CRS F3 Articulated Robot

Speed, Reliability, Accuracy and Versatility at an Affordable Price

Speed and Versatility – at an Affordable Price

Articulated robots are ideal for applications that require complex movements, such as dispensing or machine loading and unloading. For applications requiring flexible movement without sacrificing speed or reliability, the CRS F3™ provides these and six degrees of freedom. The CRS F3™ also offers a linear track option for tending multiple machines.

Key Benefits and Features:

- Fast: increased throughput and efficiency
- Robust: designed to run 24/7
- Absolute encoders: no homing necessary
- Rated Class 100 for clean room duty
- Easy to integrate: advanced software reduces programming time

CRS F3™ robots can be programmed using Thermo Electrons powerful, yet easy to learn CRS RAPL-3™ language or with our CRS ActiveRobot™ software. CRS ActiveRobot™ allows CRS F3™ robots to be controlled by any object oriented programming language such as Visual Basic®, Visual C++®, Delphi™, or J++®.

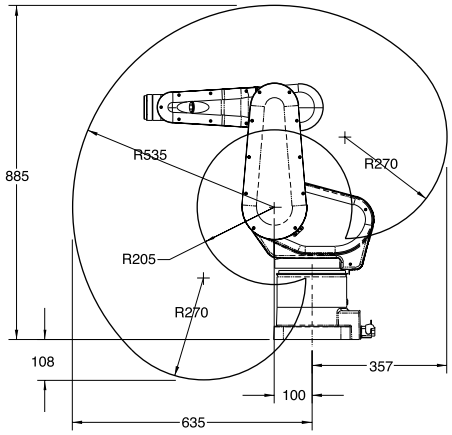
Education • Material Application • Material Handling • Assembly • Product Testing

• Analyze • Detect • Measure • Control™

Thermo
ELECTRON CORPORATION

F3 Six Axis Robot

Work Envelope



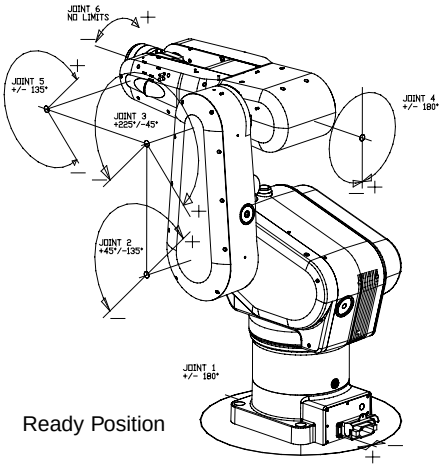
Dimensions in mm

Elevation View (w/o gripper)

Range of Motion

Safety Compliance Standards

CE (European)	
EM Emissions:	EN55011/3:1991
EM Immunity	EN50082-2:1992
Machine Safety:	EN775:1992
	ISO 10218:1992 (E)
	EN60204-1:1992
	EN292:1991
	EN954:1997 CAT-1
ANSI/RIA	15.06-1992
CSA (Canadian) Process Control Equipment	
CSA Std:	C22.2 No. Z434-94
Motor Operated:	CAN/CSA-C22.s No 68-92
Appliances	



Ready Position

Features

- Fast, robust, cost effective
- Six degrees of freedom
- Upright, inverted or track mounting
- Absolute encoders, no homing
- 16 Inputs/16 Outputs (4 Relay)

Performance Specifications

Payload	3kg (nominal)	6.6lb
Reach (no gripper)	710 mm	28 in.
Reach (std. gripper)	863 mm	34.0 in.
Repeatability	+/- 0.05mm	+/- 0.002 in.
Weight	53 kg	115 lb

Options

- CRS Servo and pneumatic gripper
- CRS ActiveRobot™ programming software
- CRS Robcomm3 PC based development software
- CRS Teach Pendant
- CRS Linear Track
- Fully integrated ATI force/torque sensor
- End of Arm I/O
- Dual pneumatic tooling option

Speed and Workspace

Axis	Workspace	Max Speed
J1 (waist)	± 180º	240º/second
J2 (shoulder)	- 135º / + 45º	210º/second
J3 (elbow)	± 135º	240º/second
J4 (wrist rotate)	± 180º	375º/second
J5 (wrist pitch)	± 135º	300º/second
J6 (wrist roll)	unlimited	375º/second

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