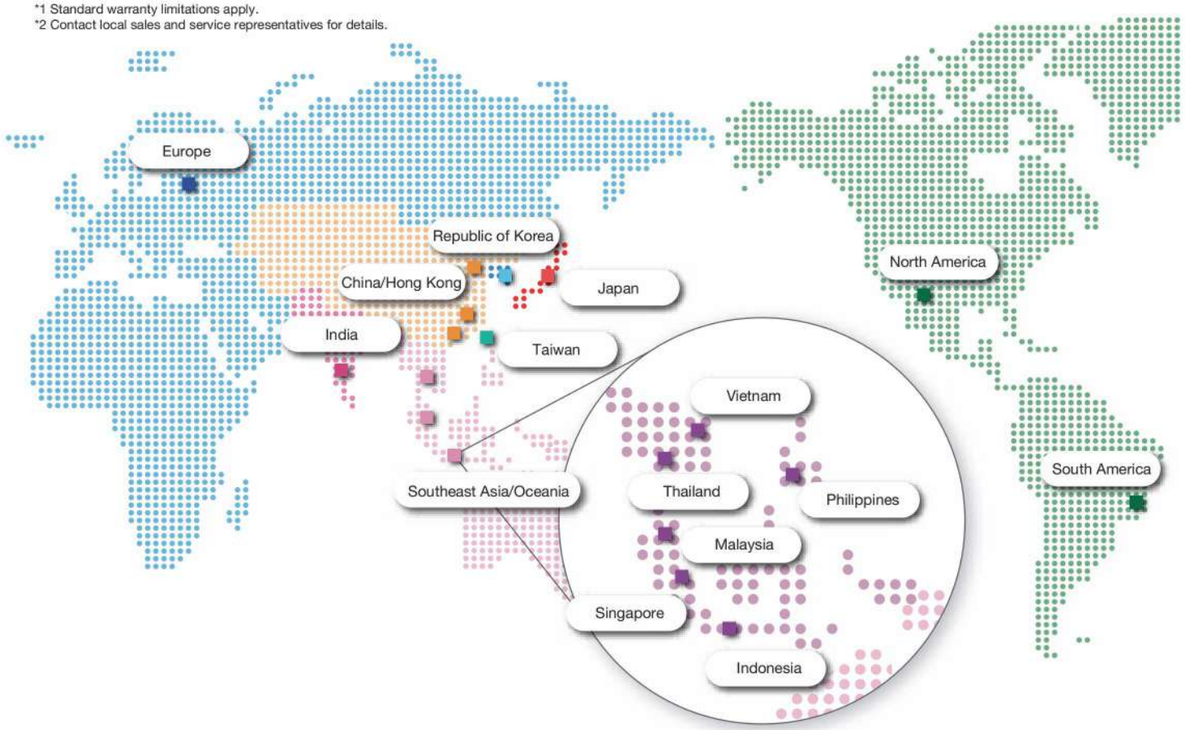
With Epson industrial robots, you get the highest standards of safety and reliability and the support of a global sales and service network

Top-quality service and support worldwide

Our global network of sales and service centers is firmly dedicated to maintaining a consistently high level of product and service quality in every region. For products under warranty, we offer on-site assistance to deal with any malfunctions or problems*1, and through our authorized sales and service representatives we offer warranty coverage for machines that are later moved to other locations*2, assuring top-quality support wherever you are.

*1 Standard warranty limitations apply.
*2 Contact local sales and service representatives for details.



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⚠ Safety Precautions	Please read associated manuals carefully before installing or using our robot products. Always use products properly per guidelines in the manuals.

Dealer's Stamp

Information correct at time of printing
Printed August 2023

EPSON ROBOTS
RANGE CATALOGUE 2023

EPSON

BRINGING AUTOMATION TO THE NEXT LEVEL.

Epson Robots are built for greater efficiency and precision while fusing form and function. Equipped with an optional complementary force sensor that is both sensitive and versatile, the robots are capable of executing a wide range of high precision tasks. Details make all the difference in the world of automation. Experience lower production costs, enhanced quality and increased productivity with Epson's highly reliable robots, while increasing businesses' bottom line.

Epson Robot

A proven reputation for precision and reliability at the leading edge of industrial robot design

Ever since we developed our first SCARA robots for wristwatch assembly over 40 years ago, Epson has been a leader in advanced robotics technology. Today, our long experience in energy-efficient, compact, high-precision technologies enables us to offer a wide range of slim, compact, and lightweight robots. And with the addition of original Epson force sensing and image processing technologies, we are achieving even higher levels of reliability, speed, precision, and productivity in process automation. Whatever challenges you face, Epson industrial robots are continuously evolving to meet the diversifying needs of manufacturers worldwide.

1982
Epson mass-production assembly robot developed

INDUSTRY FIRST
1986
Multitasking introduced

1986
ISO Class 1 cleanroom compliance achieved

INDUSTRY FIRST
1986
Variable arc motion introduced

INDUSTRY FIRST
1994
Microsoft® Windows® OS support introduced

1994

INDUSTRY FIRST
1997
Short-arm SCARA robot introduced

INDUSTRY FIRST
1997
Antistatic system developed

2001
Wall/ceiling mount SCARA robots introduced

2001

2009
Compact high-speed 6-axis C3 robot introduced

2009

INDUSTRY FIRST
2009
Ceiling-mount RS3 SCARA robot with 360° rotation introduced

INDUSTRY FIRST
2016
N2 6-axis robot with slim folding arm introduced

2016

2017
T3 SCARA robot with built-in controller

2017

2017
VT6 6-axis robot with built-in controller

2017

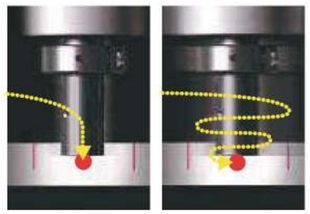
Why Epson Robots?

Epson, the global leader in robotics technology, offers you an impressive combination of high performance and operating ease. Backed by a worldwide reputation for reliability and outstanding customer support, Epson robots are bringing high-productivity automated manufacturing to an ever-expanding range of industries worldwide.

Low TCO and high reliability for the ultimate in automated productivity

High productivity

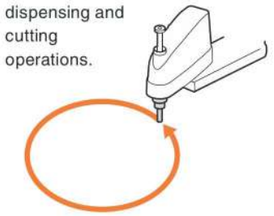
- Proprietary Epson technology reduces residual vibration to ensure high speed and precision for reduced takt time.
- Slim, lightweight body design reduces work cell space requirements while enabling higher productivity.



Epson robot　　Conventional robot

High quality

- Extremely accurate toolhead positioning enables high-precision dispensing and cutting operations.



- Integrated machine vision systems boost setup ease and workpiece handling accuracy.

Easy operation

- Intuitive graphical interface makes programming easy even for first-time users.
- From program testing to full production, improved operating ease helps reduce cost and manpower requirements.

3D simulator for work cell layout and toolpath program testing

Software Integration

Vibration control technology

Epson Robot

Vision technology

Sensing technology

Global support

Epson supports robotics customers worldwide through an international network of sales and service offices, providing information about equipment configuration options and performing simulations of the tasks that customers want robots to perform. We are also partnered with systems integrators around the world, and can provide end-to-end turnkey solutions to meet virtually any process automation need.

Product lineup

SCARA robots

G Series

Epson Robot

Top-class speed, repeatability, and low residual vibration

	G1	G3	GX4	G6	GX8	GX10 (NEW)	GX20 (NEW)
Publication page	▶P.9	▶P.11	▶P.15	▶P.17	▶P.21	▶P.23	▶P.23
Payload (kg)	4-axis: 1 / 3-axis: 1.5	Max 3	Max 4	Max 6	Max 8	Max 10	Max 20
Arm length (mm)	175 / 225	250 / 300 / 350	250 / 300 / 350	450 / 550 / 650	450 / 550 / 650	650 / 850	850 / 1000
Environmental specifications	STD Class 3	STD Class 3	STD Class 3	STD Class 3 IP54 *1 IP65	STD Class 3 IP65	STD Class 3 IP54 *1 IP65	STD Class 3 IP54 *1 IP65
Installation specifications							
Compatible controller	RC700-A	RC700-A	RC700-D	RC700-A	RC700-D	RC700-A	RC700-A

SCARA robots

LS Series

Proven reliability and functionality

T Series

Built-in controller for cost-efficient automation

RS Series

Original space-saving design for high productivity

	LS3-B	LS6-B	LS10-B	LS20-B	T3-B (NEW)	T6-B (NEW)	RS3	RS4
Publication page	▶P.27	▶P.29	▶P.31	▶P.33	▶P.35	▶P.37	▶P.39	▶P.41
Payload (kg)	Max 3	Max 6	Max 10	Max 20	Max 3	Max 6	Max 3	Max 4
Arm length (mm)	400	500 / 600 / 700	600 / 700 / 800	800 / 1000	400	600	350	550
Environmental specifications	STD Class 4	STD Class 4	STD Class 4	STD Class 4	STD *2	STD *2	STD Class 3	STD Class 3
Installation specifications								
Compatible controller	RC90-B	RC90-B	RC90-B	RC90-B	Built-in controller	Built-in controller	RC700-A	RC700-A

STD Standard

Class 3 Cleanroom model ISO 03 (Class 10 equiv.) ESD suppression

Class 4 Cleanroom model ISO 04 (Class 100 equiv.)

Class 5 Cleanroom model ISO 05 (Class 100 equiv.)

IP54 Protection model IP54

IP65 Protection model IP65

IP67 Protection model IP67

Table Top mount

Wall mount

Ceiling mount

Wall/ceiling multi-layout mount

*1: See product page for details

*2: IP20 *3: Standard model only

Controllers

Controllers ▶P.59

Software

Software ▶P.62

Vision systems

Vision systems ▶P.67

Force-sensing systems

Force-sensing systems ▶P.70

Options

Epson Robot

6-axis robots

C Series

Slim, lightweight body for greater installation flexibility

	C4	C8	C12
Publication page	▶P.43	▶P.45	▶P.49
Model name	C4 	C8 	C12 
Payload (kg)	Max 4	Max 8	Max 12
Arm length (mm)	600 900	700 900 1400	1400
Environmental specifications	STD Class 3	STD Class 3 *C8, C8L Class 4 *C8XL IP67	STD Class 5
Installation specifications			
Compatible controller	RC700-A	RC700-A	RC700-A

6-axis robots

N Series

Original compact design for greater freedom of movement in tight quarters

VT

Compact, easy setup, low TCO

	N2	N6-A850	N6-A1000	VT6L
Publication page	▶P.51	▶P.53	▶P.55	▶P.57
Model name	N2 	N6-A850 	N6-A1000 	VT6L 
Payload (kg)	Max 2.5	Max 6	Max 6	Max 6
Arm length (mm)	450	850	1000	900
Environmental specifications	STD	STD Class 5	STD Class 5	STD Class 4 IP67
Installation specifications				 *3 *3
Compatible controller	RC700-A	RC700-A	RC700-A	Built-in controller

STD Standard

Class 3 Cleanroom model ISO 03 (Class 10 equiv.) ESD suppression

Class 4 Cleanroom model ISO 04 (Class 100 equiv.)

Class 5 Cleanroom model ISO 05 (Class 100 equiv.)

IP54 Protection model IP54

IP65 Protection model IP65

IP67 Protection model IP67

Table Top mount

Wall mount

Ceiling mount

Wall/ceiling multi-layout mount

*1: See product page for details

*2: IP20 *3: Standard model only

Controllers

Controllers ▶P.59

Software

Software ▶P.62

Vision systems

Vision systems ▶P.67

Force-sensing systems

Force-sensing systems ▶P.70

Options

G series SCARA robot

G1

Compact, high-rigidity body for precision assembly and press-fit applications

- Our lightest G series robot (8kg)
- Available with 175mm or 225mm arm
- 3-axis model available for screw-in, press-fit with hand offset, and dispensing tasks

Model Number: **G1 - 17 1 S □ -UL**

- Payload: 1 : 1kg
- Arm length: 17 : 175mm; 22 : 225mm
- Joint #3 stroke: 1 : 80mm: Cleanroom-model
- Axis: □ : 4-axis spec; Z : 3-axis spec
- Environment: S : Standard; C : Cleanroom & ESD
- UL specification: □ : Non UL compliant; -UL : UL compliant

Specifications

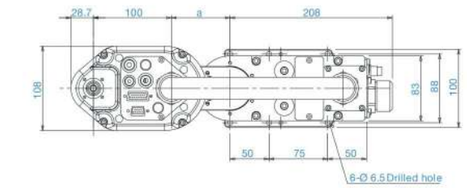
Model name		G1			
		4-axis		3- axis	
Model number		G1-171□	G1-221□	G1-171□Z	G1-221□Z
Arm length	Arm #1, #2	175 mm	225 mm	175 mm	225 mm
Payload	Rated	0.5 kg		0.5 kg	
	Maximum	1 kg		1.5 kg	
Repeatability	Joints #1, #2	±0.005 mm	±0.008 mm	±0.005 mm	±0.008 mm
	Joint #3	±0.01 mm		±0.01 mm	
	Joint #4	±0.01 deg		–	
Standard cycle time*1		0.29 sec	0.30 sec	0.29 sec	0.30 sec
Max. operating speed	Joints #1, #2	2630 mm/sec	3000 mm/sec	2630 mm/sec	3000 mm/sec
	Joint #3	1200 mm/sec		1200 mm/sec	
	Joint #4	3000 deg/sec		–	
Joint #4 allowable moment of inertia*2	Rated	0.0003 kg·m²		–	
	Maximum	0.004 kg·m²		–	
Joint #3 down force		50 N			
Installation environment		Standard/Cleanroom*3 &ESD			
Mounting type		Table Top		Table Top	
Weight (cables not included)		8 kg		8 kg	
Applicable Controller		RC700-A			
Installed wire for customer use		15 Pin D-Sub, 9 Pin D-Sub			
Installed pneumatic tube for customer use		Φ6 mm x 2, Φ4 mm x 1 : 0.59 MPa (6 kgf/cm²)			
Power		AC200-240 V Single phase			
Power Consumption*4		0.5 kVA			
Cable length		3 m/5 m/10 m/15 m/20 m			
Safety standard		CE, KC, UL			

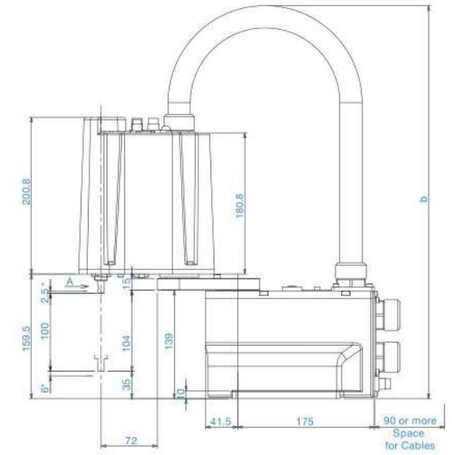
*1:Cycle time based on round-trip arch motion (100mm horizontal, 25mm vertical) with 0.5kg payload (path coordinates optimized for maximum speed) .
*2:When payload center of gravity is aligned with Joint #4 ; if not aligned with Joint #4, set parameters using INERTIA command.
*3:Complies with ISO Class 3 (ISO14644-1) and older Class 1 cleanroom standards.
*4: Varies according to operating environment and program.

Outer Dimensions (Table Top Mounting)

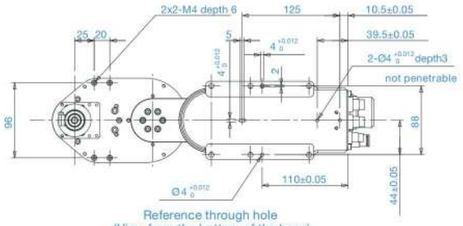
[Unit: mm]

Standard-model

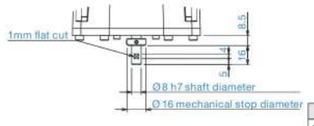




*indicates the stroke margin by mechanical stop.



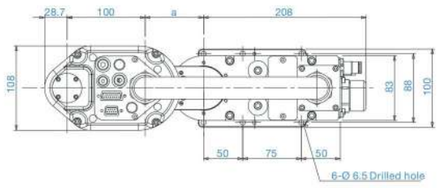
Reference through hole
(View from the bottom of the base)

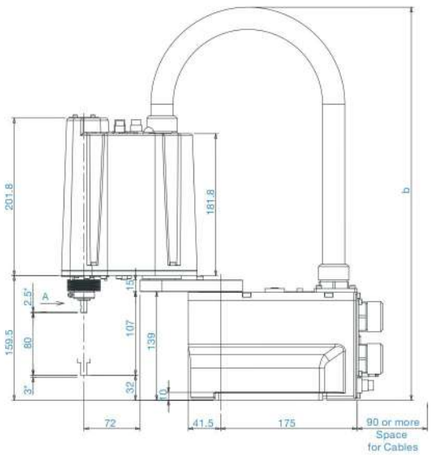


Detail of "A"
(Calibration point position of Joints #3 and #4)

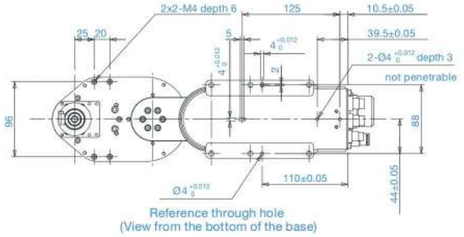
	G1_171S	G1_221S
a	75	125
b	Max.515	Max.545

Cleanroom-model

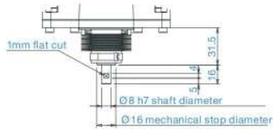




*indicates the stroke margin by mechanical stop.



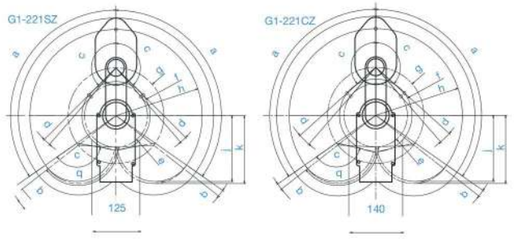
Reference through hole
(View from the bottom of the base)



Detail of "A"
(Calibration point position of Joints #3 and #4)

	G1_171C	G1_221C
a	75	125
b	Max.515	Max.55

Motion Range (Table Top Mounting)



Model	4-axis				3-axis			
	G1-171S	G1-171C	G1-221S	G1-221C	G1-171SZ	G1-171CZ	G1-221SZ	G1-221CZ
g Length of Arm #1 (mm)	75		125		75		125	
h-g Length of Arm #2 (mm)	100		100		100		100	
f Motion range	64.3		59.6	64.8	70.9	86.4	89.2	94.4
a Motion range of Joint #1 (°)	125		125		125			
c Motion range of Joint #2 (°)	140		152	149	135	123	135	132
e Mechanical stop area	60.4	62.6	52.8	56.2	69.2	82.5	82.2	
b Joint #1 angle to hit mechanical stop (°)	3		3		3			
d Joint #2 angle to hit mechanical stop (°)	3		4	5	1.3	3	4	7

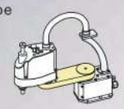
G series SCARA robot

G3

Compact body with rank-above technology for high speed and low vibration

- Handles small, heavy components and payloads up to 3kg
- Available with left- or right-curved arm for greater operating versatility
- A small robot with a long reach

Arm type



Straight arm

Curved arm

Model Number **G3 - 25 1 S □ -R -UL**

Payload
- 3 : 3kg

Arm length
- 25 : 250mm
- 30 : 300mm
- 35 : 350mm

Joint #3 stroke
- 1 : 150mm
- : 120mm: Cleanroom-model

Environment
- S : Standard
- C : Cleanroom & ESD

Mounting type
- □ : Table Top Mounting
- M : Multiple Mounting

Type
- □ : Standard
- R : Right-Curved
- L : Left-Curved

UL specification
- □ : Non UL compliant
- -UL : UL compliant

Specifications

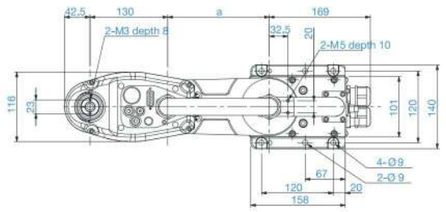
Model name		G3				
Model number		G3-251□	G3-301□□-□		G3-351□□-□	
Arm length	Arm #1, #2	250 mm	300 mm		350 mm	
Payload	Rated	1 kg				
	Maximum	3 kg				
Repeatability	Joints #1, #2	±0.008 mm	±0.01 mm		±0.01 mm	
	Joint #3	±0.01 mm				
	Joint #4	±0.005 deg				
Standard cycle time*1		0.41 sec	0.43 sec		0.41 sec	
Max. operating speed	Joints #1, #2	3550 mm/sec	3950 mm/sec		4350 mm/sec	
	Joint #3	1100 mm/sec				
	Joint #4	3000 deg/sec				
Joint #4 allowable moment of inertia*2	Rated	0.005 kg·m²				
	Maximum	0.05 kg·m²				
Joint #3 down force		150 N				
Installation environment		Standard /Cleanroom*3 & ESD				
Mounting type		Table top	Table top	Multiple	Table top	Multiple
Weight (cables not included)		14 kg				
Applicable Controller		RC700-A				
Installed wire for customer use		15 Pin D-Sub				
Installed pneumatic tube for customer use		Φ6 mm x 2, Φ4 mm x 1 : 0.59 MPa (6 kgf/cm²)				
Power		AC200-240 V Single phase				
Power Consumption*4		1.1 kVA				
Cable length		3 m/5 m/10 m/15 m/20 m				
Safety standard		CE, KC, UL				

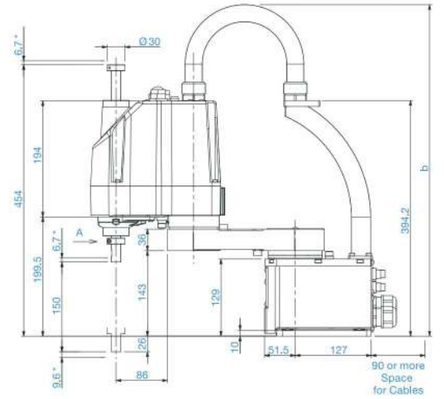
*1: Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2kg payload (path coordinates optimized for maximum speed) .
*2: When payload center of gravity is aligned with Joint #4 ; if not aligned with Joint #4, set parameters using INERTIA command.
*3: Complies with ISO Class 3 (ISO14644-1) and older Class 1 (less than 10 0.1 m particles per 28,317cm3:1cft) cleanroom standards.
*4: Varies according to operating environment and program.

Outer Dimensions (Table Top Mounting)

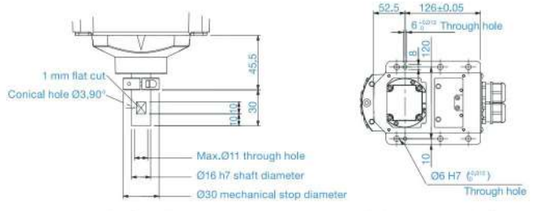
[Unit: mm]

Standard-model



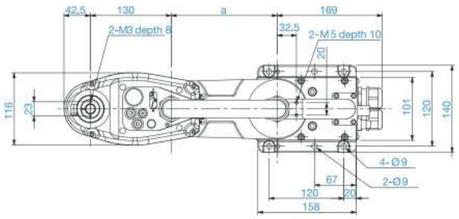


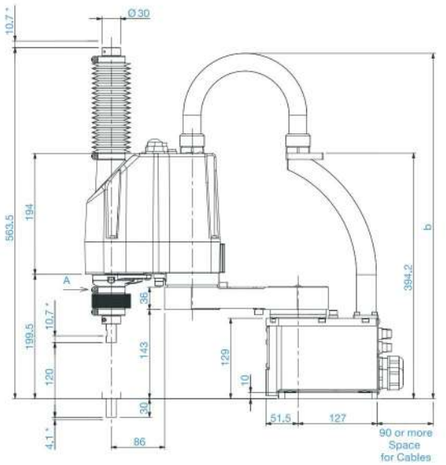
*indicates the stroke margin by mechanical stop.



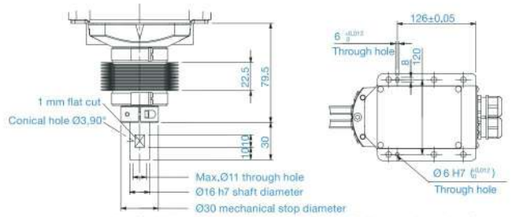
	G3_251S	G3_301S	G3_351S
a	120	170	220
b	Max.545	Max.575	Max.595

Cleanroom-model





*indicates the stroke margin by mechanical stop.

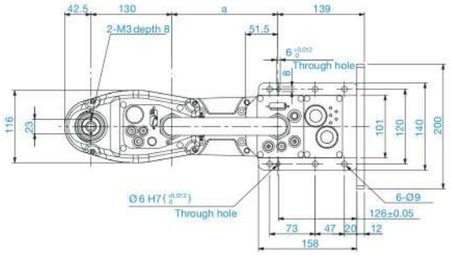


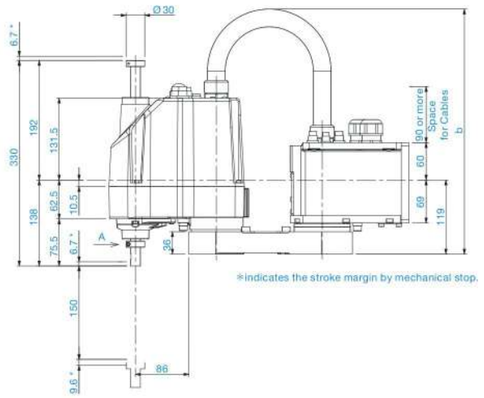
	G3_251C	G3_301C	G3_351C
a	120	170	220
b	Max.545	Max.575	Max.595

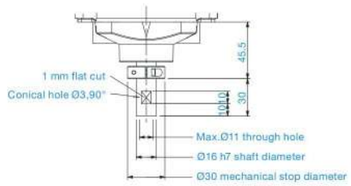
■Outer Dimensions (Multiple Mounting)

[Unit: mm]

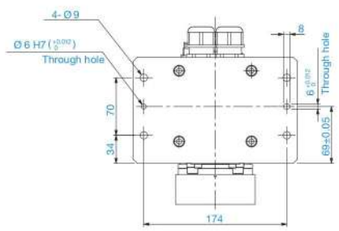
Standard-model







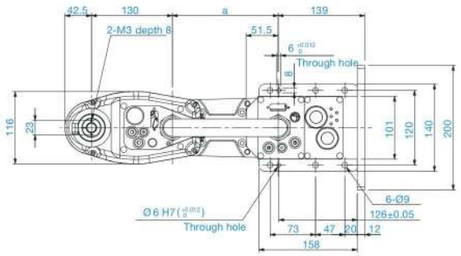
Detail of "A"
(Calibration point position of Joints #3 and #4)

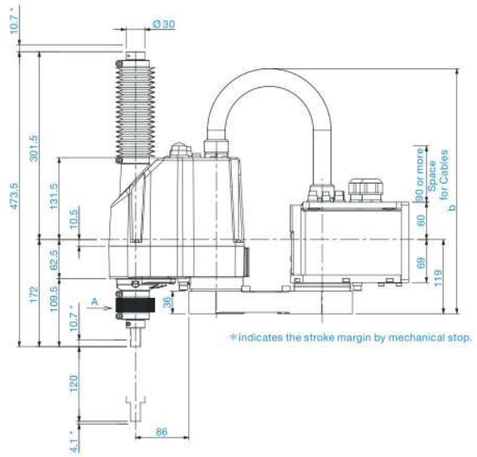


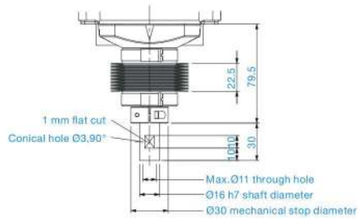
Reference through hole
(View from the bottom of the base)

	G3_301SM	G3_351SM
a	170	220
b	Max.410	Max.450

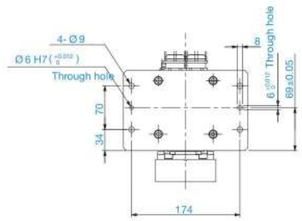
Cleanroom-model







Detail of "A"
(Calibration point position of Joints #3 and #4)



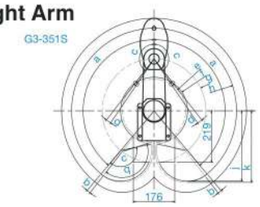
Reference through hole
(View from the bottom of the base)

	G3_301CM	G3_351CM
a	170	220
b	Max.410	Max.450

■Motion Range (Table Top Mounting)

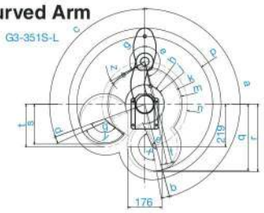
[Unit: mm]

Straight Arm



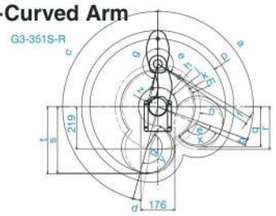
Model	Straight Arm					
	G3-251S	G3-251C	G3-301S	G3-301C	G3-351S	G3-351C
g Length of Arm #1 (mm)	120		170		220	
h-g Length of Arm #2 (mm)	130		130		130	
f Motion range	84	92	104.8	107.1	142.3	146.6
a Motion range of Joint #1 (°)	140					
c Motion range of Joint #2 (°)	141	137	142	141	142	
e Mechanical stop area	79.3		96.2		134.2	
b Joint #1 angle to hit mechanical stop (°)	2					
d Joint #2 angle to hit mechanical stop (°)	2.3	6.3	3.8	4.8	3.8	

Left-Curved Arm



Model	Left-Curved Arm			
	G3-301S-L	G3-301C-L	G3-351S-L	G3-351C-L
n Length of Arm #1 (mm)	170		220	
p-n Length of Arm #2 (mm)	130		130	
m,j Motion range	120.7, 86.8		191.6, 100.3	191.6, 107.5
a,c Motion range of Joint #1 (°)	150, 125		165, 110	
e,g Motion range of Joint #2 (°)	150, 135	145, 135	165, 120	160, 120
h,k Mechanical stop area	79.5, 113.2		97.0, 183.0	97.0, 184.2
b,d Joint #1 angle to hit mechanical stop (°)	3, 6		5, 4	
f,z Joint #2 angle to hit mechanical stop (°)	3.3, 3.3	8.3, 3.8	2.8, 3.8	7.8, 3.8

Right-Curved Arm

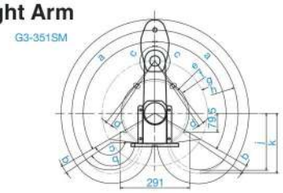


Model	Right-Curved Arm			
	G3-301S-R	G3-301C-R	G3-351S-R	G3-351C-R
n Length of Arm #1 (mm)	170		220	
p-n Length of Arm #2 (mm)	130		130	
m,j Motion range	120.7, 86.8		191.6, 100.3	191.6, 107.5
a,c Motion range of Joint #1 (°)	125, 150		110, 165	
e,g Motion range of Joint #2 (°)	135, 150	135, 145	120, 165	120, 160
h,k Mechanical stop area	79.5, 113.2		97.0, 183.0	97.0, 184.2
b,d Joint #1 angle to hit mechanical stop (°)	6, 3		4, 5	
f,z Joint #2 angle to hit mechanical stop (°)	3.3, 3.3	3.3, 8.3	3.8, 2.8	3.8, 7.8

■Motion Range (Multiple Mounting)

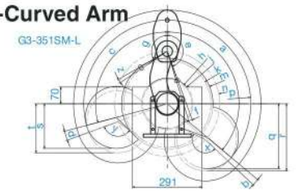
[Unit: mm]

Straight Arm



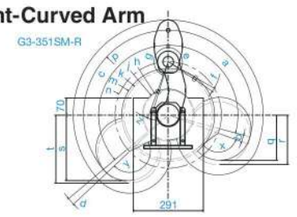
Model	Straight Arm	
	G3-301SM/CM	G3-351SM/CM
g Length of Arm #1 (mm)	170	220
h-g Length of Arm #2 (mm)	130	130
f Motion range	120.7	142.3
a Motion range of Joint #1 (°)	115	120
c Motion range of Joint #2 (°)	135	142
e Mechanical stop area	112	134.2
b Joint #1 angle to hit mechanical stop (°)	4	
d Joint #2 angle to hit mechanical stop (°)	3.8	

Left-Curved Arm



Model	Left-Curved Arm	
	G3-351SM-L	G3-351CM-L
n Length of Arm #1 (mm)	220	
p-n Length of Arm #2 (mm)	130	
m,j Motion range	191.9, 107.5	191.9, 125.6
a,c Motion range of Joint #1 (°)	130, 105	
e,g Motion range of Joint #2 (°)	160, 120	150, 120
h,k Mechanical stop area	103.3, 183.0	
b,d Joint #1 angle to hit mechanical stop (°)	3.3, 5	2, 5
f,z Joint #2 angle to hit mechanical stop (°)	2.8, 3.8	12.8, 3.8

Right-Curved Arm



Model	Right-Curved Arm	
	G3-351SM-R	G3-351CM-R
n Length of Arm #1 (mm)	220	
p-n Length of Arm #2 (mm)	130	
m,j Motion range	191.9, 107.5	191.9, 125.6
a,c Motion range of Joint #1 (°)	105, 130	
e,g Motion range of Joint #2 (°)	120, 160	120, 150
h,k Mechanical stop area	103.3, 183.0	
b,d Joint #1 angle to hit mechanical stop (°)	5, 3.3	5, 2
f,z Joint #2 angle to hit mechanical stop (°)	3.8, 2.8	3.8, 12.8

G series SCARA robot

GX4

Upgraded performance and functionality for high speed and precision applications at a lower total operating cost

- Battery-less manipulator for reduced maintenance time and equipment downtime
- GYROPLUS Technology for improved vibration control
- Built-in camera cable & user screw holes for cable fixing convenience
- MC cable bottom out specification to reduce installation space and lower factory space costs

Model Number **GX4 - A351S □ □ - R - UL**

- SKU first name: GX
- Payload: 4 : 4kg
- Versions: A version
- Arm length: 25 : 250mm; 30 : 300mm; 35 : 350mm
- Joint #3 stroke: 1 : 150mm; : 120mm: Cleanroom-model
- Environment: S : Standard; C : Clean + ESD; E : ESD
- Cable direction: □ : Backward; B : Bottom
- Mounting type: □□ : Table Top Mounting; M : Multiple Mounting
- Arm type: □ : Straight; R : Carving Arm R; L : Carving Arm L
- UL specification: □□ : Non UL applicable; UL : UL applicable

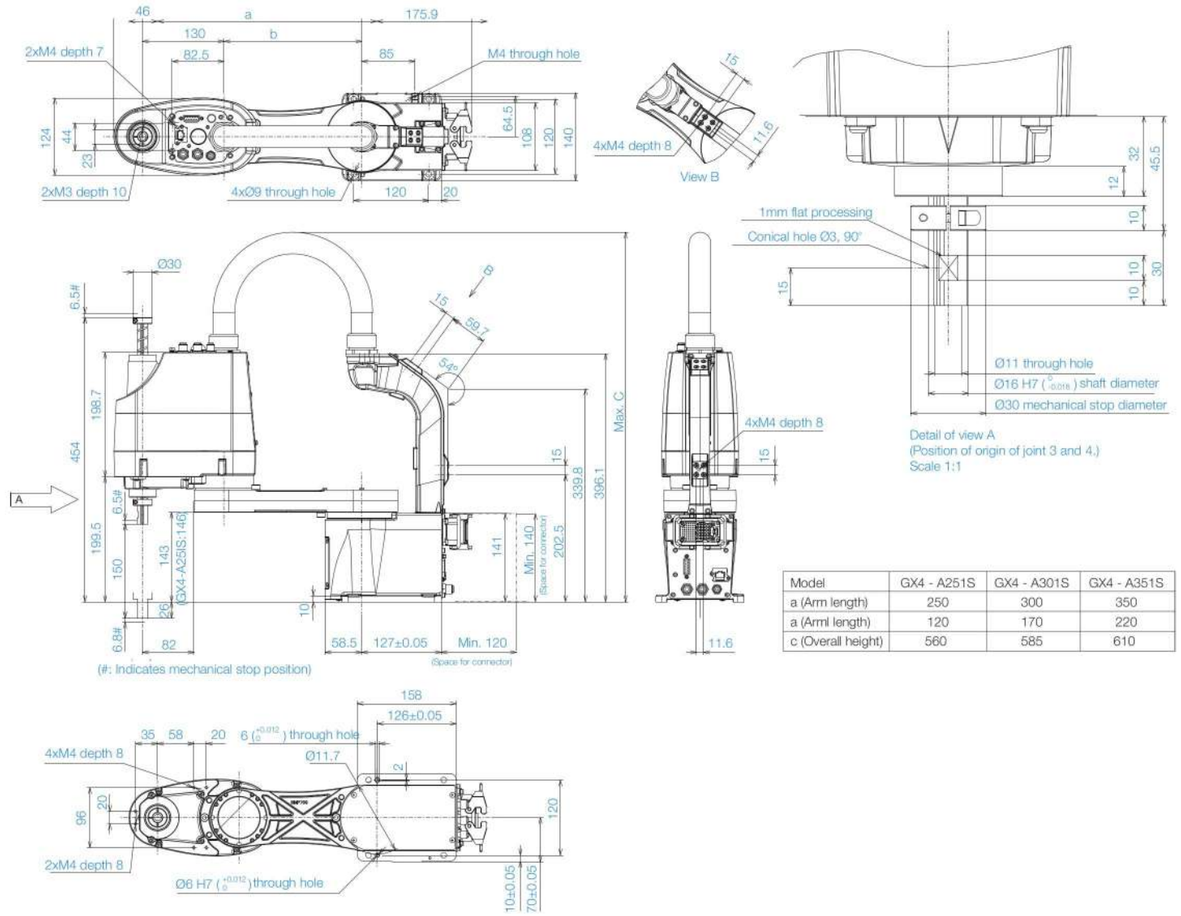
Specifications

Model Name		GX4-A		
Model Number		GX4-A251□□-□	GX4-A301□□-□	GX4-A351□□-□-□
Arm length	Joints #1 + #2 (mm)	250	300	350
Arm shape		Standard		Standard / R, L-Curved*1
Payload*2	Rated (kg)	2		
	Maximum (kg)	4		
Repeatability	Joints #1 + #2 (mm)	+/- 0.008	+/- 0.01	
	Joint #3 (mm)	+/- 0.01		
	Joint #4 (deg)	+/- 0.005		
Standard cycle time*3	(sec)	0.33	0.34	0.35
Max. operating speed	Joints #1 + #2 (mm/s)	3550	3950	4350
	Joint #3 (mm/s)	1100		
	Joint #4 (deg/s)	3100		
Joint #4 allowable moment of inertia*4	Rated (kg·m²)	0.005		
	Maximum (kg·m²)	0.05		
Joint #3 down force	(N)	150		
Installation environment		S: Standard, C: Cleanroom*5 & ESD*6, E: ESD*6		
Mounting type		□: Table Top, M: Multiple		
Cable exit direction		□: Rearward (Table Top) / Upward (Multiple), B: Downward (Table Top only)		
Weight (cables not included)	(kg) or less	Table top : 15	Table top : 15 / Multiple : 17	Table top : 16 / Multiple : 17
Applicable controller		RC700-D		
Installed wire for customer use		15 pin (D-Sub) x1, 8 pin (RJ45) x1		
Installed pneumatic tube for customer use		ø4mm x2 , ø6mm x1 : Allowable pressure 0.59 MPa (6 kgf/cm²)		
Power	(V)	AC200-240 Single phase		
Power consumption*7	(kVA)	1.2		
Cable length*8	(m)	3 / 5 / 10 / 15 / 20		
Safety standard		CE , UKCA		

*1: The curved arm is only supported in 350mm arm table top model.
*2: Do not apply the load exceeding the maximum payload.
*3: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting of table top model boost mode (path coordinates optimized for maximum speed)
*4: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method).
*5: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10 0.1 m particles per 28,317cm3:1cft) cleanroom standards.
*6: Resin covers are plated with electrolytic nickel to prevent static electricity, and the potential difference is ± 5V or less.
*7: Varies according to operating environment and program.
*8: Standard cable (not flexible cable)

Outer Dimensions (Table Top Mounting)

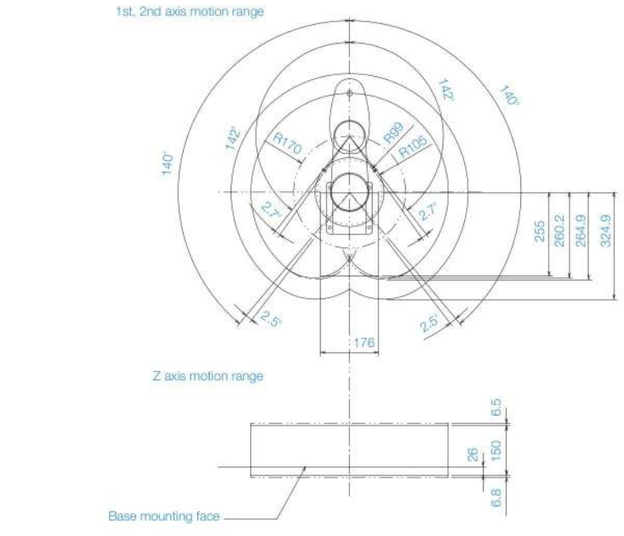
[Unit: mm]



Model	GX4 - A251S	GX4 - A301S	GX4 - A351S
a (Arm length)	250	300	350
a (Arml length)	120	170	220
c (Overall height)	560	585	610

Motion Range (Table Top Mounting)

[Unit: mm]



G series SCARA robot

G6

High speed and precision for small component assembly

- Handles payloads up to 6kg
- Available with 450mm, 550mm, or 650mm arm
- Internal cabling and ducting minimizes interference worries
- IP54/65 dust and water-resistant cleanroom models available
- Tabletop, ceiling, and wall mounting models available

Model Number **G6 - 45 1 S □ - UL**

Payload
- 6 : 6kg

Arm length
- 45 : 450mm
- 55 : 550mm
- 65 : 650mm

Joint #3 stroke
- 1 : 180mm / : 150mm: (C, D w/ bellows, P)
- 3 : 330mm / : 300mm: (C, D w/ bellows, P)

Environment
- S : Standard
- C : Cleanroom & ESD
- D : Protected:IP54 (with bellows option)
- P : Protected:IP65

UL specification
- □□ : Non UL compliant
- -UL : UL compliant

Mounting type
- □ : Table Top Mounting
- W : Wall Mounting
- R : Ceiling Mounting

Specifications

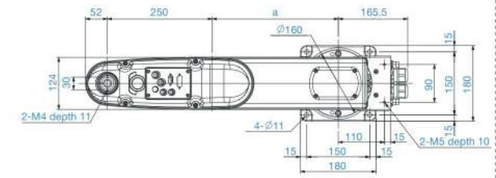
Model name		G6								
Model number		G6-45□□□			G6-55□□□			G6-65□□□		
Arm length	Arm #1, #2	450 mm			550 mm			650 mm		
Payload	Rated	3 kg								
	Maximum	6 kg								
Repeatability	Joints #1, #2	±0.015 mm								
	Joint #3	±0.01 mm								
	Joint #4	±0.005 deg								
Standard cycle time*1		0.35 sec			0.36 sec			0.39 sec		
Max. operating speed	Joints #1, #2	6440 mm/sec			7170 mm/sec			7900 mm/sec		
	Joint #3	G6-□□1□□=1100 mm/sec /G6-□□3□□=2350 mm/sec								
	Joint #4	2400 deg								
Joint #4 allowable moment of inertia*2	Rated	0.01 kg·m²								
	Maximum	0.12 kg·m²								
Joint #3 down force		150 N								
Installation environment		Standard/Cleanroom & ESD*3 /Protection*4								
Mounting type		Table top	Ceiling	Wall	Table top	Ceiling	Wall	Table top	Ceiling	Wall
Weight (cables not included)		27 kg		29 kg	27 kg		29 kg	28 kg		29.5 kg
Applicable Controller		RC700-A								
Installed wire for customer use		15 Pin D-Sub、 9 Pin D-sub								
Installed pneumatic tube for customer use		Φ6 mm x 2, Φ4 mm x2 : 0.59 MPa (6 kgf/cm²)								
Power		AC200-240 V Single phase								
Power Consumption*5		1.5 kVA								
Cable length		3 m/5 m/10 m/15 m/20 m								
Safety standard		CE, KC, UL								

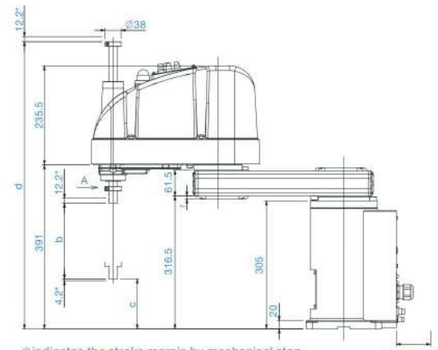
*1: Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2kg payload (path coordinates optimized for maximum speed) .
*2: When payload center of gravity is aligned with Joint #4 ; if not aligned with Joint #4, set parameters using INERTIA command.
*3: Complies with ISO Class 3 (ISO14644-1) and older Class 1 (less than 10 0.1 m particles per 28,317cm3:1cft) cleanroom standards.
*4: G6-□□□D□ protected type with optional bellows complies with IP54; G6-□□□P□ complies with IP65.
*5: t depends on operating environment and operation program.

Outer Dimensions (Table Top Mounting)

[Unit: mm]

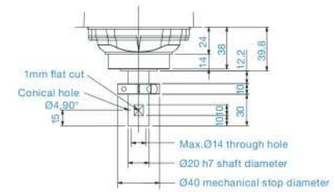
Standard-model



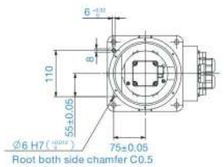


*indicates the stroke margin by mechanical stop.

90 or more Space for Cables



Detail of "A"
(Calibration point position of Joints #3 and #4)

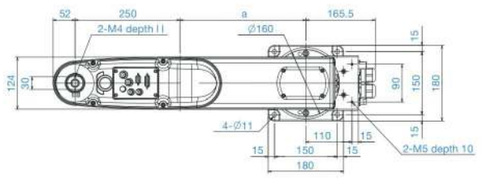


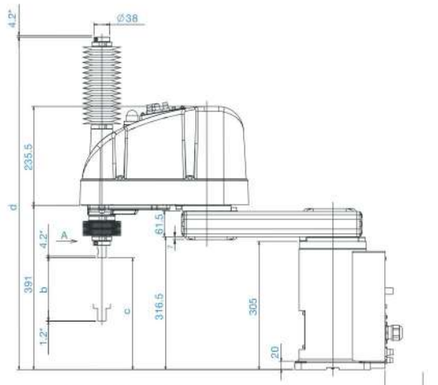
Reference through hole
(View from the bottom of the base)

	G6-45□S	G6-55□S	G6-65□S
a	200	300	400

	G6-□□1S	G6-□□3S
b	180	330
c	119	-31
d	684	834

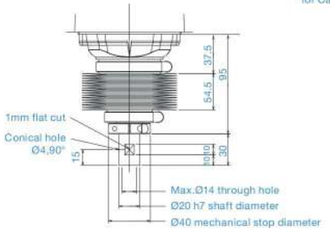
Cleanroom-model



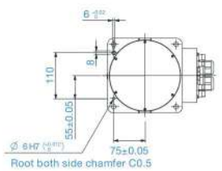


*indicates the stroke margin by mechanical stop.

90 or more Space for Cables



Detail of "A"
(Calibration point position of Joints #3 and #4)



Reference through hole
(View from the bottom of the base)

	G6-45□C	G6-55□C	G6-65□C
a	200	300	400

	G6-□□1C	G6-□□3C
b	150	300
c	116	-34
d	792	942

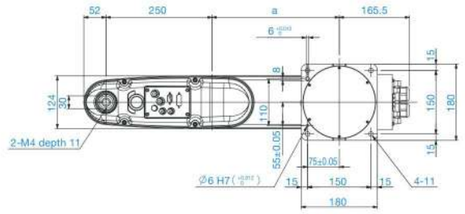
Motion Range (Table Top Mounting)

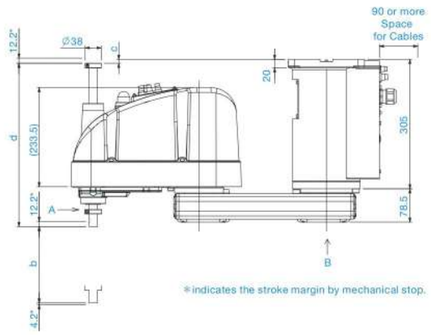
Model	Table Top Mounting					
	G6-45□S/D		G6-45□C/P/D bellows		G6-55□□	G6-65□
a Length of Arm #1 (mm)	200				300	400
b Length of Arm #2 (mm)	250					
c Motion range	Z:0～-270	134.8	Z:0～-240	134.8	161.2	232
	Z:-270～-330	143.5	Z:-240～-300	153.9		
d Motion range of Joint #1 (°)	152					
e Motion range of Joint #2 (°)	Z:0～-270	147.5	Z:0～-240	147.5	147.5	
	Z:-270～-330	145	Z:-240～-300	142		
f Mechanical stop area	124.4				133.8	207.5
g Joint #1 angle to hit mechanical stop (°)	3.5					
h Joint #1 angle to hit mechanical stop (°)	Z:0～-270	3	Z:0～-240	3	6.3	
	Z:-270～-330	5.5	Z:-240～-300	8.5		

Outer Dimensions (Ceiling Mounting)

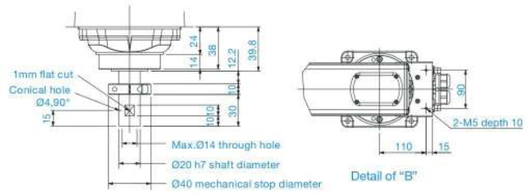
[Unit: mm]

Standard-model





*indicates the stroke margin by mechanical stop.

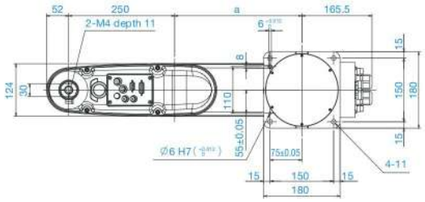


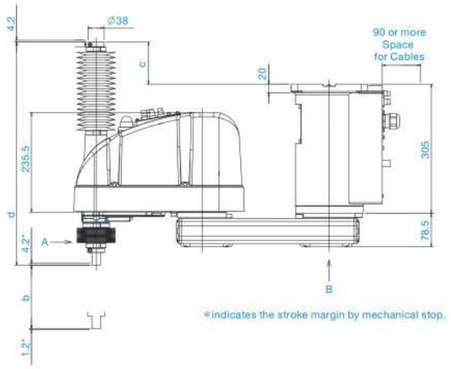
Detail of "A"
(Calibration point position of Joints #3 and #4)

	G6-45□SR	G6-55□SR	G6-65□SR
a	200	300	400

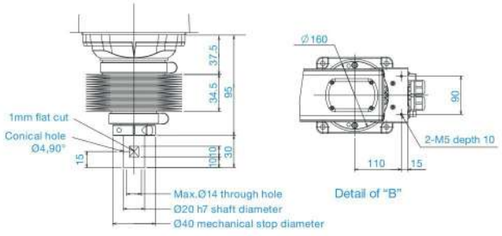
	G6-□□1SR	G6-□□3SR
b	180	330
c	-9	141
d	385	535

Cleanroom-model





*indicates the stroke margin by mechanical stop.

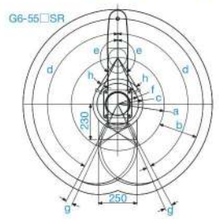


Detail of "A"
(Calibration point position of Joints #3 and #4)

	G6-45□CR	G6-55□CR	G6-65□CR
a	200	300	400

	G6-□□1CR	G6-□□3CR
b	150	300
c	99	249
d	526	676

Motion Range (Ceiling Mounting)

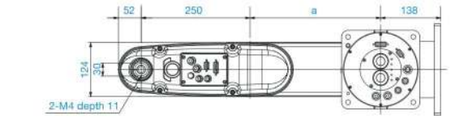


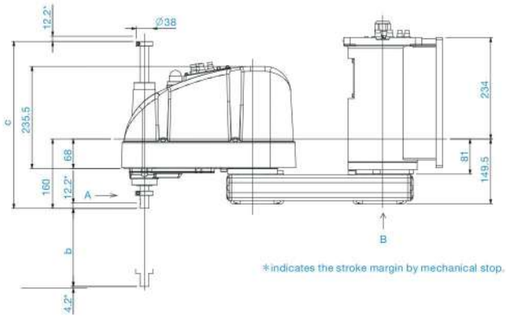
Model	Ceiling Mounting			
	G6-45□□R	G6-55□SR/DR	G6-55□CR/PR/DR bellows	G6-65□□R
a Length of Arm #1 (mm)	200	300		400
b Length of Arm #2 (mm)	250			
c Motion range	195.5	161.2	172.1	232
d Motion range of Joint #1 (°)	120	152		
e Motion range of Joint #2 (°)	130	147.5	145	147.5
f Mechanical stop area	182.4	146.8		207.5
g Joint #1 angle to hit mechanical stop (°)	5.5	3.5		
h Joint #2 angle to hit mechanical stop (°)	3.8	3.3	5.8	6.3

Outer Dimensions (Wall Mounting)

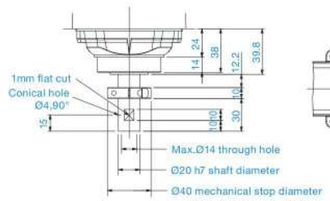
[Unit: mm]

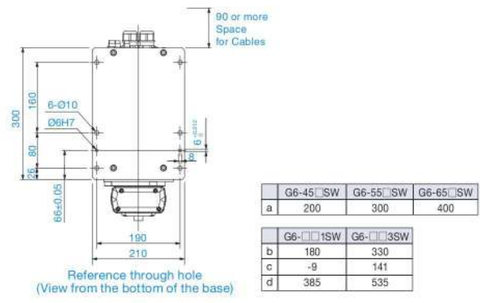
Standard-model





*indicates the stroke margin by mechanical stop.



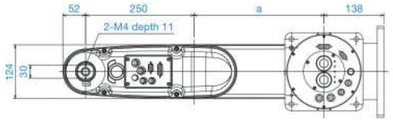


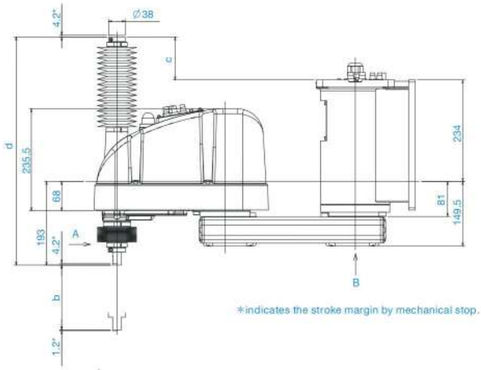
Reference through hole
(View from the bottom of the base)

	G6-45□SW	G6-55□SW	G6-65□SW
a	200	300	400

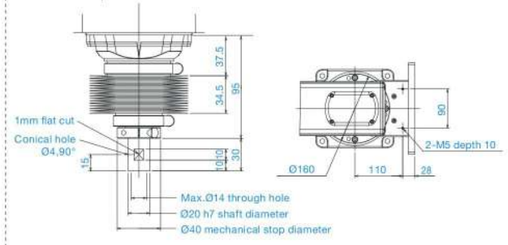
	G6-□□1SW	G6-□□3SW
b	180	330
c	-9	141
d	385	535

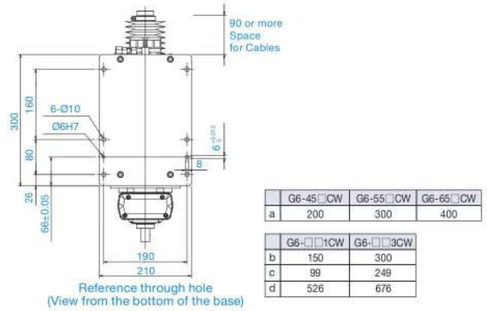
Cleanroom-model





*indicates the stroke margin by mechanical stop.





Reference through hole
(View from the bottom of the base)

	G6-45□CW	G6-55□CW	G6-65□CW
a	200	300	400

	G6-□□1CW	G6-□□3CW
b	150	300
c	99	249
d	526	676

Motion Range (Wall Mounting)

Model	Wall Mounting			
	G6-45□□W	G6-55□SW/DW	G6-55□CW/PW/DW bellows	G6-65□□W
a Length of Arm #1 (mm)	200	300		400
b Length of Arm #2 (mm)	250			
c Motion range	195.5	161.2	172.1	232
d Motion range of Joint #1 (°)	105	135		148
e Motion range of Joint #2 (°)	130	147.5	145	147.5
f Mechanical stop area	182.4	146.8		207.5
g Joint #1 angle to hit mechanical stop (°)	3.5			7.5
h Joint #2 angle to hit mechanical stop (°)	3.8	3.3	5.8	6.3

G series SCARA robot

GX8

Elevated industrial-class performance for applications requiring immense precision and accuracy at a competitive price

- Battery-less manipulator for reduced maintenance time and equipment downtime
- Improved cable fixing convenience on arm 2 with user screw holes
- Simplified MC cable attach/detachment for easy installation of robot
- Extended length of Z stroke from 180mm to 200mm

Model Number **GX 8 - A 45 2 S □ - R - UL**

- SKU first name: GX
- Payload: 8 : 8kg
- Versions: A version
- Arm length: 45 : 450mm; 55 : 550mm; 65 : 650mm
- Joint #3 stroke: 2 : 200mm; 3 : 330mm
- Environment: S : Standard; C : Clean + ESD; P : IP65; E : ESD
- Cable direction: □□ : Backward; B : Bottom
- Mounting type: □□ : Table Top Mounting; W : Wall Mounting; R : Ceiling Mounting
- UL specification: □□ : Non UL applicable; UL : UL applicable

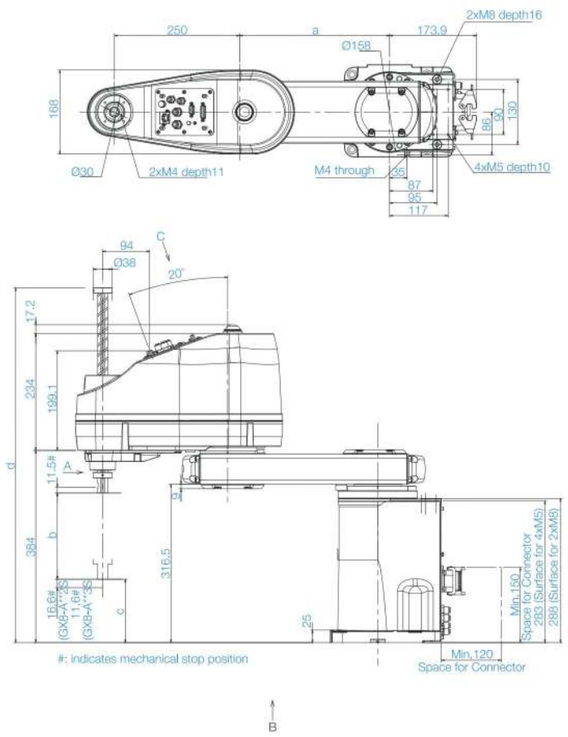
Specifications

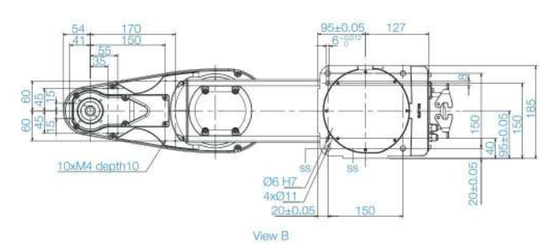
Model Name		GX8-A		
Model Number		GX8-A45□□□-□	GX8-A55□□□-□	GX8-A65□□□-□
Arm length	Joints #1 + #2 (mm)	450	550	650
Payload*1	Rated (kg)	4		
	Maximum (kg)	8		
Repeatability	Joints #1 + #2 (mm)	+/- 0.015		
	Joint #3 (mm)	+/- 0.010		
	Joint #4 (deg)	+/- 0.005		
Standard cycle time*2	(sec)	0.28	0.30	0.33
Max. operating speed	Joints #1 + #2 (mm/s)	7450	8450	9460
	Joint #3 (mm/s)	2350		
	Joint #4 (deg/s)	2800		
Joint #4 allowable moment of inertia*4	Rated (kg·m²)	0.01		
	Maximum (kg·m²)	0.16		
Joint #3 down force	(N)	150		
Installation environment		S: Standard, C: Cleanroom*4 & ESD*5, P: IP65, E: ESD*5		
Mounting type		□: Table Top, W: Wall, R: Ceiling		
Cable exit direction		□: Rearward (Table Top, Ceiling) / Upward (Wall), B: Downward (Table Top only)		
Weight (cables not included)	(kg) or less	Table top, Ceiling : 33 / Wall : 35	Table top, Ceiling : 34 / Wall : 36	Table top, Ceiling : 35 / Wall : 37
Applicable controller		RC700-D		
Installed wire for customer use		D-sub 15 pin x1, 9 pin x1, 8 pin (RJ45) x1		
Installed pneumatic tube for customer use		ø4mm x2 , ø6mm x2 : Allowable pressure 0.59 MPa (6 kgf/cm2)		
Power	(V)	AC200-240 Single phase		
Power consumption* 7	(kVA)	2.2		
Cable length*8	(m)	3 / 5 / 10 / 15 / 20		
Safety standard		CE , UKCA		

*1: Do not apply the load exceeding the maximum payload.
*2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting of table top model boost mode (path coordinates optimized for maximum speed)
*3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method).
*4: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10 0.1 m particles per 28,317cm3:1cft) cleanroom standards.
*5: Resin covers are plated with electrolytic nickel to prevent static electricity, and the potential difference is ± 5V or less.
*6: Varies according to operating environment and program.*7: Varies according to operating environment and program.
*7: Standard cable (not flexible cable)

Outer Dimensions (Table Top Mounting)

[Unit: mm]

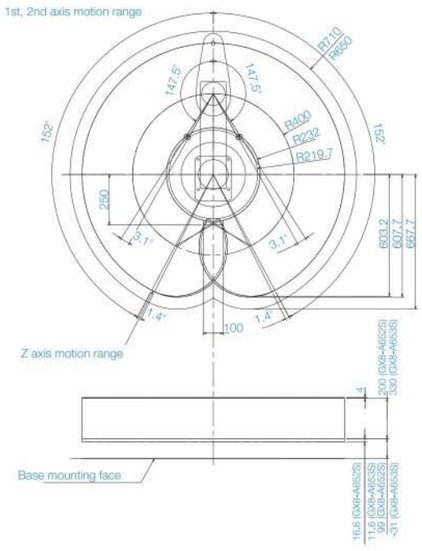




	GX8-A452S	GX8-A453S	GX8-A552S	GX8-A553S	GX8-A652S	GX8-A653S
a	200	200	300	300	400	400
b	200	330	200	330	200	330
c	99	-31	99	-31	99	-31
d	709	834	709	834	709	834

Motion Range (Table Top Mounting)

[Unit: mm]



G series SCARA robot

GX10/GX20 NEW

For high-speed, high-precision, multi-hand batch handling and packing of heavier loads

- Handles payloads of up to 10/20kg
- Choice of 650mm, 850mm, and 1000mm arm
- Internal cabling and ducting minimizes interference worries
- IP54/65 dust and water-resistant cleanroom models available
- Tabletop, ceiling, and wall mounting models available

Model Number **GX10 - 85 4 S □ - UL**

Payload
- 10 : 10kg
- 20 : 20kg

Arm length
- 65 : 650mm (GX10 series only)
- 85 : 850mm
- A0 : 1000mm (GX20 series only)

Joint #3 stroke
- 1 : 180mm / : 150mm: (C, D w/ bellows, P)
- 4 : 420mm / : 390mm: (C, D w/ bellows, P)

Environment
- S : Standard
- C : Cleanroom & ESD
- D : Protected: IP54 (with bellows option)
- P : Protected: IP65

UL specification
- □ : Non UL compliant
- -UL : UL compliant

Mounting type
- □ : Table Top Mounting
- W : Wall Mounting
- R : Ceiling Mounting

Specifications

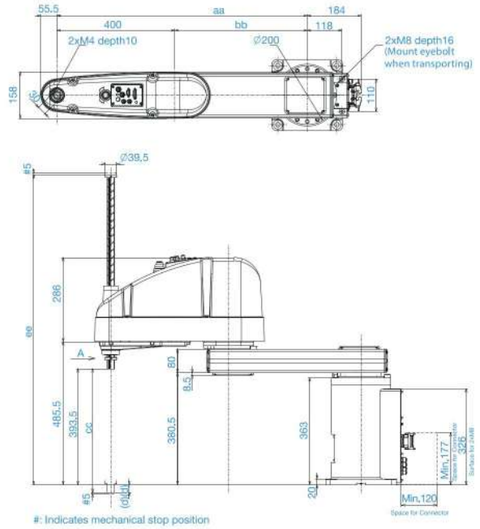
Model name		GX10/20-B		
Model number		GX10-B65□□	G10/20-B85□□□	GX20-BA0□□□
Arm length	Arm #1, #2	650 mm	850 mm	1000 mm
Payload*1	Rated	5 kg	GX10-B=5 kg /GX20-B=10kg	10 kg
	Maximum	10 kg	GX10-B=10 kg /GX20-B=20kg	20 kg
Repeatability	Joints #1, #2	±0.025 mm		
	Joint #3	±0.01 mm		
	Joint #4	±0.005 deg		
Standard cycle time*2		0.338 sec	GX10-B=0.377 sec / GX20-B=0.365 sec	0.422 sec
Max. operating speed	Joints #1, #2	8800 mm/sec	11000 mm/sec	11500 mm/sec
	Joint #3	2350 mm/sec		
	Joint #4	2400	GX10-B=2400 deg/sec / GX20-B=2350 deg/sec	2350
Joint #4 allowable moment of inertia*3	Rated	0.02 kg·m²	GX10-B=0.02 kg·m² /GX20-B=0.05 kg·m²	0.05 kg·m²
	Maximum	0.25 kg·m²	GX10-B=0.25 kg·m² /GX20-B=0.45 kg·m²	0.45 kg·m²
Joint #3 down force		250 N		
Installation environment		S: Standard (equivalent to IP20), C: Cleanroom*4 & ESD*5, P: IP65		
Cable exit direction		□Standard (table top mounting-cable routing from rear side, wall mounting-cable routing from top side, ceiling mounting-cable routing from rear side)		
Mounting type		Table top / Ceiling / Wall	Table top / Ceiling / Wall	Table top / Ceiling / Wall
Weight (cables not included)		46 kg / 51 kg	49 kg / 53 kg	50 kg / 55 kg
Applicable Controller		RC700-E		
Installed wire for customer use		D-sub 15 pin x1, 9 pin x1		
Installed pneumatic tube for customer use		Φ4 mm x 2, Φ6 mm x 2 : Allowable pressure 0.59 MPa (6 kgf/cm²)		
Power		AC200-240 V Single phase		
Power Consumption*6		2.4 kVA		
Cable length		Standard: 3 m/5 m/10 m/15 m/20 m, Flexible: 5 m/10 m/15 m/20 m		
Safety standard		CE, UKCA, KC, NRTL		

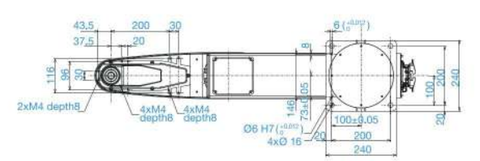
*1: Do not apply the load exceeding the maximum payload.
*2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting of table top model (path coordinates optimized for maximum speed).
*3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method).
*4: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10 0.1 m particles per 28,317cm3:1cft) cleanroom standards.
*5: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard.
*6: Varies according to operating environment and program.

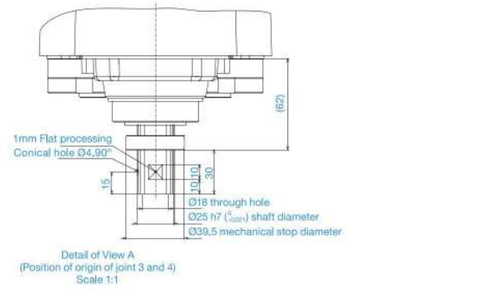
Outer Dimensions (Table Top Mounting)

[Unit: mm]

Standard-model





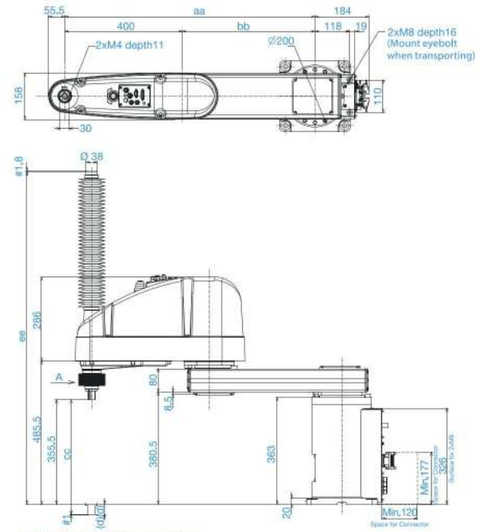


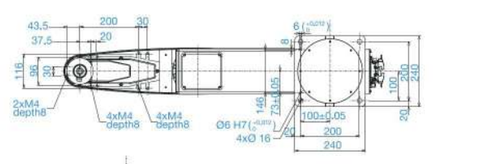
Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

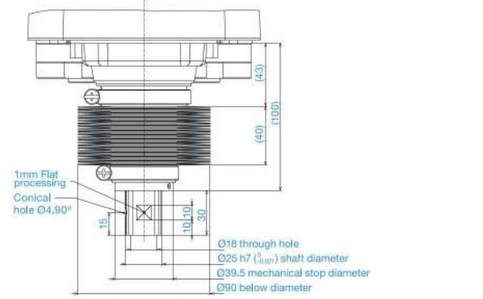
	GX10-B65□S	GX10-B85□S	GX20-B85□S	GX20-BA0□S
a	650	850	850	1000
b	250	450	450	600

	GX10/G20-B□□1S	GX10/G20-B□□4S
c	180	420
d	-213.5	26.5
e	813.5	1053.5

Cleanroom-model







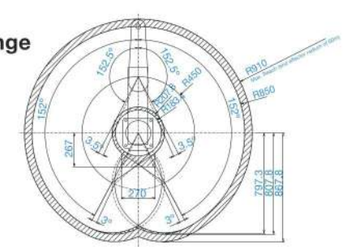
Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

	GX10-B65□C	GX10-B85□C	GX20-B85□C	GX20-BA0□C
a	650	850	850	1000
b	250	450	450	600

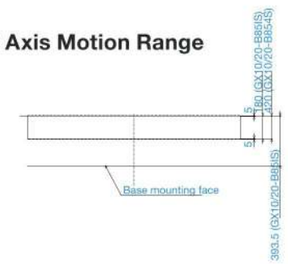
	GX10/G20-B□□1C	GX10/G20-B□□4C
c	150	390
d	-205.5	34.5
e	870.5	1129.5

Motion Range

1st, 2nd Axis Motion Range



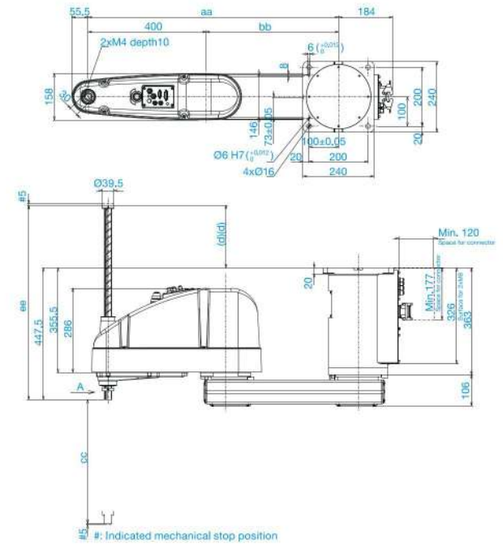
Z Axis Motion Range

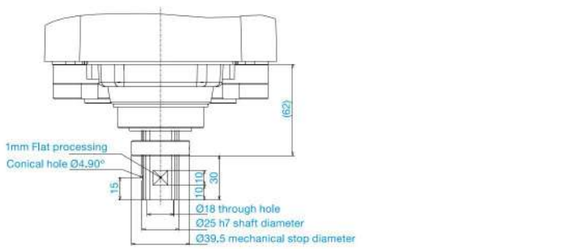


Outer Dimensions (Ceiling Mounting)

[Unit: mm]

Standard-model



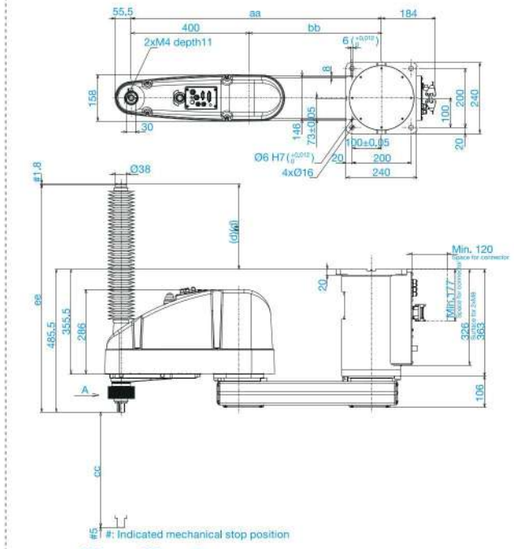


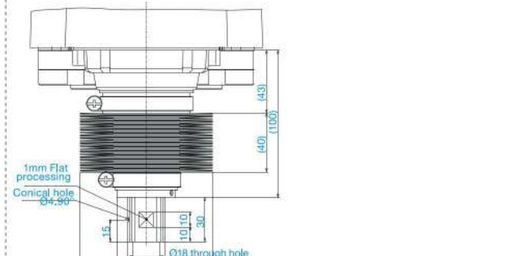
Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

	GX10-B65□SR	GX10-B85□SR	GX20-B85□SR	GX20-BA0□SR
a	650	850	850	1000
b	250	450	450	600

	GX10/20-B□□1SR	GX10/20-B□□4SR
c	180	420
d	-27.5	212.5
e	420	660

Cleanroom-model





Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

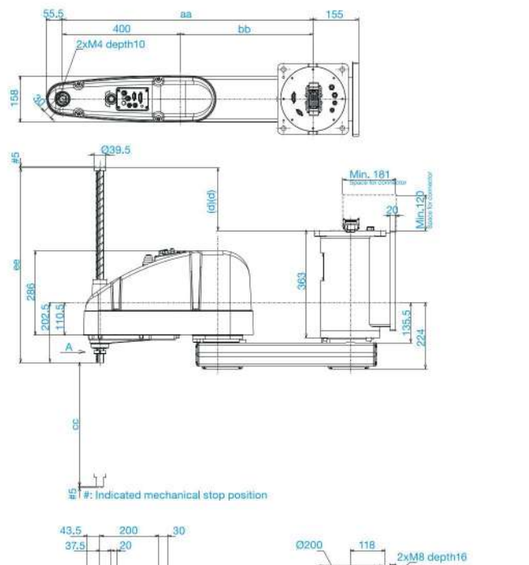
	GX10-B65□CR	GX10-B85□CR	GX20-B85□CR	GX20-BA0□CR
a	650	850	850	1000
b	250	450	450	600

	GX10/20-B□□1CR	GX10/20-B□□4CR
c	150	390
d	29.5	288.5
e	515	774

Outer Dimensions (Wall Mounting)

[Unit: mm]

Standard-model

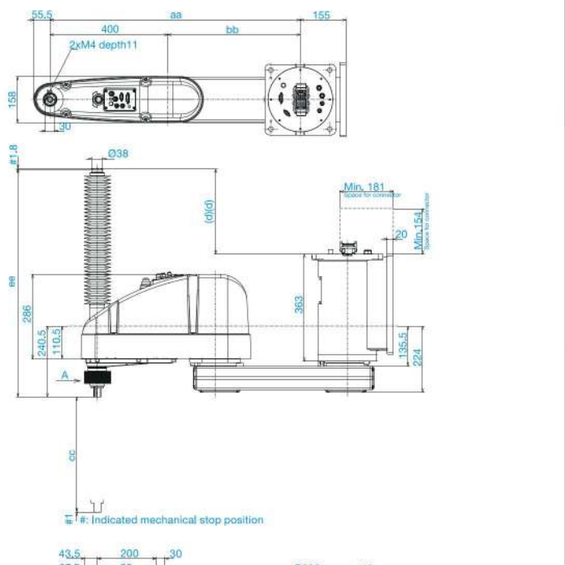


Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

	GX10-B65□SW	GX10-B85□SW	GX20-B85□SW	GX20-BA0□SW
a	650	850	850	1000
b	250	450	450	600

	GX10/20-B□□1SW	GX10/20-B□□4SW
c	180	420
d	-27.5	212.5
e	420	660

Cleanroom-model



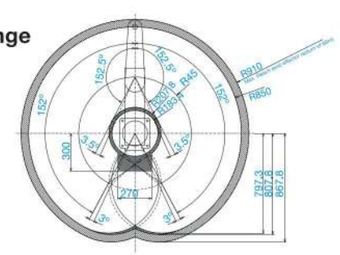
Detail of View A
(Position of origin of joint 3 and 4)
Scale 1:1

	GX10-B85□CW	GX10-B85□CW	GX20-B85□CW	GX20-BA0□CW
a	650	850	850	1000
b	250	450	450	600

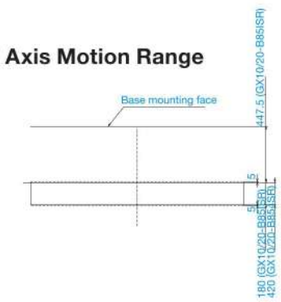
	GX10/20-B□□1CW	GX10/20-B□□4CW
c	150	390
d	29.5	288.5
e	515	774

Motion Range (Ceiling Mounting)

1st, 2nd Axis Motion Range

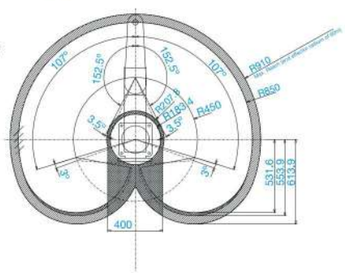


Z Axis Motion Range

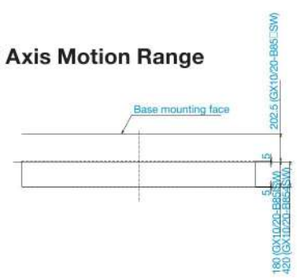


Motion Range (Wall Mounting)

1st, 2nd Axis Motion Range



Z Axis Motion Range



LS series SCARA robot

LS3-B

LS series reliability and performance with improved operating ease

- Built-in Ethernet port on arm for easier camera connectivity
- Batteryless motor unit for reduced maintenance
- Diagonally oriented rear ducting for a lower profile that helps reduce installation space requirements

Model Number **LS3 - B 40 1 S**

- Payload: 3 : 3kg
- Arm length: 40 : 400mm
- Joint #3 stroke: 1 : 150mm: Standard-model / 120mm: Cleanroom-model (with bellows)
- Environment: S : Standard / C : Cleanroom

Specifications

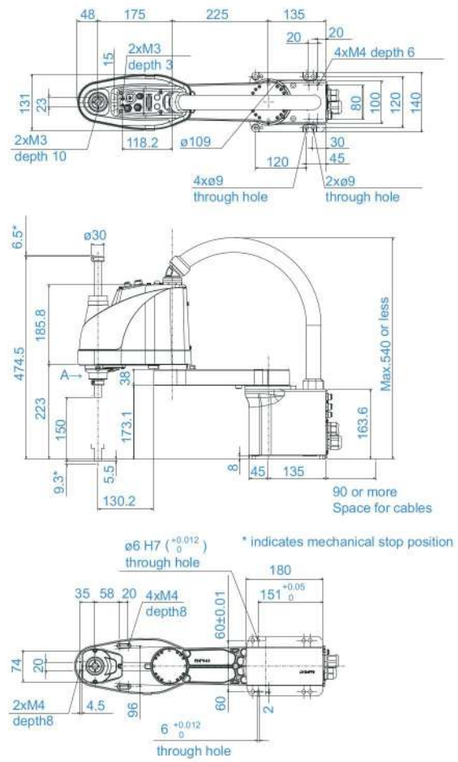
Model name		LS3-B
Model number		LS3-B401S/C
Arm length	Arm #1, #2	400 mm
Payload*1	Rated	1 kg
	Maximum	3 kg
Repeatability	Joints #1, #2	±0.01 mm
	Joint #3	±0.01 mm
	Joint #4	±0.01 deg
Standard cycle time*2		0.42 sec
Max. operating speed	Joints #1, #2	7200 mm/sec
	Joint #3	1100 mm/sec
	Joint #4	2600 deg/sec
Joint #4 allowable moment of inertia*3	Rated	0.005 kg·m²
	Maximum	0.05 kg·m²
Joint #3 down force		100 N
Installation environment		Standerd or Clean*4
Mounting type		Table Top Mounting
Weight(cables not included)		14 kg
Applicable Controller		RC90-B
Installed wire for customer use		D-sub 15 pin x1 , RJ45 8 pin (CAT 5e) x1
Installed pneumatic tube for customer use		Φ6 mm × 2 , Φ4 mm × 1 : 0.59 MPa (6 kgf / cm²)
Power		AC200-240 V Single phase
Power Consumption*5		1.0 kVA
Cable length		3 m/ 5 m/ 10 m
Safety standard		CE, KC

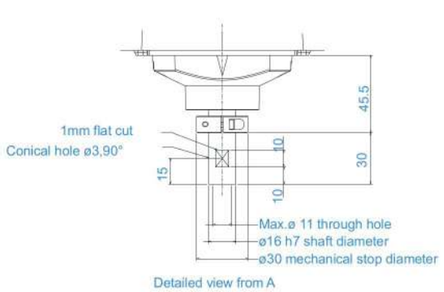
*1 : Do not apply the load exceeding the maximum payload.
*2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed).
*3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*4 : Complies with ISO Class 4 cleanroom standards.
*5 : It depends on environment and motion program.

Outer Dimensions (Table Top Mounting)

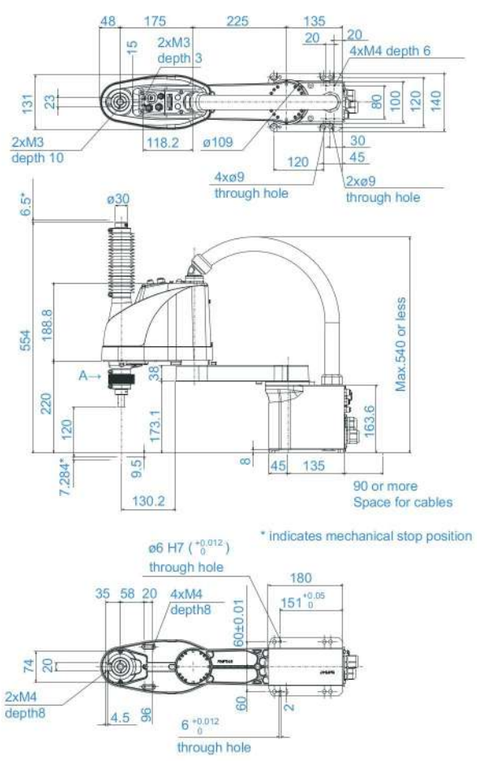
[Unit: mm]

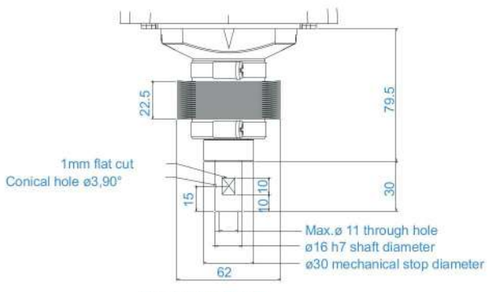
Standard-model





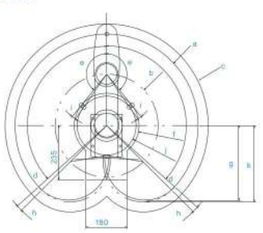
Cleanroom-model



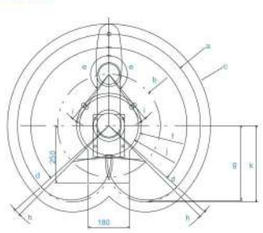


Motion Range (Table Top Mounting)

LS3-B401S



LS3-B401C



Model		LS3-B401□	
		Standard-model	Cleanroom-model
a	Arm #1 + Arm #2 length (mm)	400	
b	Arm #1 length (mm)	175	
c	Max. motion range (mm)	449	
d	Joint #1 motion angle (°)	132	
e	Joint #2 motion angle (°)	141	
f	Motion range (mm)	141.6	
g	Motion range at the rear (mm)	325.5	
h	Angle of the Joint #1 mechanical stop (°)	2.8	
i	Angle of the Joint #2 mechanical stop (°)	4.2	
j	Mechanical stop area (mm)	128.8	
k	Mechanical stop area at the rear (mm)	333.5	

LS series SCARA robot

LS6-B

LS series reliability and performance with improved operating ease

- Built-in Ethernet port on arm for easier camera connectivity
- Batteryless motor unit for reduced maintenance
- Diagonally oriented rear ducting for a lower profile that helps reduce installation space requirements

Model Number **LS6 - B60 2 S**

- Payload: 6 : 6kg
- Arm length: 50 : 500mm; 60 : 600mm; 70 : 700mm
- Joint #3 stroke: 2 : 200mm: Standard-model / 170mm: Cleanroom-model (with bellows)
- Environment: S : Standard; C : Cleanroom

Specifications

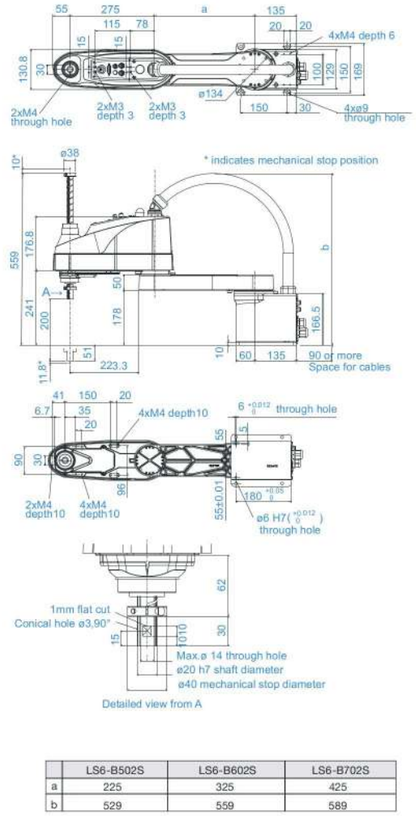
Model name		LS6-B		
Model number		LS6-B502S/C	LS6-B602S/C	LS6-B702S/C
Arm length	Arm #1, #2	500 mm	600 mm	700 mm
Payload*1	Rated	2 kg		
	Maximum	6 kg		
Repeatability	Joints #1, #2	±0.02 mm		
	Joint #3	±0.01 mm		
	Joint #4	±0.01 deg		
Standard cycle time*2		0.39 sec	0.40 sec	0.42 sec
Max. operating speed	Joints #1, #2	7120 mm/sec	7850 mm/sec	8590 mm/sec
	Joint #3	1100 mm/sec		
	Joint #4	2000 deg/sec		
Joint #4 allowable moment of inertia*3	Rated	0.01 kg•m2		
	Maximum	0.12 kg•m2		
Joint #3 down force		100 N		
Installation environment		Standerd or Clean*4		
Mounting type		Table Top Mounting		
Weight(cables not included)		17 kg		18 kg
Applicable Controller		RC90-B		
Installed wire for customer use		D-sub 15 pin x1 , RJ45 8 pin (Cat 5e Class) x1		
Installed pneumatic tube for customer use		Φ4 mm × 1、Φ6 mm × 2		
Power		AC200-240 V Single phase		
Power Consumption*5		1.1 kVA		
Cable length		3 m/5 m/10 m		
Safety standard		CE, KC		

*1 : Do not apply the load exceeding the maximum payload.
*2 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed). Rounded down to the third decimal place.
*3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*4 : Complies with ISO Class 4 cleanroom standards.
*5 : It depends on environment and motion program.

Outer Dimensions (Table Top Mounting)

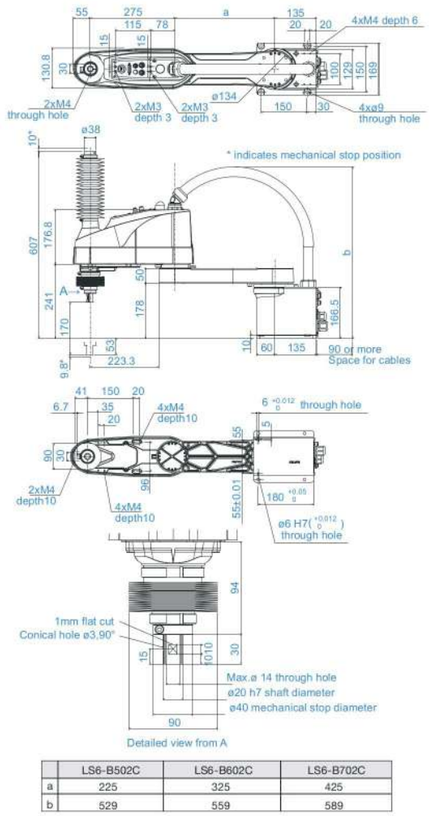
[Unit: mm]

Standard-model



	LS6-B502S	LS6-B602S	LS6-B702S
a	225	325	425
b	529	559	589

Cleanroom-model

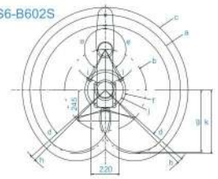


	LS6-B502C	LS6-B602C	LS6-B702C
a	225	325	425
b	529	559	589

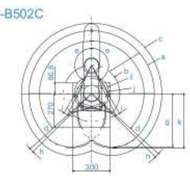
Motion Range (Table Top Mounting)

LS6-B502S

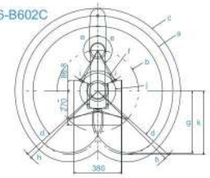
LS6-B602S



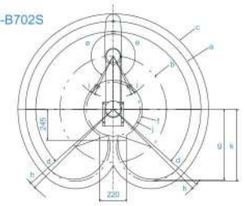
LS6-B502C



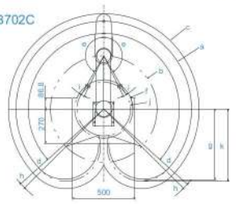
LS6-B602C



LS6-B702S



LS6-B702C



Model	LS6-B502□	LS6-B602□	LS6-B702□
a Arm #1 + Arm #2 length (mm)	500	600	700
b Arm #1 length (mm)	225	325	425
c Max. motion range (mm)	556	656	756
d Joint #1 motion angle (°)	132		
e Joint #2 motion angle (°)	150		
f Motion range (mm)	138.1	162.6	232
g Motion range at the rear (mm)	425.6	492.5	559.4
h Angle of the Joint #1 mechanical stop (°)	2.8		
i Angle of the Joint #2 mechanical stop (°)	4.2		
j Mechanical stop area (mm)	121.8	142.5	214
k Mechanical stop area at the rear (mm)	433.5	504	574.5

LS series SCARA robot

LS10-B

A versatile new addition to the proven reliability and performance of the LS series

- 10kg payload for applications requiring high inertia or the use of complex effectors
- A choice of three arm lengths and two ball screw lengths for high configurability to suit a variety of application requirements
- Built-in Ethernet port for easy camera connectivity
- Batteryless motor unit for reduced maintenance

Model Number **LS10 - B□ □ □**

Payload
10 : 10kg

Arm length
60 : 600mm
70 : 700mm
80 : 800mm

Environment
S : Standard
C : Cleanroom

Joint #3 stroke
2 : 200mm: Standard-model
: 170mm: Cleanroom-model (with bellows)
3 : 300mm: Standard-model
: 270mm: Cleanroom-model (with bellows)

Specifications

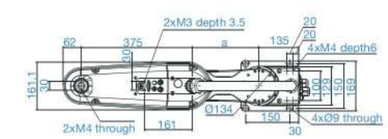
Model name		LS10-B		
Model number		LS10-B60□S/C	LS10-B70□S/C	LS10-B80□S/C
Arm length	Arm #1, #2	600 mm	700 mm	800 mm
Payload*1	Rated	5 kg		
	Maximum	10 kg		
Repeatability	Joints #1, #2	±0.02 mm		±0.025 mm
	Joint #3	±0.01 mm		
	Joint #4	±0.01 deg		
Standard cycle time*2		0.39 sec	0.41 sec	0.44sec
Max. operating speed	Joints #1, #2	9100 mm/sec	9800 mm/sec	10500 mm/sec
	Joint #3	1100 mm/sec		
	Joint #4	2700 deg/sec		
Joint #4 allowable moment of inertia*3	Rated	0.02 kg•m2		
	Maximum	0.3 kg•m2		
Joint #3 down force		200 N		
Installation environment		Standerd or Clean*4		
Mounting type		Table Top		
Weight(cables not included)		22 kg		23 kg
Applicable Controller		RC90-B		
Installed wire for customer use		D-sub 15 pin x1 , RJ45 8 pin (Cat 5e equivalent) x1		
Installed pneumatic tube for customer use		Φ6 mm × 2、Φ4 mm × 1		
Power		AC200-240 V Single phase		
Power Consumption*5		1.8 kVA		
Cable length		3 m/5 m/10 m		
Safety standard		CE, KC		

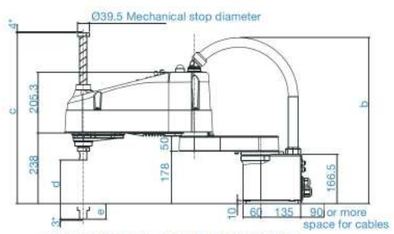
*1 : Do not apply the load exceeding the maximum payload.
*2 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed).
*3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*4 : Complies with ISO Class 4 cleanroom standards.
*5: It depends on operating environment and operation program.

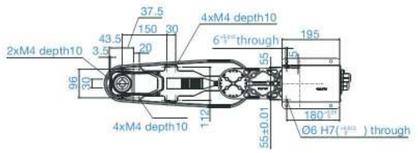
Outer Dimensions (Table Top Mounting)

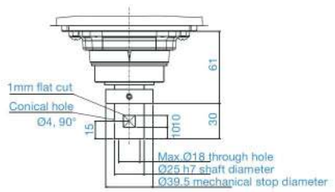
［単位：mm］

Standard-model



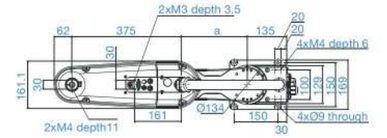


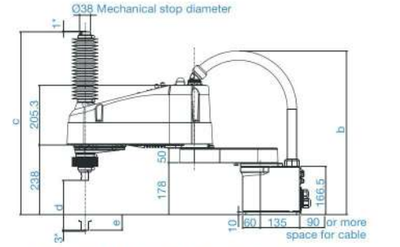


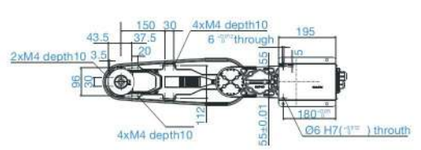


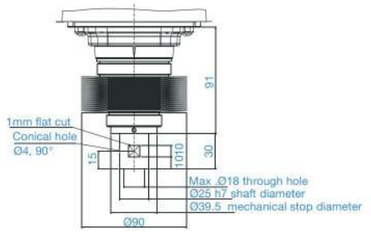
	LS10-B602S	LS10-B603S	LS10-B702S	LS10-B703S	LS10-B802S	LS10-B803S
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	577	677	577	677	577	677
d	200	300	200	300	200	300
e	53	153	53	153	53	153

Cleanroom-model





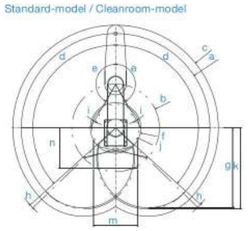




	LS10-B602C	LS10-B603C	LS10-B702C	LS10-B703C	LS10-B802C	LS10-B803C
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	627	727	627	727	627	727
d	170	270	170	270	170	270
e	53	153	53	153	53	153

Motion Range (Table Top Mounting)

Standard-model / Cleanroom-model



Model	Standard			Cleanroom		
	LS10-B602S/B603S	LS10-B702S/B703S	LS10-B802S/B803S	LS10-B602C/B603C	LS10-B702C/B703C	LS10-B802C/B803C
a Length of Arm #1 +Arm #2 (mm)	600	700	800	600	700	800
b Length of Arm #1 (mm)	225	325	425	225	325	425
c Max. motion range (mm)	663	763	863	663	763	863
d Motion range of Joint #1 (°)	132			132		
e Motion range of Joint #2 (°)	150			150		
f Motion range (mm)	212	188	213	212	188	213
g Motion range at the rear (mm)	526	592	659	526	592	659
h Joint #1 angle to hit mechanical stop (°)	2			2		
i Joint #2 angle to hit mechanical stop (°)	2			2		
j Mechanical stop area (mm)	206	176	200	206	176	200
k Mechanical stop area at the rear (mm)	531	601	670	531	601	670
m Motion range (mm)	420	330	320	420	400	480
n Motion range (mm)	300			320		

LS series SCARA robot

LS20-B

LS series reliability and performance with improved operating ease

- Higher allowable moment of inertia for improved performance when using large end effectors to perform multi-item pick-and-place operations
- Built-in Ethernet port on arm for easy camera connectivity
- Batteryless motor unit for reduced maintenance
- Improved duct design for low vibration during operation and easy cable installation

Model Number **LS20 - B80 4 S**

- Payload: 20 : 20kg
- Arm length: 80 : 800mm; A0 : 1000mm
- Joint #3 stroke: 4 : 420mm: Standard-model; 390mm: Cleanroom-model (with bellows)
- Environment: S : Standard; C : Cleanroom

Specifications

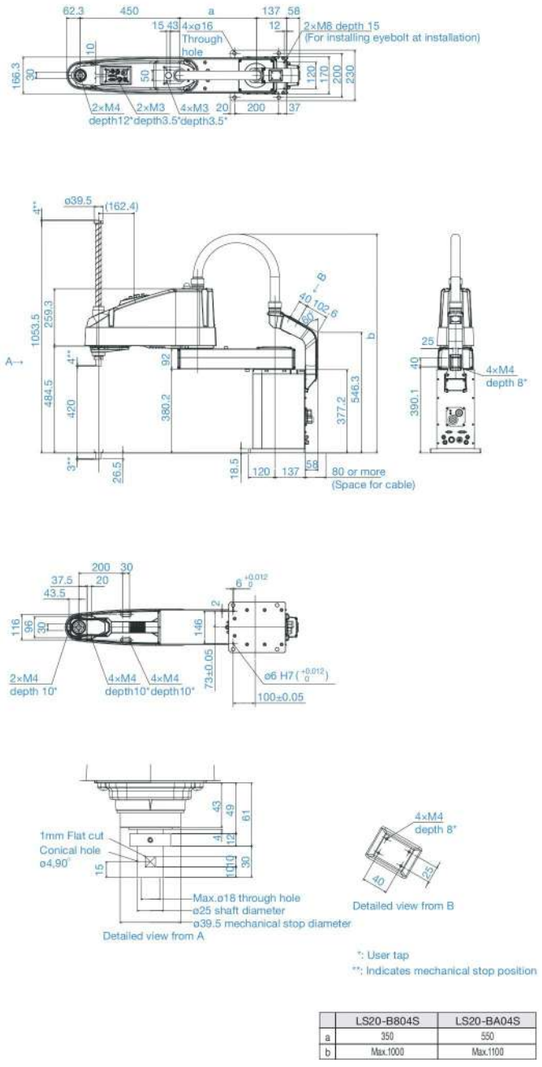
Model name		LS20-B	
Model number		LS20-B804S/C	LS20-BA04S/C
Arm length	Arm #1, #2	800 mm	1000 mm
Payload*1	Rated	10 kg	
	Maximum	20 kg	
Repeatability	Joints #1, #2	±0.025 mm	
	Joint #3	±0.01 mm	
	Joint #4	±0.01 deg	
Standard cycle time*2		0.39 sec	0.43 sec
Max. operating speed	Joints #1, #2	9940 mm/sec	11250 mm/sec
	Joint #3	2300 mm/sec	
	Joint #4	1400 deg/sec	
Joint #4 allowable moment of inertia*3	Rated	0.05 kg·m²	
	Maximum	1.00 kg·m²	
Joint #3 down force		250 N	
Installation environment		Standerd or Clean*4	
Mounting type		Table Top Mounting	
Weight(cables not included)		48 kg	51 kg
Applicable Controller		RC90-B	
Installed wire for customer use		D-sub 15 pin x1 , D-sub 9 pin x1 , RJ45 8 pin (CAT 5e) x1	
Installed pneumatic tube for customer use		Φ8 mm × 2 , Φ6 mm × 2 : 0.59 MPa (6 kgf / cm²)	
Power		AC200-240 V Single phase	
Power Consumption*5		2.4 kVA	
Cable length		3 m/ 5 m/ 10 m	
Safety standard		CE, KC	

*1 : Do not apply the load exceeding the maximum payload.
*2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed).
*3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*4 : Complies with ISO Class 4 cleanroom standards.
*5 : It depends on operating enviroment and operation program.

Outer Dimensions (Table Top Mounting)

[Unit: mm]

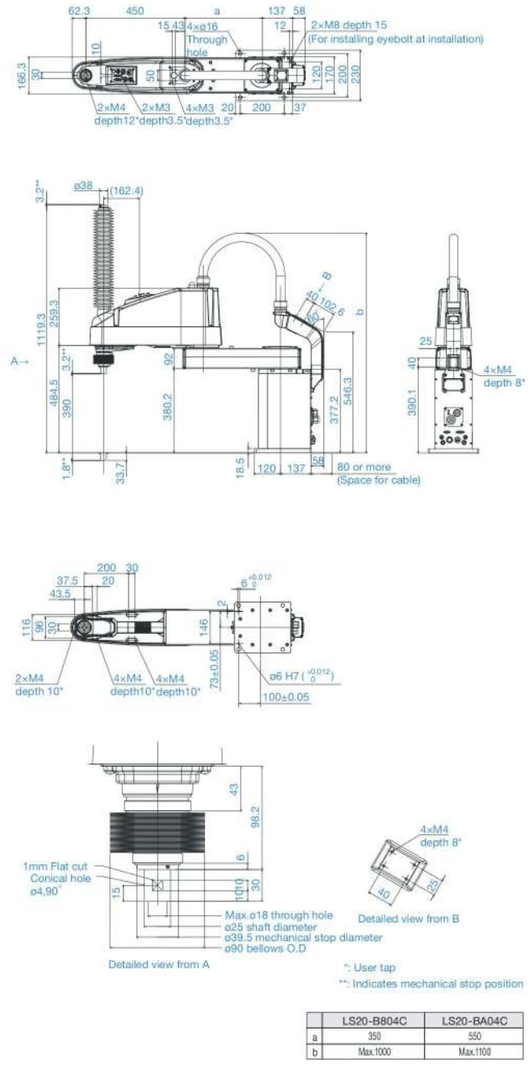
Standard-model



*: User tap
**: Indicates mechanical stop position

	LS20-B804S	LS20-BA04S
a	350	550
b	Max.1000	Max.1100

Cleanroom-model

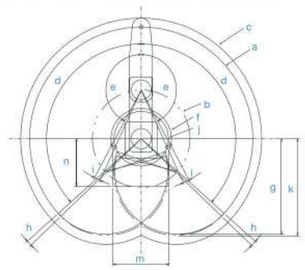


*: User tap
**: Indicates mechanical stop position

	LS20-B804C	LS20-BA04C
a	350	550
b	Max.1000	Max.1100

Motion Range (Table Top Mounting)

Standard-model / Cleanroom-model



Model	Standard		Cleanroom	
	LS20-B804S	LS20-A04S	LS20-B804C	LS20-A04C
a Length of Arm #1 +Arm #2 (mm)	800	1000	800	1000
b Length of Arm #1 (mm)	350	550	350	550
c Length of Arm #2 (mm)	864	1064	864	1064
d Motion range of Joint #1 (°)	132			
e Motion range of Joint #2 (°)	152			
f Motion range (mm)	216.5	260.7	216.5	260.7
g Motion range at the rear (mm)	684.2	818	684.2	818
h Joint #1 angle to hit mechanical stop (°)	2			
i Joint #2 angle to hit mechanical stop (°)	3.6			
j Mechanical stop area (mm)	195.3	232.8	195.3	232.8
k Mechanical stop area at the rear (mm)	693.1	832.1	693.1	832.1
m Motion range (mm)	400	290	400	330
n Motion range (mm)	340	265	340	265

T-B series SCARA Robot with built-in controller

T3-B NEW

The ultimate alternative to slide-based systems designed for small workpiece handling

- All-in-one solution ideal for virtually any application
- Energy efficient (cuts energy consumption by over 50%)*
- Simple I/0 and short cable conduit for easy cabling, and offers payload of up to 3kg
- Batteryless motor unit to reduce running costs and factory downtime

*Compared to Epson LS series robots as of January 2018. Data based on in-house testing; actual energy consumption varies according to workload and operating environment.

Model Number **T3 - B 40 1 S**

- Payload — 3: 3kg
- Arm length — 40: 400mm
- Joint #3 stroke — 1: 150mm
- Environment — S: Standard

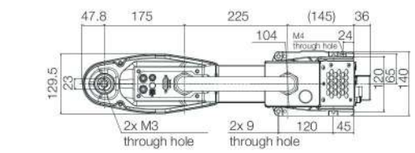
Specifications

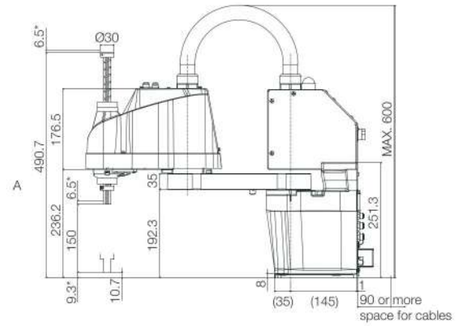
Model Name		T3-B
Model Number		T3-B401S
Arm length	Joints #1+#2 (mm)	400
Payload*1	Rated (kg)	1
	Maximum (kg)	3
Repeatability	Joints #1+#2 (mm)	± 0.02
	Joint #3 (mm)	± 0.02
	Joint #4 (deg)	± 0.02
Standard cycle time*2	(sec)	0.52 *2
Max. motion range	Joint #1 (deg)	± 132
	Joint #2 (deg)	± 141
	Joint #3 (mm)	150
	Joint #3 (deg)	± 360
Max. operating speed	Joints #1-#2 (mm/s)	3700
	Joint #3 (mm/s)	1000
	Joint #4 (deg/s)	2600
Joint #4 allowable moment of inertia *4	Rated ($kg \cdot m^2$)	0.003
	Max. ($kg \cdot m^2$)	0.01
Joint #3 down force	(N)	83
Installation environment		Standard (IP20)
Mounting type		Table Top
Weight (cables not included)	(kg) or less	14 kg : 31 lb
Applicable Controller		Built-in controller
Installed wire for customer use		Hand I/O: IN6/OUT4 (D-sub 15pin), User I/O: IN18/OUT12
Installed pneumatic tube for customer use		ø6 mm x 2, ø4mm x 1 : 0.59 MPa (6kgf/cm 2 : 86 psi)
Power / cable length		AC100-240V / 5m
Power Consumption *5	(kVA)	660VA
Safety standard		CE, KC

*1 : Do not apply the load exceeding the maximum payload
*2 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 1 kg payload (path coordinates optimized for maximum speed).
*3 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2 kg payload (path coordinates optimized for maximum speed).
*4 : Set the parameters by the Inertia command according to the load and effector status (refer to the instruction manual for the parameter calculation method).
*5 : It depends on operating environment and operation program.

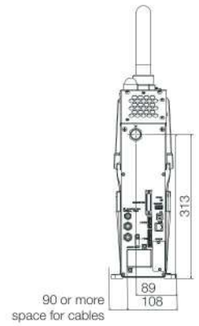
Outer Dimensions (Table Top Mounting)

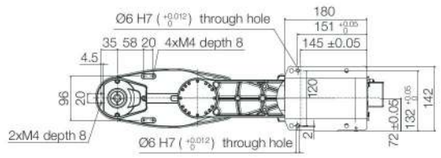
[Unit: mm]

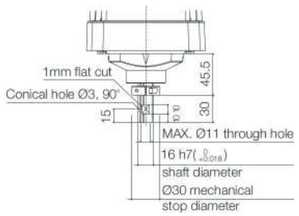




(*) indicates stroke margin by mechanical stop.



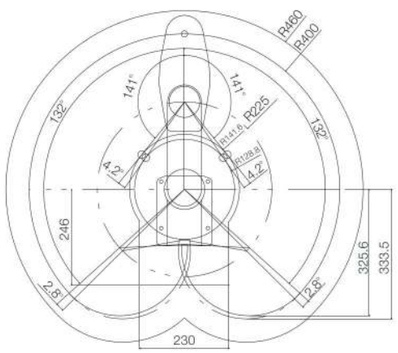




Detail view from "A"
(Calibration point position of joints #3 and #4)

Motion Range (Table Top Mounting)

[Unit: mm]



T-B series SCARA Robot with built-in controller

T6-B NEW

Cost-efficient automation solution that is versatile for handling multiple workpieces and heavier loads

- Built-in controller for simplified setup and reconfiguration
- High energy efficiency reduces factory operating costs
- Batteryless motor unit reduces running costs and factory downtime
- Ideal for easy automation of manual pick-and-place tasks with a payload of up to 6kg

Model Number: T6 - B 60 2 S _

- Payload: 6 : 6kg
- Arm length: 60 : 600mm
- Environment: S : Standard
- Joint #3 stroke: 2 : 200mm

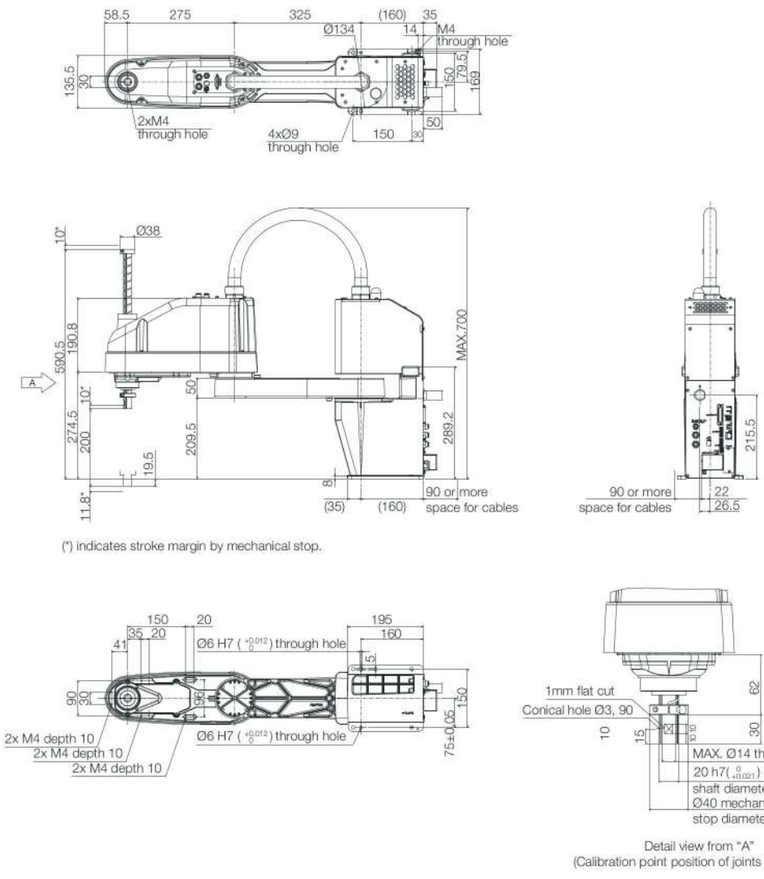
Specifications

Model Name		T6-B
Model Number		T6-B602S
Arm length	Joints #1+#2 (mm)	600
Payload*1	Rated (kg)	2
	Maximum (kg)	6
Repeatability	Joints #1+#2 (mm)	± 0.04
	Joint #3 (mm)	± 0.02
	Joint #4 (deg)	± 0.02
Standard cycle time*2	(sec)	0.46 *3
Max. motion range	Joint #1 (deg)	± 132
	Joint #2 (deg)	± 150
	Joint #3 (mm)	200
	Joint #3 (deg)	± 360
Max. operating speed	Joints #1-#2 (mm/s)	4180
	Joint #3 (mm/s)	1000
	Joint #4 (deg/s)	1800
Joint #4 allowable moment of inertia *4	Rated ($kg \cdot m^2$)	0.01
	Max. ($kg \cdot m^2$)	0.08
Joint #3 down force	(N)	83
Installation environment		Standard (IP20)
Mounting type		Table Top
Weight (cables not included)	(kg) or less	21 kg : 46 lb
Applicable Controller		Built-in controller
Installed wire for customer use		Hand I/O: IN6/OUT4 (D-sub 15pin), User I/O: IN18/OUT12
Installed pneumatic tube for customer use		ø6 mm x 2, ø4mm x 1 : 0.59 MPa (6kgf/cm 2 : 86 psi)
Power / cable length		AC100-240V / 5m
Power Consumption *5	(kVA)	1200VA
Safety standard		CE, KC

*1 : Do not apply the load exceeding the maximum payload
*2 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 1 kg payload (path coordinates optimized for maximum speed).
*3 : Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2 kg payload (path coordinates optimized for maximum speed).
*4 : Set the parameters by the Inertia command according to the load and effector status (refer to the instruction manual for the parameter calculation method).
*5 : It depends on operating environment and operation program.

Outer Dimensions (Table Top Mounting)

[Unit: mm]



(*) indicates stroke margin by mechanical stop.

Detail view from "A"
(Calibration point position of joints #3 and #4)

Motion Range (Table Top Mounting)

[Unit: mm]