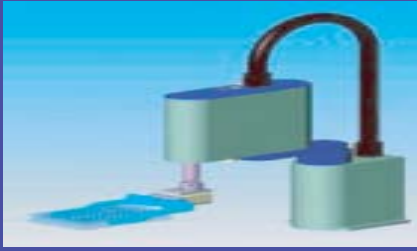


Applications



Well-plates handling



Tube handling



De-Capping

The miniSCARA/300 robot features interchangeable grippers to be utilized for handling a wide variety of labwares like test tubes & well-plates.

The miniSCARA/300 robot optimizes the use of the laboratory work-surface by its compact design & it provides an ideal platform for automating repetitive & diverse tasks, in the following areas:

- Drug discovery
- Quality control/assurance,
- Genetic analysis
- Clinical testing
- Sample preparation
- Smooth & reliable handling of rounded & squared wares made of glass or plastic

DYNASERVO



miniSCARA/300

The low cost miniSCARA/300 robots are specifically designed for automated assembly and laboratory automation for small-part handling, drug discovery, quality control, genetic analysis, clinical testing, and sample preparation. The four-axes miniSCARA/300 features a 1.5kg payload, a 300mm reach, a system repeatability of 0.02mm and a long lifespan with the built-in Harmonic gear reducers. Equipped with the "C-HOST" ASCII protocol, the miniSCARA/300 easily interfaces with PC for PC-based control and data acquisition. The miniSCARA/300 weighs only 5.5kg.

- Compact, Low Cost, High Performance
 - integrated motion & I/O control
 - multi-tasking and BASIC-like programming
- Long Lifespan with Harmonic Gear Reducers
- Easy-to-use
 - wide operation range
 - high speed motion
 - teaching in joint and user axes
 - PTP linear motion
 - ergonomic handheld robot terminal
- Expandable Serial Link I/O Module
 - up to 256DI and 256DO
- Standard Robot Language Fics-III
- PC-based Control/Data Acquisition
 - easy interface with PC-based control through C-HOST protocol
- Flexible System Configuration
 - built to custom specifications

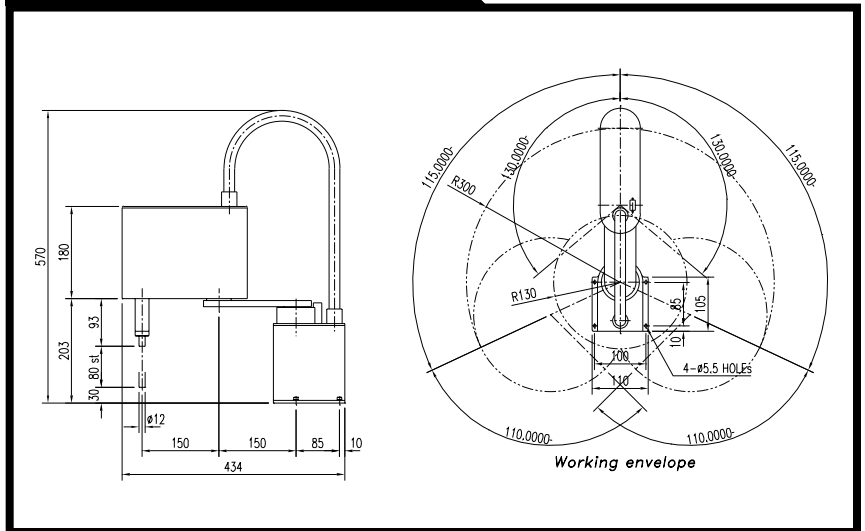
Dynaservo Inc.

email: sales@dynaservo.com <http://www.dynaservo.com>

Specifications

Name	MiniSCARA/300		
Arm Length	300mm (150+150)		
Rotation Range	A-Axis	+/-115°	
	B-Axis	+/-130°	
	Z-Axis	80 mm	
	W-Axis	+/-160°	
Maximum Speed	A-Axis	240°/s	
	B-Axis	480°/s	
	Z-Axis	200 mm/s	
	W-Axis	1200°/s	
Motor	A-Axis	AC Servo Motor	
	B-Axis	AC Servo Motor	
	Z-Axis	Stepping Motor	400 P/r
	W-Axis	Stepping Motor	400 P/r
Gear Reducer	A-Axis	Harmonic Gear 1/100	
	B-Axis	Harmonic Gear 1/50	
	Z-Axis	Ball Screw Lead=10mm	
	W-Axis	Belt(1/5)	
Payload	1.5 kg		
Max. Moment For W-Axis	0.002 kgm ²		
Positioning Accuracy	X-Axis	+/- 0.050mm	
	Y-Axis	+/- 0.050mm	
	Z-Axis	+/- 0.050mm	
	W-Axis	0.06°	
Air Conduit	2(Ø4)		
Weight	Approx. 5.5 kg		

Dimensions



Connectors

Motor Connector						Sensor Connector					
CN MOP: Motor Power (DM-25SS, Hirose)						CN I/F: Robot Sensor/Enc Signal (DM-25SP, Hirose)					
PIN	SIGNAL	IN/OUT	PIN	SIGNAL	IN/OUT	PIN	SIGNAL	IN/OUT	PIN	SIGNAL	IN/OUT
1	X/M+	IN	14	NC	-	1	X-EN A	OUT	14	+24V	IN
2	X/M-	IN	15	NC	-	2	X-EN B	OUT	15	+24V	IN
3	NC	-	16	NC	-	3	X-EN 5V	IN	16	NC	-
4	Y/M+	IN	17	NC	-	4	X-EN 0V	-	17	X-ORG	OUT
5	Y/M-	IN	18	NC	-	5	NC	-	18	Y-ORG	OUT
6	NC	-	19	NC	-	6	Y-EN A	OUT	19	Z-OV	OUT
7	Z/A+	IN	20	R/A+	IN	7	Y-EN B	OUT	20	R-ORG	OUT
8	Z/A-	IN	21	R/A-	IN	8	Y-EN 5V	IN	21	NC	-
9	Z/B+	IN	22	R/B+	IN	9	Y-EN 0V	-	22	DI-0	OUT
10	Z/B-	IN	23	R/B-	IN	10	NC	-	23	DI-1	OUT
11	Z/ACOM	-	24	R/ACOM	-	11	NC	-	24	24VGN D	-
12	Z/BCOM	-	25	R/BCOM	-	12	NC	-	25	24VGN D	-
13	NC	-				13	NC	-			

Controller Configuration

4CH Main Power 02-0831
Integrated 2-axis AC Servo Drive Atom-mini/2
Integrated 2-axis Micro-Stepping Drive Atom-PDS/2
Integrated Multi-axis Motion Controller & Handheld Terminal Fics-Atoms TC1 or Fics-Atoms SB



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