JANOME

JS series

JS/JSTH series

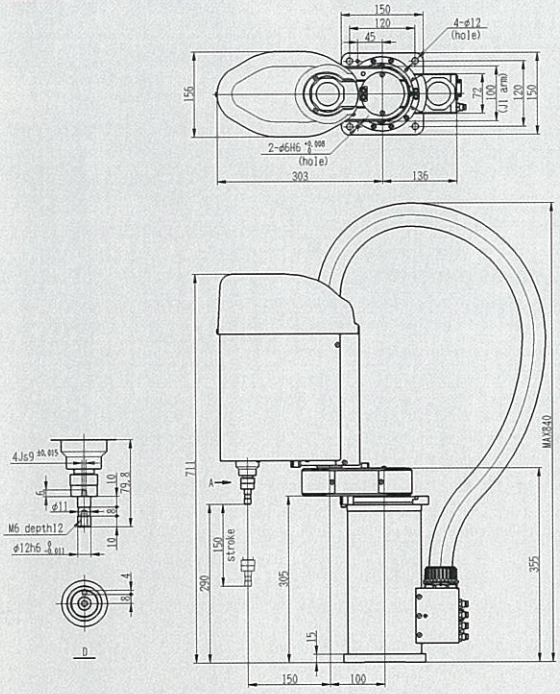
New Multi Purpose SCARA Robot

250/350/450/550
350TH/450TH/550TH
650TH/750TH/880TH/1000TH

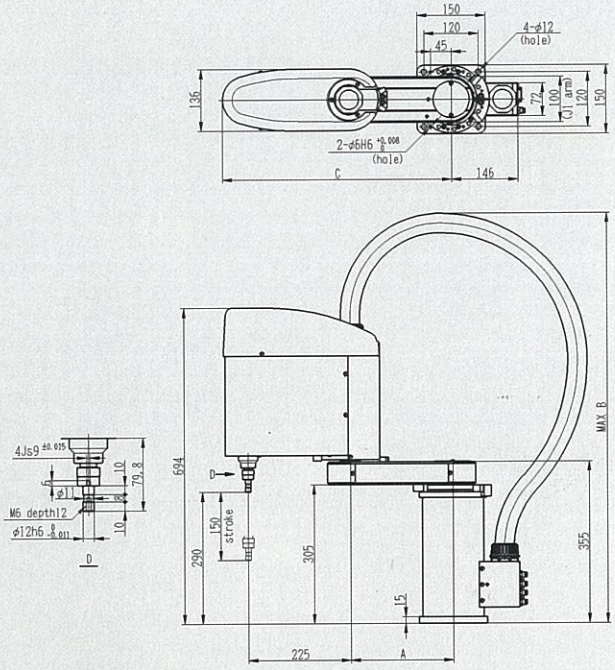
External Dimensions ※please contact us for the external dimensions.

Double shaft

JS 250



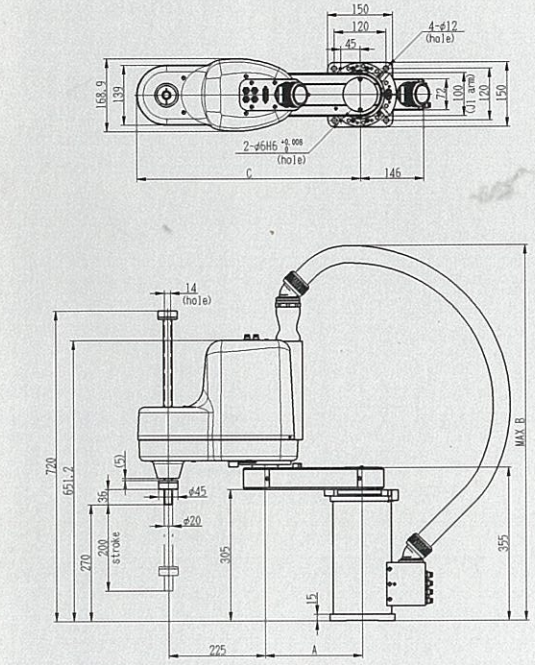
JS 350/450/550



Model	A	B	C
JS350	125	840	403
JS450	225	900	503
JS550	325	900	603

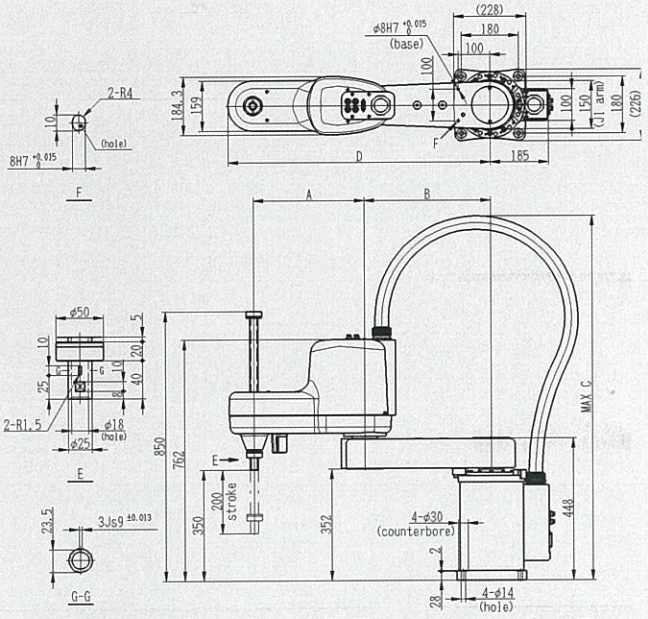
Single shaft

JS 350TH/450TH/550TH



Model	A	B	C
JS350TH	125	780	419.5
JS450TH	225	870	519.5
JS550TH	325	880	619.5

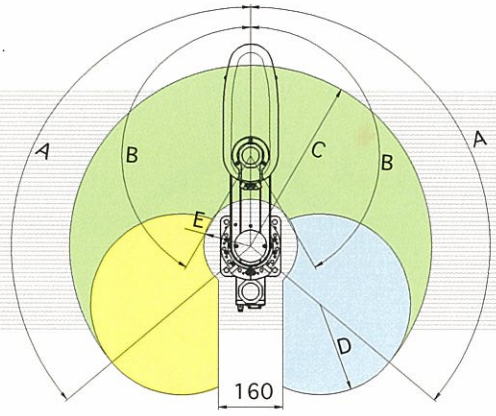
JS 650TH/750TH/880TH/1000TH



Model	A	B	C	D
JS650TH	350	300	1180	729.5
JS750TH	350	400	1150	829.5
JS880TH	480	400	1150	959.5
JS1000TH	480	520	1080	1079.5

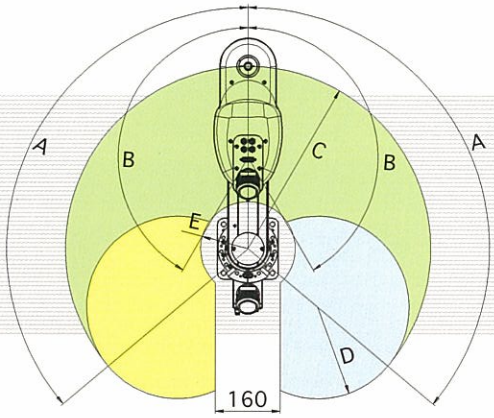
Operation Range

JS 250
350
450
550



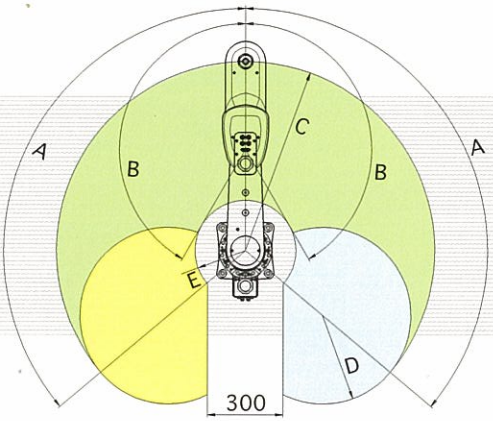
MODEL	A	B	C	D	E	Z stroke
JS250	130°	130°	R250	R150	R89	150
JS350 (CL)		150°	R350	R225	R132	
JS450 (CL)			R450		R116	
JS550 (CL)			R550		R172	

JS 350TH
450TH
550TH



MODEL	A	B	C	D	E	Z stroke
JS350TH	130°	150°	R350	R225	R132	200
JS450TH			R450		R116	
JS550TH			R550		R172	

JS 650TH
750TH
880TH
1000TH

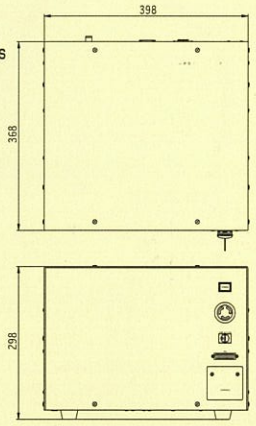


MODEL	A	B	C	D	E	Z stroke
JS650TH	130°	150°	R650	R350	R175	200
JS750TH			R750		R200	
JS880TH		160°	R880	R480	R172	
JS1000TH			R1000		R178	

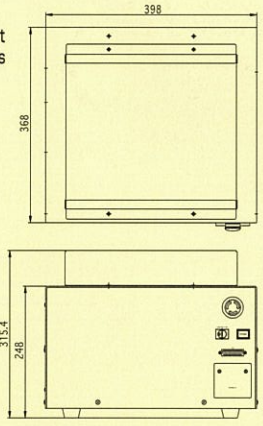
Controller

External Dimensions

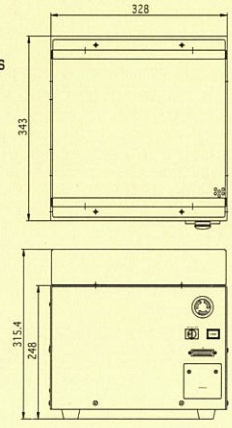
Full CE Specifications



Safety Circuit Specifications



Standard Specifications



JS series

JS250

JS350

JS450

JS550

JS series Specifications

Item \ Model		JS250	JS350	JS450	JS550
Axis Type		4 (synchronous control)			
Arm Length	J1 Arm	100mm	125mm	225mm	325mm
	J2 Arm	150mm	225mm	225mm	225mm
	J1+J2	250mm	350mm	450mm	550mm
Operation Range	J1 Arm	±130°	±130°	±130°	±130°
	J2 Arm	±145°	±150°	±150°	±150°
	Z-Axis	150mm	150mm	150mm	150mm
	R-Axis	±360°	±360°	±360°	±360°
Maximum Portable Weight		4kg	6kg	6kg	6kg
Acceptable Moment of Inertia		0.1kg·m²	0.1kg·m²	0.1kg·m²	0.1kg·m²
Maximum Speed*1	J1 and J2 (combined)	4,200mm/sec	6,300mm/sec	5,600mm/sec	6,200mm/sec
	Z-Axis	1,400mm/sec	1,850mm/sec	1,850mm/sec	1,850mm/sec
	R-Axis	1,750°/sec	1,900°/sec	1,900°/sec	1,900°/sec
Repeatability*2	X- and Y-Axis	±0.01mm	±0.01mm	±0.015mm	±0.015mm
	Z-Axis	±0.01mm	±0.01mm	±0.01mm	±0.01mm
	R-Axis	±0.01°	±0.01°	±0.01°	±0.01°
Standard Cycle Time*3	When carrying 1kg of workpiece	0.39sec	0.38sec	0.39sec	0.41sec
Machine Weight		27kg	27kg	28kg	29kg
Control Box Weight		20kg			
Drive Method		AC servomotor			
Control Method		PTP (Point to Point) control, CP (Continuous Path) control			
Interpolating Function		3-Dimensional Line and Arc Interpolation			
Position Detection		Absolute Encoder			
Teaching Method		Remote Teaching (JOG) / Manual Data Input (MDI) / Direct Teaching			
Teaching System		JANOME's original software JR C-Points: Simple and broad-use teaching system ● Simple: Easy teaching just by registering positions and parameters Optional system programs are available for basic operations and various applications.* ● Broad-use: User-oriented programming including I/O control using point job commands			
Teaching Pattern		● Programming by teaching pendant (optional) ● Off line teaching using optional JR C-Points (PC software) via PC ● On line teaching using optional JR C-Points (PC software) via PC			
Programming Capacity		255 programs			
Data Memory Capacity*4		Maximum 30,000 points			
Simple Sequencer		Maximum 1,000 steps			
External Serial Interface		RS422 1ch (for teaching pendant) RS232C 1ch (for PC: COM1) RS232C 2ch (for external devices: COM2, COM3)			
External Input/Output*5		I/O-SYS Input: 15 / Output: 14 I/O-1 Input: 18 / Output: 22 (4-relay contact) I/O-H Input: 4 / Output: 4 (2-relay contact)			
Tool Wiring and Piping		14 wires for signals, 4 air pipes: Φ4			
Power Supply		AC180~250V (single phase)			
Power Capacity		950VA	1,050VA		
Working Ambience	Ambient Temperature	0~40℃			
	Relative Humidity	20~90% (non-condensing)			

*1: Measured on a machine with regenerative resistors. Maximum speed cannot be achieved under the maximum portable weight setting.
*2: Repeatability was measured at a constant temperature, so absolute precision is not guaranteed.
*3: Measured on a machine with regenerative resistors. Continuous operation cannot be achieved at the maximum cycle time.
*4: The point data capacity will be reduced if the additional function data setting / point job data / sequencer data increases, due to the shared data storage area.
*5: NPN / PNP can be chosen before shipment.

● The specifications may be modified without prior notice to improve quality.

JSTH series

JS350TH

JS450TH

JS550TH

JS650TH

JS750TH

JS880TH

JS1000TH

■JSTH series Specifications

Item \ Model		JS350TH	JS450TH	JS550TH	JS650TH	JS750TH	JS880TH	JS1000TH
Axis Type		4 (synchronous control)						
Arm Length	J1 Arm	125mm	225mm	325mm	300mm	400mm	400mm	520mm
	J2 Arm	225mm	225mm	225mm	350mm	350mm	480mm	480mm
	J1+J2	350mm	450mm	550mm	650mm	750mm	880mm	1000mm
Operation Range	J1 Arm	±130°	±130°	±130°	±130°	±130°	±130°	±130°
	J2 Arm	±150°	±150°	±150°	±150°	±150°	±160°	±160°
	Z-Axis	200mm	200mm	200mm	200mm	200mm	200mm	200mm
	R-Axis	±360°	±360°	±360°	±360°	±360°	±360°	±360°
Maximum Portable Weight		6kg	6kg	6kg	20kg	20kg	20kg	20kg
Acceptable Moment of Inertia		0.1kg·m²	0.1kg·m²	0.1kg·m²	0.2kg·m²	0.2kg·m²	0.2kg·m²	0.2kg·m²
Maximum Speed*1	J1 and J2 (combined)	6,300mm/sec	5,600mm/sec	6,200mm/sec	6,700mm/sec	7,200mm/sec	6,500mm/sec	7,000mm/sec
	Z-Axis	1,800mm/sec	1,800mm/sec	1,800mm/sec	2,000mm/sec	2,000mm/sec	2,000mm/sec	2,000mm/sec
	R-Axis	1,900°/sec	1,900°/sec	1,900°/sec	1,800°/sec	1,800°/sec	1,800°/sec	1,800°/sec
Repeatability*2	X- and Y-Axis	±0.01mm	±0.015mm	±0.015mm	±0.02mm	±0.02mm	±0.025mm	±0.025mm
	Z-Axis	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm	±0.01mm
	R-Axis	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°	±0.01°
Standard Cycle Time*3	When carrying 1kg of workpiece	-	-	-	-	-	-	-
	When carrying 2kg of workpiece	0.43sec	0.45sec	0.43sec	0.44sec	0.46sec	0.47sec	0.50sec
Machine Weight		30kg	31kg	32kg	65kg	67kg	68kg	70kg
Control Box Weight		20kg			27kg			
Drive Method		AC servomotor						
Control Method		PTP (Point to Point) control, CP (Continuous Path) control						
Interpolating Function		3-Dimensional Line and Arc Interpolation						
Position Detection		Absolute Encoder						
Teaching Method		Remote Teaching (JOG) /Manual Data Input (MDI) /Direct Teaching						
Teaching System		JANOME's original software JR C-Points: Simple and broad-use teaching system ●Simple: Easy teaching just by registering positions and parameters Optional system programs are available for basic operations and various applications. ●Broad-use: User-oriented programming including I/O control using point job commands						
Teaching Pattern		●Programming by teaching pendant (optional) ●Off line teaching using optional JR C-Points (PC software) via PC ●On line teaching using optional JR C-Points (PC software) via PC						
Programming Capacity		255 programs						
Data Memory Capacity*4		Maximum 30,000 points						
Simple Sequencer		Maximum 1,000 steps						
External Serial Interface		RS422 1ch (for teaching pendant) RS232C 1ch (for PC: COM1) RS232C 2ch (for external devices: COM2, COM3)						
External Input/Output*5		I/O-SYS Input:15/Output:14 I/O-1 Input:18/Output:22 (4-relay contact) I/O-H Input:4/Output:4 (2-relay contact)						
Tool Wiring and Piping		14 wires for signals, 4 air pipes: Φ4			14 wires for signals, 4 air pipes: Φ6			
Power Supply		AC180~250V (single phase)						
Power Capacity		1,050VA			1,900VA			
Working Ambience	Ambient Temperature	0~40℃						
	Relative Humidity	20~90% (non-condensing)						

*1: Measured on a machine with regenerative resistors. Maximum speed cannot be achieved under the maximum portable weight setting.
*2: Repeatability was measured at a constant temperature, so absolute precision is not guaranteed.
*3: Measured on a machine with regenerative resistors. Continuous operation cannot be achieved at the maximum cycle time.
*4: The point data capacity will be reduced if the additional function data setting/point job data/sequencer data increases, due to the shared data storage area.
*5: NPN/PNP can be chosen before shipment.
● The specifications may be modified without prior notice to improve quality.

Clean Room Type Models

JS250CL / JS350CL / JS450CL

Clean Class 10 (0.3μm) *Specifications

① The special airtight structure and the vacuuming system minimize dust inside the robot.
② Special external conductive coating prevents static electricity.
③ Low dust grease is used for the Z-axis spline and ball screw; also, the Z axis is covered by a special antistatic accordion hose.
④ The robot's body (without the control box) can be used in both the clean room and regular environments.

What's Clean Class 10?

Clean Class 10 is defined by Federal Standard 209D as a particulate count that shall not exceed a total of 10 particles of a size of 0.5μm or greater per cubic foot of air.

Cleanliness	Class 10 (Federal Standard 209D)
Ventilator Diameter	Internal Diameter of Vent Pipe:Φ19
Outlet flow	180NL/min (11Nm³/h)

※Common to the robot body and control box

JS350CL

JANOME
Janome Sewing Machine Co., Ltd.
Industrial Automation Systems Division
1934 Hazama-machi, Hachioji-shi, Tokyo 193-0941 JAPAN
Tel : +81 426 61 6301, Fax: +81 426 61 6302
U R L : http://www.janome.co.jp/industrial.html
E-mail : j-industry@gm.janome.co.jp

Distributor

ООО "Евроинтех"
109387, Россия, Москва,
ул. Летняя, д. 6
Телефон/факс: +7-(495)-749-45-78
E-mail: sales@eurointech.ru
http://www.eurointech.ru

2007.01 (S) 1,000