

# MULTI-MOUNT ROBOT SOLUTIONS

## Features and Benefits

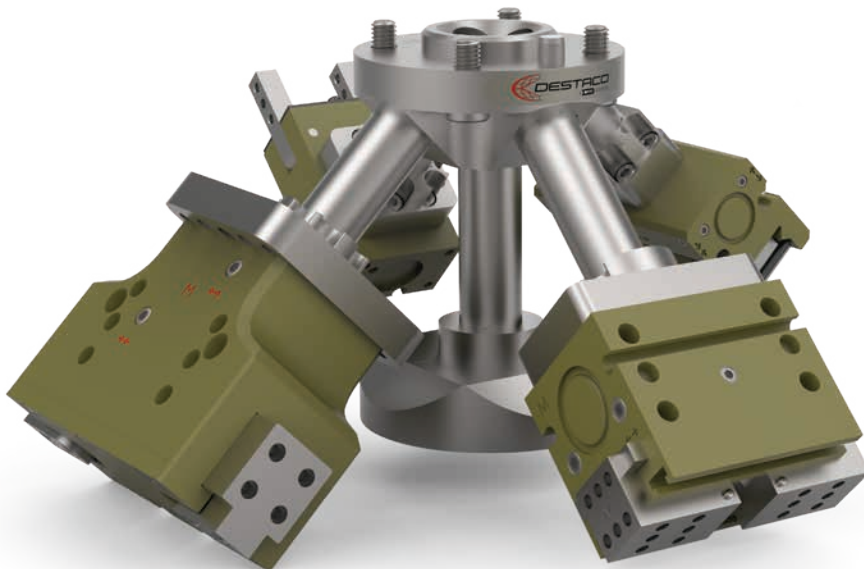
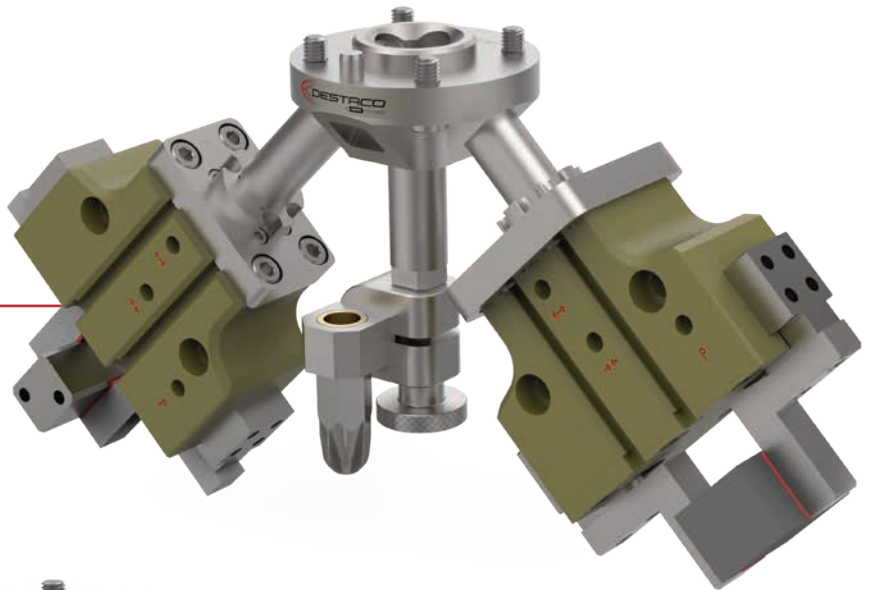


### Tool Extenders

- Extend Robot Reach
- EOL Packaging
- Small Part Placement

### Machine Tending

- CNC Machining
- Load and Unload
- Machine Transfers

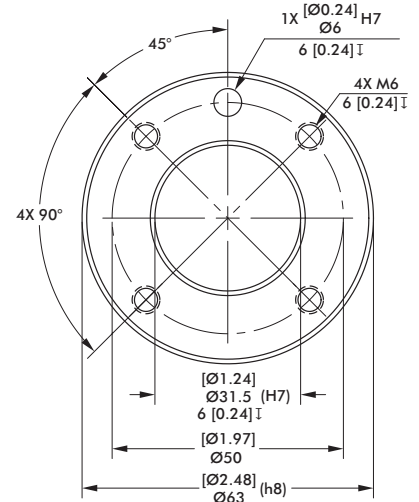
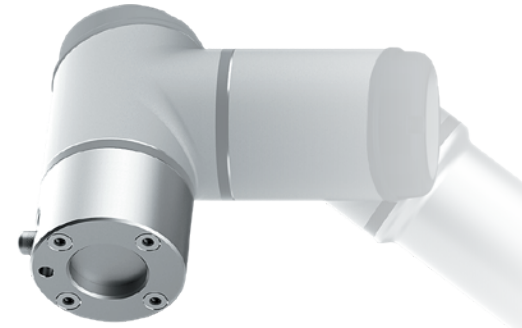


### Tool Arrays

- Mix and Match Tooling
- Multiple Size Part Transfers
- Multi-Purpose Assembly Cells
- Multiple Part Size Load and Unload
- Flex Manufacturing Cells

### MM-050-01 and TE-050-01 Robot Arm Adapters

Robot Manufacturer	Model
GENERIC	Any model with ISO-9409-1-50-4-M6 Pattern
ABB	CRB 15000
AUBO	I3, I5, I7, I10
DOBOT	CR - 5
DOOSAN ROBOTICS	M0609,M1509,M1013,M0617
ESI	C-7, C-15
F&P PERSONAL ROBOTICS	P-ROB 2R-24V, 48V
FRANKA EMIKA	PANDA
HAN'S ROBOTS	ELFIN 3, 5, 10
HANWHA PRECISION MACHINERY	HCR-3, 5, 12
JAKA/KUNLIN	ZU 7, 12
KAWADA INDUSTRIES	NEXTAGE
KUKA	LBR iiwa 7 R800, LBR iiwa 14 R820
MODBOT	Robot, SCARA
Omron TM	TM 5 - 700, TM 5 - 900, TM 12, TM 14
RAINBOW ROBOTICS	RB5
REIS	RV10-6, RV20-6
ROZUM	PULSE 75, 90
SIASUN	GCR5, GCR14, GCR20, SCR3, SCR5
STAUBLI	TX2 90, TX2 TOUCH 90, TX2 TOUCH 90L, TX2 TOUCH 90XL
TECHMAN	TM5M-700, TM5M-900, TM12M, TM14M
UNIVERSAL ROBOTS	UR3, UR5, UR10, UR16

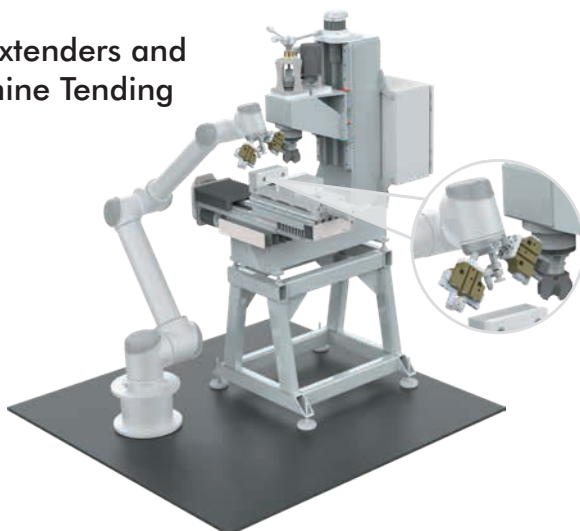


ISO-9409-1-50-4-M6  
Cobot Mounting Pattern

### Tool Arrays

- Mix and Match Tooling
- Multiple Size Part Transfers
- Multi-Purpose Assembly Cells
- Multiple Part Size Load and Unload
- Flex Manufacturing Cells

### Tool Extenders and Machine Tending



### Tool Arrays



# MULTI-MOUNT ROBOT SOLUTIONS

## Robohand Compatibility Charts

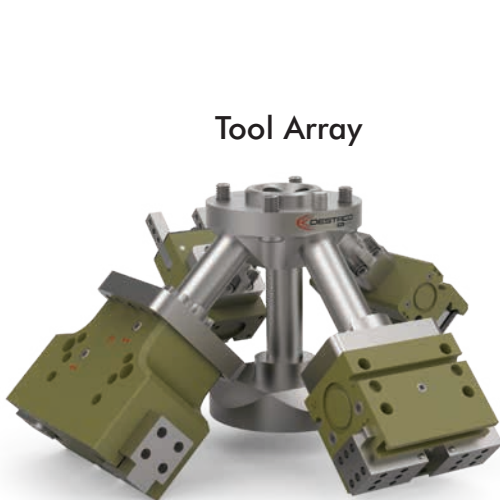


### MM-T-XX Tool Mounting Plate Kits

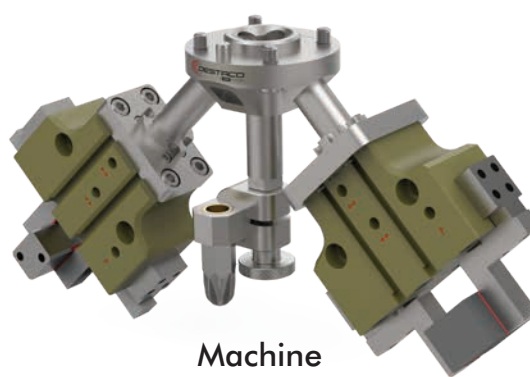
Robohand Grippers	Product Size	Description	Tool Plate Kits*
DGC	All Sizes	Pneumatic 2 Jaw Parallel Gripper	MM-T-05
DPG	All Sizes		MM-T-05
DPDL	047, 056		MM-T-05 or MM-T-06
DPDS			MM-T-05
DPDL	088, 125		MM-T-05
DPDS			MM-T-05
DPL	2520, 2535		MM-T-05
DPP	10M, 14M		MM-T-05 or MM-T-06
DPP	20M, 28M		MM-T-05
DPW	250M		MM-T-05 or MM-T-06
DPW	375M, 500M		MM-T-05
G110, G120	08M, 11M		MM-T-05 or MM-T-06
G110, G120	18M, 25M		MM-T-05
DPE-200	200		Electric 2 Jaw Parallel Gripper
DCT	12M, 16M, 20M	Angular Gripper	MM-T-05 or MM-T-06
DCT			MM-T-05



\*Use the tool plate that best fits the gripper size for the application.



Tool Array



Machine Tending



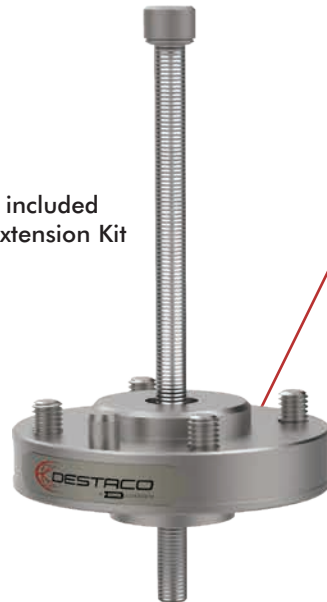
Tool Extenders

Mounting bolt included  
with TE-25060 Extension Kit

### ROBOT ADAPTER KIT

TE-050-01

Robot Adapter Kit with ISO 9409  
Mounting (see page 5). Compatible  
with multiple brands of Robots.



### EXTENSION KITS

TE-25040

TE-25060

TE-25080

TE-25100

TE-25060  
Extension Kit



### TOOL PLATE KITS

MM-T-01

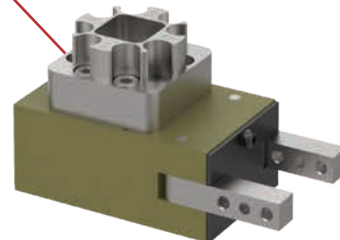
MM-T-02

MM-T-03

MM-T-04

MM-T-05

MM-T-06



MM-T-06  
Tool Plate mounted to a  
Robohand DCT-12M Gripper

How To Order: (Example for above configured product)

Order #	Description	Page
TE-050-01	Robot Adapter Kit	5
TE-25060	Extension Kit	6
MM-T-06	Tool Plate Kit	11-16

# MULTI-MOUNT ROBOT SOLUTIONS

## Tool Extension | Dimensions and Specifications

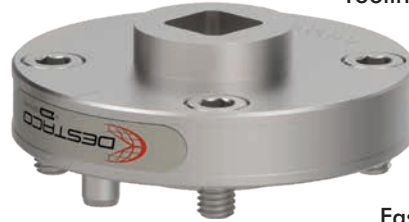


### TE-050-01 Robot Adapter Kit for Tool Extension Solutions

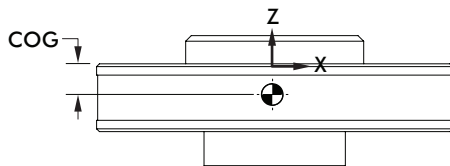
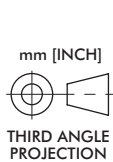
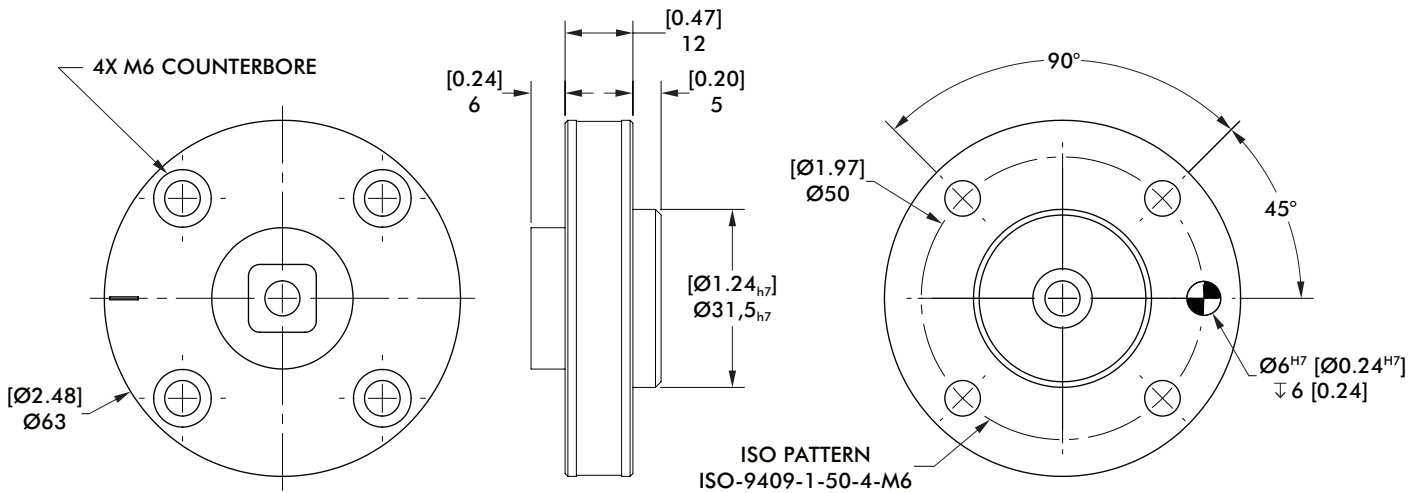
Robot Side



Tooling Side



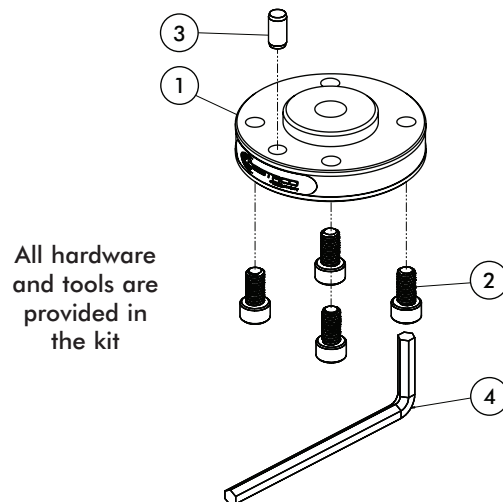
Fasteners, dowel pins included.



Specifications:	Units	TE-050-01
Weight:	Kg [lb]	0,13 [0.29]
Material:		Aluminum
Centre of Gravity [X] [Y] [Z]	mm	[0] [0] [-5,5]
Moment of Inertia @ COG -I <sub>XX</sub>	[Kg-mm <sup>2</sup> ]	32,88
Moment of Inertia @ COG -I <sub>YY</sub>	[Kg-mm <sup>2</sup> ]	34,27
Moment of Inertia @ COG -I <sub>ZZ</sub>	[Kg-mm <sup>2</sup> ]	61,42

### TE-050-01 Robot Adapter Kit Components

Item	Description	Quantity
1	Tool Extender: ISO 50 Master Base	1
2	SHCS, M6 x 12mm, Stainless, Patchlock	4
3	Dowel Pin, Ø6mm x 12mm, Stainless, 316	1
4	Wrench, Allen, 5mm Hex	1

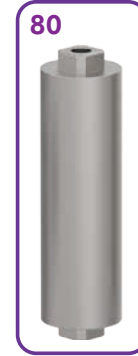




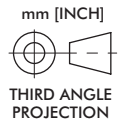
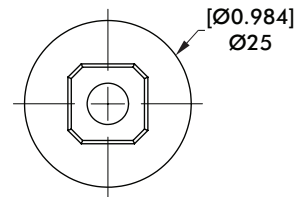
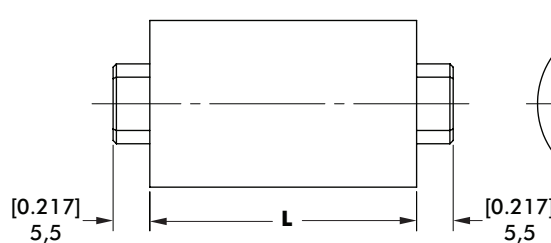
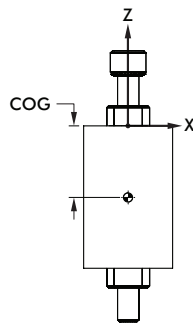
## TE-25XXX Extension Kit for Tool Extension Solutions



Extension Model: **TE** — Size: **25** — Arm Length [L]: **XXX**



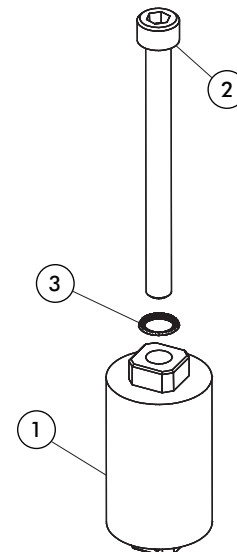
Specifications:	Units	TE-25040	TE-25060	TE-25080	TE-25100
Weight:	Kg [lb]	0,07 [0.15]	0,1 [0.22]	0,13 [0.29]	0,16 [0.35]
Material:		Aluminum	Aluminum	Aluminum	Aluminum
Center of Gravity (COG) [X] [Y] [Z]	mm	[0] [0] [-18,27]	[0] [0] [-28,4]	[0] [0] [-38,54]	[0] [0] [-48,6]
Inertia @ COG [I <sub>xx</sub> ] [I <sub>yy</sub> ] [I <sub>zz</sub> ]	[Kg-mm <sup>2</sup> ]	[21,11] [21,11] [4,32]	[49,48] [49,48] [6,41]	[98] [98] [8,5]	[172,5] [172,5] [10,57]
Length [L]:	mm	40	60	80	100



(general unit dimensions and specifications shown apply to all models)

## TE-25XXX Extension Arm Kit Components

Part #	Item	Description	Quantity
TE-25040	1	Multi-Mount; Ø25 Stem x 40mm	1
	2	SHCS, M6 X 70mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1
TE-25060	1	Multi-Mount; Ø25 Stem x 60mm	1
	2	SHCS, M6 X 90mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1
TE-25080	1	Multi-Mount; Ø25 Stem x 80mm	1
	2	SHCS, M6 x 110mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1
TE-25100	1	Multi-Mount; Ø25 Stem x 100mm	1
	2	SHCS, M6 x 130mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1



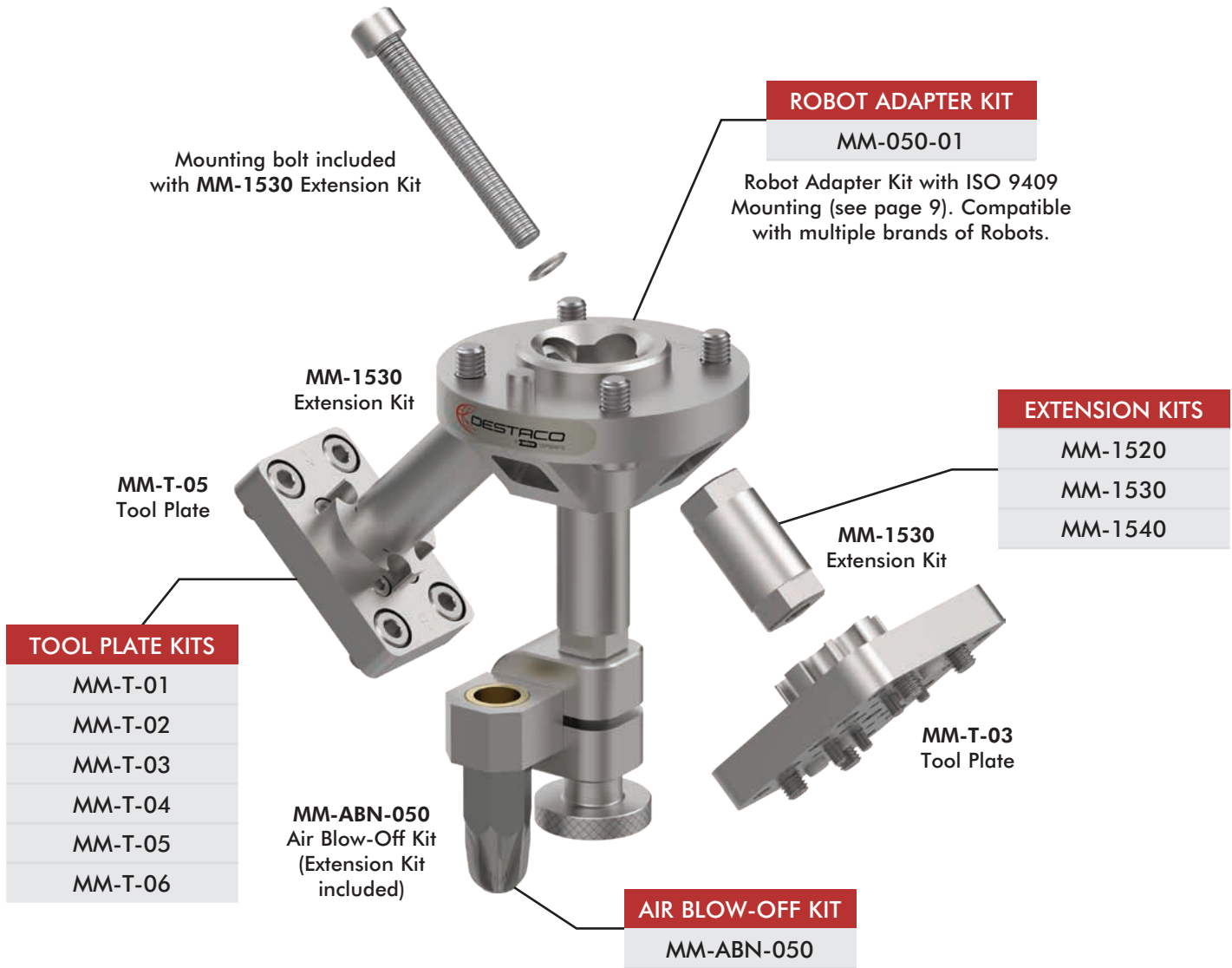
All hardware and tools are provided in the kit

# MULTI-MOUNT ROBOT SOLUTIONS

## Machine Tending | Ordering Information



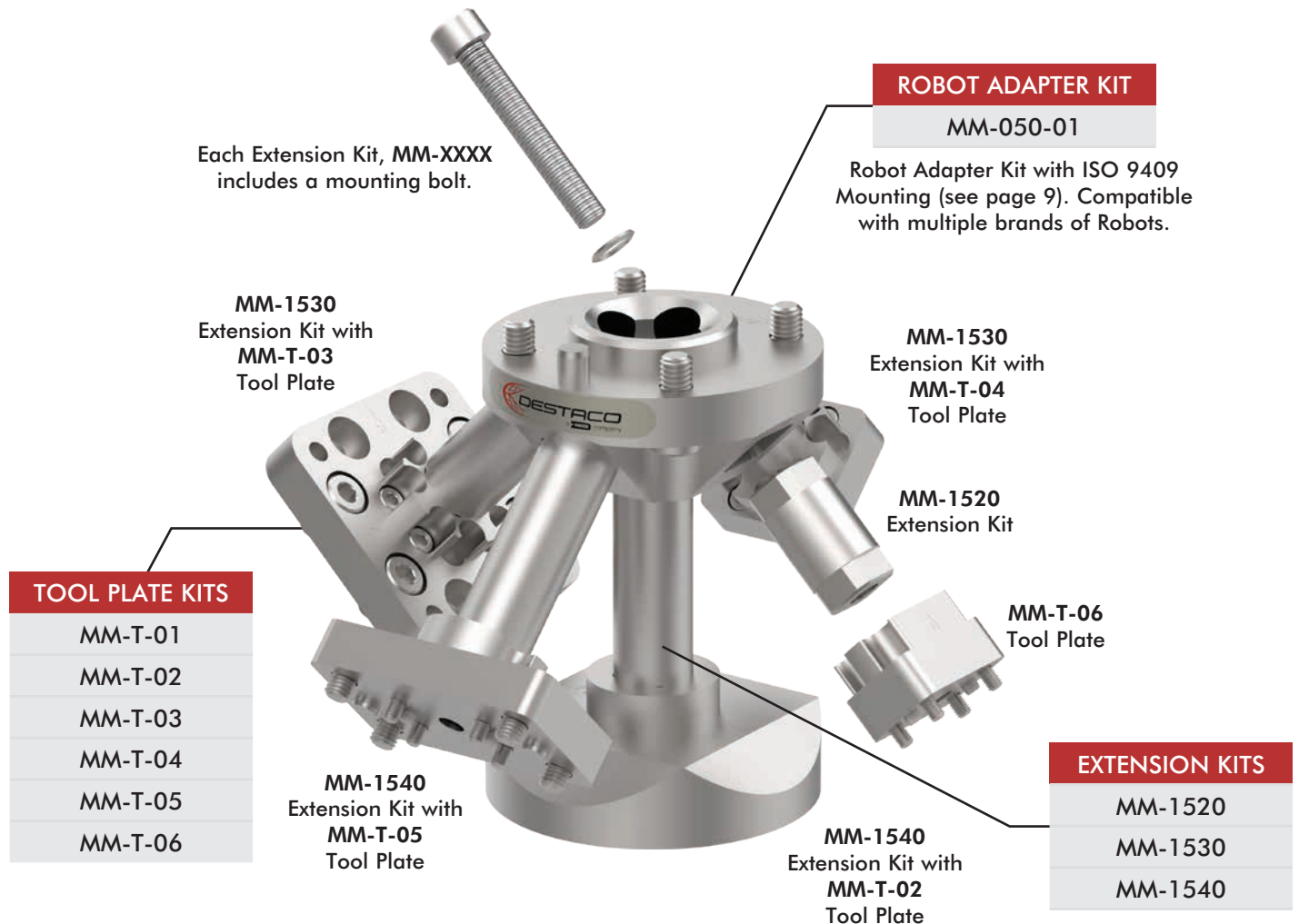
Multi-Mount Machine Tending Kits are ordered separately and assembled with tools, hardware & instructions supplied. A complete machine tending end effector requires 5 kits comprised of a Robot Adaptor Kit, 2 Extension Kits, 2 Tool Plate Kits and an optional air blowoff nozzle. Grippers or other 3rd part tools are mounted to the tool plates with supplied hardware and tools.



### How To Order: (Example for above configured product)

Order #	Description	Qty:	Page
MM-050-01	Robot Adapter Kit	1	9
MM-1530	Extension Kit	2	10
MM-T-03	Tool Plate Kit	1	11
MM-T-05	Tool Plate Kit	1	11
MM-ABN-050	Air Blow-Off Kit	1	17

Multi-Mount Tool Array Kits are ordered separately and assembled using included hardware and tools. A complete tool array end effector requires several kits comprised of a single Robot Adaptor Kit, 2 or more Extension Kits and 2 or more Tool Plate Kits. Grippers and other 3rd party tools are mounted to the tool plates.



### How To Order: (Example for above configured product)

Order #	Description	Qty:	Page
MM-050-01	Robot Adapter Kit	1	9
MM-1520	Extension Kit	1	10
MM-1530	Extension Kit	2	10
MM-1540	Extension Kit	2	10
MM-T-02	Tool Plate Kit	1	11
MM-T-03	Tool Plate Kit	1	11
MM-T-04	Tool Plate Kit	1	11
MM-T-05	Tool Plate Kit	1	11
MM-T-06	Tool Plate Kit	1	11



# MULTI-MOUNT ROBOT SOLUTIONS

## Robot Adapter Kit | Dimensions and Specifications



### MM-050-01 Robot Adapter Kit for Machine Tending and Tool Array Solutions

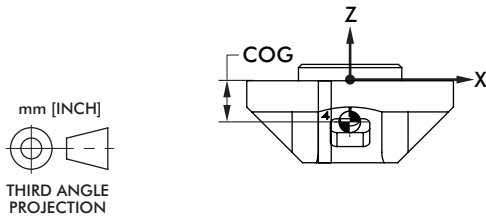
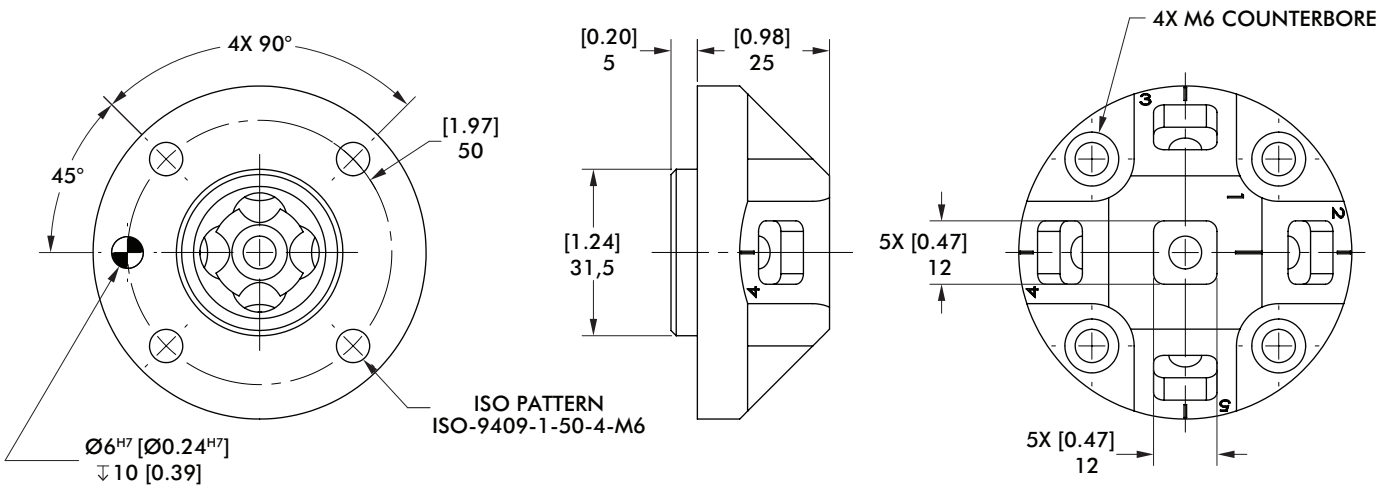


Robot Side



Tooling Side

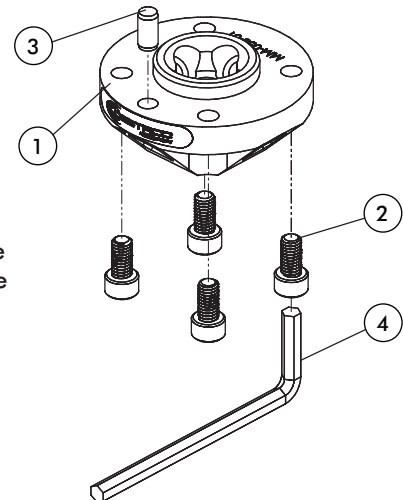
Fasteners, dowel pins included.



Specifications:	Units	MM-050-01
Weight:	Kg [lb]	0,14 [0.31]
Material:		Aluminum
Center of Gravity (COG) [X] [Y] [Z]	mm	[0] [0] [-8,4]
Moment of Inertia @ COG -I <sub>xx</sub>	[Kg-mm <sup>2</sup> ]	37,6
Moment of Inertia @ COG -I <sub>yy</sub>	[Kg-mm <sup>2</sup> ]	36,21
Moment of Inertia @ COG -I <sub>zz</sub>	[Kg-mm <sup>2</sup> ]	60,5

### MM-050-01 Robot Adapter Kit Components

Item	Description	Quantity
1	Multi-Mount: ISO 50 Master Base	1
2	SHCS, M6 x 12mm, Stainless, Patchlock	4
3	Dowel Pin, Ø6mm x 12mm, Stainless, 316	1
4	Wrench, Allen, 5mm Hex	1



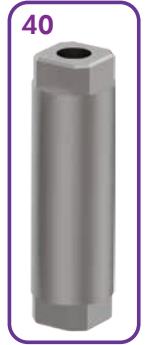
All hardware and tools are provided in the kit

### MM-15XX Extension Kit for Machine Tending and Tool Array Solutions

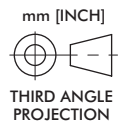
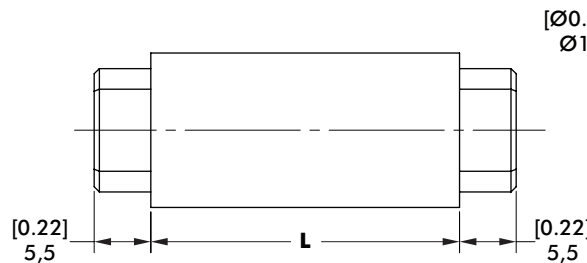
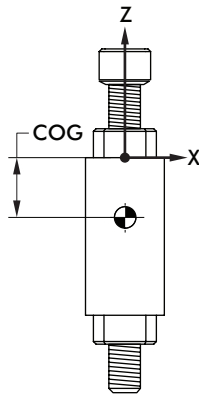
Multi Mount — Size — Extension Length [L]  
**MM** — **15** — **XX**



MM1530  
Extension Kit  
Shown



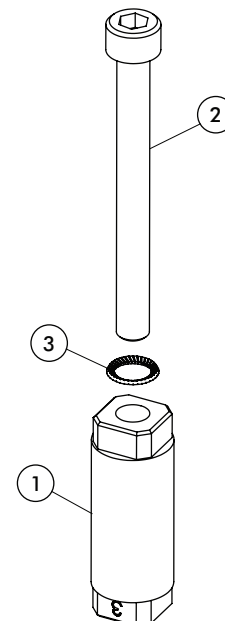
Specifications:	Units	MM-1520	MM-1530	MM-1540
Weight:	Kg [lb]	0,25 [0.05]	0,31 [0.06]	0,37 [0,08]
Material:		Aluminum	Aluminum	Aluminum
Centre of Gravity [X] [Y] [Z]	mm	[0] [0] [-6,41]	[0] [0] [-11,6]	[0] [0] [-16,7]
Inertia @ COG [Ixx] [Iyy] [Izz]	[Kg-mm <sup>2</sup> ]	[5,46] [5,46] [0,44]	[13,46] [13,46] [0,58]	[14,6] [14,6] [0,72]
Length [L]:	mm [in]	20 [0.79]	30 [1.18]	40 [1.57]



(general unit dimensions and specifications shown apply to all models)

### MM-15XX Extension Kit Components

Part #	Item	Description	Quantity
MM-1520	1	Multi-Mount; Ø15 Stem x 20mm	1
	2	SHCS, M6 X 50mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1
MM-1530	1	Multi-Mount; Ø15 Stem x 30mm	1
	2	SHCS, M6 x 60mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1
MM-1540	1	Multi-Mount; Ø15 Stem x 40mm	1
	2	SHCS, M6 x 70mm, Stainless	1
	3	Belleville Spring Lock Washer, 1/4" & M6	1



All hardware  
and tools are  
provided in  
the kit

# MULTI-MOUNT ROBOT SOLUTIONS

Tool Plate Kits | Ordering Information and Specifications

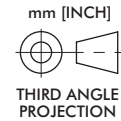
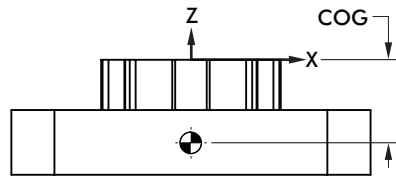


## MM-T-XX Tool Plate Kits

for Tool Extenders,  
Machine Tending and  
Tool Array Solutions



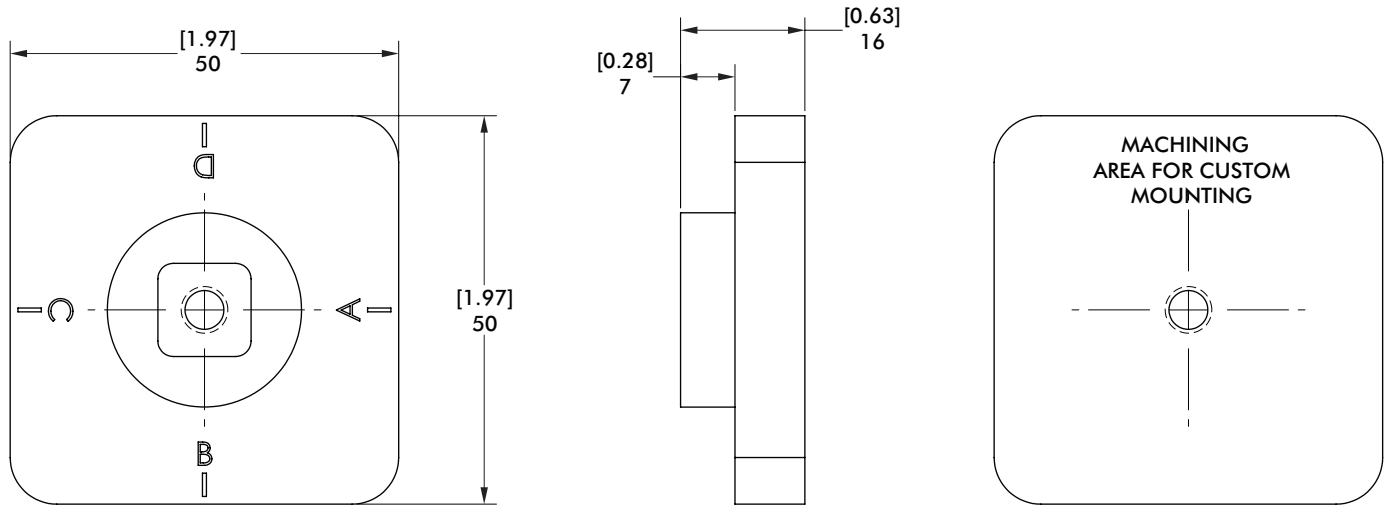
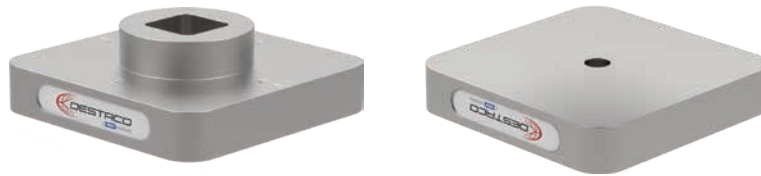
Fasteners, dowel pins  
& tools included.



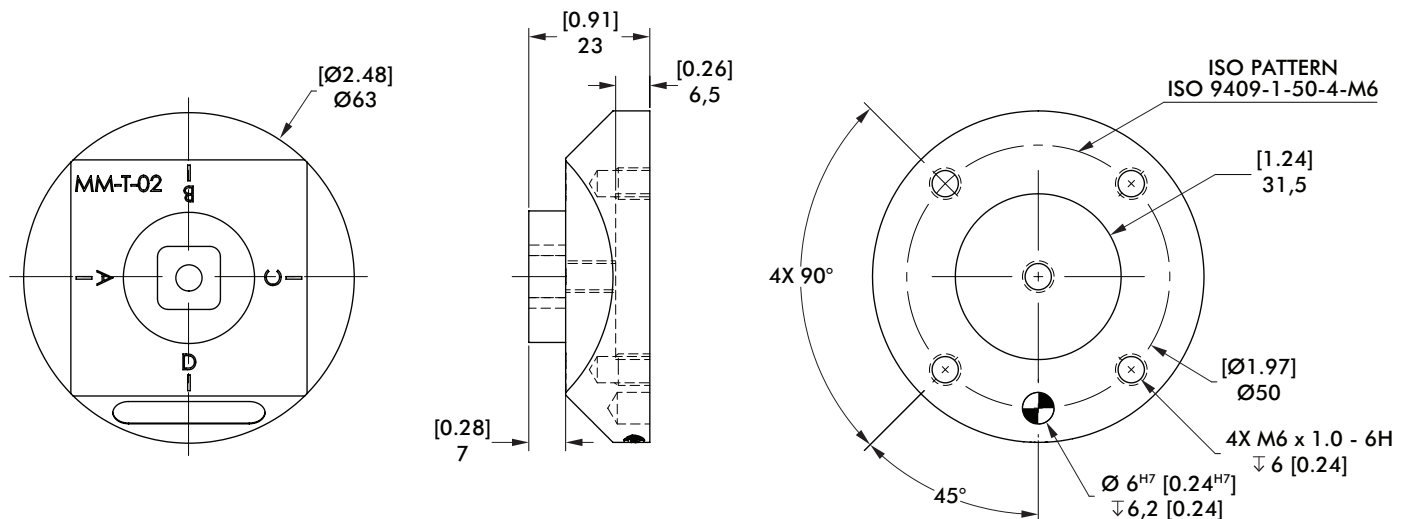
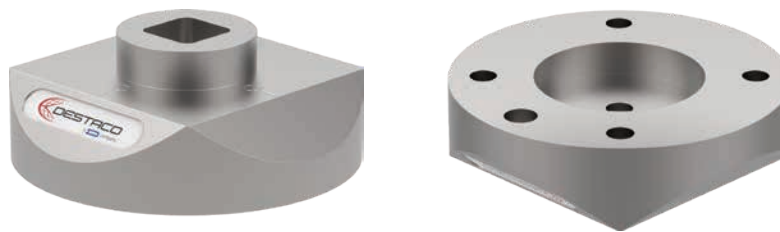
Specifications:	Units	MM-T-01	MM-T-02	MM-T-03	MM-T-04	MM-T-05	MM-T-06
Weight:	Kg [lb]	0,07 [0.15]	0,11 [0.24]	0,06 [0.14]	0,021 [0.046]	0,051 [0.11]	0,02 [0.04]
Material:		Aluminum					
Center of Gravity (COG) [X] [Y] [Z]	mm	[0] [0] [-10,7]	[0] [0] [-14,21]	[0] [0] [-11,5]	[0] [0] [-10,62]	[0] [0] [-11,1]	[0] [0] [-10,2]
Moment of Inertia @ COG [I <sub>xx</sub> ]	[Kg-mm <sup>2</sup> ]	13,38	30,57	15,23	1,72	4,36	0,78
Moment of Inertia @ COG [I <sub>yy</sub> ]	[Kg-mm <sup>2</sup> ]	13,38	30,25	11,02	1,42	11,56	1,38
Moment of Inertia @ COG [I <sub>zz</sub> ]	[Kg-mm <sup>2</sup> ]	25,13	54,96	24,83	2,45	14,46	1,54

**MM-T-01 Tool Plate**  
for Tool Extenders,  
Machine Tending and  
Tool Array Solutions

mm [INCH]  
THIRD ANGLE PROJECTION



**MM-T-02 Tool Plate**  
for Tool Extenders,  
Machine Tending and  
Tool Array Solutions

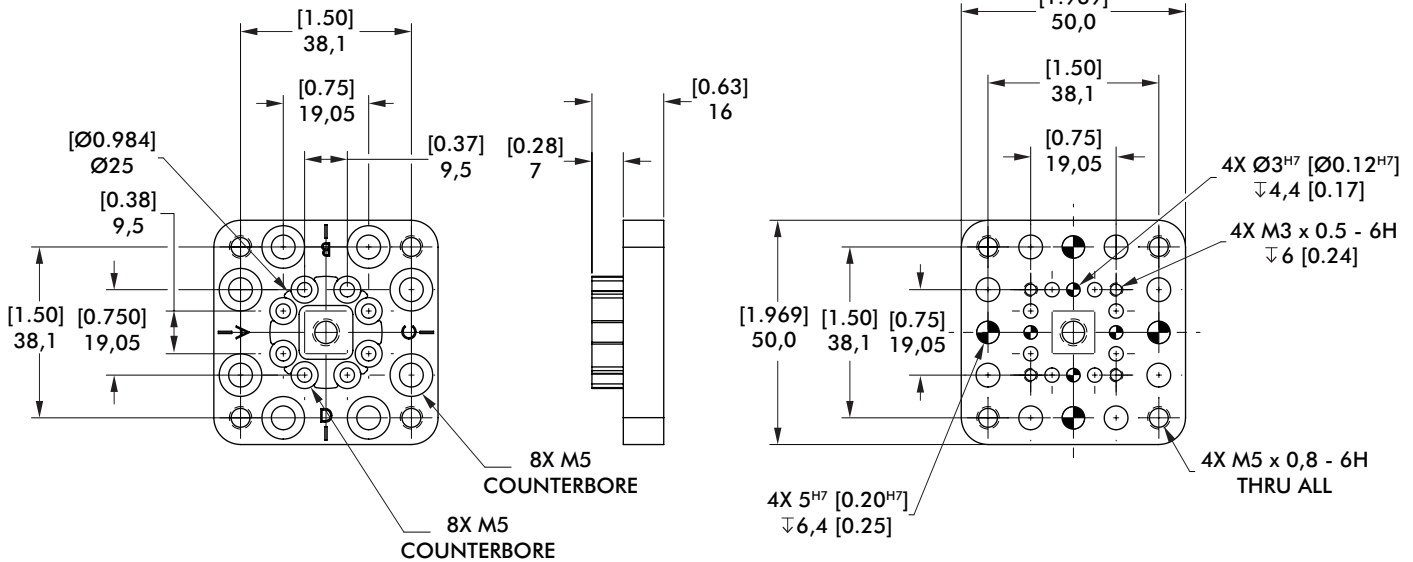
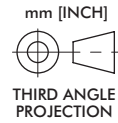


# MULTI-MOUNT ROBOT SOLUTIONS

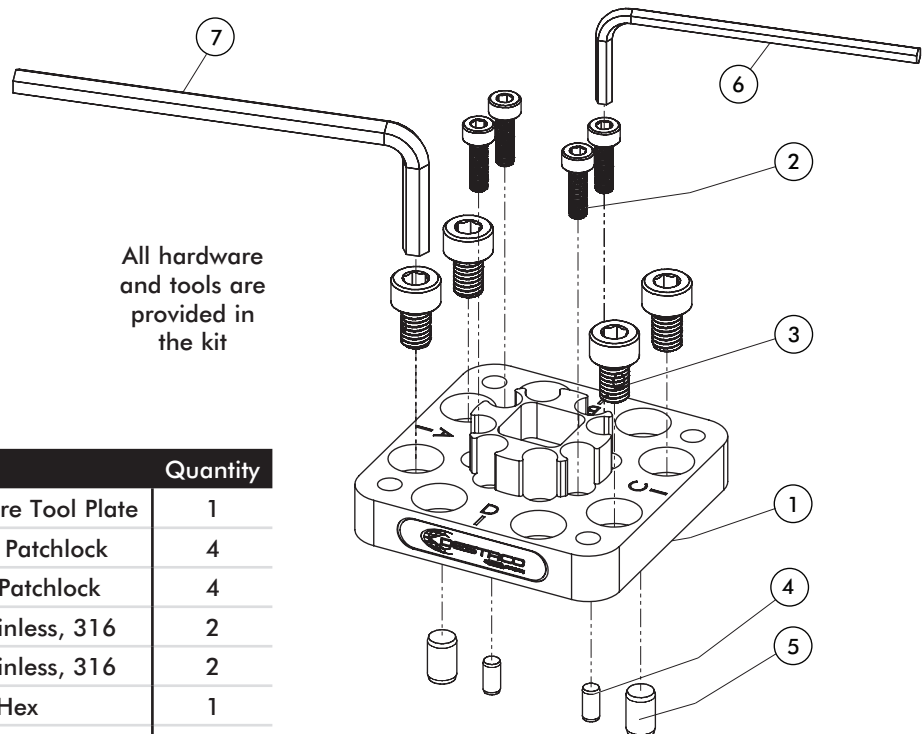


## Tool Plate Kits | Dimensions

**MM-T-03 Tool Plate**  
for Tool Extenders,  
Machine Tending and  
Tool Array Solutions



## MM-T-03 Tool Plate Kit Components



Item	Description	Quantity
1	Multi-Mount; 3 & 5mm DC Square Tool Plate	1
2	SHCS, M3 x 10mm, Stainless, Patchlock	4
3	SHCS, M5 x 8mm, Stainless, Patchlock	4
4	Dowel Pin, Ø3mm x 6mm, Stainless, 316	2
5	Dowel Pin, Ø5mm x 8mm, Stainless, 316	2
6	Wrench, Allen, 2,5mm Hex	1
7	Wrench, Allen, 4mm Hex	1



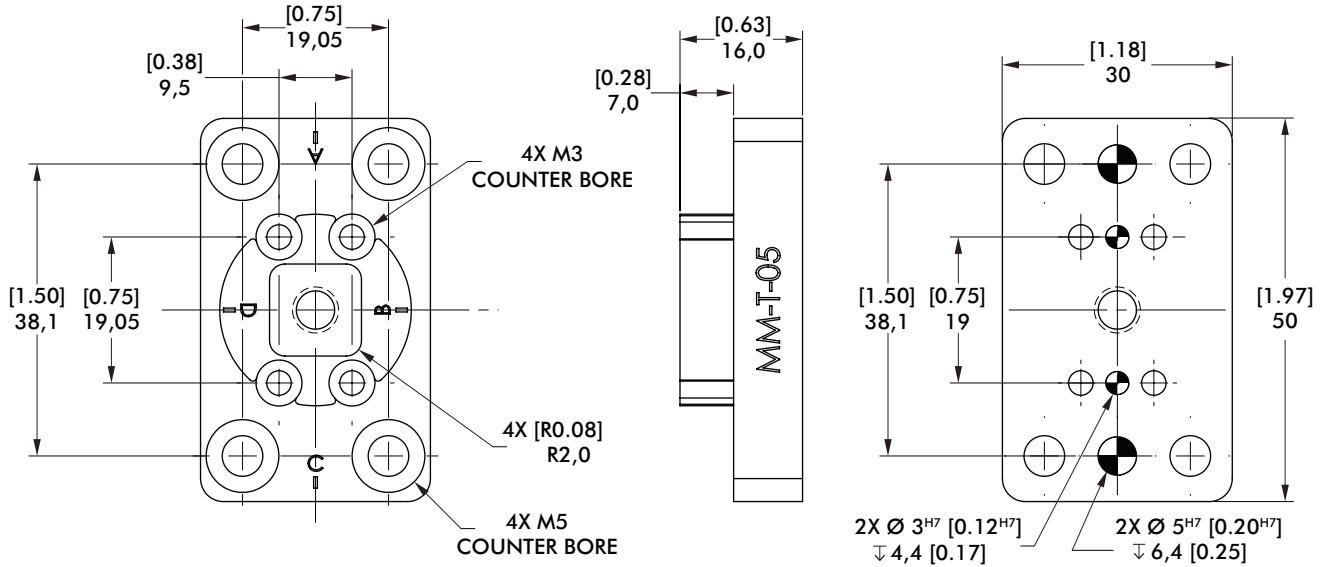
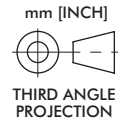
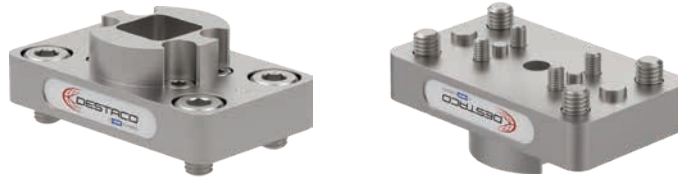


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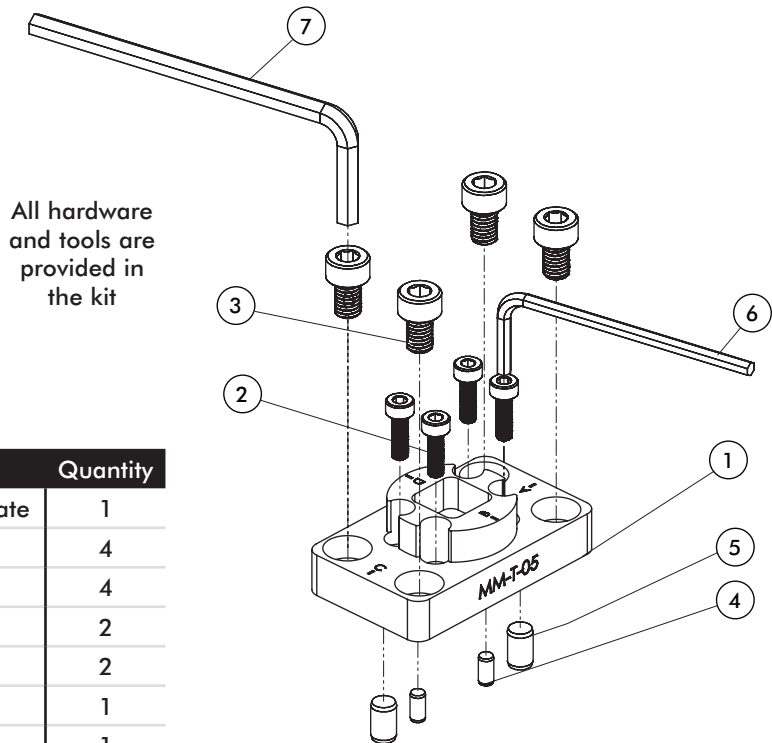


## Tool Plate Kits | Dimensions

**MM-T-05 Tool Plate**  
for Tool Extenders,  
Machine Tending and  
Tool Array Solutions



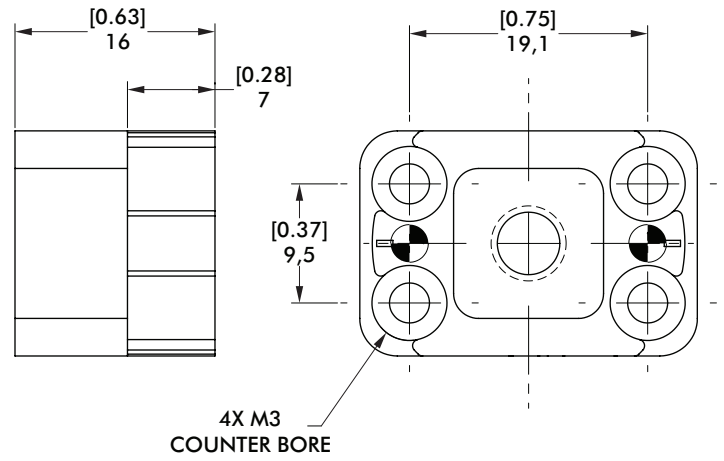
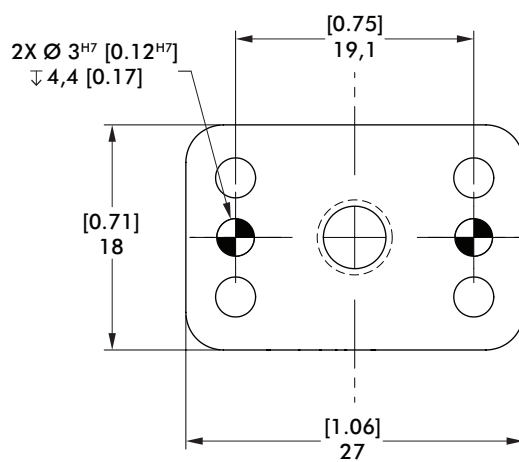
## MM-T-05 Tool Plate Kit Components



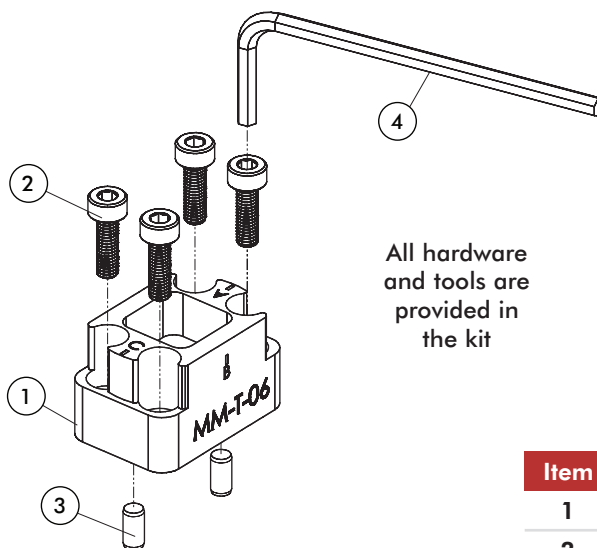
Item	Description	Quantity
1	Multi-Mount; 3 & 5mm DC Rectangle Tool Plate	1
2	SHCS, M3 x 10mm, Stainless, Patchlock	4
3	SHCS, M5 x 8mm, Stainless, Patchlock	4
4	Dowel Pin, $\text{\O} 3\text{mm}$ x 6mm, Stainless, 316	2
5	Dowel Pin, $\text{\O} 5\text{mm}$ x 8mm, Stainless, 316	2
6	Wrench, Allen, 2,5mm Hex	1
7	Wrench, Allen, 4mm Hex	1

### MM-T-06 Tool Plate for Tool Extenders, Machine Tending and Tool Array Solutions

mm [INCH]  
THIRD ANGLE PROJECTION



### MM-T-06 Tool Plate Kit Components



All hardware  
and tools are  
provided in  
the kit

Item	Description	Quantity
1	Multi-Mount; 3mm DC Rectangle Tool Plate	1
2	SHCS, M3 x 10mm, Stainless, Patchlock	4
3	Dowel Pin, Ø3mm x 6mm, Stainless, 316	2
4	Wrench, Allen, 2,5mm Hex	1

# MULTI-MOUNT ROBOT SOLUTIONS

Air Blow-Off Kits | Dimensions and Specifications

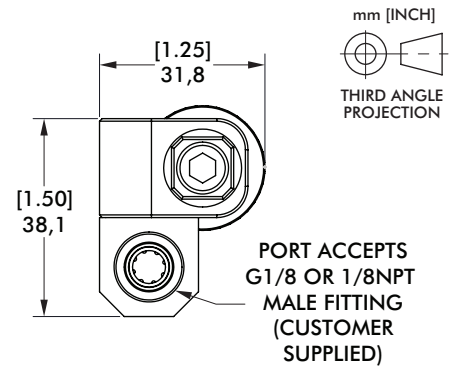
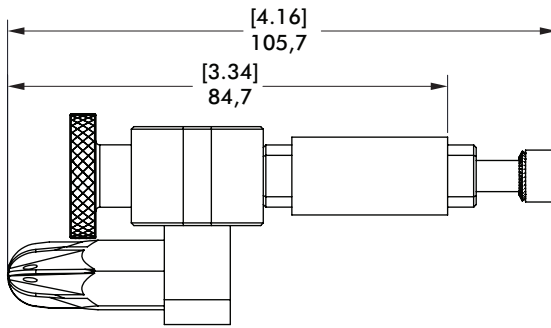
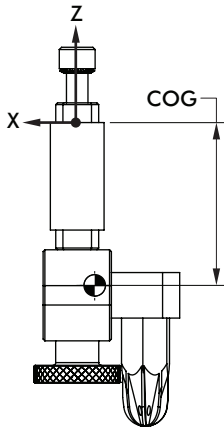


## MM-ABN-050 Air Blow-Off for Machine Tending Solutions



Specification	Units	MM-ABN-050
Weight:	Kg [lb]	0,12 [0.26]
Centre of Gravity [X] [Y] [Z]	mm	[4,7] [4,01] [-45,01]
Minimum Operating Pressure	bar [psi]	2 [29]
Maximum Operating Pressure	bar [psi]	7 [101.5]
Moment of Inertia @ COG -I <sub>xx</sub>	[Kg-mm <sup>2</sup> ]	72,8
Moment of Inertia @ COG -I <sub>yy</sub>	[Kg-mm <sup>2</sup> ]	77,6
Moment of Inertia @ COG -I <sub>zz</sub>	[Kg-mm <sup>2</sup> ]	16
Air Consumption at 7 Bar [100 PSI]	l/min [cfm]	350 [12]
Sound Volume	dB	71
Max Temperature	C [F]	120 [250]

OSHA Compliant 29 CFR 1910.242,  
OSHA Compliant 29 CFR 1910.95



(general unit dimensions and specification shown)

## MM-ABN-050 Air Blow-Off Components

Item	Description	Quantity
1	Multi-Mount; Ø15 Stem x 30mm	1
2	Micro Swivel Arm End 1/2" Dia	1
3	Port Only Adapter w/Insert	1
4	Air Nozzel 1/8" NPT Female	1
5	Knurled-Head Thumb Nut M6 x 1 18-8 Stainless Steel	1
6	SHCS, M6 x 85mm, Stainless	1
7	Belleville Spring Lock Washer, 1/4" & M6	2
8	O-Ring AS 568A-108 3/32" x 1/4" ID	1

