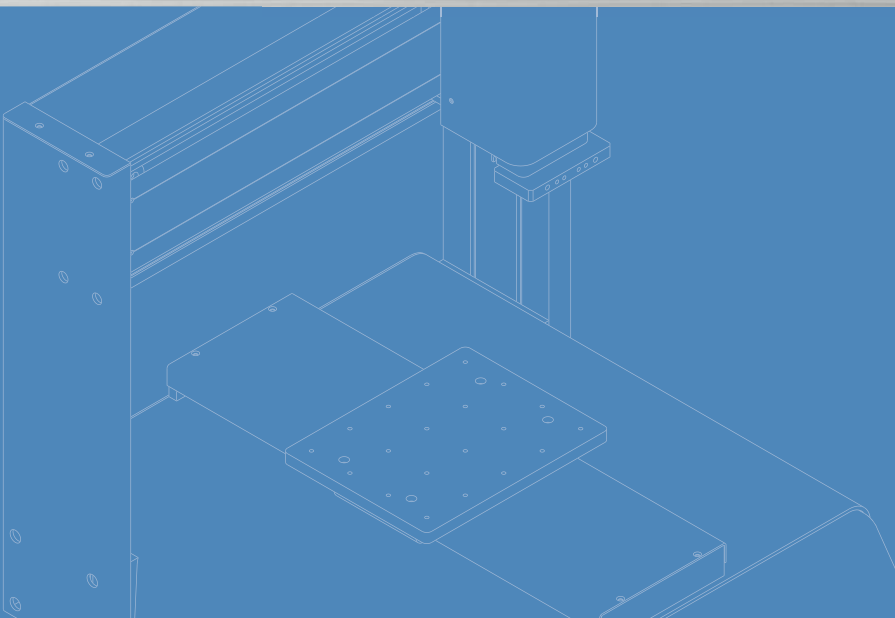# Robotics

Dispensing Automation

Index
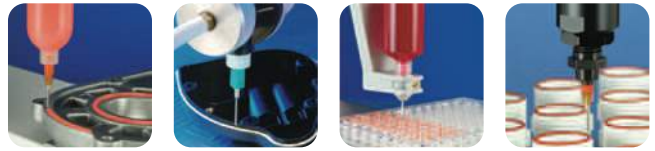
Introducing Advances in Robotics
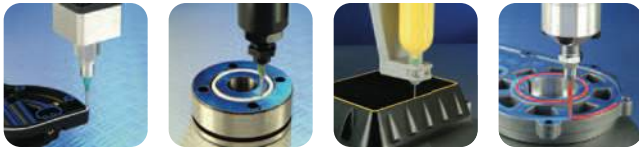
Features
- Dots, lines, circles & arcs
- Simple programming
- Three and four axes models
- Suitable for a wide range of dispensing
- Interpolates in all axes
- CE and RoHS compliant Robots

F7000N Benchtop - *Optima* - Series

Introducing the enhanced 32 bit F7000N series with upgraded features. These systems offer improved speed, reliability and performance with micron measured reliability and resolution. Maximum point capacity is 5 million. F7000N *Optima* robots are available in three and four axes models. Fisnar robots interpolate lines and curves in all axes. Robots are equipped with an easy-to-use teach pendant for simple programming using Fisnar proven user-friendly software, providing simple prompts that enable a program to be operational within minutes.

F4000N & F5000N Benchtop - *Plus* - Series

An excellent value benchtop robot series with a proven record of accuracy and reliability. The *Plus* series includes upgraded components that result in a quieter and more efficient operation. Programs are stored on board and a USB drive is provided for easy program transfer and off-robot storage. F4000N & F5000N robots are equipped with an easy-to-use teach pendant for simple programming using Fisnar proven user-friendly software, providing simple prompts that enable a program to be operational within minutes.

F3000N Benchtop - *Exacta* - Series - Servo Ball Screw Drives - Heavy Duty

Highly accurate, closed-loop positioning robots with ball-screw drives. Manufactured for low vibration and rugged operating efficiency. The new robust F3000N *Exacta* series include proven servo drive technology. Closed-loop technology provides fail safe operation. Programs are stored on board the robot but may be uploaded and downloaded by RS232 port. F3000N robots are equipped with an easy-to-use teach pendant for simple programming using Fisnar proven user-friendly software, providing simple prompts that enable a program to be operational within minutes.

F2000N Benchtop - *Lotus* - Series

The original benchtop series robots offering superior I/O electronics and enhanced programming software. Robots are equipped with a teach pendant for simple programming. Programs are stored on board the robot; alternatively an optional software package allows programming, editing and storage off line. Robots are available in CE and non CE models.

F9000N & F8000N Gantry & Cantilever Series

Gantry and Cantilever designs have several distinguishable uses - conveyorized production lines, spray applications and applications requiring heavier dispensing systems such as Meter & Mixing two-part equipment, Hot Melt systems and custom sizes with longer Z axis reach. They are particularly suited to the Solar assembly industry as these robots can be manufactured to any required size. Standard sizes are featured in this brochure. F9000N and F8000N robots are equipped with an easy-to-use teach pendant for simple programming. Optional bar coded identity software is available.

F2004N SCARA Robot - Selective Compliance Assembly Robot Arm

An high speed industrial SCARA robot, ideal for high volume dispensing and pick & place applications requiring greater flexibility for automated manufacturing environments, including conveyors and work cells. The F2000N robot is equipped with an easy-to-use teach pendant for simple programming using Fisnar proven user-friendly software, providing simple prompts that enable a program to be operational within minutes.

RT404 & Z620 Benchtop Rotary table and Z-Axis Dispense Systems

The RT404 is a rugged semi-automatic, dual-head rotary dispensing table, designed for either foot pedal or hand operated control. Dispensing valves or syringes maybe mounted on the two heads and angled so that they can dispense circular beads either inside or outside an object. The Z620 Z-Aaxis motion system ideal solution for repetitive filling, potting and other dispensing operations requiring a simple up and down operation.

(973) 646-5044

F7300N - 3 & 4 Axes

Working Area 300 x 300mm

Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High Resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 5 million point memory capacity, 50,000 points per program
- USB connector allows system updates and program interchange between robots
- Available without Teach Pendant for multiple installations.

The model F7300N is a RoHS compliant upgrade to the popular 11.81" x 11.81" (300 x 300mm) benchtop robot. This internationally accepted robot maintains the compact style and functionality of design, providing a precision multiple axis robot ideal for many bench dispensing projects. Resolution is 1 micron and interpolation is in all axes. The F7300N has been engineered to accept a tool weight of up to 5kg and a worktable load of 10kg, making the system tough enough for a wide range of automated dispensing applications.

Dimensions

Model

| F7300N | Robot 3-axes 110/220V |
| F7304N | Robot 4-axes 110/220V |

Accessories (optional)

562008C	External start box
DSP501LF	Dispenser
F7000N-WIN	Windows® software package

Specifications

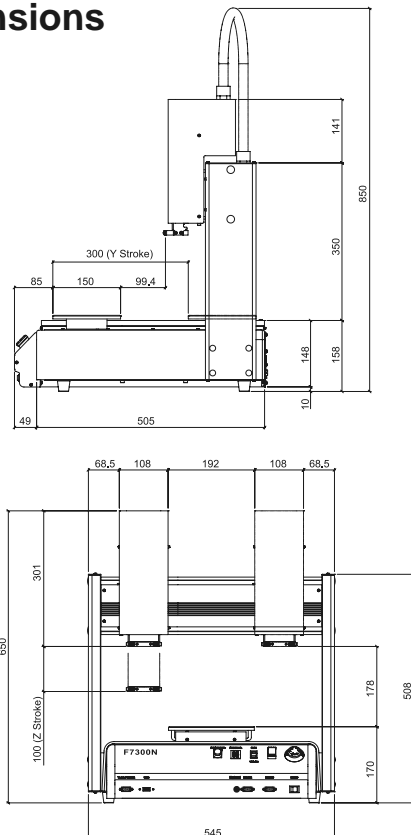| X/Y/Z Work area (mm):	300 / 300 / 100 4th axis +/-360°
Worktable load / Tool:	10 kg. / 5 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 50,000 points / program
Processor:	32 Bit
Drive Sys. / Stepping motor:	5-phase micro stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	Auto-switching AC100-240 - 300 Watts
Dimensions (WxDxH):	545 x 554 x 850
Weight:	82.5 lbs (37.5 kg)

F7400N - 3 & 4 Axes

Working Area 400 x 400mm
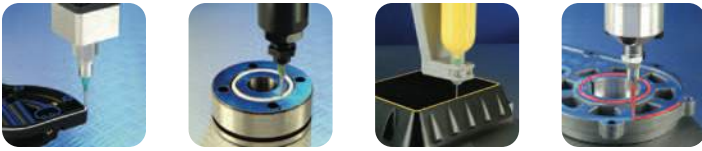
Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High Resolution 0.001mm
- Performs continuous path and point-to-point motions.
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 5 million point memory capacity, 50,000 points per program
- USB connector allows system updates and program interchange between robots
- Available without Teach Pendant for multiple installations

The model F7400N dispensing robot has the largest working area in the F7000N series at 15.75" x 15.75" (400 x 400mm). Fisnar Inc. robots interpolate in all axes for 3D dispensing of adhesives, silicones and UV Cure resins. It is also possible to mount a vacuum pick and place system coupled with automatic dispensing equipment for dispense and place operations. Resolution is 1 micron and interpolation is in all axes. The F7400N has been engineered to accept a tool weight of up to 5kg and a worktable load of 10kg, making the system tough enough for a wide range of automated dispensing applications.

Model

| F7400N | Robot 3-axes 110/220V |
| F7404N | Robot 4-axes 110/220V |

Accessories (optional)

562008C	External start box
DSP501LF	Dispenser
F7000N-WIN	Windows® software package

Specifications

X/Y/Z Work area (mm):	400 / 400 / 100 4th axis +/-360°
Worktable load / Tool:	10 kg. / 5 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 50,000 points / program
Processor:	32 Bit
Drive Sys. / Stepping motor:	5-phase micro stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	Auto-switching AC100-240 - 300 Watts
Dimensions (WxDxH):	635 x 645 x 850
Weight:	94.6 lbs (43 kg)

Dimensions
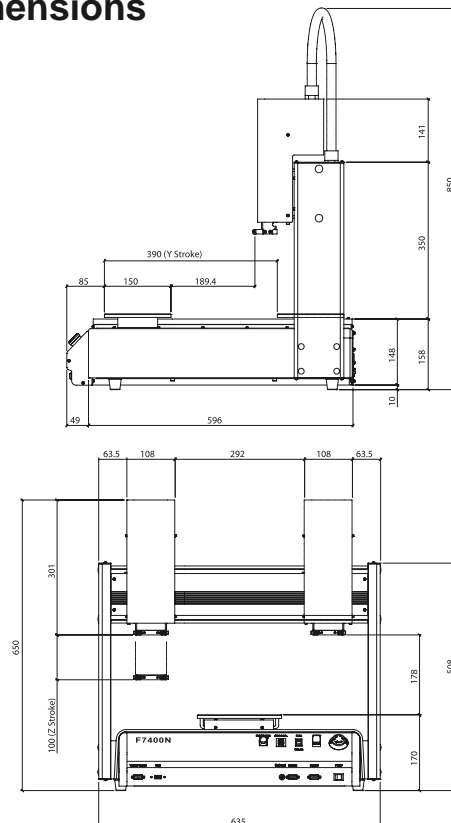
F7000NV - Series Vision System

With Auto Alignment Function

Features

- Ideal for irregular dispensing route per component
- High Resolution 0.001mm
- Automatic offset of dispensing route
- Precision operation
- Increased production efficiency
- Touch screen programming
- Preview simulation of dispense route
- Auto offset of coordinates after tip change
- Edit programs directly - easy learn - fast response
- CAD DXF and Excel accepted
- Optional LED light accessories for light conditions

Detail

Touch screen programming with simulation preview.

Vision system includes:
- Robot 3 axes - optional 300 x 300mm or 400 x 400mm
- Touch screen PC
- Software
- Color camera
- Camera control
- Exlite Cognate in-sight white LED
- CCD conversion ring (20.40.60mm)
- CCD fixture, LSC light fixture, control system fixture
- Frame capture dongle USB, extended line, LAN cable

The vision system is supplied complete including the PC, ensuring all components are compatible, thereby eliminating any costly start-up issues and reducing the learning curve.

The system is designed to provide automatic dispensing program offsets when the dispensing path of a component cannot be guaranteed.

Accepts CAD, DXF and Excel formats for dispense paths. Commonly two fiducial points are used to provide program offsets, however one is also possible.

Optional LED's may be required depending on refractive surface.

Model (complete system)

F7300NV	3-axes Robot 300x300mm 110/220V CE
F7400NV	3-axes Robot 400x400mm 110/220V CE

Accessories (optional)

F7001NZ	4X zoom lens
DSP501LF	Dispenser

Specifications

X/Y/Z Work area (mm):	300 / 300 / 100 or 400 / 400 / 100
Vision Software:	Robot Vision
System Operation:	Touch Screen Computer (All in One)
Camera:	USB Color Camera
Interface Port:	LAN
Frame Grabber:	USB Dongle
Light System:	EXLITE Cognate In-Sight White LED
Lens:	4X (optional)
Teaching Method:	1. PC Software, 2. Screen Touch, 3. Teach Pendant
Software Function:	1. Program Edit, 2. Auto Vision Align, 3. Accept DXF Files

F7900N - 3 Axes
Working Area 200 x 200mm

Optima
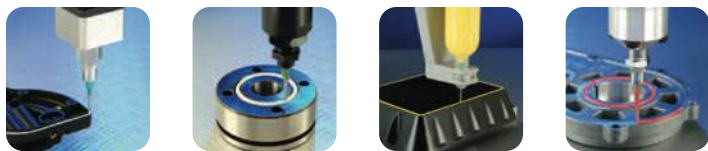
Features

- High resolution 0.02mm
- On board 100 programs, 400,000 point memory capacity, 4,000 points per program
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- USB connector allows system updates and program interchange between robots by flash memory card
- Available without Teach Pendant for multiple installations

A powerful compact-sized desktop robot with a working area of 7.87" x 7.87" (200 x 200mm). Its reduced benchtop footprint makes it an ideal robot for automating a current manual dispensing application.

Programming is carried out by a teach-pendant (included) using the industry's leading dispensing software that walks the user through step-by-step instructions to create a sophisticated dispensing operation in minutes.

Model

F7900N   3-axes robot 110/220V

Accessories (optional)

562008C   External start box
DSP501LF   Dispenser
F7000N-WIN   Windows® software package

Specifications

X/Y/Z Work area (mm):	200 / 200 / 50
Worktable load / Tool:	3 kg. / 1 kg.
Max. Speed X&Y / Z:	500 / 250 (mm/sec)
Repeatability:	+/- 0.04mm/ Axis
Resolution:	0.02mm/ Axis
Data Memory:	100 Program 4,000 points / program
Drive Sys. / Stepping motor:	3-phase
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	4 inputs / 4 outputs
External Interface:	USB / RS232
Power Supply:	AC 95-132V - AC 180-250V
Dimensions (WxDxH):	323 x 443 x 437
Weight:	22 lbs (10 kg)

Dimensions

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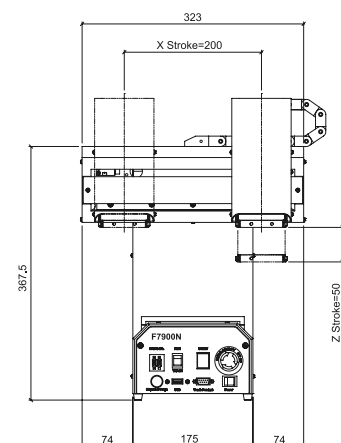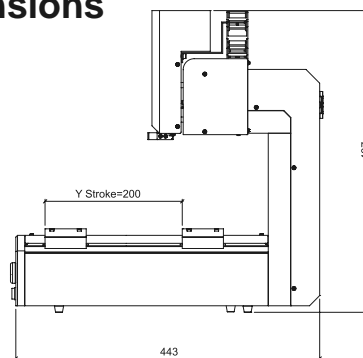
F4300N - 3 Axes

Working Area 300 x 300mm

Features

- High resolution 0.001mm
- On board 100 programs, 400,000 point memory capacity, 4,000 points per program
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Available without Teach Pendant for multiple installations
- USB connector allows system updates and program interchange between robots

A powerful compact-sized desktop robot with a working area of 11.81" x11.81" (300 x 300mm). Its reduced benchtop footprint makes it an ideal robot for automating a current manual dispensing application.
Programming is carried out by a teach-pendant (included) using the industry's leading dispensing software that walks the user through step-by-step instructions to create a sophisticated dispensing operation in minutes.
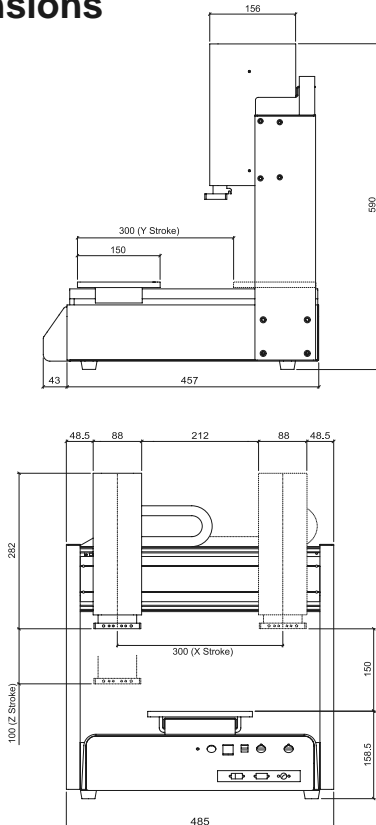
Dimensions

Model

F4300N	Robot 3-axes 110/220V

Accessories (optional)

562008C	External start box
DSP501LF	Dispenser
F4000N-WIN	Windows® software package

Specifications

X/Y/Z Work area (mm):	300 / 300 / 100
Worktable load / Tool:	10 kg. / 5 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 4,000 points / program
Drive Sys. / Stepping motor:	3-phase
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	AC 95-132V, AC 180-250V
Dimensions (WxDxH):	485 x 500 x 590
Weight:	66 lbs (30 kg)

F4400N - 3 Axes
Working Area 400 x 400mm
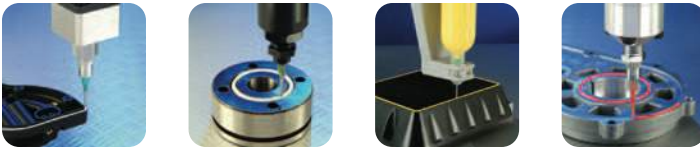
Features
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 400,000 point memory capacity, 4,000 points per program
- Available without Teach Pendant for multiple installations
- USB connector allows system updates and program interchange between robots

The model F4400N provides a generous working area of 15.75" x 15.75" (400 x 400mm). Fisnar robots interpolate in all axes for 3D dispensing of adhesives, silicones and UV Cure resins.

Resolution is 1 micron and interpolation is in all axes. The F4400N has been engineered to accept a tool weight of up to 5kg and a worktable load of 10kg, making the system tough enough for a wide range of automated dispensing applications.

Model

F4400N   Robot 3-axes 110/220V

Accessories (optional)

562008C   External start box
DSP501LF   Dispenser
F4000N-WIN   Windows® software package

Specifications

X/Y/Z Work area (mm):	400 / 400 / 100
Worktable load / Tool:	10 kg. / 5 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 4,000 points / program
Drive Sys. / Stepping motor:	3-phase
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	AC 95-132V, AC 180-250V
Dimensions (WxDxH):	530 x 600 x 596
Weight:	88 lbs (40 kg)

Dimensions

7
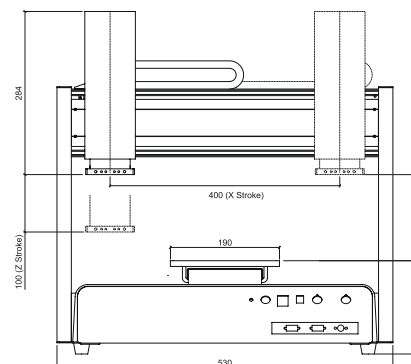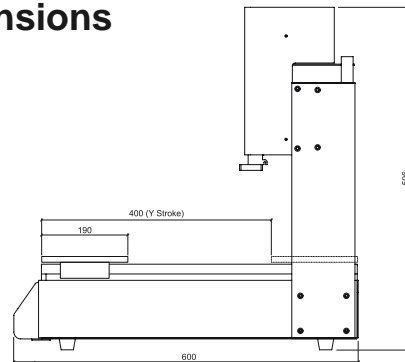
F4500N - 3 Axes

Working Area 500 x 500mm

Features

- High resolution 0.001mm

- On board 100 programs, 400,000 point memory capacity, 4,000 points per program

- Performs continuous path and point-to-point motions

- Quick fluid-purge button located on front panel

- Software tip alignment routine for quick program offsets when changing dispensing tips

- Step-and-repeat functions – program one object only for multiple identical objects

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling

- Available without Teach Pendant for multiple installations

- USB connector allows system updates and program interchange between robots

A powerful and optimum sized benchtop robot with a working area of 19.68" x19.68" (500 x 500mm) and extra Z reach of 5.90" (150mm). Ideal for large non contiguous structures and for larger dispensing equipment or apparatus. The F4500N is suitable for plasma treatment applications prior to dispensing. Programming is carried out by a teach-pendant (included) using the industry's leading dispensing software that walks the user through step-by-step instructions to create a sophisticated dispensing operation in minutes.

Dimensions

Model

F4500N   Robot 3-axes 110/220V CE

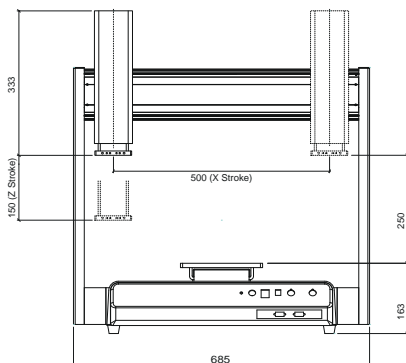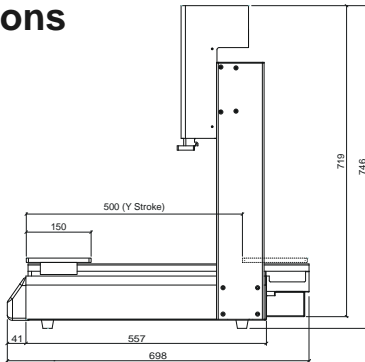## Accessories (optional)

562008C	External start box
DSP501LF	Dispenser
F4000N-WIN	Windows® software package

Specifications

X/Y/Z Work area (mm):	500 / 500 / 150
Worktable load / Tool:	10 kg. / 5 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 4,000 points / program
Drive Sys. / Stepping motor:	3-phase
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	AC 95-132V, AC 180-250V
Dimensions (WxDxH):	685 x 698 x 746
Weight:	102 lbs (46 kg)

8

F4200N - 3 Axes

Working Area 200 x 200mm
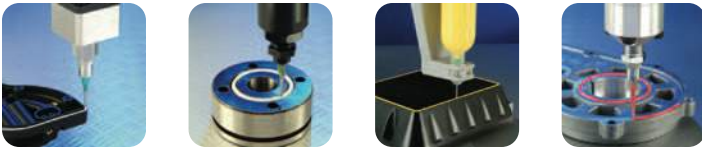
Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling

- High resolution 0.001mm

- Performs continuous path and point-to-point motions

- Quick fluid-purge button located on front panel

- Software tip alignment routine for quick program offsets when changing dispensing tips

- Step-and-repeat functions – program one object only for multiple identical objects

- On board 100 programs, 400,000 point memory capacity, 4,000 points per program

- Available without Teach Pendant for multiple installations

The F4200N is a compact and economically priced benchtop robot. Designed for medical and laboratory type environments requiring a streamlined and easily maintained machine. This robot will support most light dispensing applications that require a high performance standard. The bench space reduction is an additional benefit. Programming is simply carried out by a teach-pendant (included) using the industry's leading dispensing software that walks the user through step-by-step instructions to create a sophisticated dispensing operation in minutes.

Model

F4200N   Robot 3-axes 200x200mm 110/220V

Accessories (optional)

562008C   External start box
DSP501LF   Dispenser
F4000N-WIN   Windows® software package

Specifications

X/Y/Z Work area (mm):	200 / 200 / 50
Worktable load / Tool:	3 kg. / 1 kg.
Max. Speed X&Y / Z:	500 / 200 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 4,000 points / program
Drive Sys. / Stepping motor:	3-phase micro stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	AC 95-132V, AC 180-250V
Dimensions (WxDxH):	327 x 500 x 450
Weight:	33 lbs (14.9 kg)

Dimensions

x stroke=200
455.9
327

y stroke=200
120
365.9
245.9
139.5
z stroke=50
90   341.5
497.5

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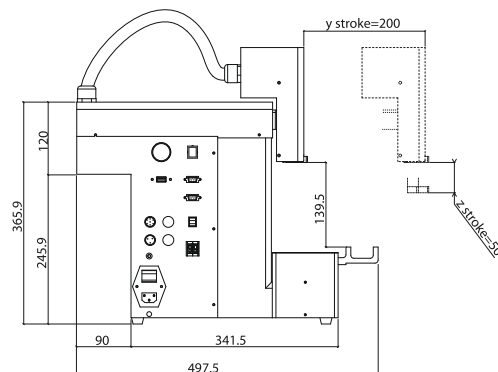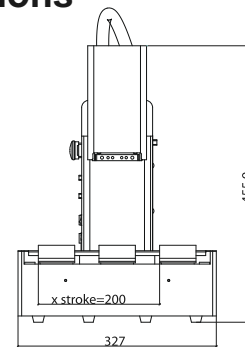
F5200N - 3 Axes Gantry UNITOP™

Working Area 200 x 200mm

Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Place-anywhere UNITOP™ gantry design, allows flexible operation
- High resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel of controller
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 400,000 point memory capacity, 4,000 points per program
- Available without Teach Pendant for multiple installations
- USB connector allows system updates and program interchange between robots

The model F5200N is a compact and economically priced gantry robot with all moving axes above the workpiece. The Unitop™ is suitable for any platform requiring a gantry type mounting providing open access under the robot. The F5200N is also ideal for conveyor fed automation or installed in work cells operating as a slave robot.

Working area is 7.87" x 7.87" (200 x 200mm). Programming is simply carried out by a teach-pendant (included) using the industry's leading dispensing software that walks the user through step-by-step instructions to create a sophisticated dispensing operation in minutes.

Dimensions

481.7

x stroke=200mm

442.5

y stroke=200mm

z stroke=50mm

240

122

272.2

248.5

386

Model

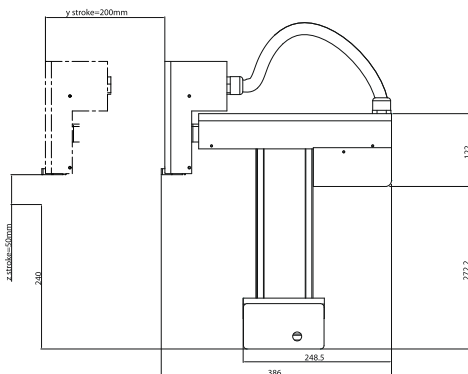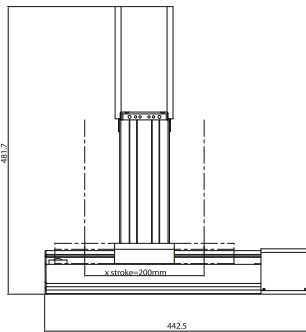F5200N   Robot UNITOP™ 3-axes 110/220V CE

Accessories (optional)

DSP501LF   Dispenser
F4000N-WIN   Windows® software package

Specifications

X/Y/Z Work area (mm):	200 / 200 / 50
Total load - Z axis:	2 kg.
Max. Speed X&Y / Z:	500 / 300 (mm/sec)
Repeatability:	+/- 0.02mm/ Axis
Resolution:	0.001mm/ Axis
Data Memory:	100 Programs 4,000 points / program
Drive Sys. / Stepping motor:	Micro stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	8 inputs / 8 outputs
External Interface:	USB / RS232
Power Supply:	AC 110 - 220V
Dimensions (WxDxH):	350 x 330 x 475
Weight:	37.4 lbs (17 kg)

F3300N - 3 & 4 Axes Servo

Working Area 300 x 300mm
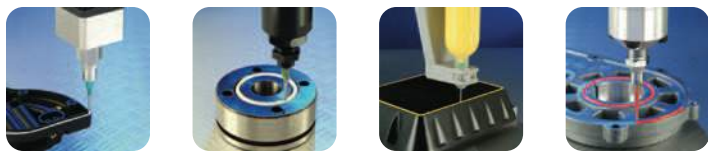
Features

- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 1,000 points per program
- Memory capacity, 20,000 steps / 20,000 points

The model F3300N is a RoHS compliant 11.81" x 11.81" (300 x 300mm) benchtop robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for many bench dispensing projects. Resolution is 1 micron and interpolation is in all axes. The F3300N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model with a worktable load of 15 kg, making the system tough enough for a wide range of automated dispensing applications.

Model

F3300N   Robot 3-axes 220V
F3304N   Robot 4-axes 220V

Accessories (optional)

DSP501LF   Dispenser

Dimensions

Specifications

X/Y/Z Work area (mm):	300 / 300 / 100	R-axis +/-360°
Worktable load / Tool:	15 kg. / 7 kg.	R-axis 15 kg. / 4 kg.
Max. Speed X&Y / Z:	500 (mm/sec)	R-axis 360°/sec
Repeatability:	+/- 0.02mm Axis	R-axis ± 0.11°
Resolution:	0.001mm	
Data Memory:	100 Programs 20,000 step / 20,000 pts.	
Processor:	Main: 32bit, 1200 Mflops	
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40 Mips	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 4, Out: 5 User I/O IN: 16, Out: 15	
External Interface:	RS232-C 2ch	
Power Supply:	AC 220V	
Dimensions (mm) (WxDxH):	604 x 680 x 730	
Weight:	123.2 lbs (56 kg)	

(973) 646-5044
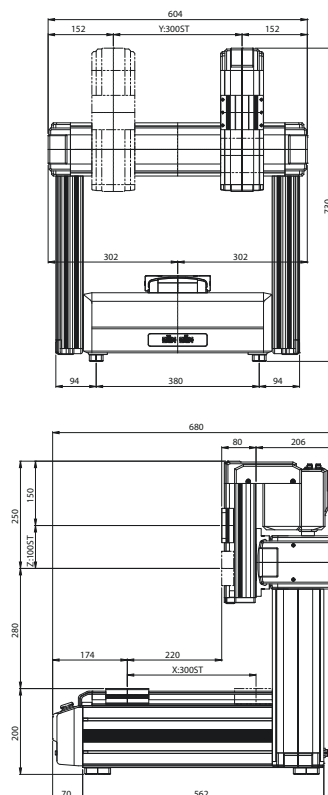
F3400N 3 & 4 - Axes Servo

Working Area 400 x 400mm

Features

- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 1,000 points per program
- Memory capacity, 20,000 steps / 20,000 points

The model F3400N is a RoHS compliant 15.74" x 15.74" (400 x 400mm) benchtop robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for many bench dispensing projects. Resolution is 1 micron and interpolation is in all axes. The F3400N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model with a worktable load of 15 kg, making the system tough enough for a wide range of automated dispensing applications.

Dimensions
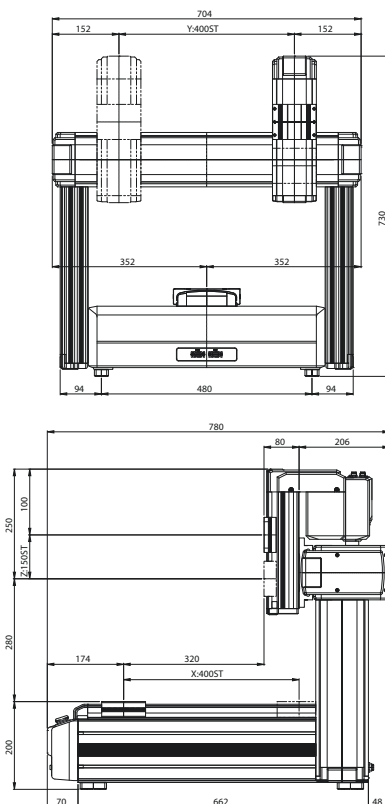
Model

F3400N	Robot 3-axes 220V
F3404N	Robot 4-axes 220V

Accessories (optional)

DSP501LF	Dispenser

Specifications

X/Y/Z Work area (mm):	400 / 400 / 150	R-axis +/-360°
Worktable load / Tool:	15 kg. / 7 kg.	R-axis 15 kg / 4 kg
Max. Speed X&Y / Z:	500 (mm/sec)	R-axis 360°/sec
Repeatability:	+/- 0.02mm Axis	R-axis ± 0.11°
Resolution:	0.001mm	
Data Memory:	100 Programs 20,000 step / 20,000 pts.	
Processor:	Main: 32bit, 1200 Mflops	
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40 Mips	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 4, Out: 5 User I/O IN: 16, Out: 15	
External Interface:	RS232-C 2ch	
Power Supply:	AC 220V	
Dimensions (mm) (WxDxH):	704 x 780 x 730	
Weight:	143 lbs (65 kg)	

www.fisnar.com

F3000N - Dual Station Models

Dual Operation
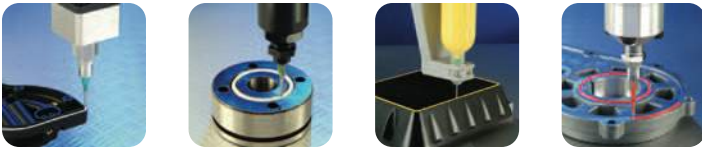
Features

- Dual station operation
- Select from 300mm x 500mm or 400mm x 600mm systems
- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- High resolution 0.001mm
- Performs continuous path and point-to-point motions
- Quick fluid-purge button located on front panel
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 1,000 points per program
- Memory capacity, 20,000 steps / 20,000 points

F3000N Exacta 3 axes dual station systems include two independent working areas. Ideal for fast change over of identical parts or two dispensing operations. A servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axes robot ideal for many bench dispensing projects. Resolution is 1 micron and interpolation is in all axes. F3000N robots have been engineered to accept a tool weight of up to 7kg and a worktable load of 15 kg, making the F3000N tough enough for a wide range of automated dispensing applications.

Model

F3350N	300 x 500 DS 3-axes 220V
F3460N	400 x 600 DS 3-axes 220V

Dimensions (F3460N)

Specifications

W+X/Y/Z Work area (mm):	300 / 300 / 500 / 100 400 / 400 / 600 / 100
Worktable load / Tool:	15 kg. / 7 kg. + 15 kg. / 7 kg.
Max. Speed All Axes:	500 (mm/sec)
Repeatability:	+/- 0.02mm Axis
Resolution:	0.001mm
Data Memory:	100 Programs 20,000 step / 20,000 pts.
Processor:	Main: 32bit, 1200 Mflops
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40 Mips
Motion Control:	PTP & CP (3D Line, circle)
Teaching Method:	Teach Pendant
I/O Signals:	System I/O In: 4, Out: 5 User I/O In: 16, Out: 15
External Interface:	RS232-C 2ch
Power Supply:	AC 220V
Dimensions (mm) (WxDxH):	804 x 680 x 730 904 x 780 x 730
Weight:	165 lbs (75 kg) 209 lbs (95 kg)

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13
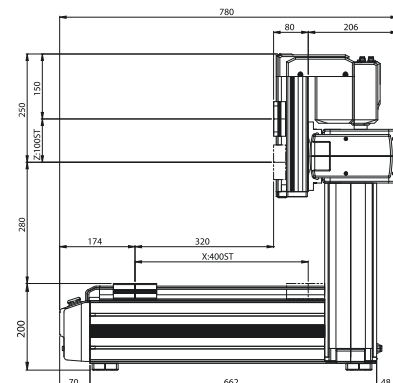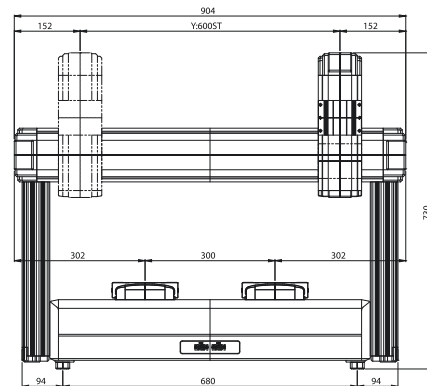
F2200N - 3 & 4 Axes

Working Area 200 x 200mm

Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling

- Repeatability 0.006mm for perfect dispensing

- Performs continuous path and point-to-point motions

- System includes 16 I/O signal interface for connection to tools and controllers

- Software tip alignment routine for quick program offsets when changing dispensing tips

- Step-and-repeat functions – program one object only for multiple identical objects

- On board 255 programs, 30,000 point memory capacity

- Fast, accurate and reliable 24 hours a day

The model F2200N is extremely economical on bench space, occupying a footprint of only 12.60 x 15.25 inches (320 x 387.5mm). Simple to program using a teach pendant or optional Windows® software. This cartesian robot automatically interpolates lines and curves in all axes. The model F2204N also includes a 4th axis for tool rotation. The powerful yet user-friendly software provides simple prompts, allowing programs to be created quickly and easily. It is possible to program and be operational within minutes.

Dimensions

Model

F2200N-1	Robot 3-axes 110V
F2200N-1CE	Robot 3-axes 110V CE
F2204N-1	Robot 4-axes 110V
F2204N-1CE	Robot 4-axes 110V CE
F2200N-2	Robot 3-axes 220V
F2200N-2CE	Robot 3-axes 220V CE
F2204N-2	Robot 4-axes 220V
F2204N-2CE	Robot 4-axes 220V CE

Accessories (optional)

DSP501LF	Dispenser
F2000N-WIN	Windows® software package

Specifications

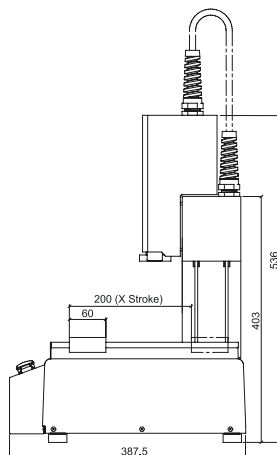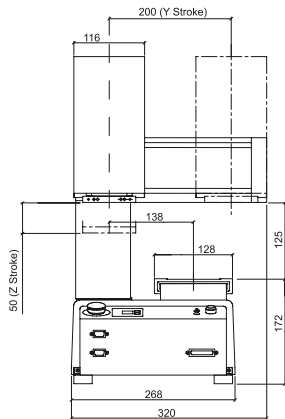|	
X/Y/Z Work area (mm):	200 / 200 / 50 4th axis +/-360°
Worktable load / Tool:	7 kg. / 3.5 kg.
Max. Speed X&Y / Z:	700 / 250 (mm/sec) 4th axis 600°/sec
Resolution X&Y / Z (mm):	0.005 / 0.0025 4th axis 0.009°
Repeatability:	3-axis: +/- 0.006mm/Axis 4-axis: +/-0.01mm/Axis, R-axis: 0.004°
Data Memory:	255 Programs, 30,000 Points
PLC:	100 programs, 1000 steps per program
Drive Sys. / Stepping motor:	5-phase stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	16 inputs / 16 outputs
External Interface:	RS232
Power Supply:	110V: AC 90-132V 220V: AC 180-250V
Dimensions (WxDxH):	3-axis: 320 x 387.5 x 536mm 4-axis: 320 x 387.5 x 655mm
Weight:	3-axis: 39.6 lbs (18 kg) 4-axis: 44 lbs (20 kg)

Working Area 300 x 320mm
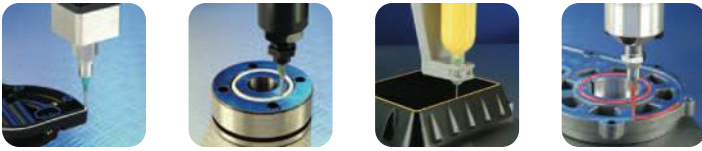
Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Repeatability 0.007mm for perfect dispensing
- Performs continuous path and point-to-point motions
- System includes 16 I/O signal interface for connection to tools and controllers
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 255 programs, 30,000 point memory capacity
- Fast, accurate and reliable 24 hours a day

The F2300N is a popular robot in the Cartesian range, with a working area of 11.81 x 12.60 inches (300 x 320mm). The system is easily programmed using a teach pendant or optional Windows® software. This cartesian robot automatically interpolates lines and curves in all axes. The model F2304N also includes a 4th axis for tool rotation. The powerful yet user-friendly software provides simple prompts, allowing programs to be created quickly and easily. It is possible to program and be operational within minutes.

Model

F2300N-1	Robot 3-axes 110V
F2300N-1CE	Robot 3-axes 110V CE
F2304N-1	Robot 4-axes 110V
F2304N-1CE	Robot 4-axes 110V CE
F2300N-2	Robot 3-axes 220V
F2300N-2CE	Robot 3-axes 220V CE
F2304N-2	Robot 4-axes 220V
F2304N-2CE	Robot 4-axes 220V CE

Accessories (optional)

DSP501LF	Dispenser
F2000N-WIN	Windows® software package

Dimensions

Specifications

X/Y/Z Work area (mm):	300 / 320 / 100 4th axis +/-360°
Worktable load / Tool:	11 kg. / 6 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec) 4th axis 800°/sec
Resolution X&Y / Z (mm):	0.005 / 0.0025 4th axis 0.009°
Repeatability:	3-axis: +/- 0.007mm/Axis 4-axis: +/-0.01mm/Axis, R-axis: 0.004°
Data Memory:	255 Programs, 30,000 Points
PLC:	100 programs, 1000 steps per program
Drive Sys. / Stepping motor:	5-phase stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	16 inputs / 16 outputs
External Interface:	RS232
Power Supply:	110V: AC 90-132V 220V: AC 180-250V
Dimensions (WxDxH):	3-axis: 560 x 529 x 649mm 4-axis: 560 x 529 x 840mm
Weight:	3-axis: 77 lbs (35 kg) 4-axis: 79.2 lbs (36 kg)

(973) 646-5044
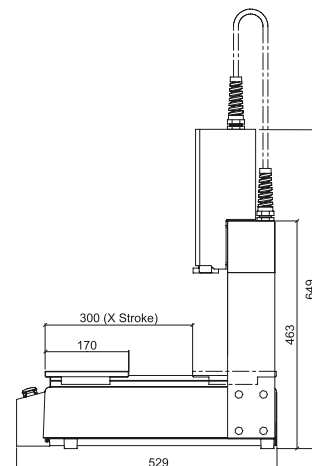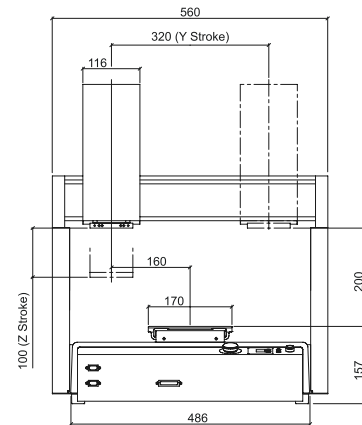
F2400N - 3 & 4 Axes

Working Area 400 x 400mm

Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling

- Repeatability 0.007mm for perfect dispensing

- Performs continuous path and point-to-point motions

- System includes 16 I/O signal interface for connection to tools and controllers

- Software tip alignment routine for quick program offsets when changing dispensing tips

- Step-and-repeat functions – program one object only for multiple identical objects

- On board 255 programs, 30,000 point memory capacity

- Fast, accurate and reliable 24 hours a day

The F2400N has a work area of 15.75 x 15.75 inches (400 x 400mm), but the footprint is less than 25 inches (629mm) square for mounting on a standard workbench. The system is easily programmed using a teach pendant or optional Windows® software. This cartesian robot automatically interpolates lines and curves in all axes. The model F2204N also includes a 4th axis for tool rotation. The powerful yet user-friendly software provides simple prompts, allowing programs to be created quickly and easily. It is possible to program and be operational within minutes.

Dimensions

400 (Y Stroke)
118
150 (Z stroke)
235
170
300
157
584

400 (X Stroke)
170
799
563
629

Model

F2400N-1	Robot 3-axes 110V
F2400N-1CE	Robot 3-axes 110V CE
F2404N-1	Robot 4-axes 110V
F2404N-1CE	Robot 4-axes 110V CE
F2400N-2	Robot 3-axes 220V
F2400N-2CE	Robot 3-axes 220V CE
F2404N-2	Robot 4-axes 220V
F2404N-2CE	Robot 4-axes 220V CE

Accessories (optional)

DSP501LF	Dispenser
F2000N-WIN	Windows® software package

Specifications

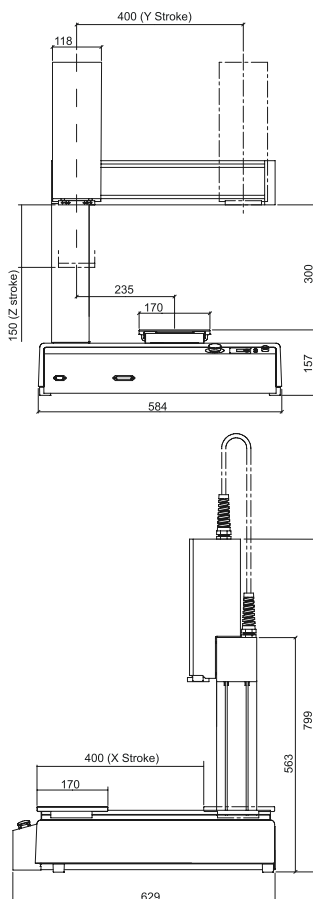|	
X/Y/Z Work area (mm):	400 / 400 / 150 4th axis +/-360°
Worktable load / Tool:	11 kg. / 6 kg.
Max. Speed X&Y / Z:	800 / 320(mm/sec) 4th axis 800°/sec
Resolution X&Y / Z (mm):	0.005 / 0.0025 4th axis 0.009°
Repeatability:	3-axis: +/- 0.007mm/Axis 4-axis: +/- 0.01mm/Axis, R-axis: 0.004°
Data Memory:	255 Programs, 30,000 Points
PLC:	100 programs, 1000 steps per program
Drive Sys. / Stepping motor:	5-phase stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	16 inputs / 16 outputs
External Interface:	RS232
Power Supply:	110V: AC 90-132V 220V: AC 180-250V
Dimensions (WxDxH):	3-axis: 584 x 629 x 799mm 4-axis: 584 x 629 x 890mm
Weight:	3-axis: 92.4 lbs (42 kg) 4-axis: 94.6 lbs (43 kg)

Working Area 510 x 510mm
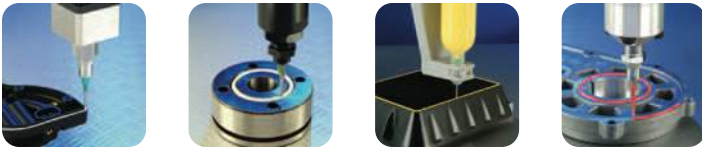
Lotus

Features

- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Repeatability 0.008mm for perfect dispensing
- Performs continuous path and point-to-point motions
- System includes 16 I/O signal interface for connection to tools and controllers
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 255 programs, 30,000 point memory capacity
- Fast, accurate and reliable 24 hours a day

The F2500N has a work area of 20.07 x 20.07 inches (510 x 510mm), but the footprint is less than 25 inches (629mm) square for mounting on a standard workbench. The F2500N Cartesian robot is open on one side allowing large objects to be easily handled in and out of the work area. The system automatically interpolates lines and curves in all axes and the model F2504N also includes a 4th axis for tool rotation. The powerful yet user-friendly software provides simple prompts, allowing programs to be created quickly and easily. It is possible to program and be operational within minutes.

Model

F2500N-1	Robot 3-axes 110V
F2500N-1CE	Robot 3-axes 110V CE
F2504N-1	Robot 4-axes 110V
F2504N-1CE	Robot 4-axes 110V CE
F2500N-2	Robot 3-axes 220V
F2500N-2CE	Robot 3-axes 220V CE
F2504N-2	Robot 4-axes 220V
F2504N-2CE	Robot 4-axes 220V CE

Accessories (optional)

DSP501LF	Dispenser
F2000N-WIN	Windows® software package

Specifications

X/Y/Z Work area (mm):	510 / 510 / 150 4th axis +/-360°
Worktable load / Tool:	11 kg. / 6 kg.
Max. Speed X&Y / Z:	800 / 320 (mm/sec) 4th axis 800°/sec
Resolution X&Y / Z (mm):	0.005 / 0.0025 4th axis 0.009°
Repeatability:	3-axis: +/- 0.008mm/Axis 4-axis: +/-0.01mm/Axis, R-axis: 0.004°
Data Memory:	255 Programs, 30,000 Points
PLC:	100 programs, 1000 steps per program
Drive Sys. / Stepping motor:	5-phase stepping motor
Motion Control:	PTP & CP
Teaching Method:	Teach Pendant
I/O signals:	16 inputs / 16 outputs
External Interface:	RS232
Power Supply:	110V: AC 90-132V 220V: AC 180-250V
Dimensions (WxDxH):	3-axis: 676 x 728 x 799mm 4-axis: 676 x 728 x 890mm
Weight:	3-axis: 94.6 lbs (43 kg) 4-axis: 96.8 lbs (44 kg)

Dimensions
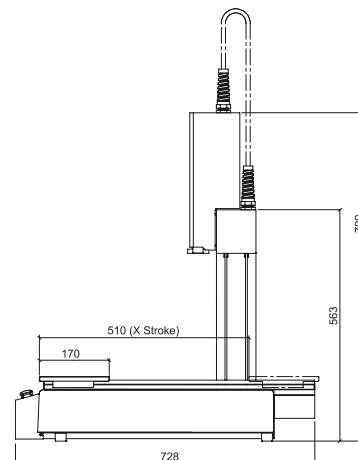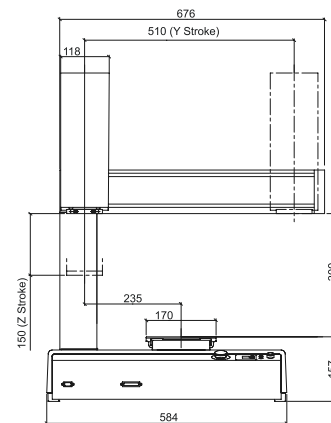
F9300N - 3 & 4 Axes Servo Cantilever

Working Area 300 x 300mm
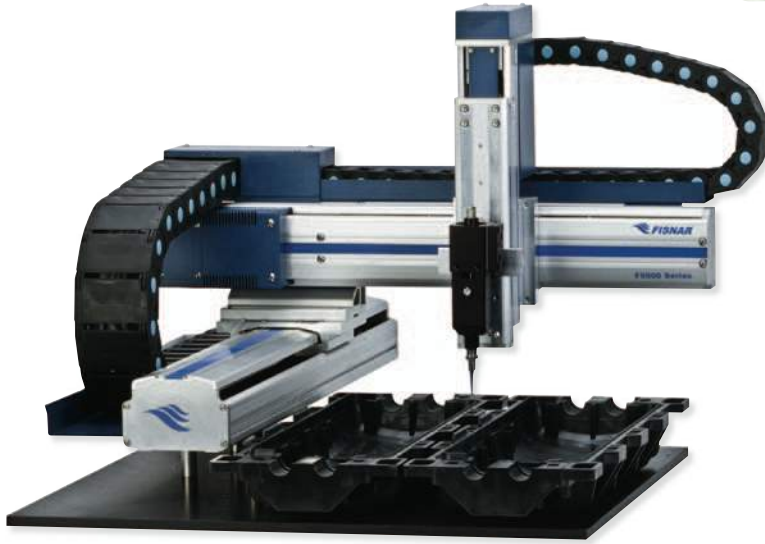
Features

- **Customized sizes available**
- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, solar junctions, stringers, coating, frame sealing and filling
- Resolution 0.001mm
- Performs continuous path and point-to-point motions
- Self contained controller functions
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 3,000 points per program
- Optional bar code scanning software

The model F9300N is a RoHS compliant 11.81" x 11.81" (300 x 300mm) gantry cantilever style robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for conveyor fed applications, such as solar modules. Many projects also require all moving axes to be above the work station, the F9300N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F9300N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model.

Dimensions
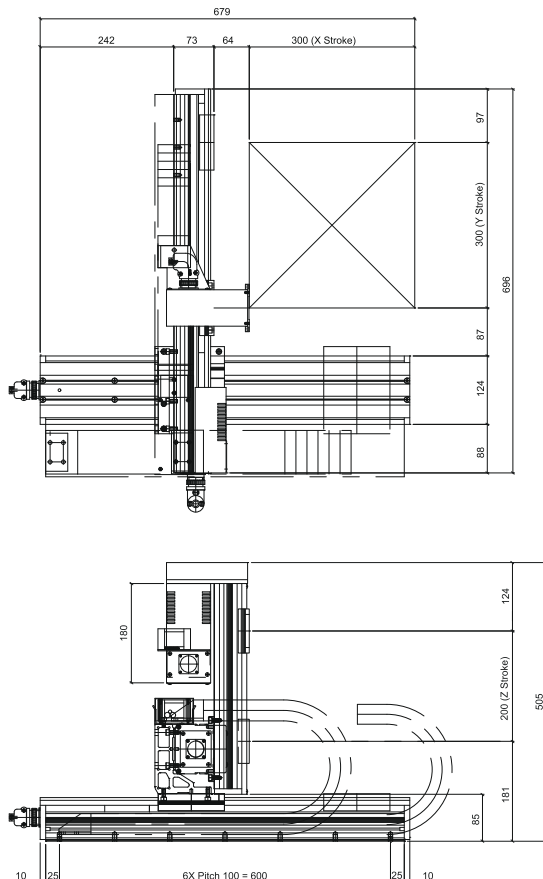
Model

F9300N	Robot 3-axes 220V
F9304N	Robot 4-axes 220V

Accessories (optional)

DSP501LF	Dispenser
F9000N-WIN	Windows® software package

Mounting Supports (two required each side)

Main	Height	Qty
562022-050	50mm	1
562022-100	100mm	1
562022-150	150mm	1

Specifications

X/Y/Z Work area (mm):	300 / 300 / 200 R-axis +/-360°
Maximum tool load:	7 kg. R-axis 4 kg.
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec
Repeatability:	+/- 0.02mm/ Axis R-axis ± 0.05°
Resolution:	0.001mm R-axis ± 0.001°
Data Memory:	100 Programs 3,000 step / PGM
Processor:	Main: 32bit, 900 mflops
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40mips
Motion Control:	PTP & CP (3D Line, circle)
Teaching Method:	Teach Pendant
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32
External Interface:	RS232
Power Supply:	2Ø AC220V - 500VA (600VA)
Dimensions (WxDxH):	679 x 696 x 505
Weight:	63.8 lbs (29 kg)

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F9600N - 3 & 4 Axes Servo Gantry

Working Area 600 x 600mm
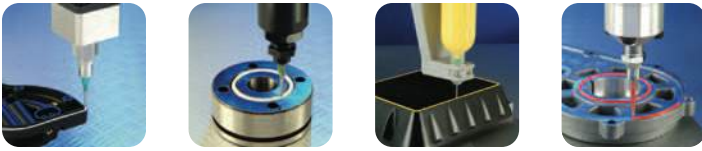
Features

- **Customized sizes available**
- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, solar junctions, stringers, coating, frame sealing and filling
- Resolution 0.001mm
- Performs continuous path and point-to-point motions
- Self contained controller functions
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 3,000 points per program
- Optional bar code scanning software

The model F9600N is a RoHS compliant 23.62" x 23.62" (600 x 600mm) gantry style robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for conveyor fed applications, such as solar modules. Many projects also require all moving axes to be above the work station, the F9600N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F9600N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model.

Model

F9600N	Robot 3-axes 220V
F9604N	Robot 4-axes 220V

Accessories (optional)

DSP501LF	Dispenser
F9000N-WIN	Windows® software package

Mounting Supports (two required each side)

Main (Left Side)	Idle (Right Side)	Height	Qty
562022-050	562023-050	50mm	1
562022-100	562023-100	100mm	1
562022-150	562023-150	150mm	1

Specifications

X/Y/Z Work area (mm):	600 / 600 / 200	R-axis +/-360°
Maximum tool load:	7 kg.	R-axis 4 kg.
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec	
Repeatability:	+/- 0.02mm/ Axis	R-axis ± 0.05°
Resolution:	0.001mm	R-axis ± 0.001°
Data Memory:	100 Programs 3,000 step / PGM	
Processor:	Main: 32bit, 900 mflops	
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40mips	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32	
External Interface:	RS232	
Power Supply:	2Ø AC220V - 500VA (600VA)	
Dimensions (WxDxH):	979 x 1022 x 505	
Weight:	81.4 lbs (37 kg)	

Dimensions

(973) 646-5044
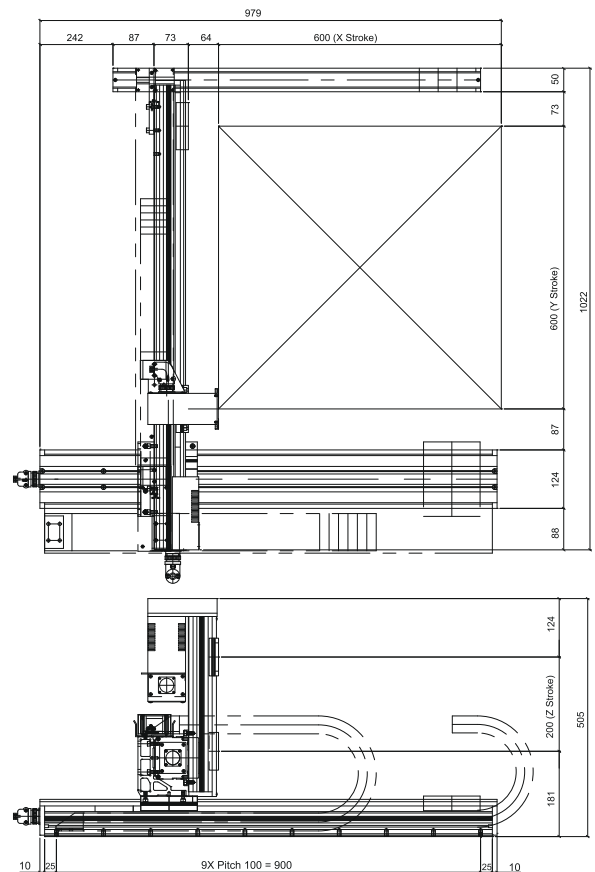
F9800N - 3 & 4 Axes Servo Gantry

Working Area 800 x 600mm

Features

- **Customized sizes available**
- Robust ball-screw servo motor drives
- Ideal for form-in-place gaskets, adhesives, potting, solar junctions, stringers, coating, frame sealing and filling
- Resolution 0.001mm
- Performs continuous path and point-to-point motions
- Self contained controller functions
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 3,000 points per program
- Optional bar code scanning software

The model F9800N is a RoHS compliant 31.50" x 23.62" (800 x 600mm) gantry style robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for conveyor fed applications, such as solar modules. Many projects also require all moving axes to be above the work station, the F9800N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F9800N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model.

Dimensions

Model

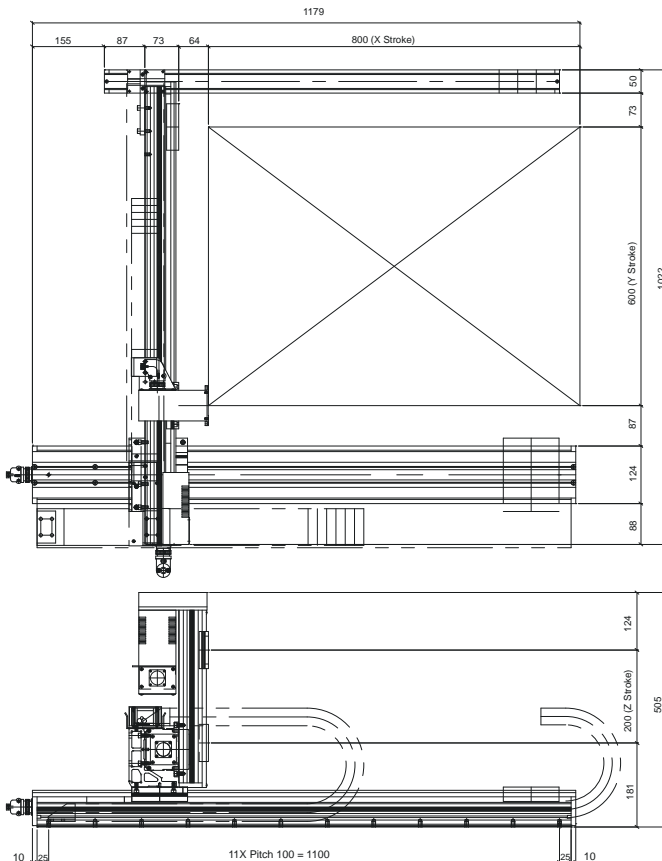| F9800N | Robot 3-axes 220V |
| F9804N | Robot 4-axes 220V |

Accessories (optional)

| DSP501LF | Dispenser |
| F9000N-WIN | Windows® software package |

Mounting Supports (three required each side)

Main (Left Side)	Idle (Right Side)	Height	Qty
562022-050	562023-050	50mm	1
562022-100	562023-100	100mm	1
562022-150	562023-150	150mm	1

Specifications

X/Y/Z Work area (mm):	800 / 600 / 200	R-axis +/-360°
Maximum tool load:	7 kg.	R-axis 4 kg.
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec	
Repeatability:	+/- 0.02mm/ Axis	R-axis ± 0.05°
Resolution:	0.001mm	R-axis ± 0.001°
Data Memory:	100 Programs 3,000 step / PGM	
Processor:	Main: 32bit, 900 mflops	
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40mips	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32	
External Interface:	RS232	
Power Supply:	2Ø AC220V - 500VA (600VA)	
Dimensions (mm) (WxDxH):	1179 x 1022 x 505	
Weight:	94.6 lbs (43 kg)	

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F9250N - 3 & 4 Axes Servo Gantry - Solar

Working Area 2500 x 1500mm
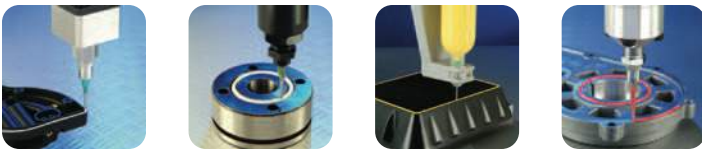
Features

- Large Area - **Customized sizes available up to 7 meters**
- Robust ball-screw servo motor drives
- Ideal for solar panel fabrication
- Junctions, stringers, potting, coating, frame sealing, gaskets
- Resolution 0.001mm
- Performs continuous path and point-to-point motions
- Self contained controller functions
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 3,000 points per program
- Optional bar code scanning software

The model F9250N is a RoHS compliant 98.42" x 59.05" (2500 x 1500mm) gantry style robot. It's servo motor driven ball-screw design enables closed loop operation. A rugged and reinforced aluminum structure helps prevent vibration while maintaining a compact style and functionality, providing a precision multiple axis robot ideal for conveyor fed applications, such as solar modules. Many projects also require all moving axes to be above the work station, the F9250N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F9250N has been engineered to accept a tool weight of up to 7kg and 4kg for the 4-axes model.

Model

F9250N	Robot 3-axes 220V
F9254N	Robot 4-axes 220V

Accessories (optional)

DSP501LF	Dispenser
F9000N-WIN	Windows® software package

Mounting Supports (seven required each side)

Main (Left & Right Side)	**Height**	**Qty**
562022-050	50mm	1
562022-100	100mm	1
562022-150	150mm	1

Specifications

X/Y/Z Work area (mm):	2500 / 1500 / 200	R-axis +/-360°
Maximum tool load:	7 kg.	R-axis 4 kg.
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec	
Repeatability:	+/- 0.02mm/ Axis	R-axis ± 0.05°
Resolution:	0.001mm	R-axis ± 0.001°
Data Memory:	100 Programs 3,000 step / PGM	
Processor:	Main: 32bit, 900 mflops	
Drive Sys. / Servo:	3Ø AC Servo Motor 16Bit, 40mips	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32	
External Interface:	RS232	
Power Supply:	2Ø AC220V - 500VA (600VA)	
Dimensions (mm) (WxDxH):	3160 x 2420 x 930	
Weight:	335 lbs (152.27 kg)	

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F8800N - 3 & 4 Axes Servo Cantilever
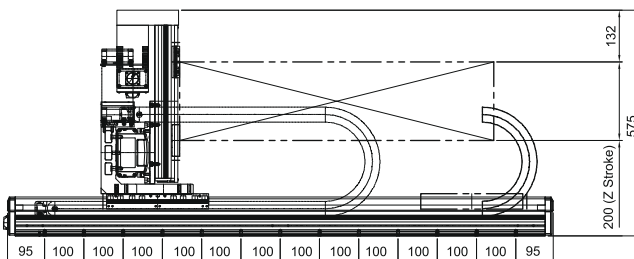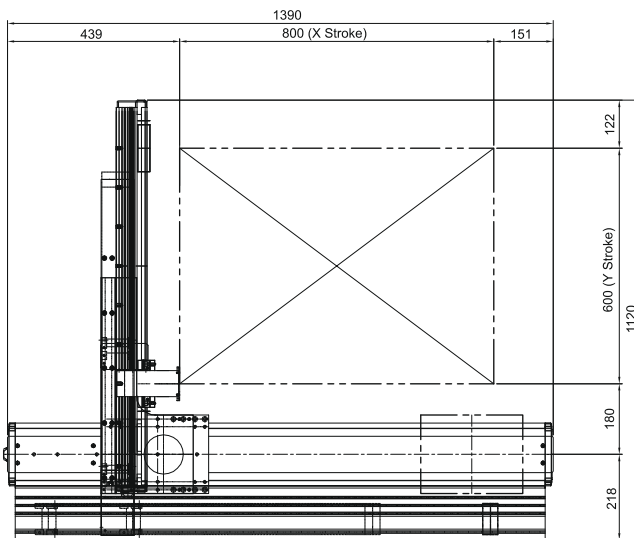
Working Area 800 x 600mm

Features

- Compact open access design
- Highly rigid frame structure
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Positioning repeatability 0.02mm
- Performs continuous path and point-to-point motions
- AC servo motors and ball-screw design
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 1,000 points per program
- Memory capacity, 20,000 steps / 20,000 points

The model F8800N is a RoHS compliant 31.50" x 23.62" (800 x 600mm) cantilever open access style robot. It's servo motor driven ball-screw design enables closed loop operation. A specially ruggedized aluminum structure prevents flexing and vibration while maintaining functionality, providing a precision multiple axis robot ideal for conveyor fed applications. Many projects also require all moving axes to be above the work station, the F8800N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F8800N has been engineered to accept a tool weight of up to 5kg and 2kg for the 4-axes model.

Dimensions

1390
439 | 800 (X Stroke) | 151
122
600 (Y Stroke)
1120
180
218

132
575
200 (Z Stroke)
95 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 95

Model

F8800N	Robot 3-axes 220V
F8804N	Robot 4-axes 220V

Mounting Supports (optional)
(three required)

Main	Height	Qty
562024-050	50mm	1
562024-100	100mm	1
562024-150	150mm	1

Specifications

X/Y/Z Work area (mm):	800 / 600 / 200	R-axis +/-360°
Maximum Tool Load:	5 kg.	R-axis 2 kg.
Body Frame X-axis:	120mm - 200mm	
Body Frame Y-axis:	90mm - 160mm	
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec	
Repeatability:	+/- 0.02mm/ Axis	R-axis ± 0.058°
Resolution:	0.001mm	R-axis ± 0.001°
Run Out Y-axis:	0.1mm Full Travel	
Data Memory:	100 Programs 20,000 step / 20,000 points	
Processor:	Main: 32bit, 900 mflops	
Servo Output X-axis:	200 watt → 800 watt	
Servo Output Y-axis:	200 watt → 400 watt	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32	
External Interface:	RS232	
Power Supply:	2Ø AC220V - 500VA (600VA)	
Dimensions (WxDxH):	1110 x 1380 x 565	
Weight:	3-axes: 159 lbs (72 kg) 4-axes: 179 lbs (81 kg)	

F8100N - 3 & 4 Axes Servo Cantilever

Working Area 1000 x 800mm

Features

- Compact open access design
- Highly rigid frame structure
- Ideal for form-in-place gaskets, adhesives, potting, coating and filling
- Positioning repeatability 0.02mm
- Performs continuous path and point-to-point motions
- AC servo motors and ball-screw design
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Step-and-repeat functions – program one object only for multiple identical objects
- On board 100 programs, 1,000 points per program
- Memory capacity, 20,000 steps / 20,000 points

The model F8100N is a RoHS compliant 39.37" x 31.50" (1000 x 800mm) cantilever open access style robot. It's servo motor driven ball-screw design enables closed loop operation. A specially ruggedized aluminum structure prevents flexing and vibration while maintaining functionality, providing a precision multiple axis robot ideal for conveyor fed applications. Many projects also require all moving axes to be above the work station, the F8100N provides that capability. Resolution is 1 micron and interpolation is in all axes. The F8100N has been engineered to accept a tool weight of up to 5kg and 2kg for the 4-axes model.

Model

F8100N	Robot 3-axes 220V
F8104N	Robot 4-axes 220V

Mounting Supports (optional)
(four required)

Main	Height	Qty
562025-050	50mm	1
562025-100	100mm	1
562025-150	150mm	1

Specifications

|		
X/Y/Z Work area (mm):	1000 / 800 / 200	R-axis +/-360°
Maximum Tool Load:	5 kg.	R-axis 2 kg.
Body Frame X-axis:	120mm - 200mm	
Body Frame Y-axis:	90mm - 160mm	
Max. Speed X&Y / Z:	1000 / 1000 / 500 (mm/sec) R-axis 360°/sec	
Repeatability:	+/- 0.02mm/ Axis	R-axis ± 0.058°
Resolution:	0.001mm	R-axis ± 0.001°
Run Out Y-axis:	0.13mm Full Travel	
Data Memory:	100 Programs 20,000 step / 20,000 points	
Processor:	Main: 32bit, 900 mflops	
Servo Output X-axis:	200 watt → 800 watt	
Servo Output Y-axis:	200 watt → 400 watt	
Motion Control:	PTP & CP (3D Line, circle)	
Teaching Method:	Teach Pendant	
I/O Signals:	System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32	
External Interface:	RS232	
Power Supply:	2Ø AC220V - 500VA (600VA)	
Dimensions (WxDxH):	1425 x 1630 x 628	
Weight:	3-axes: 254 lbs (115 kg) 4-axes: 273 lbs (124 kg)	

Dimensions

(973) 646-5044
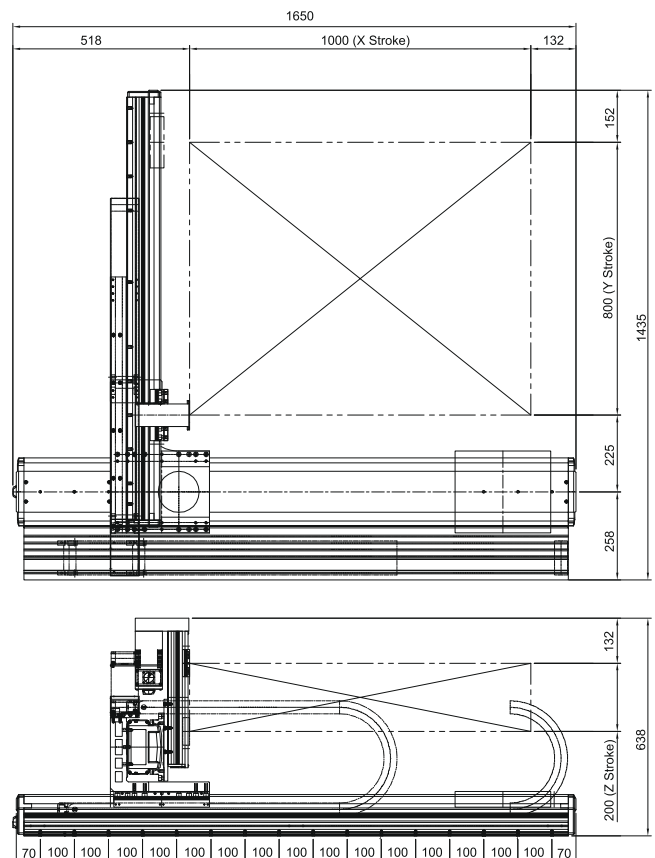
F2004N - Scara

Working Area 300 x 300mm

A 4 axes high-speed industrial SCARA robot ideal for high volume and large area dispensing applications requiring greater flexibility for automated manufacturing environments, including conveyors and work cells. Can also be used for pick & place applications.
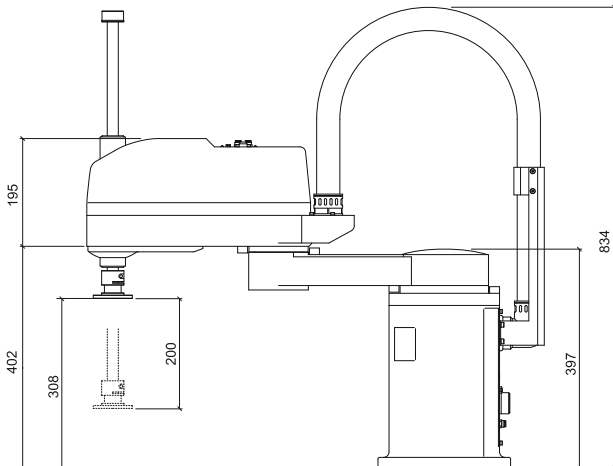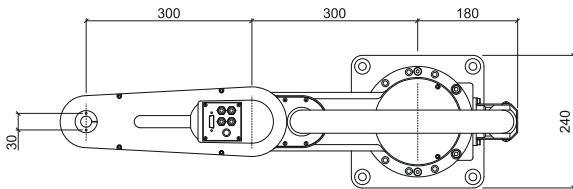
Features

- Highly rigid frame structure
- Ideal for form-in-place gaskets, adhesives, potting, coating, filling and pick & place procedures
- Positioning repeatability 0.02mm
- Performs continuous path and point-to-point motions
- AC servo motors
- Software tip alignment routine for quick program offsets when changing dispensing tips
- Digital servo controlled motors
- Multiple I/O communications
- High speed movement up to 5000mm/sec

Model

F2004N	Robot 4-axes 220V

Accessories (optional)

DSP501LF	Dispenser
F9000N-WIN	Windows® software package

Dimensions

Specifications

Rated/Max Payload:		2/7 kg
Arm Length:	J1 + J2 arm	300 x 300mm
Repeatability:	J1 + J2 arm	+/- 0.03mm
	J3	+/- 0.02mm
	J4	+/- 0.03°
Operating Range:	J1 arm	+/-125°
	J2	+/-125°
	J3	200mm
	J4	+/-360° R Axis 360°/sec
Max Speed (No Load):	J1 + J2 arm	5.6 m/s
	J3	1 m/s
	J4	720°/s
Allowable Inertia of J4:		0.003 kgf.m.s2
Type of Encoder:		Absolute
Program Capacity:		100 Programs 3,000 step / 3,000 pts.
Drive System / Motor:		Full Digital AC servo
Motion Control:		PTP, CP
Linear/Circular Interpolation:		4-axes
Teaching Method:		Teach Pendant
Processor Main CPU:		32 bit *1 900 Mflops
Processor Servo CPU:		16 bit *2 40 Mips
Data Memory Type:		2MB Battery Backup SRAM
PLC:		10 Programs 1,000 pts/program
I/O Signals:		System I/O IN: 24, Out: 6 User I/O IN: 32, Out: 32
External Interface:		RS232C
Power Supply:		1ø AC220V
Dimensions (mm) (WxDxH):	Manipulator	240x828x834
	Controller	368x302x160
Weight:	Manipulator	81.6 lbs (37kg)
	Controller	22 lbs (10kg)

RT404-FLEXII - Dual Station Rotary Table
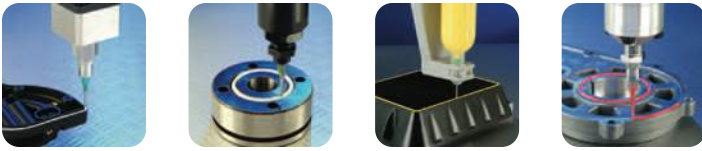
Working Diameter 152mm

Features

• Dispenses in circles from 0-900°

• Adjustable Z-axis including tilt control

• Variable speed table

• Simple to set up and operate

• Fully programmable for perfect dispensing

The RT404-FLEXII rotary table provides an efficient method of dispensing a circular pattern on areas that are difficult to access. The tilting Z-axis allows controlled rotary dispensing on an angle. The RT404-FLEXII dispenses adhesives, silicones, grease and lubricants and is fully adjustable in rotation speed, circle diameter and dispensing time. Dispense from barrels, cartridges or valves mounted on the Z-axis. The Z-axis tilt is easily adjusted to dispense either on a vertical wall within a cylindrical part or on an outside wall. The system is fully programmable to control dispense delay, rotation delay, degree of rotation and wait period before cycling.

Model

RT404-FLEXII-110   Rotary Table 110V
RT404-FLEXII-220   Rotary Table 220V

Accessories (optional)

DSP501LF   Dispenser 110/220V

Specifications

Dispenser:	DSP501LF (not included)
Cycle Initiation:	Manual or Automatic
Vertical Travel:	2.00" (50mm) other lengths optional
Rotation Speed:	0-60rpm
Air Input:	70-100 psi (5 - 7 bar)
Air Output:	1-100 psi (0.1 - 7 bar)
Dimensions (WxDxH):	635 x 643 x 850
Weight:	26.5 lbs (43 kg)

Z620 - Z-Axis Station

The Z620 is an ideal solution for repetitive filling, potting or other dispensing operations requiring z-axis control. The z-axis system will consistently dispense material to a specific height and can be integrated into an automated line or conveyor-fed station. Other features include adjustable tilt, speed and dispense time. The Z620 controller interfaces with the DSP501LF dispenser to complete the system.

Model

Z620   Auto-z dispenser 110/220V

Accessories (optional)

DSP501LF   Dispenser 110/220V

Specifications

Power:	Switchable 110V or 220V, 50/60Hz
Stroke:	0.2" - 2.0" (5.08mm - 50mm)
Front to back positioning:	0" - 1.75" (0mm - 45mm)
Air Input:	60-90 psi (4 - 6 bar)
Controller Dimensions (WxDxH):	222 x 222 x 67mm
Unit Dimensions (WxDxH):	258 x 258 x 495mm
Weight:	22 lbs (10 kg)