

Manual Tool Changers

Product Description

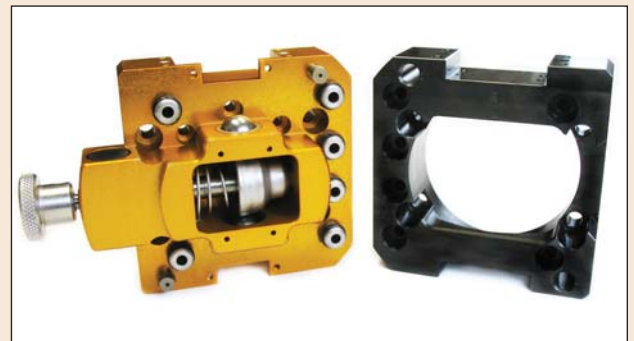
ATI Industrial Automation has developed a series of Manual Tool Changers that provides a cost-effective solution for quickly changing tools by hand. They feature a unique design that combines high strength, excellent repeatability and a patent-pending screw-cam locking mechanism with multiple fail-safe features, which resists vibration and prevents loosening. The new Manual Tool Changers also feature quick-action locking for one-handed manual operation. These robust and compact Manual Tool Changers can handle payloads up to 80 pounds (36 kg) and pass pneumatics and electrical signals..

Product Features

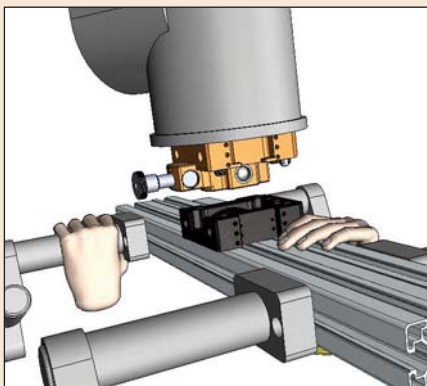
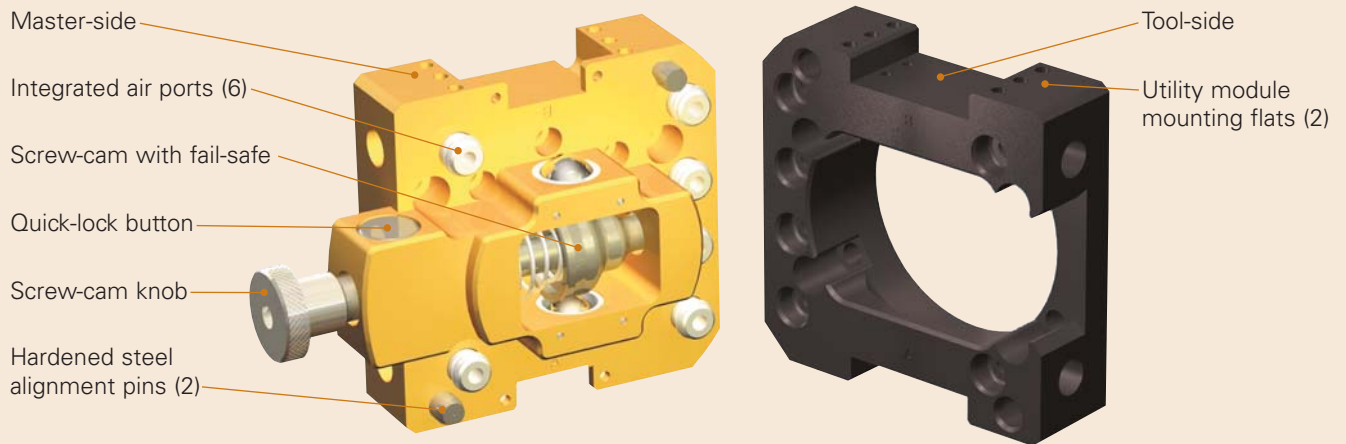
- Manual one-handed actuation.
- High strength-to-weight ratio.
- Very small package size.
- Integrated air pass-through ports.
- Screw-cam results in high locking force.
- Additional mounting flats for adding ATI utility modules.



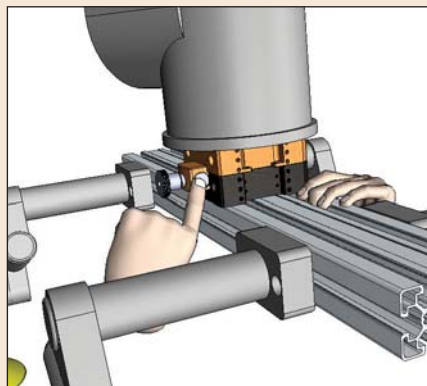
MC-16 Master and Tool-Side Manual Tool Changer



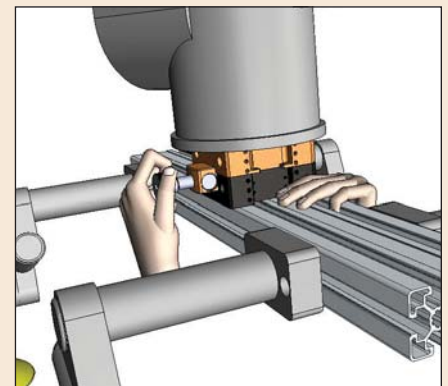
MC-36 Master and Tool-Side Manual Tool Changer



Bring tooling to Master



Push button for quick locking
(tighten knob to secure)

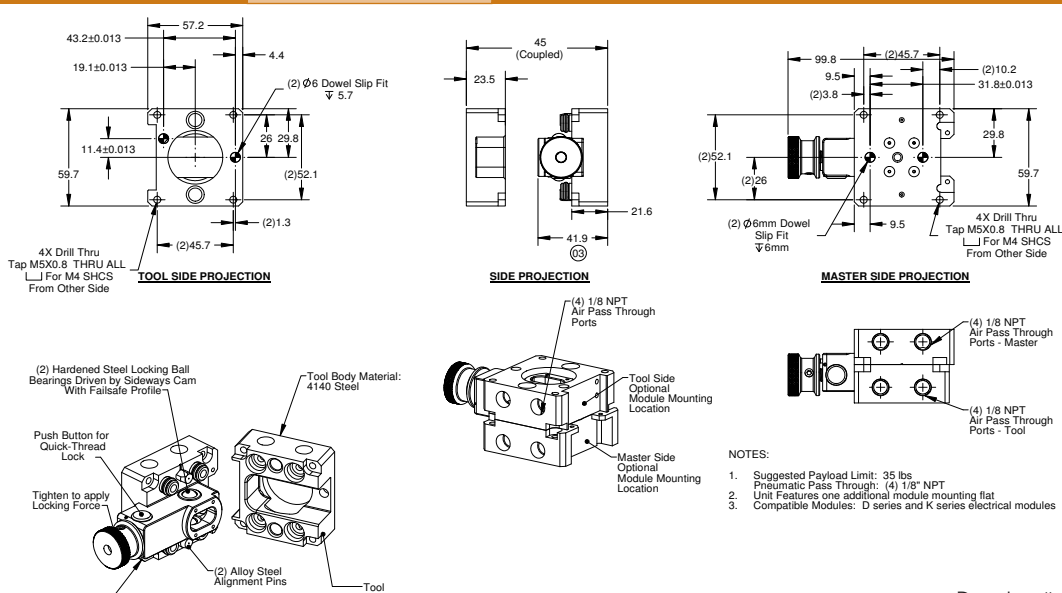


Unscrew knob to unlock

Specifications	MC-16	MC-36
Suggested Payload Limit	35 lb (16 kg)	80 lb (36 kg)
Static Moment Capacity – (X and Y)	220 lbf-in (25 Nm)	1000 lbf-in (113 Nm)
Weight – when coupled (no accessory modules)	1.35 lb (0.61kg)	3.5 lb (1.59 kg)
Pneumatic pass-through Ports (qty) size	(4) 1/8 NPT	(6) 1/8 NPT
Additional pass-through utilities	1 Flat	2 Flats

ATI reserves the right to change these specifications.

ATI INDUSTRIAL AUTOMATION
www.ati-ia.com
MC-16 Manual Tool Changer



TOOL SIDE PROJECTION

SIDE PROJECTION

MASTER SIDE PROJECTION

43.2±0.013, 57.2, 4.4, 19.1±0.013, (2) Ø6 Dowel Slip Fit ∇ 5.7, 11.4±0.013, 59.7, 26, 29.8, (2)52.1, (2)45.7, (2)1.3, 4X Drill Thru Tap MSX0.8 THRU ALL For M4 SHCS From Other Side

(2) Hardened Steel Locking Ball Bearings Driven by Sideways Cam With Fallsate Profile

Push Button for Quick-Thread Lock

Tighten to apply Locking Force

(2) Alloy Steel Alignment Pins

Master

Tool Body Material: 4140 Steel

Tool

(4) 1/8 NPT Air Pass Through Ports

Tool Side Optional Module Mounting Location

Master Side Optional Module Mounting Location

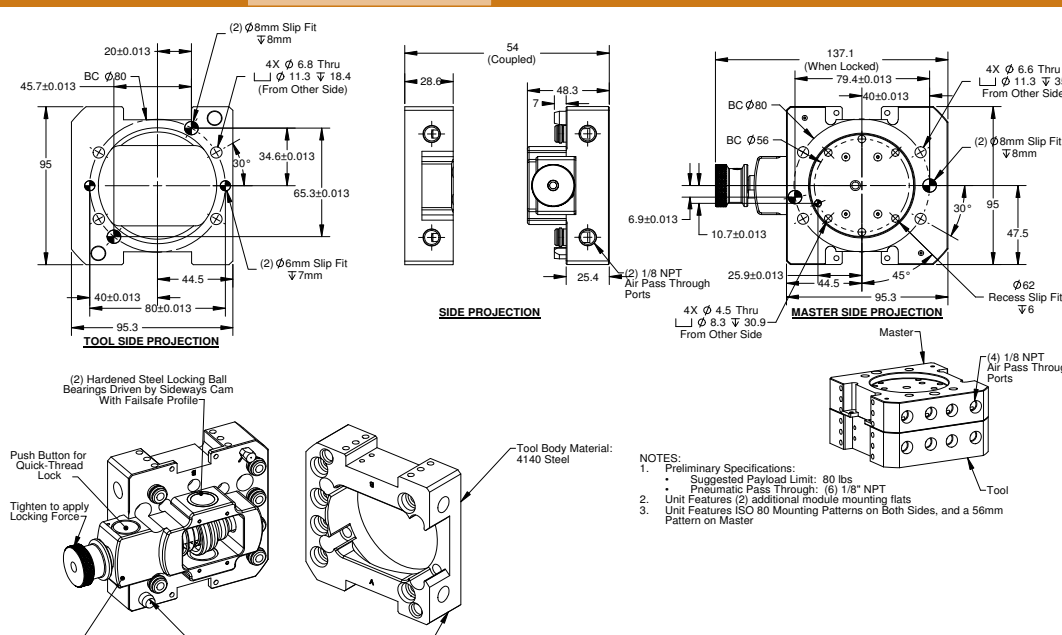
99.8, 9.5, (2)10.2, (2)3.8, 31.8±0.013, 29.8, 59.7, (2)52.1, (2)26, (2) Ø6mm Dowel Slip Fit ∇ 6mm, 4X Drill Thru Tap MSX0.8 THRU ALL For M4 SHCS From Other Side, 9.5

NOTES:

- Suggested Payload Limit: 35 lbs
- Pneumatic Pass Through: (4) 1/8" NPT
- Unit Features one additional module mounting flat
- Compatible Modules: D series and K series electrical modules

Drawing # 9230-20-2945-03

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MC-36 Manual Tool Changer



TOOL SIDE PROJECTION

SIDE PROJECTION

MASTER SIDE PROJECTION

20±0.013, (2) Ø8mm Slip Fit ∇ 8mm, 45.7±0.013, BC Ø80, 4X Ø 6.8 Thru ∇ 11.3 ∇ 18.4 (From Other Side), 34.6±0.013, 30°, 65.3±0.013, (2) Ø6mm Slip Fit ∇ 7mm, 95, 40±0.013, 80±0.013, 95.3, 44.5

(2) Hardened Steel Locking Ball Bearings Driven by Sideways Cam With Fallsate Profile

Push Button for Quick-Thread Lock

Tighten to apply Locking Force

(2) Alloy Steel Alignment Pins

Master

Tool Body Material: 4140 Steel

Tool

(4) 1/8 NPT Air Pass Through Ports

Tool Side Optional Module Mounting Location

Master Side Optional Module Mounting Location

137.1, (When Locked) 79.4±0.013, 40±0.013, 4X Ø 6.6 Thru ∇ 11.3 ∇ 35 From Other Side, BC Ø80, BC Ø56, (2) Ø8mm Slip Fit ∇ 8mm, 6.9±0.013, 10.7±0.013, 30°, 95, 47.5, 25.9±0.013, 44.5, 45°, 95.3, Ø62 Recess Slip Fit ∇ 6, 25.4, (2) 1/8 NPT Air Pass Through Ports, 4X Ø 4.5 Thru ∇ 8.3 ∇ 30.9 From Other Side

NOTES:

- Preliminary Specifications:
 - Suggested Payload Limit: 80 lbs
 - Pneumatic Pass Through: (6) 1/8" NPT
- Unit Features (2) additional module mounting flats
- Unit Features ISO 60 Mounting Patterns on Both Sides, and a 56mm Pattern on Master

Drawing # 9230-20-2934-04