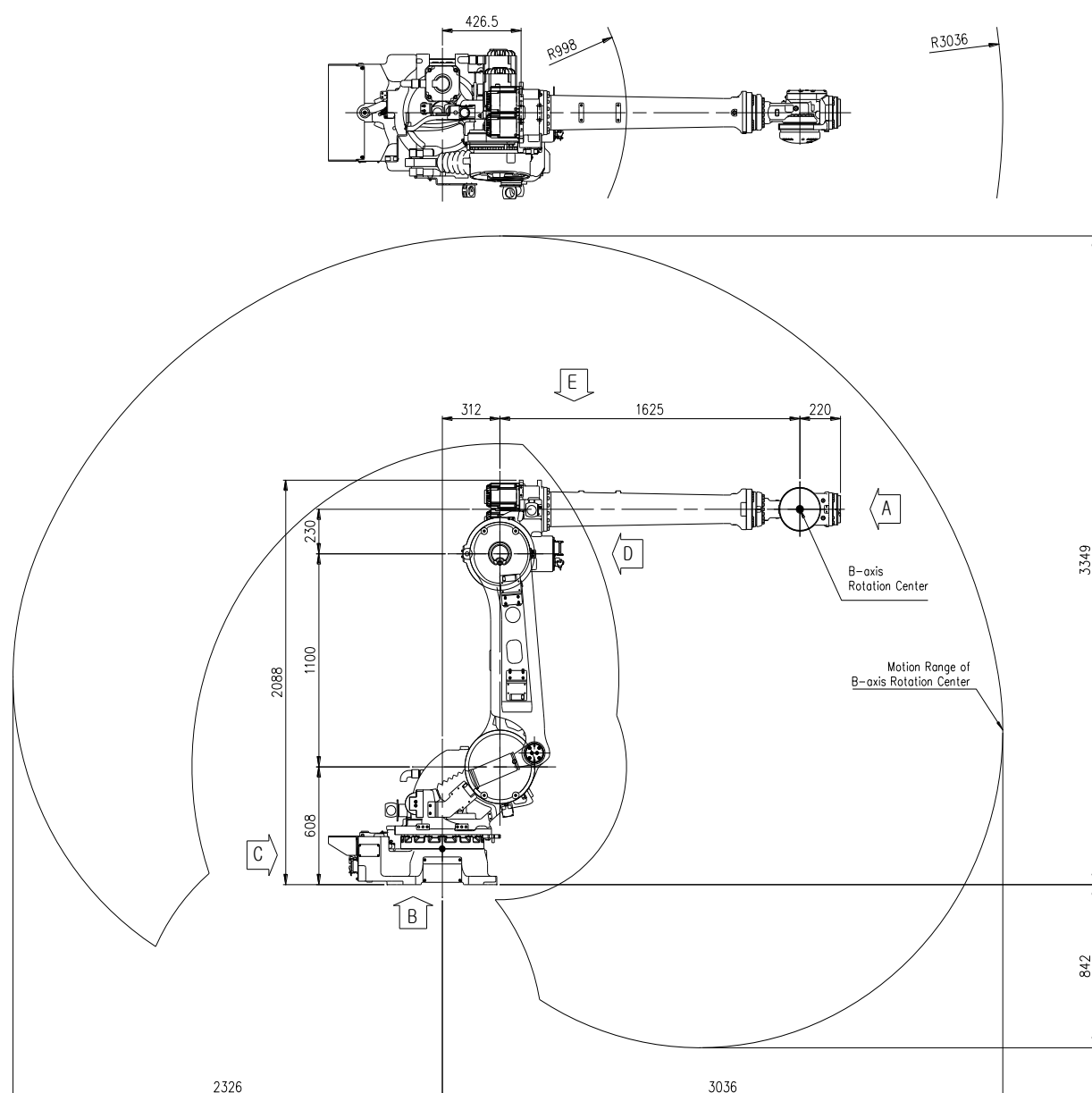


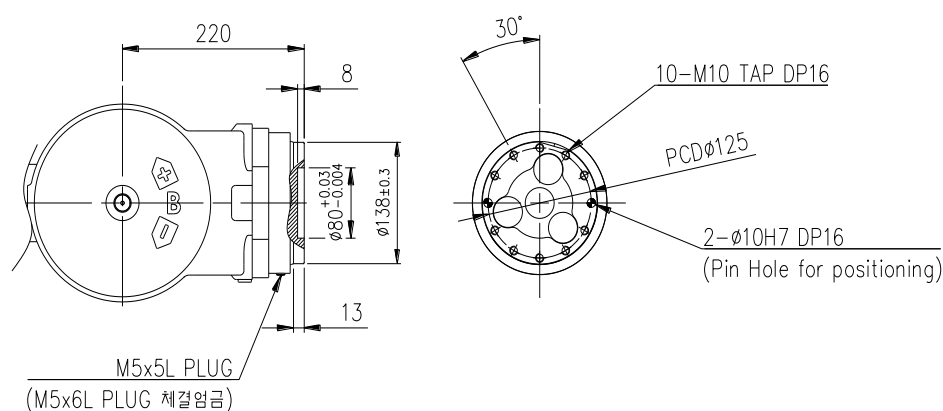
HDR160L-

Installation method	
Floor	●
Ceiling	
Wall surface	

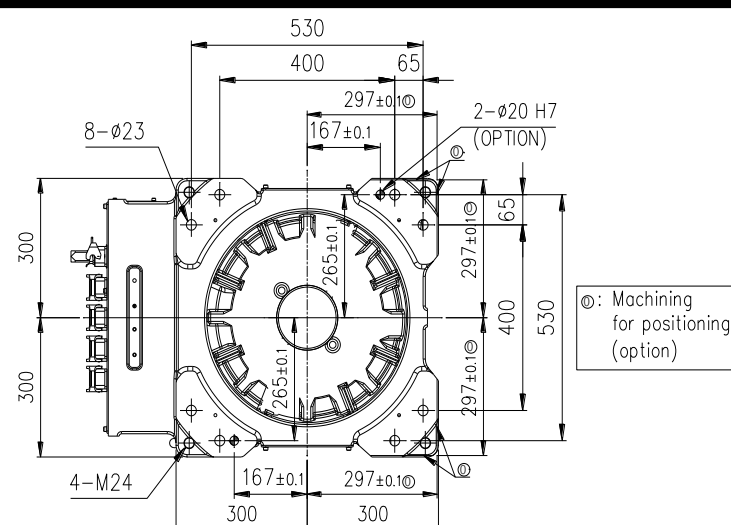
Application	
Spot welding	●
Arc welding	
Handling	●
Assembly	●
Sealing	
Painting	



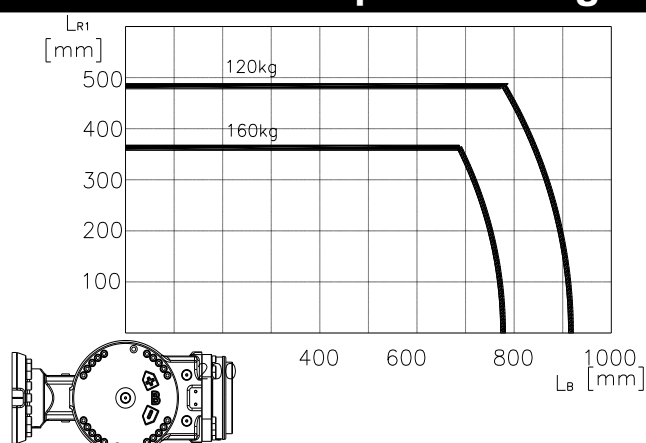
View A: Detailed drawing of the wrist attachment part



View B: Dimensional drawing for the floor installation of the body



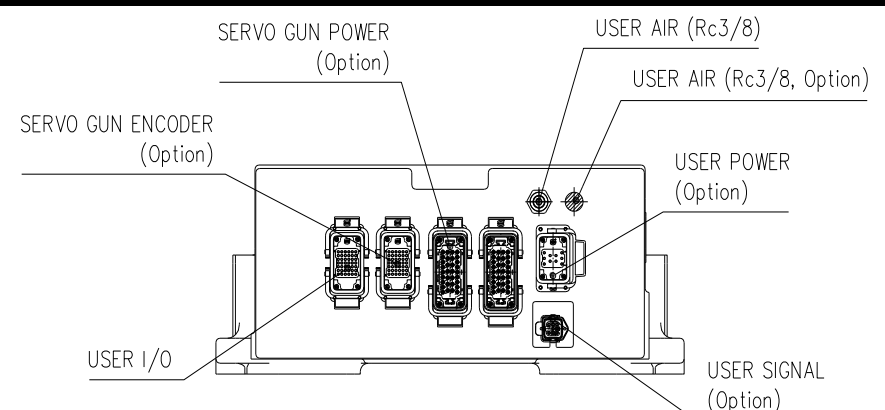
Wrist-axis torque line diagram



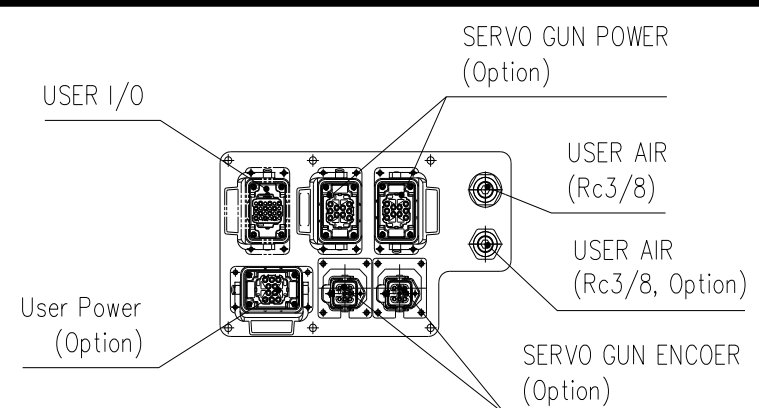
Item		Specification	
Robot model		HDR160L-30	
Payload		160 Kg	
Structure		Articulated	
Degree of freedom		6 axes	
Max. working envelope	A r m *	S Swivel	$\pm 3.14 \text{ rad } (\pm 180^\circ)$
		H Horizontal	$+2.70 \sim 0.18 \text{ rad } (+155^\circ \sim +10^\circ)$
		V Vertical	$+3.32 \sim -1.39 \text{ rad } (+190^\circ \sim -80^\circ)$
	Wrist	R2 Rotation 2	$\pm 6.28 \text{ rad } (\pm 360^\circ)$
		B Bending	$\pm 2.23 \text{ rad } (\pm 128^\circ)$
		R1 Rotation 1	$\pm 6.28 \text{ rad } (\pm 360^\circ)$
Max. working speed	A r m *	S Swivel	$2.09 \text{ rad / s } (120^\circ / \text{s})$
		H Horizontal	$2.01 \text{ rad / s } (115^\circ / \text{s})$
		V Vertical	$2.01 \text{ rad / s } (115^\circ / \text{s})$
	Wrist	R2 Rotation 2	$3.04 \text{ rad / s } (174^\circ / \text{s})$
		B Bending	$3.00 \text{ rad / s } (172^\circ / \text{s})$
		R1 Rotation 1	$4.54 \text{ rad / s } (260^\circ / \text{s})$
Wrist torque	R2	Rotation 2	1,079 Nm (110 kgfm)
	B	Bending	1,079 Nm (110 kgfm)
	R1	Rotation 1	566 Nm (58 kgfm)
repeatability		$\pm 0.05 \text{ mm}$	
Ambient Temperature		$0 \sim 45^\circ \text{C } (273 \sim 318 \text{ K})$	
Robot's Weight		985 Kg	

***) When the optional limit switch is attached, the action range of the main axis will be limited (see the manual)**

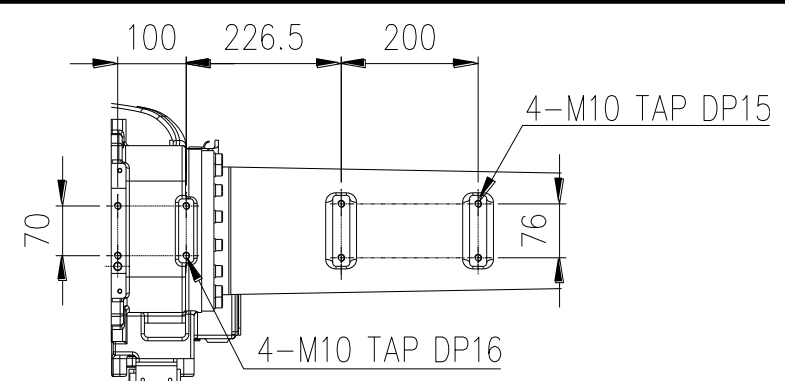
View C: Application cable connection part



View D: Application cable connection part



View E: Details of the application ancillary part attachment



**** For product improvement, some of the ratings, specifications, dimensions, etc. are subject to changes without notice.**