

QC-300

"I have found the ATI QC tool changer to be very reliable and robust for robot end-of-arm tooling applications."

Vipin Patel, Fanuc Robotics



The QC-300 Master & Tool plate w/ electrical module.

BENEFITS AND FEATURES

Strongest Automatic Tool Changer in the World

Standard electrical module has five pins that may be used for tool ID. The master connector contains the signals for the detection sensor.

No-Touch Locking™ technology allows up to 10.0 mm plate separation when locking.

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.

Specifications	Data	Comments		
Suggested Payload Limit	1003 lb (455 kg)	Higher payloads possible with low moment		
Locking Force @ 80 psi (5.5 bar)	7940 lb (35333 N)	Fail-safe takes over when load exceeds locking force.		
Static Moment Capacity (X & Y)	29100 lb-in (3870 Nm)	Dynamic moment capacity 3x higher than static moment capacity. Tests show failure point at 12x X & Y static moment specifications.		
Static Moment Capacity (Z)	25000 lb-in (2825 Nm)			
Positional Repeatability (X, Y, & Z)	0.0006 in (0.015 mm)	Repeatability tested at rated load at one million cycles.		
Weight (when coupled)	44.2 lb (20.1 kg)	29.1 lb Master plate; 15.1 lb Tool plate		
Maximum allowable distance between Master & Tool plate before locking.	0.40 in (10 mm)	No-Touch Locking™ technology allows Master & Tool plate to lock with plate separation.		
Pneumatic Pass-through Ports (qty) size	(10) 3/8 BSPT	Max pressure of 100 psi (7 bar), (8) self-sealing ports.		
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 12 pneumatic ports
P38	n/a	n/a	Additional (4) 3/8 NPT pneumatic ports	Provides a total of 14 pneumatic ports
SIP	n/a	n/a	Lock/unlock sensing	See page 26

HOW TO ORDER THE QC-300:

9120-300□-□□□-□□□

M: Master
T: Tool

OPTION B
OPTION A

(000 = no option)

Example:

9120-300M-000-000: QC-300 Master plate, no options, standard electrical module

9120-300T-H10-000: QC-300 Tool plate w/H10 electrical module

9120-300M-T19-F02: QC-300 Master plate w/T19 electrical module & F02 fluid module