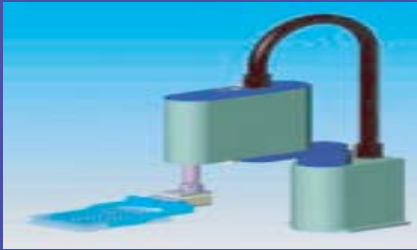


Applications



Well-plates handling



Tube handling



De-Capping

The miniSCARA robots feature interchangeable grippers to be utilized for handling a wide variety of labwares like test tubes & well-plates.

The miniSCARA robots optimize the use of the laboratory work-surface by their compact design & provide 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/200

The low cost miniSCARA 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/200 features a 0.8kg payload, a 200mm 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 easily interfaces with PC for PC-based control and data acquisition. The miniSCARA weighs only 3kg.

- **Compact, Low Cost, High Performance**
- **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**
 - integrated motion & I/O control
 - multi-tasking and BASIC-like programming
- **PC-based Control/Data Acquisition**
 - easy interface with PC-based control through C-HOST protocol
- **Flexible System Configuration**
 - built to custom specifications

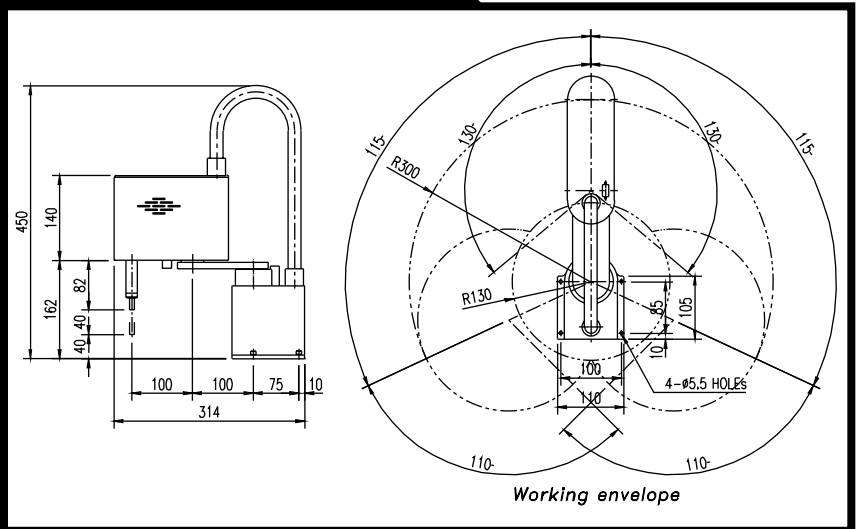
Dynaservo Inc.

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

Specifications

Name	MiniSCARA/200		
Arm Length	200mm (100+100)		
Rotation Range	A-Axis	+/-115°	
	B-Axis	+/-130°	
	Z-Axis	50 mm	
	W-Axis	+/-160°	
Maximum Speed	A-Axis	300°/s	
	B-Axis	300°/s	
	Z-Axis	50 mm/s	
	W-Axis	1200°/s	
Motor	A-Axis	11W DC Servo Motor	1,000P/r
	B-Axis	11W DC Servo Motor	1,000P/r
	Z-Axis	Stepping Motor	400 P/r
	W-Axis	Stepping Motor	400 P/r
Gear Reducer	A-Axis	Harmonic Gear 1/50	
	B-Axis	Harmonic Gear 1/50	
	Z-Axis	Ball Screw Lead=2.0mm	
	W-Axis	Belt(1/4)	
Payload	0.8 kg		
Max. Moment For W-Axis	0.002 kgm ²		
Positioning Accuracy	X-Axis	0.0072° → 0.025mm/R200	
	Y-Axis	0.0071° → 0.012mm/R100	
	Z-Axis	0.005mm	
	W-Axis	0.225°	
Air Conduit	2(Ø4)		
Weight	Approx. 3.8 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-0V	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/ACO M	-	11	NC	-	24	24VGN D	-
12	Z/BCOM	-	25	R/BCO M	-	12	NC	-	25	24VGN D	-
13	NC	-				13	NC	-			

Controller Configuration

4CH Main Power

02-0831

Integrated 2-axis DC Servo Drive

Atom-DC/2

Integrated 2-axis Micro-Stepping Drive

Atom-PDS/2

Integrated Multi-axis Motion Controller & Handheld Terminal

Fics-Atoms TC1 or Fics-Atoms SB



Dynaservo Inc.

3950 14th Avenue, Suite 402
Markham, Ontario, Canada L3R 0A9
(905) 479-0175

DYNASERVO

Distributed by