

MODEL TC-300

Payload Capacity—kg/lbs. 455/1003
 Static Moment X and Y Resistance†—Nm/lb-in 3289/29100
 Static Moment Z Resistance†—Nm/lb-in 2825/25000
 Positional Repeatability X, Y & Z—mm/in. 0.015/0.0006
 Weight when Coupled—kg/lb. 20.1/44.2
 Locking Force @ 80 psi (5.5 bar)—N/lb. 35333/7940

Diameter when Coupled—mm/in 259/10.2
 Height when Coupled—mm/in. 116/4.6
 Pneumatic Port Type—Pass Through (10). 3/8 BSPT
 Pneumatic Port—“Lock” & “Unlock” 1/4 BSPT
 Max. Allowable Distance Between
 Plates before Locking—mm/in 10.0/0.40

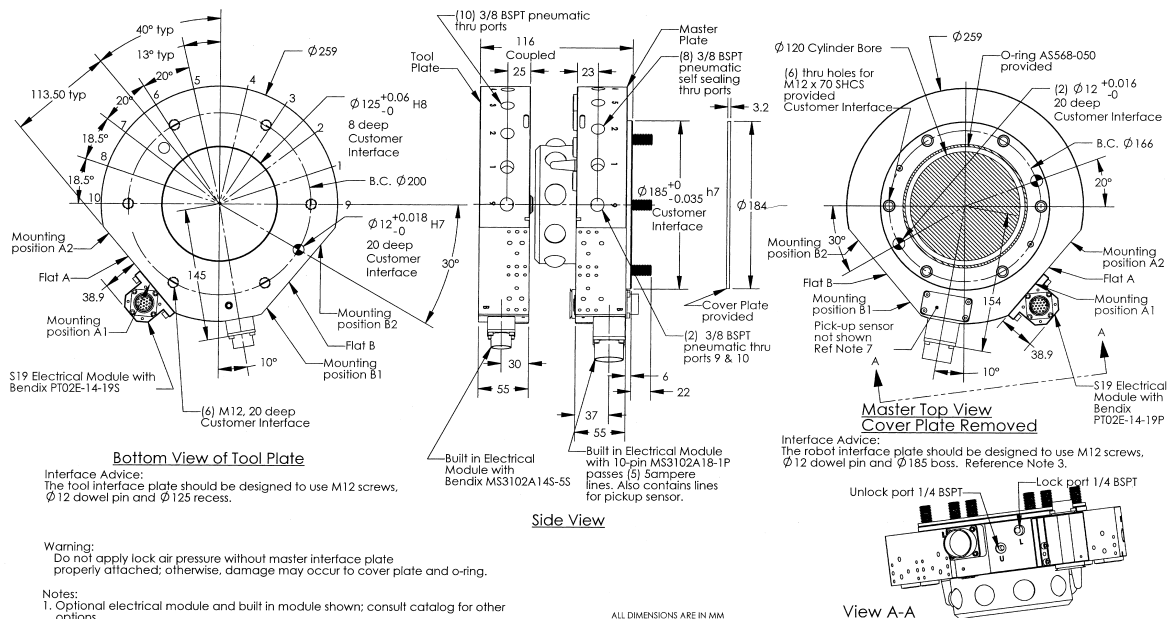
†Can handle a dynamic moment 3 times higher than the static moment capacity. Moment tests show failure point at 12 times static moment specifications.

Special Features: Standard electrical module has five pins that may be used for tool ID. The master connector contains the signals for the detection sensor. The detection sensor detects when the tool plate is within 1.5mm of the master plate, signaling ready to lock.

Self-sealing pneumatic ports on the master side seal when the master and tool separate.

Options

Option	# Pins	Electrical Rating	Description	Comments
MT8	8	20A/500V	MS cylindrical, threaded connector	Sealed, no-touch master pins
S19/S26	19/26	5A/250V	MS miniature quick-disconnect connector	Fluid resistant, untouchable master pins
R19/R26	19/26	5A/250V	MS miniature quick-disconnect connector	Fluid resistant, untouchable master pins
J16	16	5A/250V	MS miniature quick-disconnect connector	Serrated rhodium-plated contact pins
T19	19	5A/250V	MS cylindrical, threaded connector	Fluid resistant, untouchable master pins
F02/F04	—	—	(2) or (4) 3/8 G/NPT self-sealing ports	For fluid or pneumatic pass-through
P14	—	—	Additional (2) 1/4 NPT pneumatic ports	Provides a total of 12 pneumatic ports
P18	—	—	Additional (4) 1/8 NPT pneumatic ports	Provides a total of 14 pneumatic ports
P38	—	—	Additional (4) 3/8 NPT pneumatic ports	Provides a total of 14 pneumatic ports
V34	—	—	3/4 G vacuum port	Vacuum only
SIP	—	—	Lock/unlock sensing	See page 19



Warning:
 Do not apply lock air pressure without master interface plate properly attached; otherwise, damage may occur to cover plate and o-ring.

- Notes:
- Optional electrical module and built in module shown; consult catalog for other options.
 - Mounting hardware is provided; cover plate, o-ring and master plate screws.
 - Cover plate is not necessary if robot interface plate provides sealing. The recommended interface plate bore depth without a cover plate is 5.5mm, with a cover plate is 8.6mm.
 - Orientation marks are provided to assist in robot teaching.
 - Misalignments allowed when coupling; consult specifications.
 - DXF, DWG and IGES images available upon request.
 - Proximity sensor indicates when master and tool are within 1.5mm.