

High speed and precision
for small component assembly

- Handles payloads up to 6kg
- Available with 450mm, 550mm, or 650mm arm



G6 specifications

Arm length	450 mm	550 mm	650 mm
Payload	Rated 3 kg / Max 6 kg		
Standard cycle time	0.35 sec	0.36 sec	0.39 sec
Repeatability	Joint#1, #2	±0.015 mm	
	Joint#4	±0.005°	

Specifications

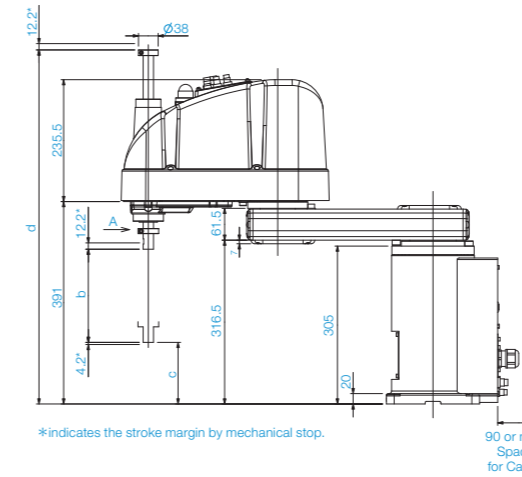
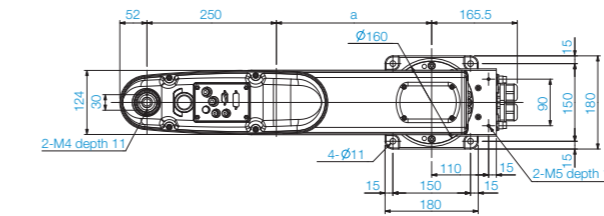
Mounting type	G6-45**			G6-55***			G6-65***		
	Table top	Ceiling	Wall	Table top	Ceiling	Wall	Table top	Ceiling	Wall
Arm length	450 mm			550 mm			650 mm		
Max. operating speed	6440 mm/s			7170 mm/s			7900 mm/s		
	G6-***1=1100 mm/s / G6-***3*=2350 mm/s			2400 deg/s					
Weight(cables not included)	27 kg	29 kg		27 kg	29 kg		28 kg	29.5 kg	
Repeatability	±0.015 mm			±0.01 mm			±0.005 deg		
	±0.01 mm			±0.005 deg					
	±0.005 deg								
Max. motion range	±152 deg			±120 deg			±105 deg		
	±120 deg			±130 deg			±147.5 deg		
	±105 deg			±152 deg			±135 deg		
	±148 deg			±147.5 deg			±152 deg		
Payload	Rated			3 kg			3 kg		
	Maximum			6 kg			6 kg		
Standard cycle time ¹	0.35 sec			0.36 sec			0.39 sec		
Joint #4 allowable moment of inertia ²	Rated			0.01 kg·m ²			0.01 kg·m ²		
	Maximum			0.12 kg·m ²			0.12 kg·m ²		
Motor power consumption	Joint #1			400 W			400 W		
	Joint #2			400 W			400 W		
	Joint #3			200 W			200 W		
	Joint #4			100 W			100 W		
Joint #3 down force	150 N			150 N			150 N		
Home	Home-return-less			Home-return-less			Home-return-less		
Installed wire for customer use	15Pin (D-Sub), 9Pin (D-sub)			15Pin (D-Sub), 9Pin (D-sub)			15Pin (D-Sub), 9Pin (D-sub)		
Installed pneumatic tube for customer use	Φ4mm×2, Φ6mm×2			Φ4mm×2, Φ6mm×2			Φ4mm×2, Φ6mm×2		
Installation environment	Standard/Cleanroom ³ /Protection ⁴			Standard/Cleanroom ³ /Protection ⁴			Standard/Cleanroom ³ /Protection ⁴		
Applicable Controller	RC180, RC620			RC180, RC620			RC180, RC620		
Safety standard	CE compliant, ANSI/RIA15.06-1999			CE compliant, ANSI/RIA15.06-1999			CE compliant, ANSI/RIA15.06-1999		

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 10 (less than 10 0.1µm particles per 28,317cm³:1cft) cleanroom standards.
⁴: G6-***D* protected type with optional bellows complies with IP54; G6-***P* complies with IP65.

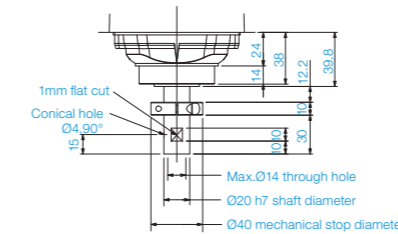
[Unit: mm]

Outer Dimensions (Table Top Mounting)

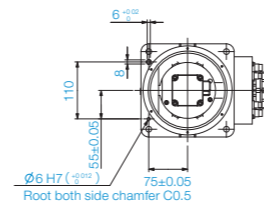
Standard-model



*indicates the stroke margin by mechanical stop. 90 or more Space for Cables



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

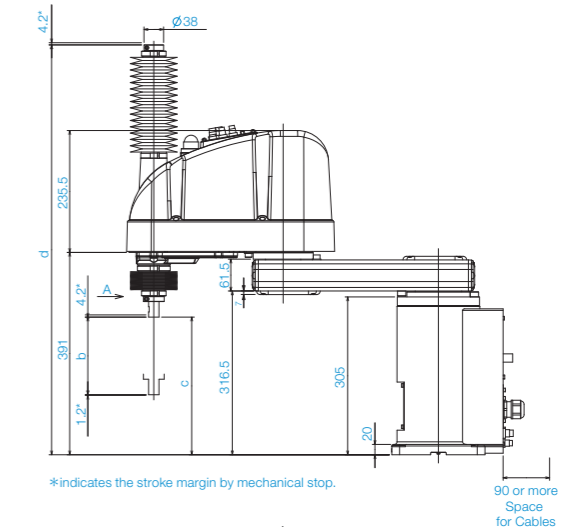
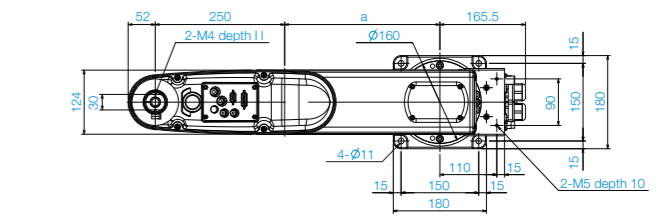


Reference through hole (View from the bottom of the base)

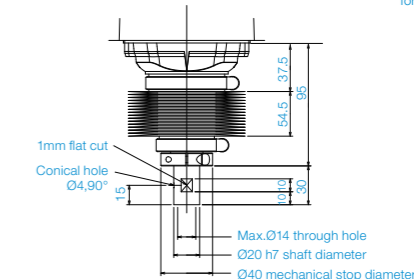
	G6-45*S	G6-55*S	G6-65*S
a	200	300	400

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

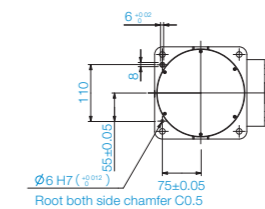
Cleanroom-model



*indicates the stroke margin by mechanical stop. 90 or more Space for Cables



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

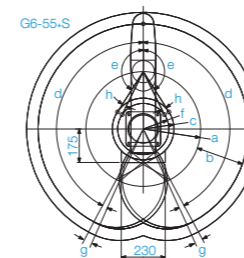


Reference through hole (View from the bottom of the base)

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

	G6-***1C	G6-***3C
b	150	330
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			
b Length of Arm #2 (mm)	250			
c Motion range	Z:0~270	134.8	Z:0~240	134.8
	Z:270~330	143.5	Z:240~300	153.9
d Motion range of Joint #1 (degree)	152			
e Motion range of Joint #2 (degree)	Z:0~270	147.5	Z:0~240	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 (degree)	3.5			
h Joint #1 angle to hit mechanical stop (degree)	Z:0~270	3	Z:0~240	3
	Z:270~330	5.5	Z:240~300	8.5

