◆ Robot specifications

Item			SRA100	SRA166	SRA210	SRA166L	SRA120EL
Robot model			SRA100	SRA166	SRA210	SRA166L	SRA120EL
Structure			Articulated construction				
Number of axes			6				
Drive system			AC servo system				
Max. operating area (rad[°])	Arm	J1 Swivel	±3.14[±180]				
		J2 Back & forth	+1.05～-1.40[+60～-80]				
		J3 Up & down	+2.62～-2.56 [+150～-146.5]			+2.62～-2.33 [+150～-133.4]	+2.62～-2.23 [+150～-127.7]
	Wrist	J4 Rotation2	±6.28[±360]				
		J5 Bend	±2.36 [±135]		±2.27 [±130]	±2.36 [±135]	
		J6 Rotation1	±6.28[±360]				
Max. velocity (rad/s[°/s])	Arm	J1 Swivel	2.37[136]	2.18[125]	2.01[115]		
		J2 Back & forth	2.36[135]	2.01[115]	1.83[105]		
		J3 Up & down	2.36[135]	2.11[121]	1.97[113]		
	Wrist	J4 Rotation2	4.19[240]	3.14[180]	2.44[140]		
		J5 Bend	4.07[233]	3.02[173]	2.32[133]	3.02[173]	
		J6 Rotation1	6.31[351]	4.54[260]	3.49[200]	4.54[260]	
Payload (kg)		Wrist	100	166	210	166	120
		Forearm*1	45(maximum90)				
Allowable static load torque (N·m)		J4 Rotation2	580	951	1337	951	687
		J5 Bend	580	951	1337	951	687
		J6 Rotation1	290	490	720	490	353
Max. allowable moment of inertia*2 ($kg \cdot m^2$)		J4 Rotation2	60	88.9	141.1	88.9	60
		J5 Bend	60	88.9	141.1	88.9	60
		J6 Rotation1	30	45	79	45	30
Max. reach (mm)			2654		2674	2951	3099
Position repeatability*3 (mm)			±0.1		±0.15		
Installation			Floor mounted				
Ambient conditions*4			Temperature: 0～45°C Humidity: 20～85% RH (without condensation) Vibration of installation surface:0.5 G (4.9 m/s^2) or less				
Robot mass (kg)			960		990	980	985

1[rad] = 180/π[°], 1[N·m] = 1/9.8[kgf·m]

*1：Load specification of number 1 arm varies according to wrist load conditions and installation position.

*2：Note that the allowable moment of inertia of wrist varies with the wrist load conditions.

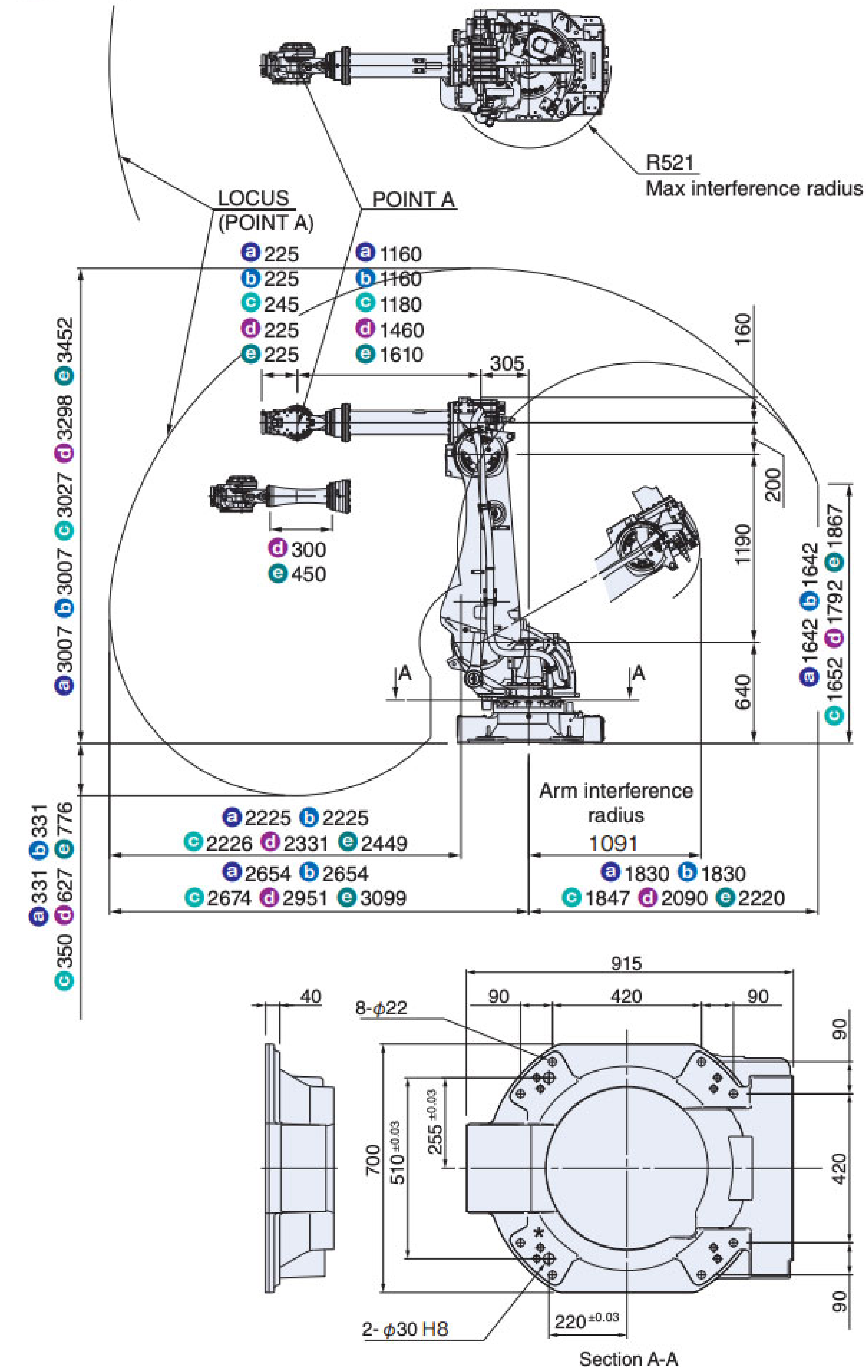
*3：JIS B 8432 compliant.

*4：Permitted height is not higher than 1,000m above sea level.

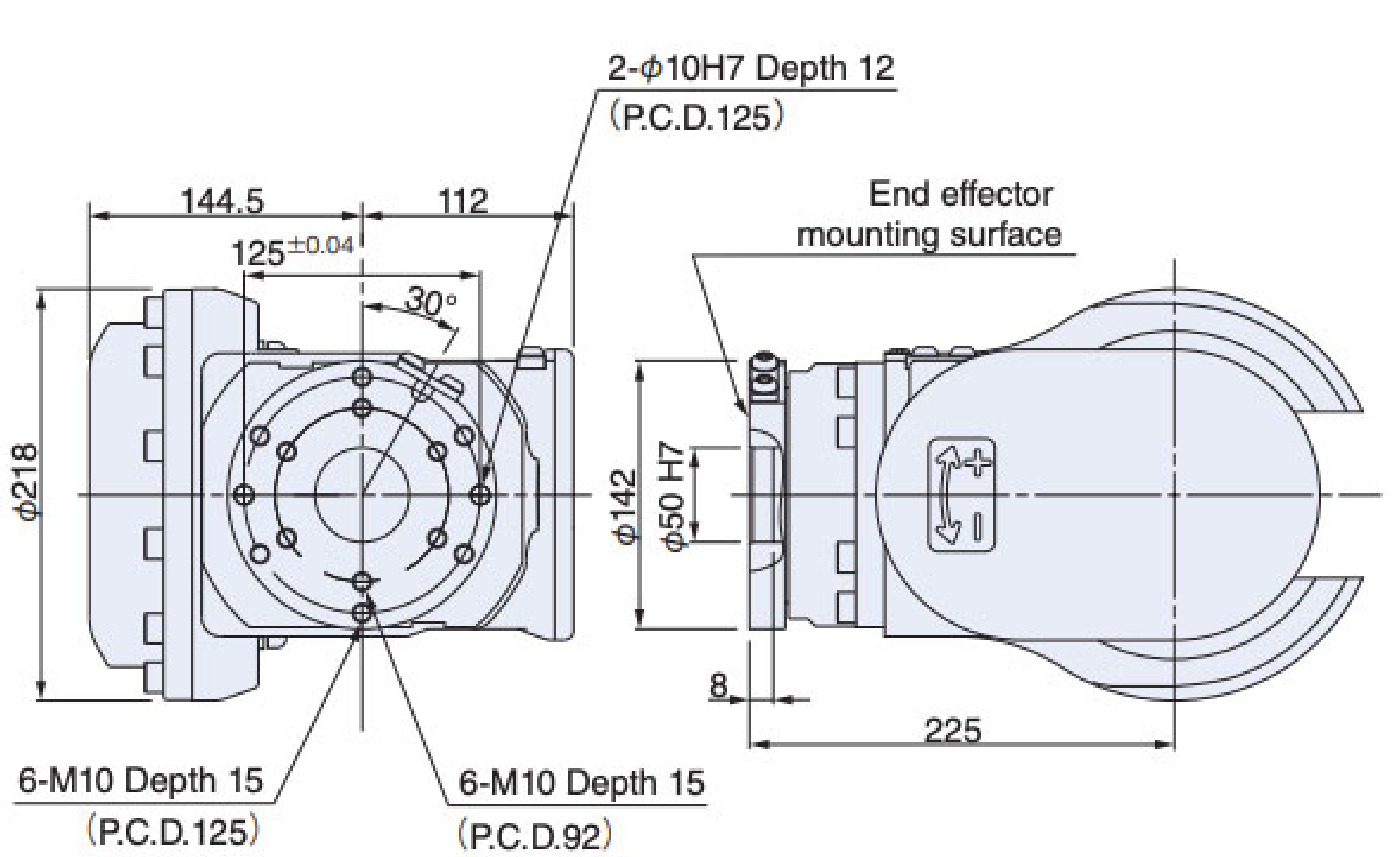
◆ Exterior dimensions and operating envelope

SRA100/166/210/166L/120EL

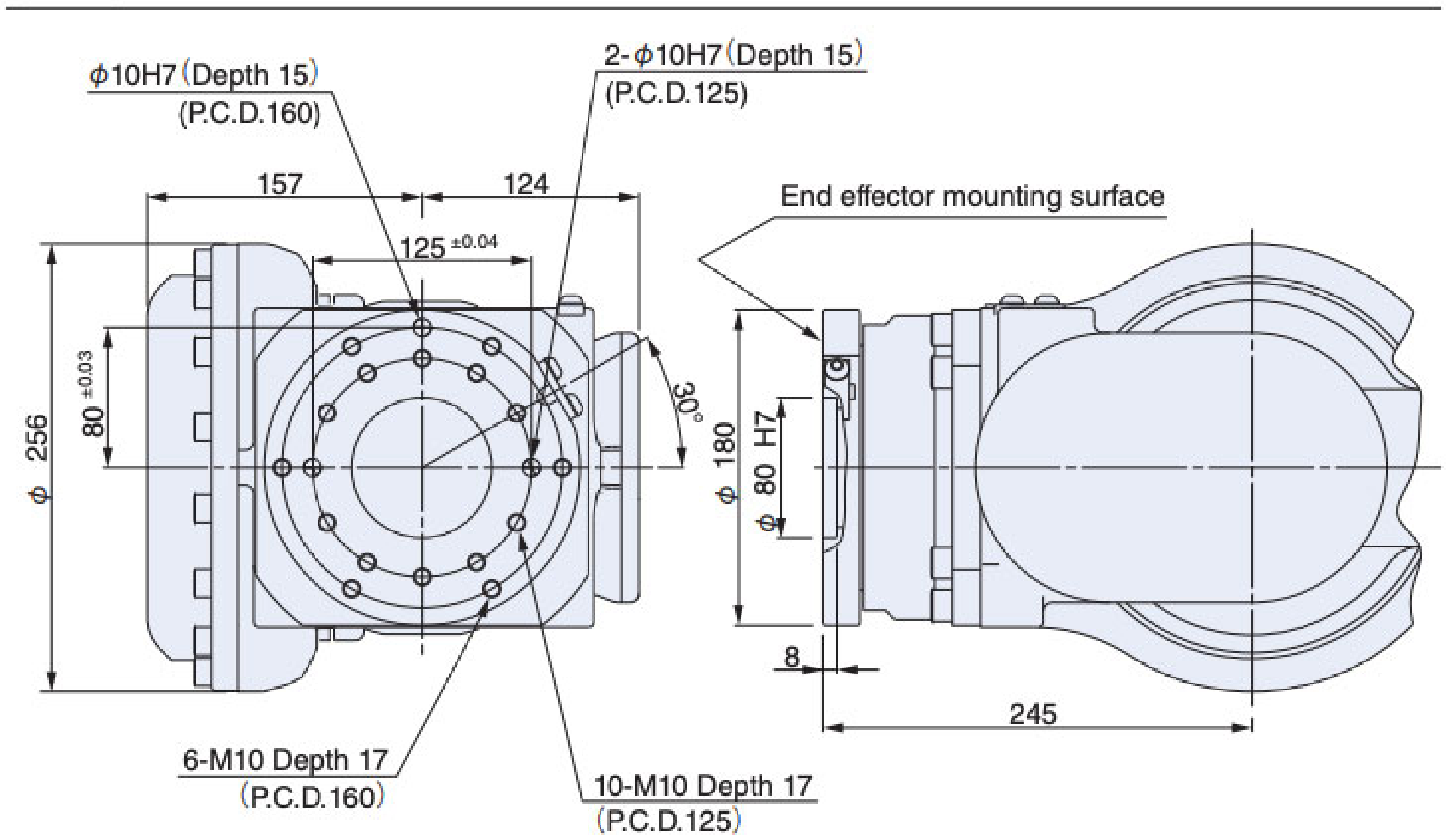
*Values in diagram indicated as ⓐSRA100 ⓑSRA166 ⓒSRA210 ⓓSRA166L ⓔSRA120EL



SRA100/166/166L/120EL



SRA210



- The specifications are subject to changes without notice.
- In case that an end user uses this product for military purpose or production of weapon, this product may be liable for the subject of export restriction stipulated in the Foreign Exchange and Foreign Trade Control Law. Please go through careful investigation and necessary formalities for export.