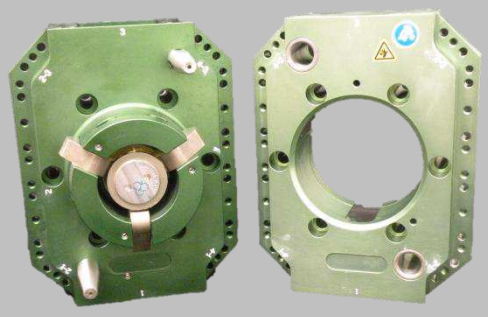
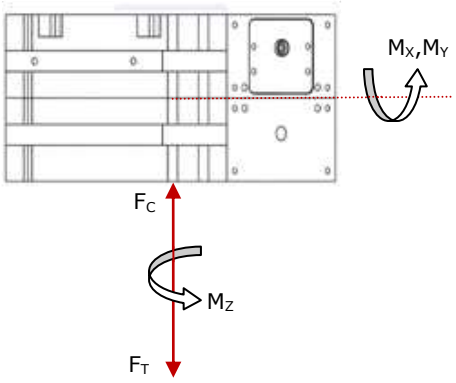
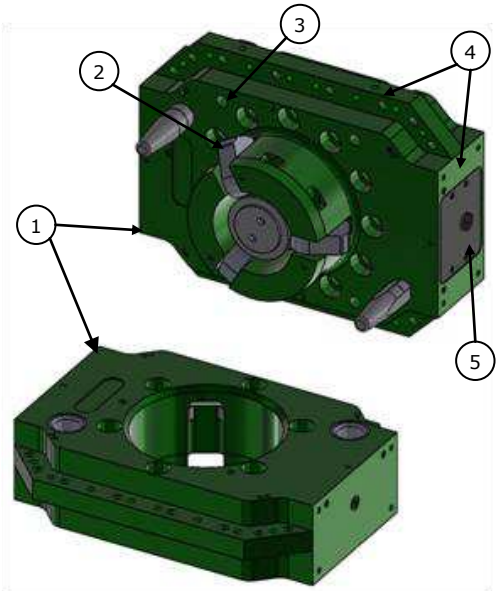
EPSILON TOOL CHANGER
ER125/ET125

Applied Robotics automatic tool changing technology allows for exchanging robotic end-of-arm tooling (EOAT) on the fly without shutting down production lines. Not only does this add efficiency to processes requiring frequent connection/disconnection of tooling and support utilities, but also reduces the probability of human errors introduced by manual connections.







SPECIFICATIONS

	METRIC	ENGLISH
Mechanical		
Payload	350 Kg	770 lbs
Maximum Operating Moment (M_X,M_Y)	2,576 Nm	22,800 in-lbs
Maximum E-Stop Moment (M_X,M_Y)	4,817 Nm	42,631 in-lbs
Maximum Operating Torque (M_Z)	4,180 Nm	36,995 in-lbs
Maximum E-Stop Torque (M_Z)	5,110 Nm	45,225 in-lbs
Maximum Tensile Force (F_T)	24,754 N	5,565 lbs
Maximum Compressive Force (F_C)	127,998 N	28,775 lbs
Positional Repeatability (X, Y & Z)	+/- 0.02 mm	+/- 0.0008 in
Operating Temperature	5 - 60 °C	40 - 140 °F
Electrical/Pneumatic		
Supply Pressure	5 - 7 bar	72 - 101 psi
Couple/Uncouple Sensing Voltage	22 – 28 Vdc	22 – 28 Vdc

Features & Benefits

1) High Strength Aluminum Alloy Body
2) Cam Locking Mechanism with **Lifetime Guarantee**
   - Self-Centering
   - Wear Compensating
   - Self-Cleaning
   - Positive Cam Retraction
   - Mechanical Locking (Loss of Air)
3) Optional Tool present
4) Flexible Utility Options
5) Couple/Uncouple Sensing with Pressure Detection

Optional Utilities

- Couple/Uncouple Valve Module (w/ Tool Stand Monitoring)
- Safety Control Module (SCM)
- Pneumatic Passthru
- Coolant Passthru
- I/O Communication (Discrete, DeviceNet, EIP, PROFINET IO, etc.)
- Servo (Power & Encoder/Resolver)
- High Power (Weld Power)

Applied Robotics™ Solutions in reach

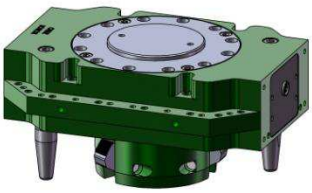
Applied Robotics Europe™ Solutions in reach

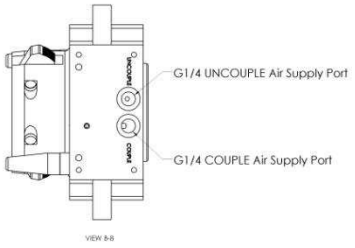
Date Issued: March 31, 2016

PRODUCT INFORMATION

ROBOT ADAPTOR

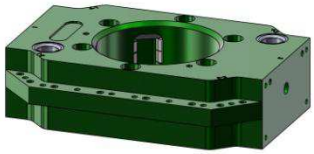
ROBOT ADAPTOR WEIGHT: 5.53 kg [12.17 lbs]

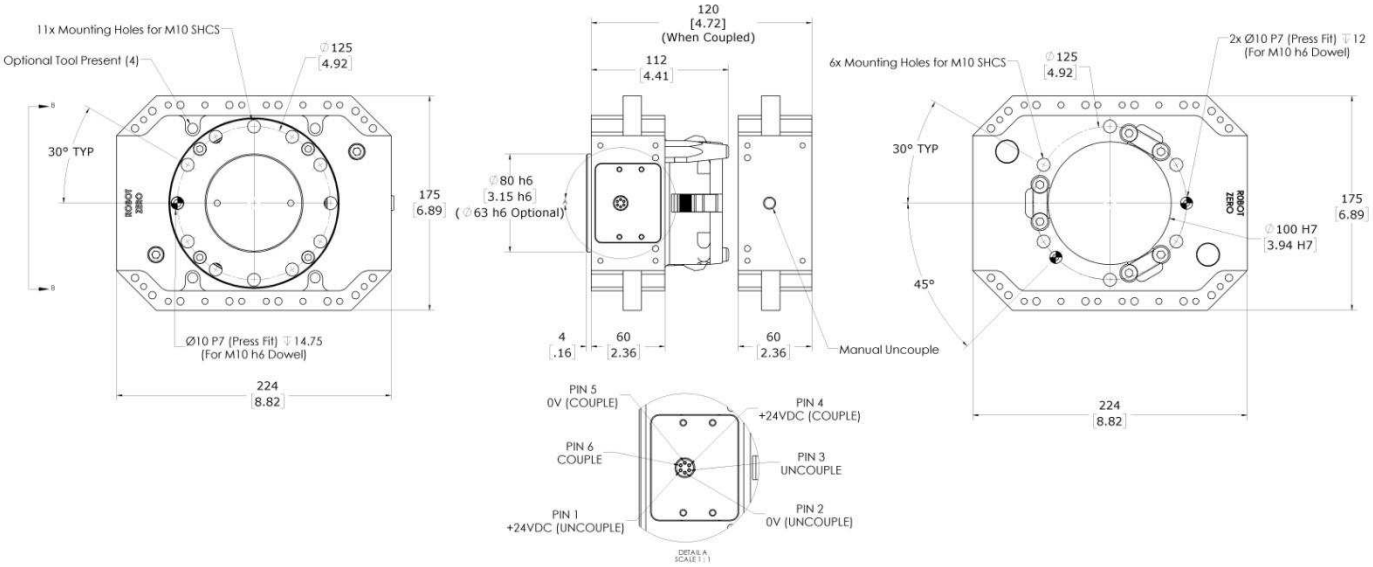




TOOL ADAPTOR

TOOL ADAPTOR WEIGHT: 3.69 kg [8.12 lbs]





PRODUCT DESCRIPTION

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Housing Type/Construction
- R = Robot Side (Aluminum Sender)
- RS = Robot Side (Steel Sender)
- T = Tool Side (Aluminum)
- TS = Tool Side (Steel)

Assembly Code (Assigned by Factory)

Bolting Circle
- 200 = 200mm Bolt Circle
- 160 = 160mm Bolt Circle
- 125 = 125mm Bolt Circle
- 125LP = Low Profile 125mm Bolt Circle
- 100 = 100mm Bolt Circle
- 80 = 80mm Bolt Circle (Robot Only)
- 63 = 63mm Bolt Circle
- 50 = 50mm Bolt Circle (Robot Only)
- 31.5 = 31.5mm Bolt Circle

Sinking/Sourcing (Robot Only)
- PNP = Sourcing
- PM12 = Sourcing w/ M12 Connection
- NPN = Sinking
- NM12 = Sinking w/ M12 Connection
- N/A = No Sensing

Boss/Hub Diameter
- 160 = 160mm
- 100 = 100mm
- 080 = 80mm
- 063 = 63mm
- 050 = 50mm (Robot Only)
- 040 = 40mm
- 031 = 31.5mm (Robot Only)
- 022 = 22.5mm (Tool Only)
- 020 = 20mm (Robot Only)

Hardware Kit
- N = No Hardware
- A = 16xM16 SHCS w/ 1x12mm Dowel (Robot Only)
- B = 11xM12 SHCS w/ 1x12mm Dowel (Robot Only)
- C = 6xM12 SHCS w/ 1x12mm Dowel (Robot Only)
- D = 11xM10 SHCS w/ 1x10mm Dowel (Robot Only)
- E = 11xM10 SHCS w/ 1x10mm Dowel and 10x10.5mm ID washers (Robot Only)
- F = 6xM10 SHCS w/ 1x10mm Dowel (Robot Only)
- G = 6xM10 SHCS w/ 1x10mm Dowel and 6x10.5mm ID washers (Robot Only)
- H = 6xM8 SHCS w/ 1x8mm Dowel (Robot Only)
- I = 4xM6 SHCS w/ 1x6mm Dowel (Robot Only)
- J = 4xM5 SHCS w/ 1x5mm Dowel (Robot Only)
- K = 15xM16 SLHCS w/ 2x12mm Dowels (Tool Only)
- L = 9xM12 SHCS w/ 2x12mm Dowels (Tool Only)
- M = 6xM10 SHCS w/ 2x10mm Dowels (Tool Only)
- O = 6xM8 SHCS w/ 2x8mm Dowel (Tool Only)
- P = 4xM6 SHCS w/ 2x6mm Dowel (Tool Only)
- Q = 4xM5 SLHCS w/ 2x5mm Dowel (Tool Only)
- R = 6xM10 SHCS w/ 1x10mm Dowel (ER125LP Only)
- S = 6xM10 SHCS w/ 2x10mm Dowel (ET125LP Only)

Tool Present Option (Robot Only)
- 0 = No TP Switches
- 1 = 1 TP Switch
- 2 = 2 TP Switches
- 3 = 3 TP Switches

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