

## RHC SERIES

### Automatic Tool Changers | Features and Benefits

**Durable Components**

Locking components are made from hardened bearing & tool steels

**Self Lubricating Seals**

Self lubricating dynamic seals

**Quality Materials**

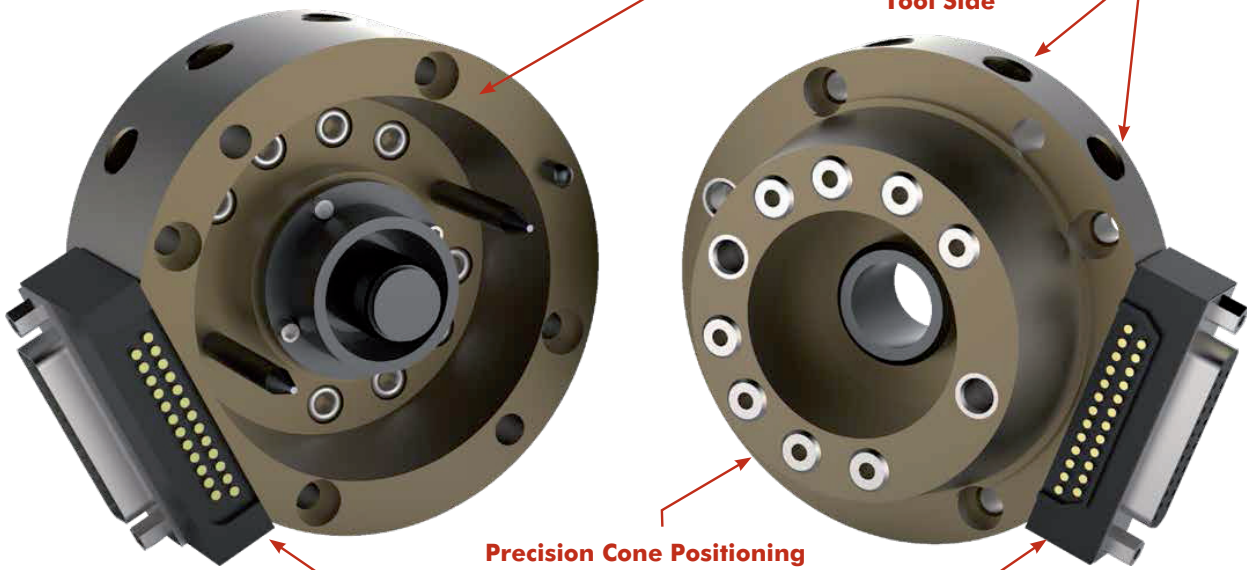
Each body is made of lightweight 7075-T6 aircraft quality aluminum

**Pneumatic Ports**

User pneumatic ports

**Robot Side**

**Tool Side**



**Precision Cone Positioning**

Machine tool proven mating conical coupling

**Durable Finish**

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

**Electrical Contacts**

(Sold Separately- See "How to Order" Section for more info)

**Failsafe Operation**

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

### Mounting Information



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

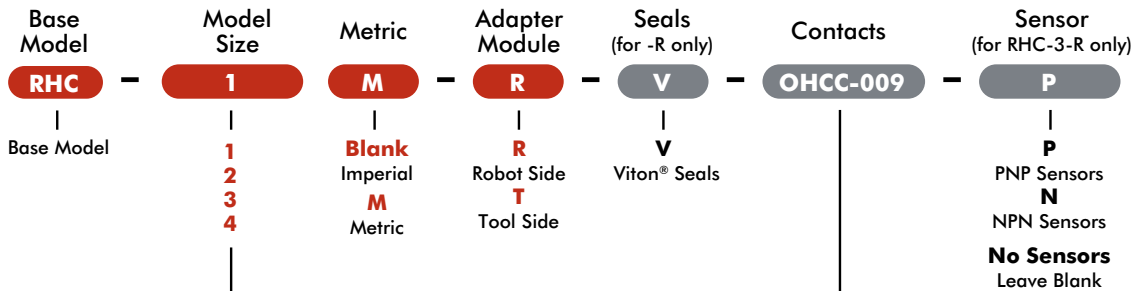
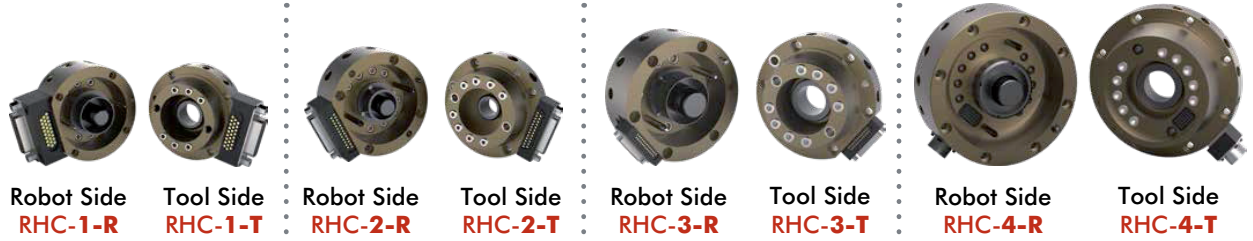


**Tool Half Adaptor** mounts payload with screws from behind or through the front and locates with dowel pins for accuracy. Protect cone surfaces from debris to insure proper positioning.

Dimensions and technical information are subject to change without notice

## RHC SERIES

### Automatic Tool Changers | Ordering Information



Size	Max. Moment Nm [in-lb]	Max. Payload Kg [lbs]
<b>RHC-1</b>	28 [250]	9 [20]
<b>RHC-2</b>	136 [1200]	59 [130]
<b>RHC-3</b>	1017 [9000]	136 Kg [300]
<b>RHC-4</b>	2825 [25000]	454 Kg [1000]

Robot Side	Optional Contacts
<b>OHCC-009</b>	15 Pin D-Sub Contacts (RHC-1)
<b>OHCC-001</b>	26 Pin D-Sub Contacts (RHC-1)
<b>OHCC-011</b>	15 Pin D-Sub Contacts (RHC-2, -3)
<b>OHCC-003</b>	25 Pin D-Sub Contacts (RHC-2, -3)
<b>OHCC-005</b>	19 Pin Mil. Spec. Contacts (RHC-3)
<b>OHCC-007</b>	38 Pin Mil. Spec. Contacts (RHC-3)
<b>OHCC-021</b>	24 Pin Mil. Spec. Contacts (RHC-4)
Tool Side	Optional Contacts
<b>OHCC-010</b>	15 Pin D-Sub Contacts (RHC-1)
<b>OHCC-002</b>	26 Pin D-Sub Contacts (RHC-1)
<b>OHCC-012</b>	15 Pin D-Sub Contacts (RHC-2, -3)
<b>OHCC-004</b>	25 Pin D-Sub Contacts (RHC-2, -3)
<b>OHCC-006</b>	19 Pin Mil. Spec. Contacts (RHC-3)
<b>OHCC-027</b>	24 Pin Mil. Spec. Contacts (RHC-4)
<b>OHCC-023</b>	24 Wire Single Pigtail Connector (RHC-4)
<b>OHCC-022</b>	24 Wire Double Pigtail Connector (RHC-4)

### Sensor and Pneumatic Accessories (Ordered Separately)

#### 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)
- OISP-008** Replacement Locked Position PNP 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 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

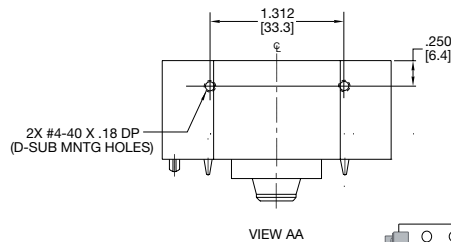
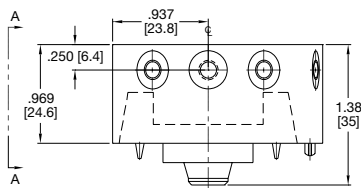
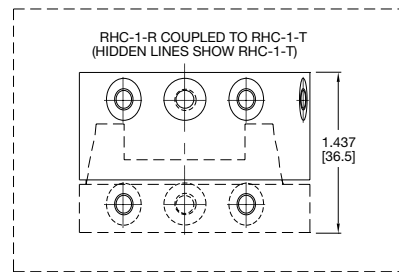
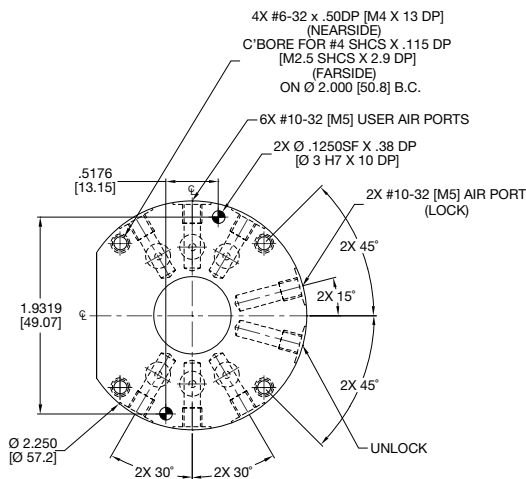
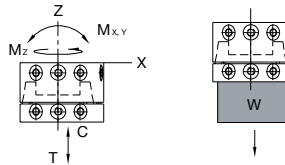


### RHC-1-R Specification:

**Max. Payload (W):** 9 Kg [20 lbs]  
**Weight:** 0.18 Kg [0.41 lbs]  
**Bore Ø:** 19 mm [0.75 in]  
**Displacement:** 4.18 cm<sup>3</sup> [0.255 in<sup>3</sup>]

### Loading Capacity

**Max. Tensile T:** 890 N [200 lb]  
**Max. Compressive C:** 2224 N [500 lb]  
**Max. Moment (M<sub>x</sub>/M<sub>y</sub>):** 14 Nm [125 in-lb]  
**Max. Moment (M<sub>z</sub>):** 28 Nm [250 in-lb]



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE

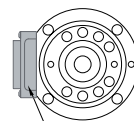
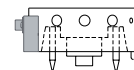
THIRD ANGLE PROJECTION

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]



26 PIN OR 15 PIN D-SUB ELECTRICAL CONTACTS

Model	Robot Side	Description	Specification
RHC-1	OHCC-009	15 Pin D-Sub Contacts	15 Pin @ 3 AMPS
	OHCC-001	26 Pin D-Sub Contacts	26 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice

## RHC-1-T (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

### RHC-1-T Specification:

Max. Payload (**W**): 9 Kg [20 lbs]

Weight: 0.09 Kg [0.22 lbs]

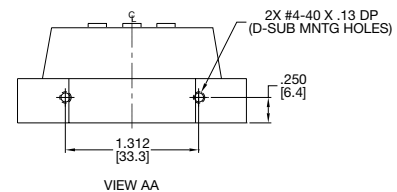
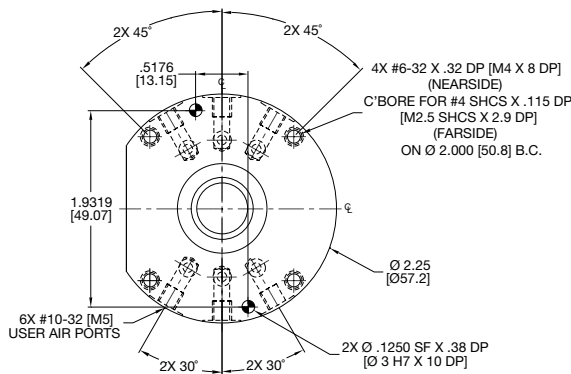
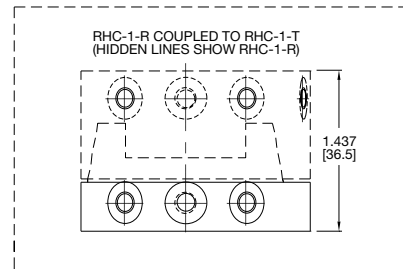
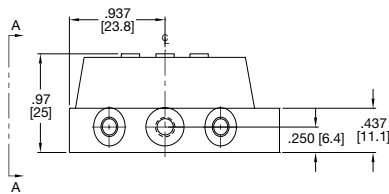
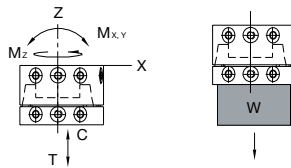
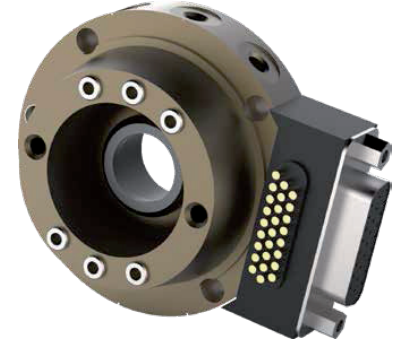
### Loading Capacity

Max. Tensile **T**: 890 N [200 lb]

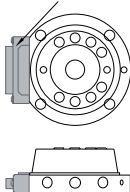
Max. Compressive **C**: 2224 N [500 lb]

Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 14 Nm [125 in-lb]

Max. Moment (**M<sub>z</sub>**): 28 Nm [250 in-lb]



26 PIN OR 15 PIN D-SUB ELECTRICAL CONTACTS



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

$\phi$   
DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE

$\triangle$   
THIRD ANGLE PROJECTION

$\oplus$   
ALL DOWEL HOLES ARE SF (SLIP FIT).  
LOCATIONAL TOLERANCE  
±.0005" OR [±.013MM]

$\oplus$   
METRIC THREADS  
COURSE PITCH

IMPERIAL ( [IN.] )  
0.00 = ±.01  
0.000 = ±.005  
0.0000 = ±.0005

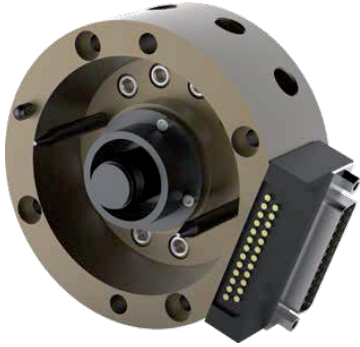
METRIC (MM)  
[0] = [±.25]  
[0.0] = [±.13]  
[0.00] = [±.013]

Model	Tool Side	Description	Specification
RHC-1	OHCC-010	15 Pin D-Sub Contacts	15 Pin @ 3 AMPS
	OHCC-002	26 Pin D-Sub Contacts	26 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice

## RHC-2-R (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

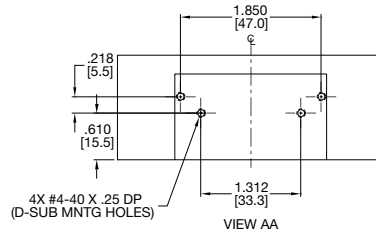
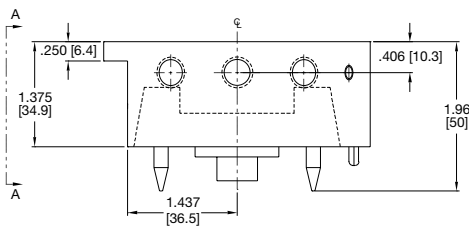
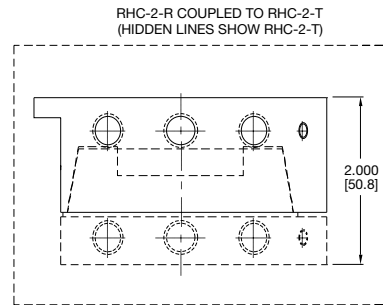
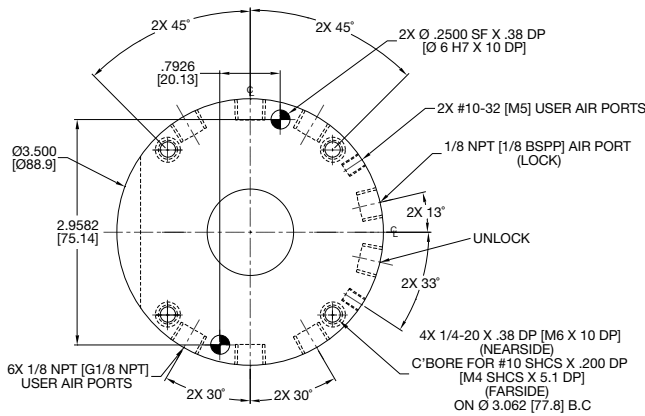
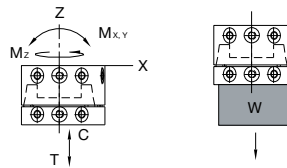


### RHC-2-R Specification:

- Max. Payload (**W**): 59 Kg [130 lbs]
- Weight: 0.44 Kg [0.99 lbs]
- Bore  $\varnothing$ : 28.57 mm [1.125 in]
- Displacement: 12.22 cm<sup>3</sup> [0.746 in<sup>3</sup>]

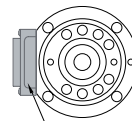
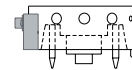
### Loading Capacity

- 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]



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]



25 PIN OR 15 PIN D-SUB ELECTRICAL CONTACTS

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]

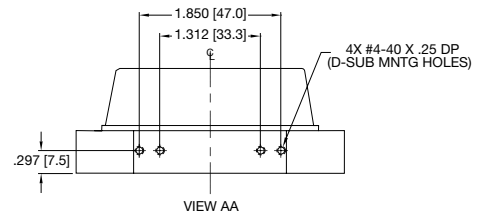
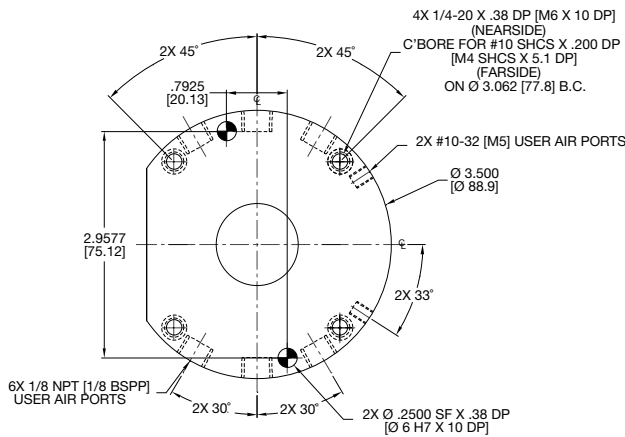
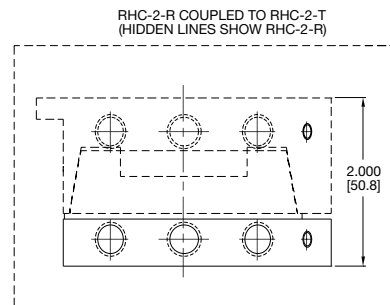
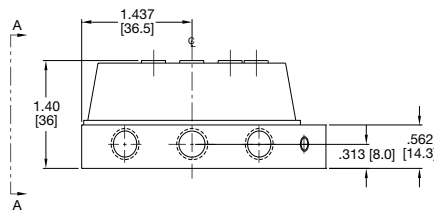
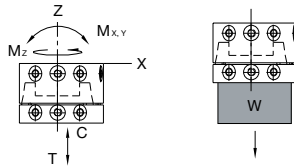
### Loading Capacity

Max. Tensile **T**: 3336 N [750 lb]

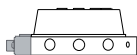
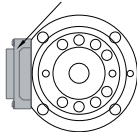
Max. Compressive **C**: 6672 N [1500 lb]

Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 90 Nm [800 in-lb]

Max. Moment (**M<sub>z</sub>**): 136 Nm [1200 in-lb]



25 PIN OR 15 PIN D-SUB ELECTRICAL CONTACTS



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

$\varnothing$   
DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE

$\triangle$   
THIRD ANGLE PROJECTION

$\odot$   
ALL DOWEL HOLES ARE SF (SLIP FIT).  
LOCATIONAL TOLERANCE  
 $\pm .0005$ " OR  $\pm .013$ MM

$\oplus$   
METRIC THREADS  
COURSE PITCH

IMPERIAL ( [ IN. ] )  
0.00 =  $\pm .01$   
0.000 =  $\pm .005$   
0.0000 =  $\pm .0005$

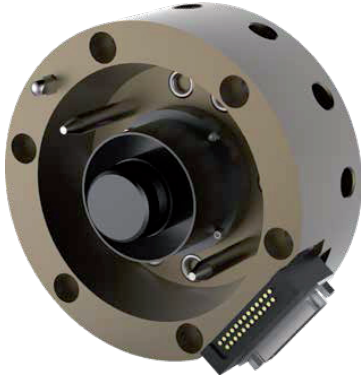
METRIC ( [ MM ] )  
[0] =  $\pm .25$   
[0.0] =  $\pm .13$   
[0.00] =  $\pm .013$

Model	Tool Side	Description	Specification
RHC-2	OHCC-012	15 Pin D-Sub Contacts	15 Pin @ 3 AMPS
	OHCC-004	25 Pin D-Sub Contacts	25 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice

## RHC-3-R (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

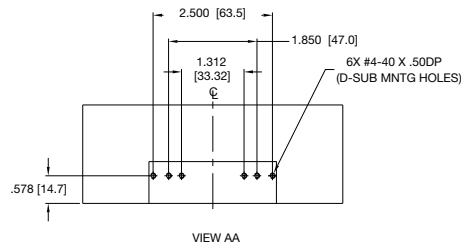
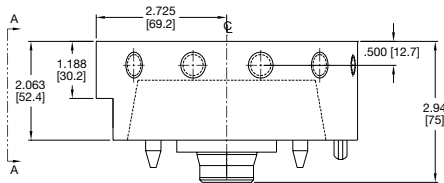
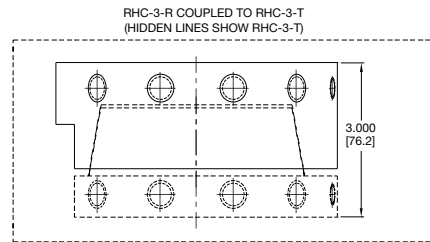
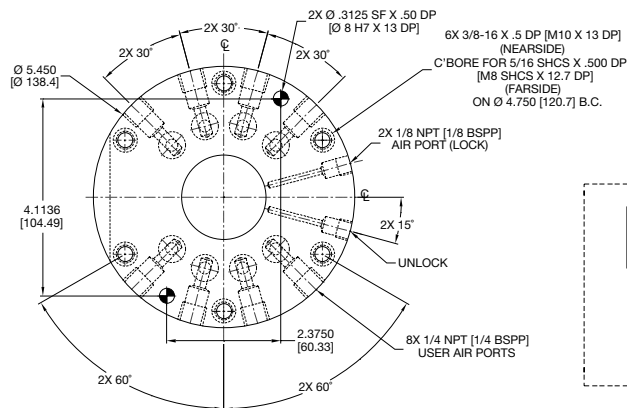
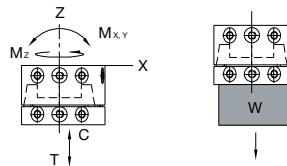


### RHC-3-R Specification:

- Max. Payload (**W**): 136 Kg [300 lbs]
- Weight: 1.79 Kg [3.95 lbs]
- Bore  $\varnothing$ : 44.45 mm [1.750 in]
- Displacement: 44.34 cm<sup>3</sup> [2.706 in<sup>3</sup>]

### Loading Capacity

- Max. Tensile **T**: 8896 N [2000 lb]
- Max. Compressive **C**: 17793 N [4000 lb]
- Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 678 Nm [6000 in-lb]
- Max. Moment (**M<sub>z</sub>**): 1017 Nm [9000 in-lb]



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

$\varnothing$  DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE

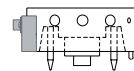
THIRD ANGLE PROJECTION

ALL DOWEL HOLES ARE SF (SLIP FIT). LOCATIONAL TOLERANCE  $\pm$ .0005" OR  $\pm$ .013MM

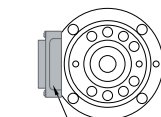
METRIC THREADS COURSE PITCH

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



Model	Robot Side	Description	Specification
RHC-3	OHCC-011	15 Pin D-Sub Contacts	15 Pin @ 3 AMPS
	OHCC-003	25 Pin D-Sub Contacts	25 Pin @ 3 AMPS
	OHCC-005	19 Pin Mil. Spec. Contacts	19 Pin @ 3 AMPS
	OHCC-007	38 Pin Mil. Spec. Contacts	38 Pin @ 3 AMPS



25 OR 15 PIN D-SUB OR 19 OR 38 PIN MIL SPEC ELECTRICAL CONTACTS

Dimensions and technical information are subject to change without notice

## RHC-3-T (TOOLING SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions

### RHC-3-T Specification:

Max. Payload (**W**): 136 Kg [300 lbs]

Weight: 1.29 Kg [2.85 lbs]

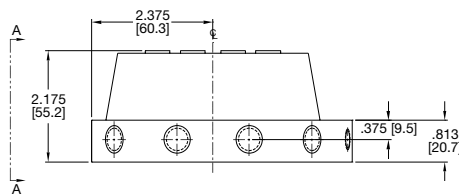
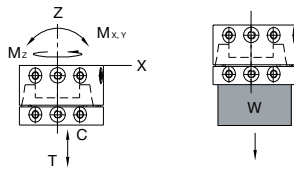
### Loading Capacity

Max. Tensile **T**: 8896 N [2000 lb]

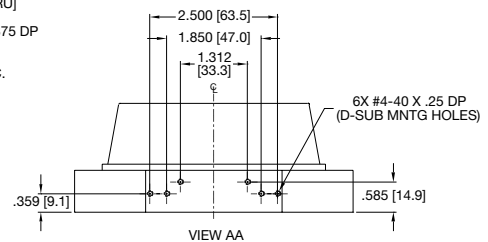
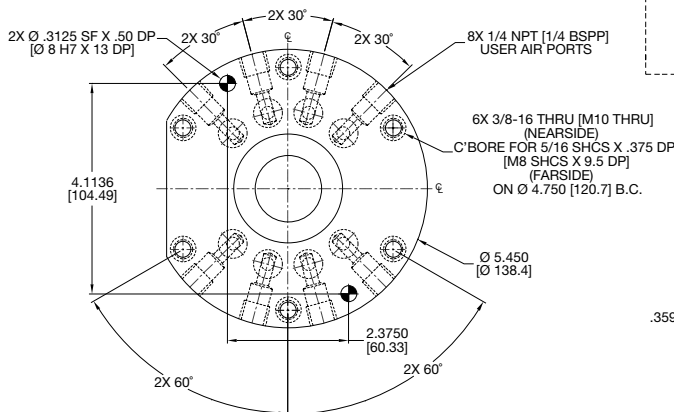
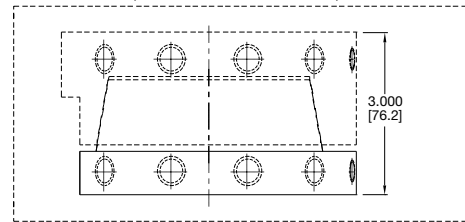
Max. Compressive **C**: 17793 N [4000 lb]

Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 678 Nm [6000 in-lb]

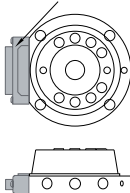
Max. Moment (**M<sub>z</sub>**): 1017 Nm [9000 in-lb]



RHC-3-R COUPLED TO RHC-3-T  
(HIDDEN LINES SHOW RHC-3-R)



25 OR 15 PIN D-SUB or  
19 OR 38 PIN MIL SPEC  
ELECTRICAL CONTACTS



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]

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 (ROBOT SIDE)

Automatic Tool Changers | Technical Specifications | Dimensions



### 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 cm<sup>3</sup> [85.52 in<sup>3</sup>]

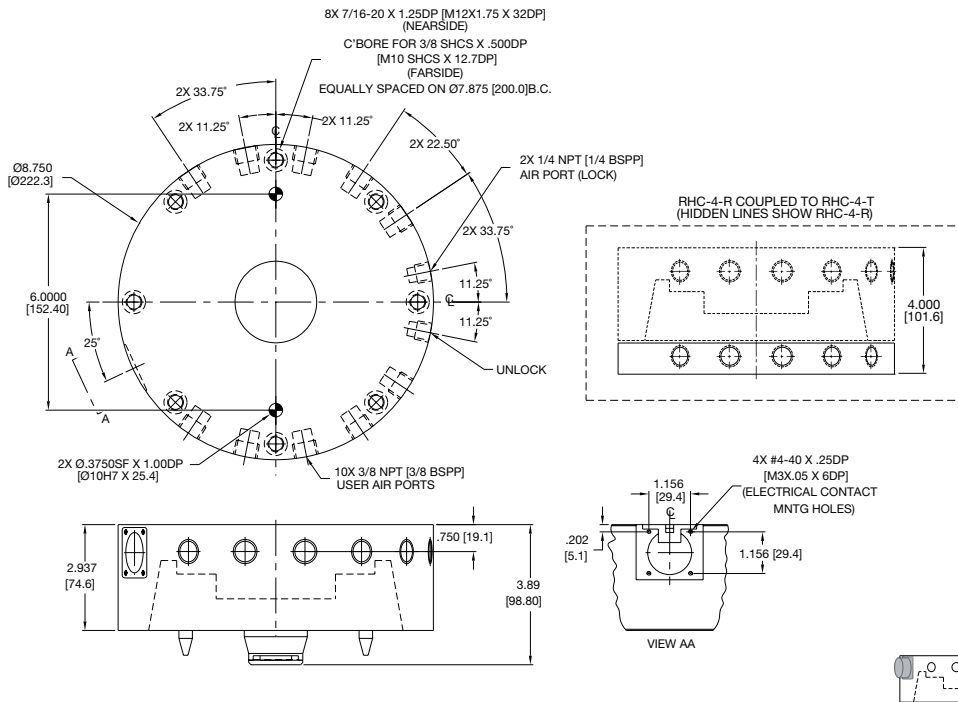
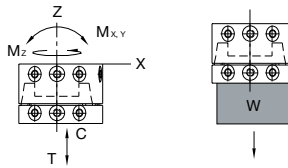
### Loading Capacity

Max. Tensile **T**: 35586 N [8000 lb]

Max. Compressive **C**: 71171 N [16000 lb]

Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 2825 Nm [25000 in-lb]

Max. Moment (**M<sub>z</sub>**): 2825 Nm [25000 in-lb]



UNLESS OTHERWISE NOTED ALL TOLERANCES ARE AS SHOWN BELOW

DIMENSIONS ARE SYMMETRICAL ABOUT CENTERLINE

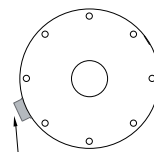
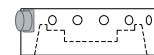
THIRD ANGLE PROJECTION

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]



24 PIN MIL SPEC ELECTRICAL CONTACTS

Model	Robot Side	Description	Specification
RHC-4	OHCC-021	24 Pin Mil. Spec. Contacts	24 Pin @ 3 AMPS

Dimensions and technical information are subject to change without notice

## 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]

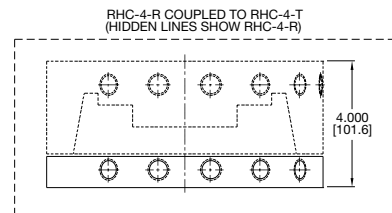
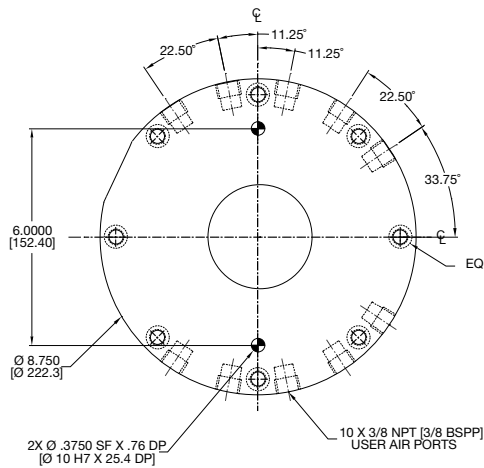
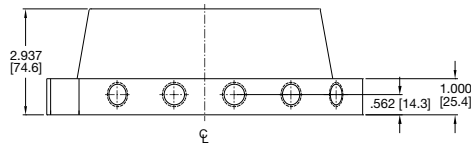
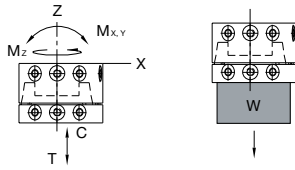
### Loading Capacity

Max. Tensile **T**: 35586 N [8000 lb]

Max. Compressive **C**: 71171 N [16000 lb]

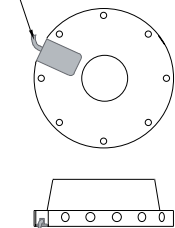
Max. Moment (**M<sub>x</sub>/M<sub>y</sub>**): 2825 Nm [25000 in-lb]

Max. Moment (**M<sub>z</sub>**): 2825 Nm [25000 in-lb]



8X 7/16-20 X .75 DP [M12 X 19 DP] (NEAR SIDE)  
 C'BORE FOR 3/8 SHCS X .375 DP [M10 SHCS X 9.5 DP] (FAR SIDE)  
 EQUALLY SPACED ON Ø 7.875 [Ø 200.0] B.C.

INDUCTIVE SENSOR MOUNTING KIT



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]

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

Dimensions and technical information are subject to change without notice