

QC-100



QC-100 Master & Tool plate w/ T19 electrical module.

“If not for these tools we would still be struggling with automatic tool change. Where other plants have failed, we have succeeded...We owe ATI many thanks.”

John Jackson, Automation Area and Tooling Construction Supervisor

BENEFITS AND FEATURES

Excellent Strength-to-Weight Ratio

No-Touch Locking™ technology allows up to 7.0 mm plate separation when locking.

Patented Fail-safe Locking Mechanism

- ♦ Locking mechanism design results in low force acting on the piston.
- ♦ Large piston diameter and outward ball travel increase moment capacity.
- ♦ All locking parts made of R_C 58 stainless steel.

Long-life Bushings for Pneumatic Pass-through

Specifications	Data	Comments
Suggested Payload Limit	330 lb (150 kg)	Higher payloads possible with low moment
Locking Force @ 80 psi (5.5 bar)	2730 lb (12149 N)	Fail-safe takes over when load exceeds locking force.
Static Moment Capacity (X, Y, & Z)	6940 lb-in (784 Nm)	Dynamic moment capacity 3x higher than static moment capacity. Tests show failure point at 12x X & Y static moment specifications.
Positional Repeatability (X, Y, & Z)	0.0006 in (0.015 mm)	Repeatability tested at rated load at one million cycles.
Weight (when coupled)	11.75 lb (5.33 kg)	7.5 lb Master plate; 4.25 lb Tool plate
Maximum allowable distance between Master & Tool plate before locking.	0.28 in (7.0 mm)	No-Touch Locking™ technology allows Master & Tool plate to lock with plate separation.
Pneumatic Pass-through Ports (qty) size	(8) 3/8 NPT	Max pressure of 100 psi (7 bar)

Option	# pins	Elec. rating	Description*	Comments
H10	10	13A/600V	MS cylindrical, threaded connector	Contact pins isolated from each other
S19/S26	19/26	3A/250VAC	MS miniature quick-disconnect connector	Fluid-resistant, untouchable master pins
R19/R26	19/26	3A/250VAC	MS miniature quick-disconnect connector	Fluid-resistant, untouchable master pins
J16	16	3A/250VAC	MS miniature quick-disconnect connector	Serrated rhodium-plated contact pins
T19	19	3A/250VAC	MS cylindrical, threaded connector	Fluid-resistant, untouchable master pins
F02	n/a	n/a	(2) 3/8 NPT self-sealing ports	For fluid or pneumatic pass-through
P14	n/a	n/a	Additional (2) 1/4 NPT pneumatic ports	Provides a total of 10 pneumatic ports
P38	n/a	n/a	Additional (4) 3/8 NPT pneumatic ports	Provides a total of 12 pneumatic ports
SIP	n/a	n/a	Lock/unlock sensing	See page 26

HOW TO ORDER THE QC-100:

9120-100-□-□-□-□-□-□

M: Master
T: Tool

OPTION B
OPTION A
(000 = no option)

Example:

- 9120-100M-000-000:** QC-100 Master plate, no options
- 9120-100T-T19-000:** QC-100 Tool plate w/ T19 electrical module
- 9120-100M-H10-P38:** QC-100 Master plate w/ H10 electrical module & P38 pneumatic port option