

TC1 SERIES

Manual Tool Changers | Ordering Information

Base Model
TC1 - **Model Size**
050 **Robot or Tool Plate**
M-01

Robot Plate

M-00 Application Specific - User adds mounting hole pattern

M-01 ISO-9409-1-50-4-M6 mounting pattern with boss
(See robot compatibility table on next page)

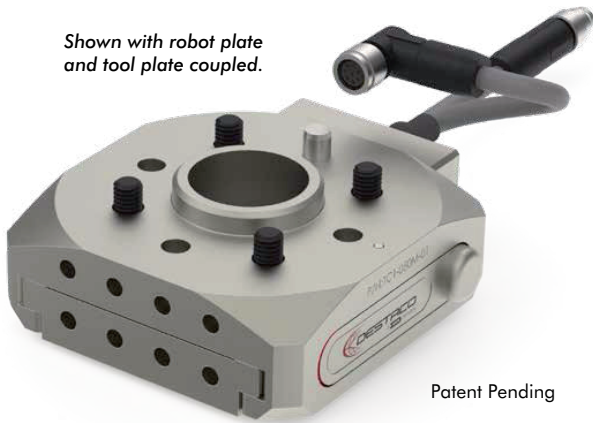
Tool Plate

T-00 Application Specific - User adds mounting hole pattern

T-01 DirectConnect mounting to DESTACO Robohand products

T-02 ISO-9409-1-50-4-M6 mounting pattern

Shown with robot plate and tool plate coupled.



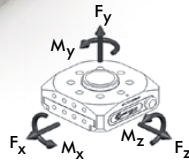
Patent Pending



TC1-050M-01
 Robot Plate
 ISO 9409 Mounting
 (see page 3).
 Compatible with multiple
 brands of cobots.



TC1-050T-01
 Tool Plate with
 DirectConnect
 Robohand Mounting.



Specifications:	TC1	
Max. Payload:	Kg [lb]	10 [22]
Coupled Weight:	Kg [lb]	0.33 [0.73]
Robot Plate Weight:	Kg [lb]	0.20 [0.44]
Tool Plate Weight:	Kg [lb]	0.13 [0.29]
Repeatability:	mm [in]	±0.025 [0.001]
Temperature Range:	C° [F°]	-30° to 66° [-22° to 151°]
Max Moment (My, Mz, Mx)	Nm [in-lb]	1000 [8850]
Max Force (Fy, Fz)	N [lbf]	1000 [225]
Max Force (Fx)	N [lbf]	100 [22.5]

Optional Accessories

Description	Order no.
8-Pin M8 Socket Connector Electrical Pass-thru for Robot Plate	TC1-E01M-C01
8-Pin M8 Plug Connector Electrical Pass-thru for Tool Plate	TC1-E01T-C01
PNP Magneto Resistive 4mm Sensing Module for Tool Plate	TC1-E01T-P01
NPN Magneto Resistive 4mm Sensing Module for Tool Plate	TC1-E01T-N01
Tool Plate Holder	TC1-050H-01
Seal Replacement Kit	SLKT-480

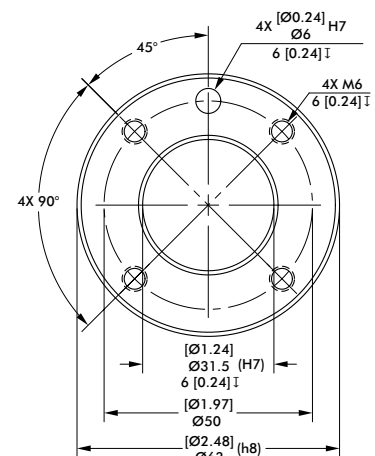
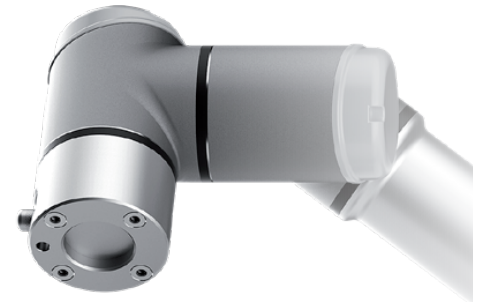
Dimensions and technical information are subject to change without notice

TC1 SERIES

Manual Tool Changers | Compatibility Charts

TC1-050M-01 Robot Plate - Robot Compatibility

Robot Manufacturer	Model
GENERIC	Any model with ISO-9409-1-50-4-M6 Pattern
STAUBLI	TX2touch-90, 90L, 90XL
UNIVERSAL ROBOTS	UR3, UR5, UR10, UR16
REIS	RV10-6, RV20-6
TECHMAN/OMRON	TM5-700, TM5-900, TM12, TM14
KUKA	LBR iiwa 7 R800, LBR iiwa 14 R820
AUBO	I3, I5, I7, I10
ESI	C-7, C-15
F&P PERSONAL ROBOTICS	P-ROB 2R-24V, 48V
HANWHA PRECISION MACHINERY	HCR-3, 5, 12
JAKA/KUNLIN	ZU 7, 12
MODBOT	COBOT, SCARA
ROZUM	PULSE 75, 90
SIASUN	GCR5, GCR14, GCR20, SCR3, SCR5
HAN'S ROBOTS	ELFIN 3, 5, 10
FRANKA EMIKA	PANDA



TC1-050T-01 Tool Plate - Robohand Compatibility

Robohand Products	Compatible Series	Description	
DPE	200-25	Electric 2 Jaw Parallel Gripper	
DGC	All Sizes		
DPDL	047, 056, 088, 125		
DPDS			
DPG			All Sizes
DPL			2520, 2535
DPP	All Sizes		Pneumatic 2 Jaw Parallel Gripper
DPW	250M, 375M, 500M		
G110, G120	All Sizes		
DCT	12M, 16M, 20M, 25M		Pneumatic 2 Jaw Angular Gripper
DRF	All Sizes	Rotary Actuator	
DRG			
DLM		Miniature Linear Rail Thruster Slide	
DLT		Linear Thruster Slide	
DLB		Linear Base Slide	

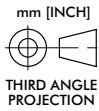


Shown with G120 Parallel Gripper and TC1-E01T-P01 Magneto Resistive Sensors.

Dimensions and technical information are subject to change without notice

TC1 ROBOT PLATE

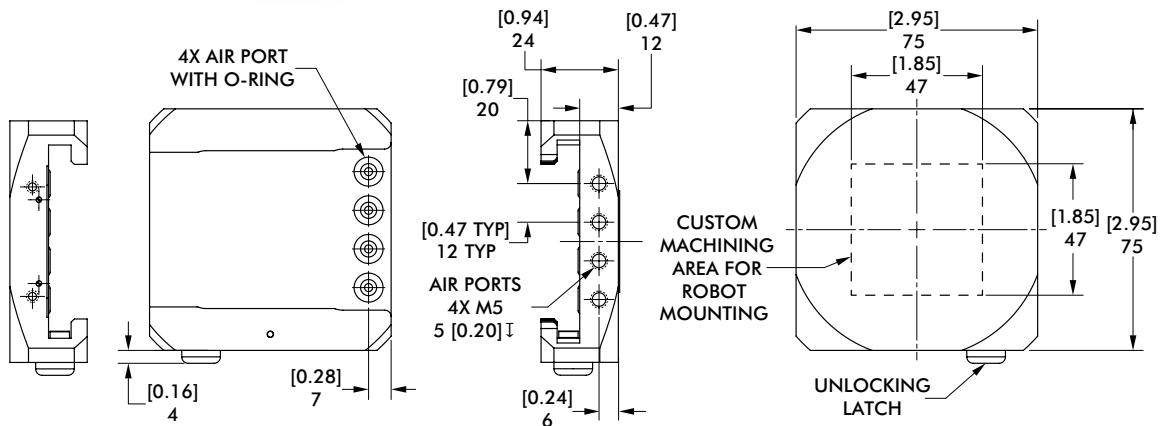
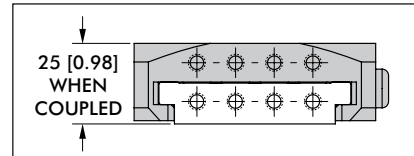
Manual Tool Changers | Dimensions



TC1-050M-00 Blank Robot Plate (general unit dimensions shown apply to all models)



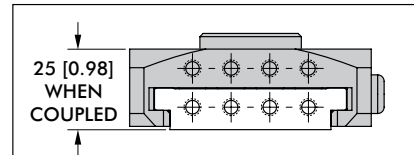
Requires mounting pattern added by user for their specific application.



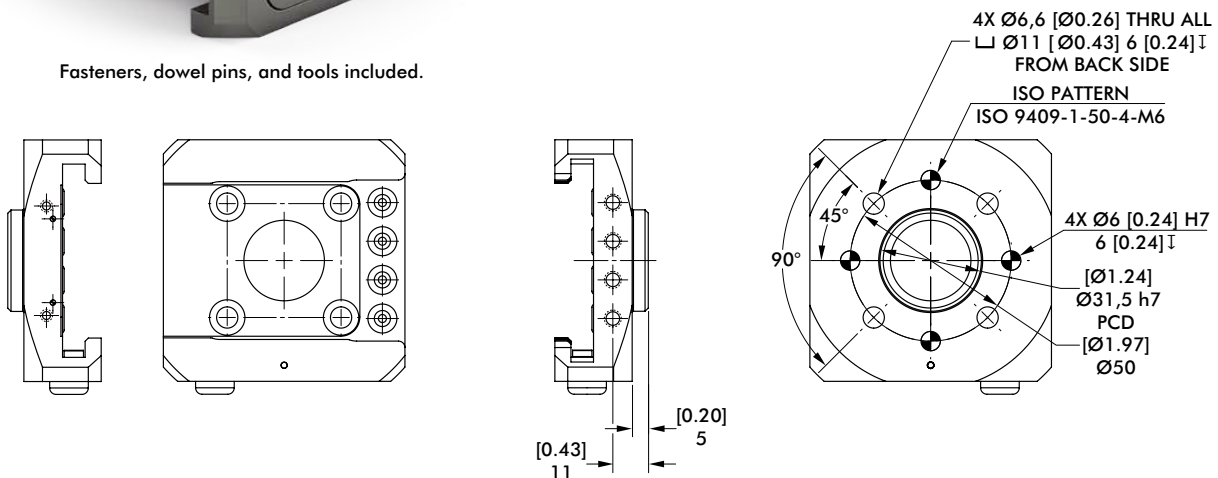
TC1-050M-01 ISO 9409 Robot Plate (see TC1-050M-00 for general dimensions)



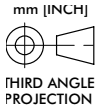
Compatible with multiple brands of cobots. Verify cobot arm mounting pattern.



Fasteners, dowel pins, and tools included.



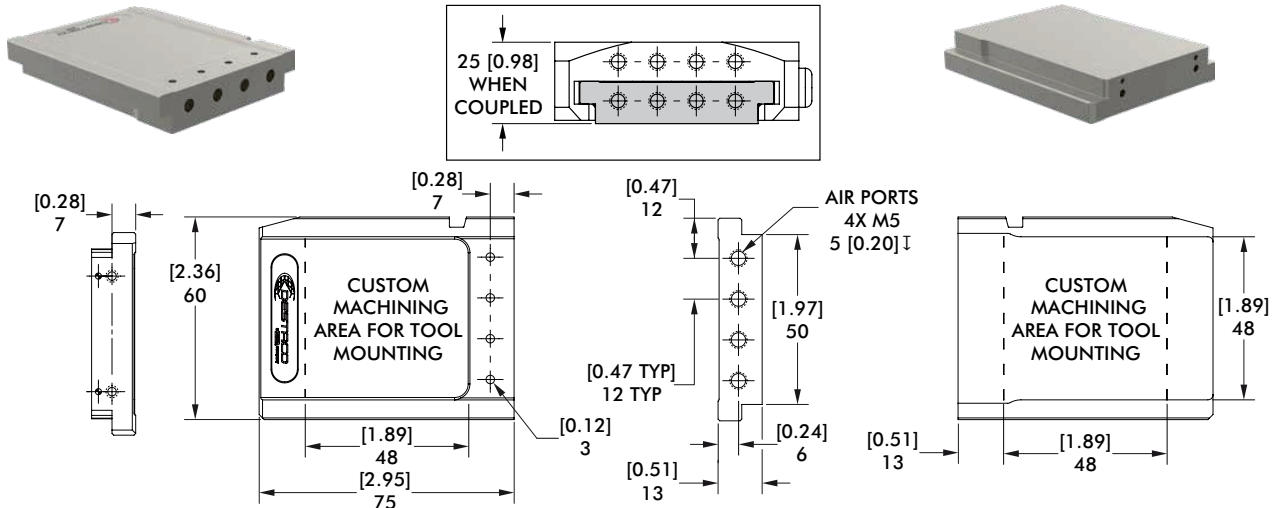
Dimensions and technical information are subject to change without notice



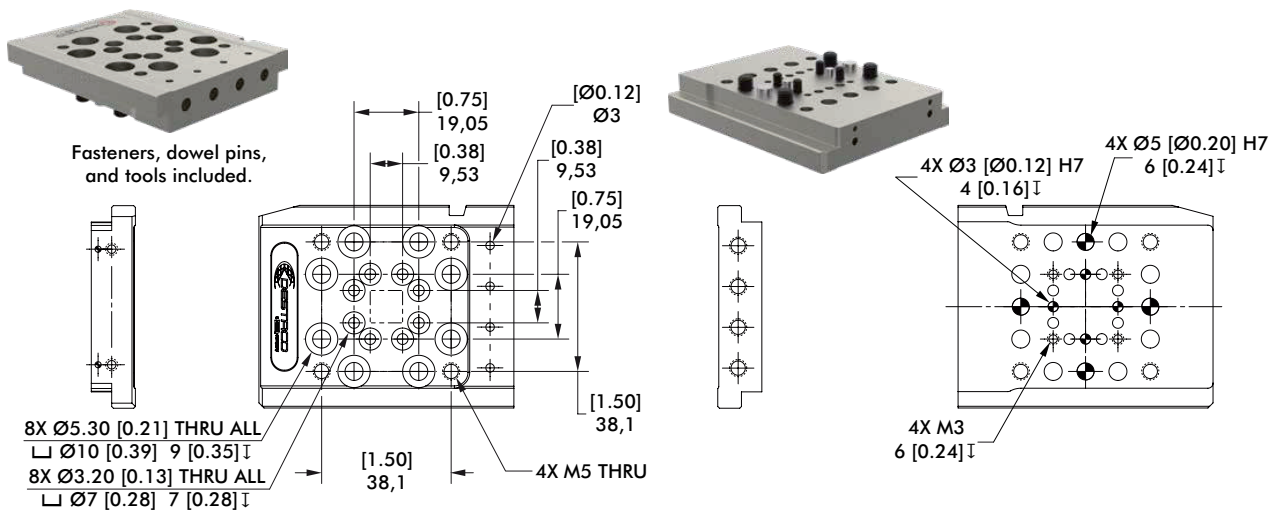
TC1 TOOL PLATE

Manual Tool Changers | Dimensions

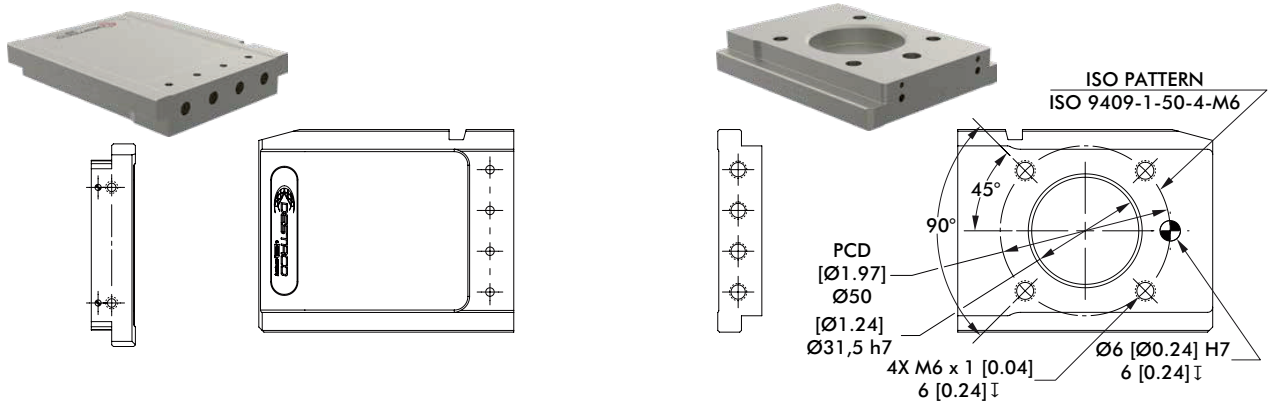
TC1-050T-00 Blank Tool Plate (general unit dimensions shown apply to all models)



TC1-050T-01 DirectConnect Robohand Mounting Tool Plate (see TC1-050T-00 for general dimensions)



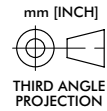
TC1-050T-02 ISO 9409 Mounting Pattern Tool Plate (see TC1-050T-00 for general dimensions)



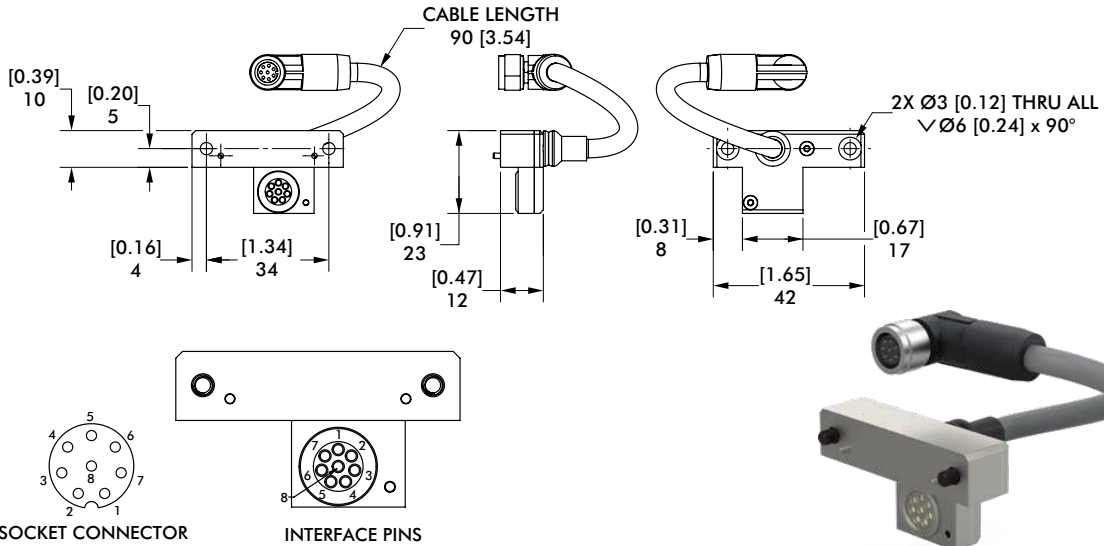
Dimensions and technical information are subject to change without notice

TC1 ELECTRICAL MODULES

Manual Tool Changers | Dimensions and Specifications



TC1-E01M-C01 8-Pin M8 Socket Electrical Pass-thru Module for Robot Plate

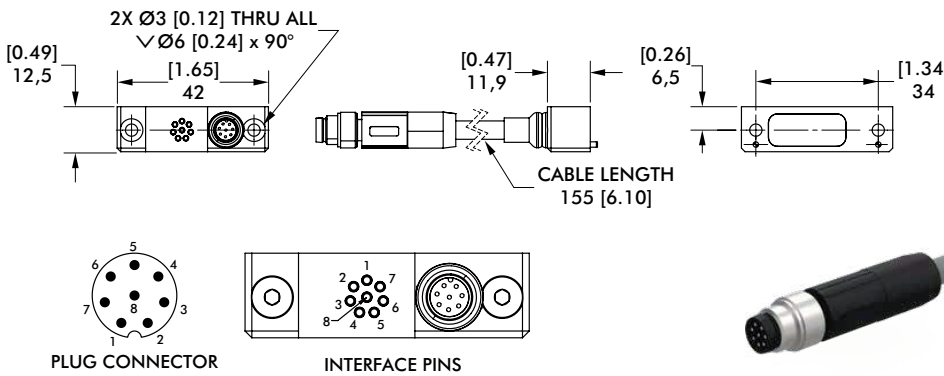


Fasteners and tools included.

CONNECTOR PIN	INTERFACE PIN
1	1
2	2
3	3
4	4
5	8
6	5
7	6
8	7

ELECTRIC SPECIFICATION					
SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNIT
V _{dd}	CONDUCTOR VOLTAGE	-	-	30	V
I _{dd}	CONDUCTOR CURRENT (PER SENSOR)	-	-	1.5	A

TC1-E01T-C01 8-Pin M8 Plug Electrical Pass-thru Module for Tool Plate

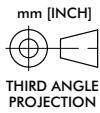


Fasteners and tools included.

CONNECTOR PIN	INTERFACE PIN
1	1
2	2
3	3
4	4
5	8
6	5
7	6
8	7

ELECTRIC SPECIFICATION					
SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNIT
V _{dd}	CONDUCTOR VOLTAGE	-	-	30	V
I _{dd}	CONDUCTOR CURRENT (PER SENSOR)	-	-	1.5	A

Dimensions and technical information are subject to change without notice

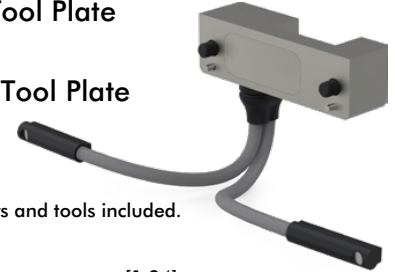


TC1 ELECTRICAL MODULES

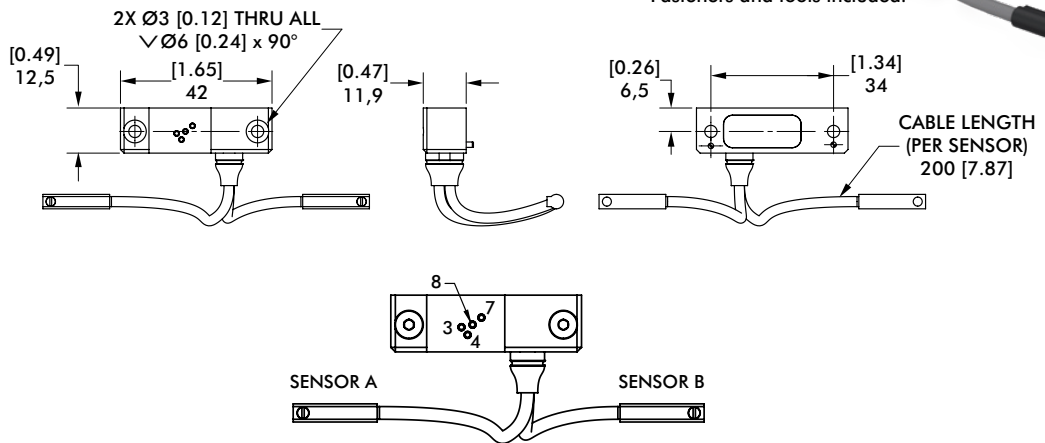
Manual Tool Changers | Dimensions and Specifications

TC1-E01T-P01 PNP Magneto Resistive 4mm Sensing Module for Tool Plate
(for use with grippers to detect jaw positioning)

TC1-E01T-N01 NPN Magneto Resistive 4mm Sensing Module for Tool Plate
(for use with grippers to detect jaw positioning)

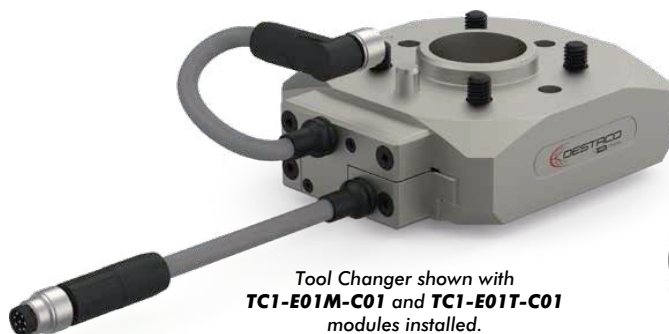


Fasteners and tools included.



INTERFACE PIN	SIGNAL DESCRIPTION
3	SIGNAL B
4	SIGNAL A
8	+V
7	0V

ELECTRIC SPECIFICATION					
SYMBOL	CHARACTERISTIC	MIN	TYP	MAX	UNIT
V _{dd}	SUPPLY VOLTAGE	4.5	-	28	V DC
I _{dd}	OUTPUT CURRENT (PER SENSOR)	-	-	100	mA
I _Q	QUIESCENT (IDLE) CURRENT	-	20	-	mA

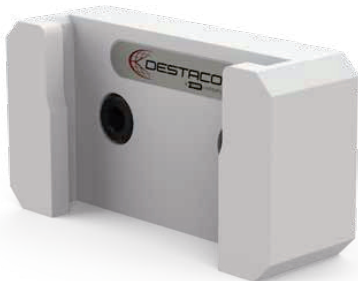
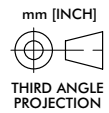


Dimensions and technical information are subject to change without notice

TC1 TOOL HOLDER

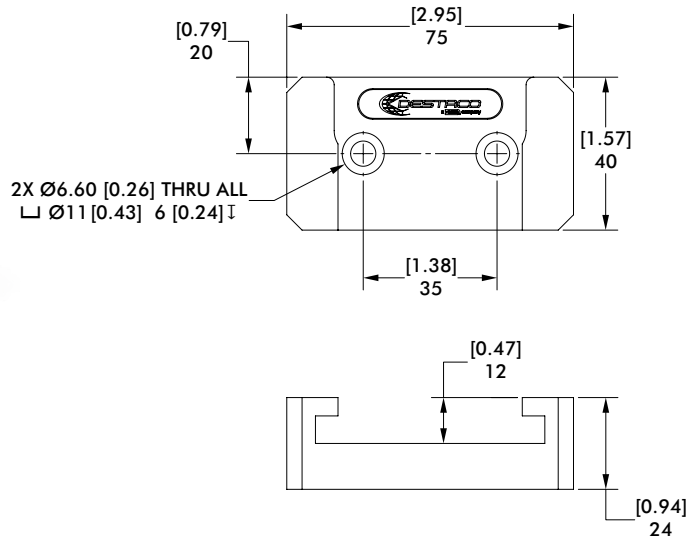
Manual Tool Changers | Dimensions

TC1-050**H-01** Tool Holder



Fasteners and tools included.

Material: Acetal Plastic



Tool Plate shown with a Robohand DPE-200 Electric Parallel Gripper placed in Tool Holder.



Tool Plate shown placed in Tool Holder.

Dimensions and technical information are subject to change without notice