight female plug (w/o cable), solder type, cable clamp
-----------------	--

TOOL HALF MODULES:

How to Order Modules:



MODULE FOR TP-60

PREMOUNTED	SEPARATE	
E26	KE26-TP60	26 pin 5A Module with Industrial User Connector, without Cable

MODULE FOR TP-150

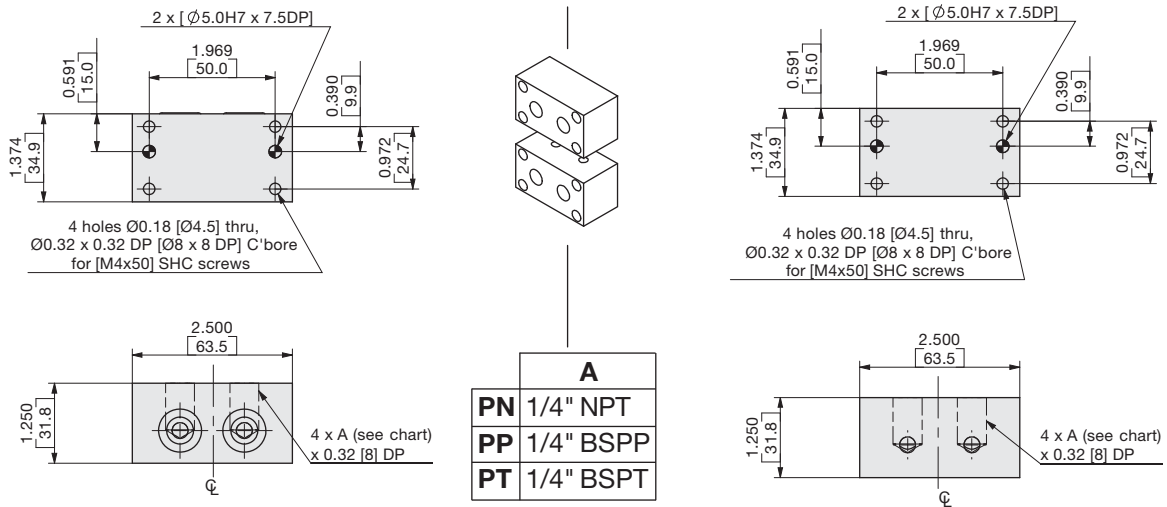
PREMOUNTED	SEPARATE	
E26	KE26-TP150	26 pin 5A Module with Industrial User Connector, without Cable

ACCESSORIES:

ELCT-046	Straight male 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 ports Module, Face Seal (PN14, PP14, PT14) For QC/TP-60 & QC/TP-150

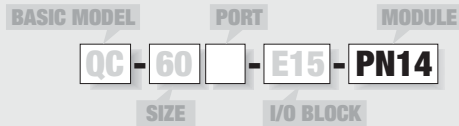


Flat for module mounting not shown: See QC or TP drawings.

Maximum Working Pressure: 10 bar

ROBOT HALF MODULES:

How to Order Modules:



MODULES FOR QC-60

	PREMOUNTED	SEPARATE	
PN14	KPN14-QC60	2 x 1/4" NPT Pneumatic Ports, 10 bar	
PP14	KPP14-QC60	2 x 1/4" BSPP Pneumatic Ports, 10 bar	
PT14	KPT14-QC60	2 x 1/4" BSPT Pneumatic Ports, 10 bar	

MODULES FOR QC-150

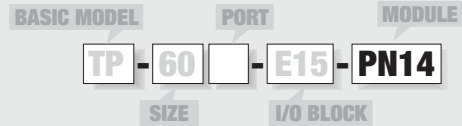
	PREMOUNTED	SEPARATE	
PN14	KPN14-QC150	2 x 1/4" NPT Pneumatic Ports, 10 bar	
PP14	KPP14-QC150	2 x 1/4" BSPP Pneumatic Ports, 10 bar	
PT14	KPT14-QC150	2 x 1/4" BSPT Pneumatic Ports, 10 bar	

ACCESSORIES:

SLKT-395 Seal Repair Kit

TOOL HALF MODULES:

How to Order Modules:



MODULES FOR TP-60

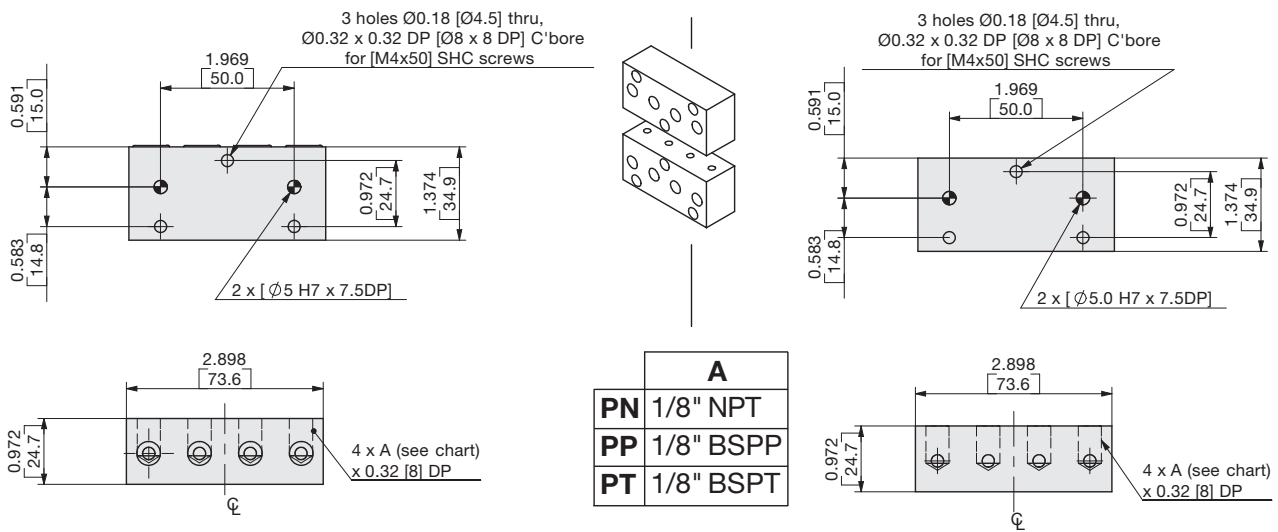
	PREMOUNTED	SEPARATE	
PN14	KPN14-TP60	2 x 1/4" NPT Pneumatic Ports, 10 bar	
PP14	KPP14-TP60	2 x 1/4" BSPP Pneumatic Ports, 10 bar	
PT14	KPT14-TP60	2 x 1/4" BSPT Pneumatic Ports, 10 bar	

MODULES FOR TP-150

	PREMOUNTED	SEPARATE	
PN14	KPN14-TP150	2 x 1/4" NPT Pneumatic Ports, 10 bar	
PP14	KPP14-TP150	2 x 1/4" BSPP Pneumatic Ports, 10 bar	
PT14	KPT14-TP150	2 x 1/4" BSPT Pneumatic Ports, 10 bar	

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

4 X 1/8" Air ports Module, Face Seal (PN18, PP18, PT18) For QC/TP-60 & QC/TP-150

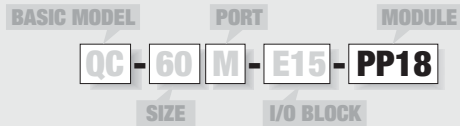


Flat for module mounting not shown: See QC or TP drawings.

Maximum Working Pressure: 10 bar

ROBOT HALF MODULES:

How to Order Modules:



MODULES FOR QC-60

	PREMOUNTED	SEPARATE	
PN18	KPN18-QC60	4 x 1/8" NPT Pneumatic Ports, 10 bar	
PP18	KPP18-QC60	4 x 1/8" BSPP Pneumatic Ports, 10 bar	
PT18	KPT18-QC60	4 x 1/8" BSPT Pneumatic Ports, 10 bar	

MODULES FOR QC-150

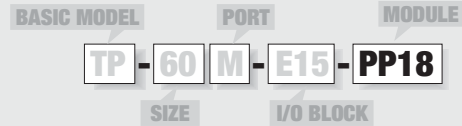
	PREMOUNTED	SEPARATE	
PN18	KPN18-QC150	4 x 1/8" NPT Pneumatic Ports, 10 bar	
PP18	KPP18-QC150	4 x 1/8" BSPP Pneumatic Ports, 10 bar	
PT18	KPT18-QC150	4 x 1/8" BSPT Pneumatic Ports, 10 bar	

ACCESSORIES:

SLKT-391 Seal Repair Kit

TOOL HALF MODULES:

How to Order Modules:



MODULES FOR TP-60

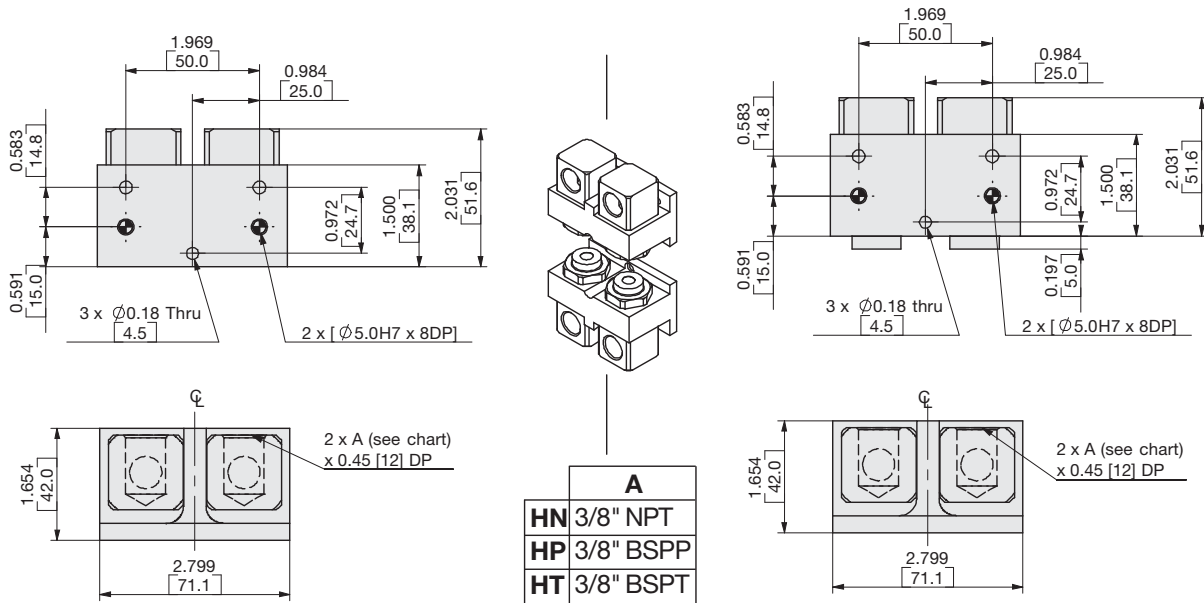
	PREMOUNTED	SEPARATE	
PN18	KPN18-TP60	4 x 1/8" NPT Pneumatic Ports, 10 bar	
PP18	KPP18-TP60	4 x 1/8" BSPP Pneumatic Ports, 10 bar	
PT18	KPT18-TP60	4 x 1/8" BSPT Pneumatic Ports, 10 bar	

MODULES FOR TP-150

	PREMOUNTED	SEPARATE	
PN18	KPN18-TP150	4 x 1/8" NPT Pneumatic Ports, 10 bar	
PP18	KPP18-TP150	4 x 1/8" BSPP Pneumatic Ports, 10 bar	
PT18	KPT18-TP150	4 x 1/8" BSPT Pneumatic Ports, 10 bar	

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

2 x 3/8" Fluid Ports Module, Non Spilling, Double Shut-Off (HP38, HN38, HT38) For QC/TP-60 & QC/TP-150

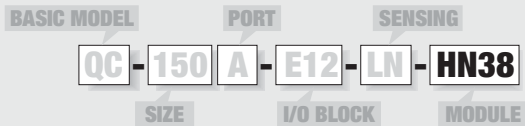


Flat for module mounting not shown: See QC or TP drawings.

Maximum Working Pressure: 100 bar

ROBOT HALF MODULES:

How to Order Modules:



MODULE FOR QC-60

PREMOUNTED SEPARATE

HN38 KHN38-QC60 2 x 3/8" NPT Fluid Ports Module, 100 bar

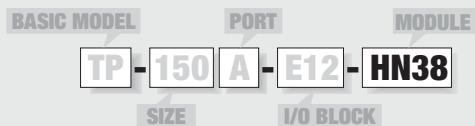
MODULE FOR QC-150

PREMOUNTED SEPARATE

HN38 KHN38-QC150 2 x 3/8" NPT Fluid Ports Module, 100 bar

TOOL HALF MODULES:

How to Order Modules:



MODULE FOR TP-60

PREMOUNTED SEPARATE

HN38 KHN38-TP60 2 x 3/8" NPT Fluid Ports Module, 100 bar

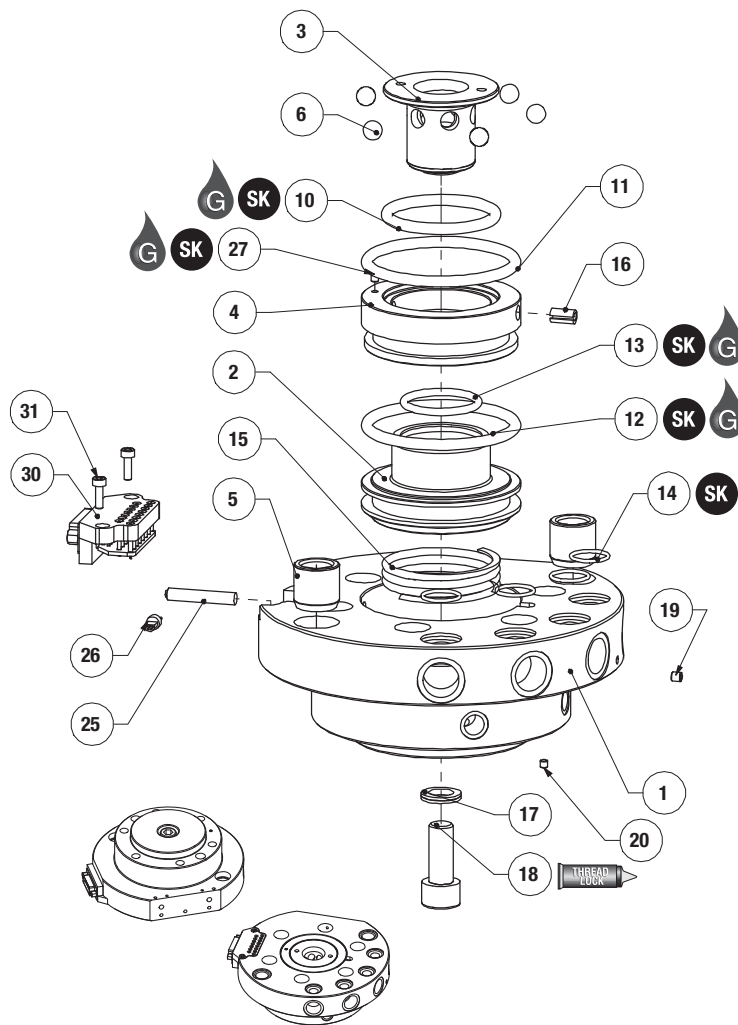
MODULE FOR TP-150

PREMOUNTED SEPARATE

HN38 KHN38-TP150 2 x 3/8" NPT Fluid Ports Module, 100 bar

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

Robot Half



Item Qty Name

Robot Side		
1	1	Body
2	1	Piston
3	1	Ball retainer
4	1	Ring
5	2	Bushing
6	4 to 6	Ball
10	1	Ring, O-Ring
11	1	Ring, O-Ring
12	1	Piston, O-ring
13	1	Piston, O-ring
14	4	Body, O-Ring
15	1	Spring
16	1	Ring, Pin (QC-150 only)
17	1	Retainer, O-Ring
18	1	Retainer, Washer
19	1	Body, SHC screw
20	1	Body, SHC screw
25	1	Sensor, (QC-150 only - optional)
26	1	Sensor Connector, (QC-150 only - optional)
27	1	Sensor, SS screw (QC-150 only)
30	1	I/O Module
31	2	Module, SHC Screw

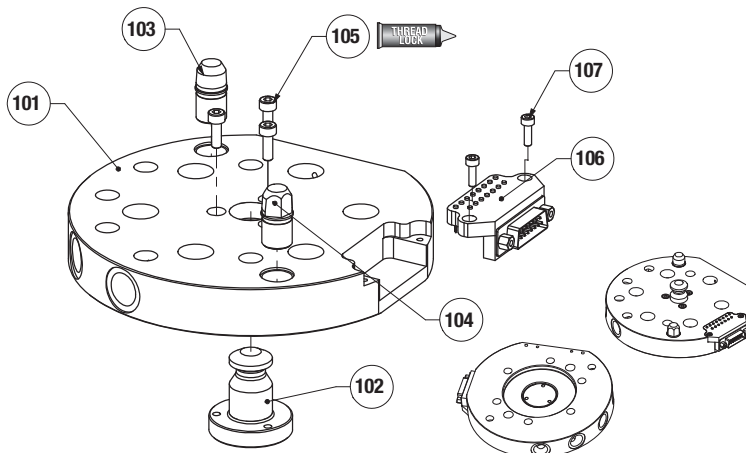
Tool Side

101	1	Body
102	1	Locking Pin
103	1	Centering Pin
104	1	Diamond Pin
105	3	Pin, Screw
106	1	I/O Module
107	2	Module, SHC screw

NOTE: Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.

SK Seal Repair Kit Order #'s See Product Data Sheets

Tool Half



Seal Kit Items



Thread Locker



Krytox™ Lubricant



Lightweight Machine Oil



Teflon™ Based Grease

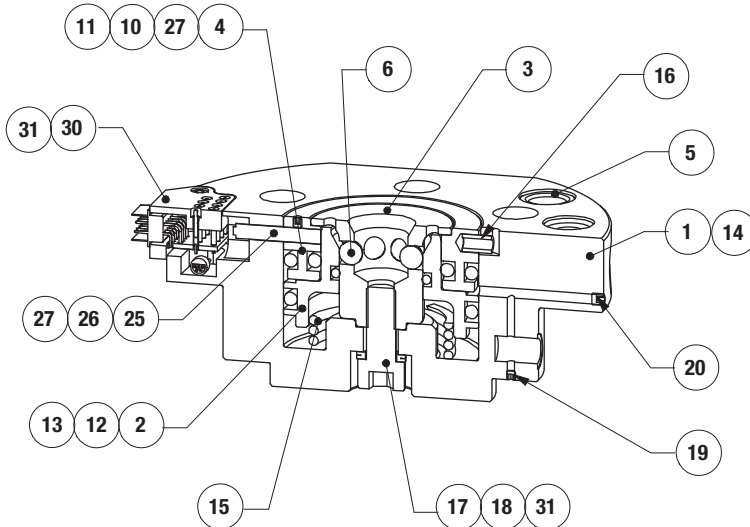


Super Bonder

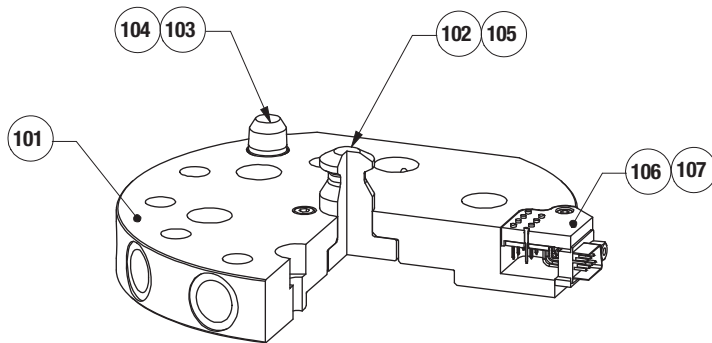


Third Angle Projection

Robot Half



Tool Half



Item	Qty	Name
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Robot Side

1	1	Body
2	1	Piston
3	1	Ball retainer
4	1	Ring
5	2	Bushing
6	4 to 6	Ball
10	1	Ring, O-Ring
11	1	Ring, O-Ring
12	1	Piston, O-ring
13	1	Piston, O-ring
14	4	Body, O-Ring
15	1	Spring
16	1	Ring, Pin (QC-150 only)
17	1	Retainer, O-Ring
18	1	Retainer, Washer
19	1	Body, SHC screw
20	1	Body, SHC screw
25	1	Sensor, (QC-150 only - optional)
26	1	Sensor Connector, (QC-150 only - optional)
27	1	Sensor, SS screw (QC-150 only)
30	1	I/O Module
31	2	Module, SHC Screw

Tool Side

101	1	Body
102	1	Locking Pin
103	1	Centering Pin
104	1	Diamond Pin
105	3	Pin, Screw
106	1	I/O Module
107	2	Module, SHC screw

NOTE: Contact the Robohand Sales Department for a complete spare parts list with order numbers and prices.

Assembly Procedure - Robot Side

- 1) Install the air port plugs (#19) and (#20) with thread-locker into the body (#1)
- 2) Lubricate and install seals (#12) and (#13) into the piston (#2)
- 3) Insert the springs (#15) into the body
- 4) Insert the piston sub-assembly into the body
- 5) Lubricate and install seals (#10) and (#11) into the ring (#4)
- 6) Insert the pin (#16) into the ring (#4)
- 7) Insert the ring sub-assembly into the body
- 8) Insert the balls (#6) into the ball retainer (#3)
- 9) Insert the ball and retainer sub-assembly into the body
- 10) Fasten the ball retainer with washer (#17) and screws (#18) with thread-locker
- 11) Press in the bushings (#5) into the body
- 12) Mount the O-Ring (#14) into the body
- 13) For QC150 with latch sensor only, fully insert the sensor (#25) into the body and slightly pull it back (0.5 to 1 mm). Fasten the sensor (#25) with screw (#27). Plug in male connector (#26) with the female connector of the I/O block (#30)
- 14) Mount the I/O block (#30) into the body and fasten with screw (#31)

Assembly Procedure - Tool Side

- 1) Insert the locking pin (#102) into the body #101 and fasten with screws (#105) with thread-locker
- 2) Press in the diamond pin (#104) into the body
- 3) Press in the pin (#103) into the body
- 4) Mount the I/O block (#106) into the body and fasten with screw (#107)



Seal Kit Items



Thread Locker



Krytox™ Lubricant



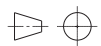
Lightweight Machine Oil



Teflon™ Based Grease



Super Bonder



Third Angle Projection



New Product #	Old Product #	Description
Robot Half Size 30		
QC-30-E15	QC2336-0-0-0	Robot Half, Imperial, 15 Pin I/O Module
QC-30-D15	QC1862-0-0-0	Robot Half, Imperial, Double 15 Pin I/O Module
QC-30M-E15	QC1956-0-0-0	Robot Half, Metric, 15 Pin I/O Module
QC-30M-E12	QC7499-0-0-0	Robot Half, Metric, 12 Pin I/O Module
Tool Half Size 30		
TP-30-E15	TP2337-0-0	Tool Half, Imperial, 15 Pin I/O Module
TP-30-D15	TP1506-0-0	Tool Half, Imperial, Double 15 Pin I/O Module
TP-30M-E15	TP1957-0-0	Tool Half, Metric, 15 Pin I/O Module
TP-30M-E12	TP7500-0-0	Tool Half, Metric, 12 Pin I/O Module
Accessories Size 30		
E15-QC30	502678	15 Pin I/O Block with Micro D-Sub Connector
E12-QC30	507494	12 Pin I/O Block with Turck M12 Connector
E15-TP30	502679	15 Pin I/O Block with Micro D-Sub Connector
E12-TP30	507495	12 Pin I/O Block with Turck M12 Connector
CABL-024	903319	Straight Male Cordset 1.2M for E15
SLKT-387	KQC30-OR	Seal Repair Kit, QC30
SLKT-388	KQC30-HW	Face Sealing Repair Kit, QC30
Robot Half Size 60		
QC-60-E15	QC6675-0-0-0	Robot Half, NPT, 15 Pin I/O Module
QC-60-G15	QC2166-0-0-0	Robot Half, NPT, 15 Pin Non-Recessed I/O Module
QC-60M-E15	QC6704-0-0-0	Robot Half, Metric, 15 Pin I/O Module
QC-60M-E12	QC7592-0-0-0	Robot Half, Metric, 12 Pin I/O Module
QC-60M-G15	QC4588-0-0-0	Robot Half, Metric, 15 Pin Non-Recessed I/O Module
QC-60A-E15	QC6708-0-0-0	Robot Half, BSPT, 15 Pin I/O Module
QC-60A-G15	QC1980-0-0-0	Robot Half, BSPT, 15 Pin Non-Recessed I/O Module
QC-60-E15-10P	QC6923-0-0-0	Robot Half, NPT, 15 Pin I/O Module, 10 Ports
QC-60M-E15-10P	QC7079-0-0-0	Robot Half, Metric, 15 Pin I/O Module, 10 Ports
QC-60A-E15-10P	QC7078-0-0-0	Robot Half, BSPT, 15 Pin I/O Module, 10 Ports
Tool Half Size 60		
TP-60-E15	TP6676-0-0-0	Tool Half, NPT, 15 Pin I/O Module
TP-60-G15	TP2093-0-0-0	Tool Half, NPT, 15 Pin Non-Recessed I/O Module
TP-60M-E15	TP6705-0-0-0	Tool Half, Metric, 15 Pin I/O Module
TP-60M-E12	TP7593-0-0-0	Tool Half, Metric, 12 Pin I/O Module
TP-60M-G15	TP4591-0-0-0	Tool Half, Metric, 15 Pin Non-Recessed I/O Module
TP-60A-E15	TP6709-0-0-0	Tool Half, BSPT, 15 Pin I/O Module
TP-60A-G15	TP1981-0-0-0	Tool Half, BSPT, 15 Pin Non-Recessed I/O Module
TP-60-E15-10P	TP6924-0-0-0	Tool Half, NPT, 15 Pin I/O Module, 10 Ports
TP-60M-E15-10P	TP7081-0-0-0	Tool Half, Metric, 15 Pin I/O Module, 10 Ports
TP-60A-E15-10P	TP7080-0-0-0	Tool Half, BSPT, 15 Pin I/O Module, 10 Ports
Accessories Size 60		
SLKT-389	KQC60-OR	Seal Repair Kit, QC60
Robot Half Size 150		
QC-150-E15	QC6677-0-0-0	Robot Half, NPT, 15 Pin I/O Module
QC-150-G15	QC2292-0-0-0	Robot Half, NPT, 15 Pin Non-Recessed I/O Module
QC-150-E15-LP	QC6677-052-0-0	Robot Half, NPT, 15 Pin I/O Module, PNP Latch sensor
QC-150-G15-LP	QC2292-052-0-0	Robot Half, NPT, 15 Pin Non-Recessed I/O Module, PNP Latch sensor
QC-150-E15-LN	QC6677-050-0-0	Robot Half, NPT, 15 Pin I/O Module, NPN Latch sensor
QC-150-G15-LN	QC2292-050-0-0	Robot Half, NPT, 15 Pin Non-Recessed I/O Module, NPN Latch sensor
QC-150M-E15	QC6706-0-0-0	Robot Half, Metric, 15 Pin I/O Module
QC-150M-G15	QC4593-0-0-0	Robot Half, Metric, 15 Pin Non-Recessed I/O Module
QC-150M-E15-LP	QC6706-052-0-0	Robot Half, Metric, 15 Pin I/O Module, PNP Latch sensor
QC-150M-G15-LP	QC4593-052-0-0	Robot Half, Metric, 15 Pin Non-Recessed I/O Module, PNP Latch sensor
QC-150M-E15-LN	QC6706-050-0-0	Robot Half, Metric, 15 Pin I/O Module, NPN Latch sensor
QC-150M-G15-LN	QC4593-050-0-0	Robot Half, Metric, 15 Pin Non-Recessed I/O Module, NPN Latch sensor
QC-150A-E15	QC6710-0-0-0	Robot Half, BSPT, 15 Pin I/O Module
QC-150A-G15	QC3066-0-0-0	Robot Half, BSPT, 15 Pin Non-Recessed I/O Module
QC-150A-E15-LP	QC6710-052-0-0	Robot Half, BSPT, 15 Pin I/O Module, PNP Latch sensor
QC-150A-G15-LP	QC3066-052-0-0	Robot Half, BSPT, 15 Pin Non-Recessed I/O Module, PNP Latch sensor
QC-150A-E15-LN	QC6710-050-0-0	Robot Half, BSPT, 15 Pin I/O Module, NPN Latch sensor
QC-150A-G15-LN	QC3066-050-0-0	Robot Half, BSPT, 15 Pin Non-Recessed I/O Module, NPN Latch sensor



New Product #	Old Product #	Description
Tool Half Size 150		
TP-150-E15	TP6678-0-0-0	Tool Half, NPT, 15 Pin I/O Module
TP-150-G15	TP2293-0-0-0	Tool Half, NPT, 15 Pin Non-Recessed I/O Module
TP-150M-E15	TP6707-0-0-0	Tool Half, Metric, 15 Pin I/O Module
TP-150M-G15	TP4595-0-0-0	Tool Half, Metric, 15 Pin Non-Recessed I/O Module
TP-150A-E15	TP6711-0-0-0	Tool Half, BSPT, 15 Pin I/O Module
TP-150A-G15	TP2259-0-0-0	Tool Half, BSPT, 15 Pin Non-Recessed I/O Module
Modules Size 60 and 150		
KG15-QC60	502675	15 Pin I/O Block (Non-Recessed) with D-Sub Connector - QC side
KE15-QC60	506671	15 Pin I/O Block with D-Sub Connector - QC side
KG15-TP60	502676	15 Pin I/O Block (Non-Recessed) with D-Sub Connector - TP side
KE15-TP60	506673	15 Pin I/O Block with D-Sub Connector - TP side
KE26-QC60	QE26	26 pin 5A Module with Industrial Connector - QC side
KE26-TP60	TE26	26 pin 5A Module with Industrial Connector - TP side
KE19-QC60	QE19	19 pin 5A Module with Industrial Connector - QC side
KE19-TP60	TE19	19 pin 5A Module with Industrial Connector - TP side
KE10-QC60	QE10	10 pin 13A Module with Industrial Connector - QC side
KE10-TP60	TE10	10 pin 13A Module with Industrial Connector - TP side
KG15-QC150	502675	15 Pin I/O Block (Non-Recessed) with D-Sub Connector - QC side
KE15-QC150	506671	15 Pin I/O Block with D-Sub Connector - QC side
KE26-QC150	QE26	26 pin 5A Module with Industrial Connector - QC side
KE26-TP150	TE26	26 pin 5A Module with Industrial Connector - TP side
KE19-QC150	QE19	19 pin 5A Module with Industrial Connector - QC side
KE19-TP150	TE19	19 pin 5A Module with Industrial Connector - TP side
KE10-QC150	QE10	10 pin 13A Module with Industrial Connector - QC side
KE10-TP150	TE10	10 pin 13A Module with Industrial Connector - TP side
KPN18-QC60	QNPT18	4 x 1/8 NPT Pneumatic Ports Module - QC side
KPP18-QC60	QBSPP18	4 x 1/8 BSPP Pneumatic Ports Module - QC side
KPT18-QC60	QBSPT18	4 x 1/8 BSPT Pneumatic Ports Module - QC side
KPN18-TP60	TNPT18	4 x 1/8 NPT Pneumatic Ports Module - TP side
KPP18-TP60	TBSPP18	4 x 1/8 BSPP Pneumatic Ports Module - TP side
KPT18-TP60	TBSPT18	4 x 1/8 BSPT Pneumatic Ports Module - TP side
KPN14-QC60	QNPT14	2 x 1/4 NPT Pneumatic Ports Module - QC side
KPP14-QC60	QBSPP14	2 x 1/4 BSPP Pneumatic Ports Module - QC side
KPT14-QC60	QBSPT14	2 x 1/4 BSPT Pneumatic Ports Module - QC side
KPN14-TP60	TNPT14	2 x 1/4 NPT Pneumatic Ports Module - TP side
KPP14-TP60	TBSPP14	2 x 1/4 BSPP Pneumatic Ports Module - TP side
KPT14-TP60	TBSPT14	2 x 1/4 BSPT Pneumatic Ports Module - TP side
KPN18-QC150	QNPT18	4 x 1/8 NPT Pneumatic Ports Module - QC side
KPP18-QC150	QBSPP18	4 x 1/8 BSPP Pneumatic Ports Module - QC side
KPT18-QC150	QBSPT18	4 x 1/8 BSPT Pneumatic Ports Module - QC side
KPN18-TP150	TNPT18	4 x 1/8 NPT Pneumatic Ports Module - TP side
KPP18-TP150	TBSPP18	4 x 1/8 BSPP Pneumatic Ports Module - TP side
KPT18-TP150	TBSPT18	4 x 1/8 BSPT Pneumatic Ports Module - TP side
KPN14-QC150	QNPT14	2 x 1/4 NPT Pneumatic Ports Module - QC side
KPP14-QC150	QBSPP14	2 x 1/4 BSPP Pneumatic Ports Module - QC side
KPT14-QC150	QBSPT14	2 x 1/4 BSPT Pneumatic Ports Module - QC side
KPN14-TP150	TNPT14	2 x 1/4 NPT Pneumatic Ports Module - TP side
KPP14-TP150	TBSPP14	2 x 1/4 BSPP Pneumatic Ports Module - TP side
KPT14-TP150	TBSPT14	2 x 1/4 BSPT Pneumatic Ports Module - TP side
KHN38-QC60	QQD38	2 x 3/8 NPT Fluid Ports Module - QC side
KHN38-TP60	TQD38	2 x 3/8 NPT Fluid Ports Module - TP side
KHN38-QC150	QQD38	2 x 3/8 NPT Fluid Ports Module - QC side
KHN38-TP150	TQD38	2 x 3/8 NPT Fluid Ports Module - TP side
ELCT-047	502363	Straight Female D-Sub User Plug (w/o cable) Solder Type for E15/G15 (QC-60/150 & TP-60/150)
ELCT-041	904831	Straight Female Plug (w/o cable) for E10-QC60/150
ELCT-042	904834	Straight Male Plug (w/o cable) for E10-TP60/150
ELCT-043	902484	Straight Female Plug (w/o cable) for E19-QC60/150
ELCT-044	902486	Straight Male Plug (w/o cable) for E19-TP60/150
ELCT-045	904837	Straight Female Plug (w/o cable) for E26-QC60/150
ELCT-046	904833	Straight Male Plug (w/o cable) for E26-TP60/150