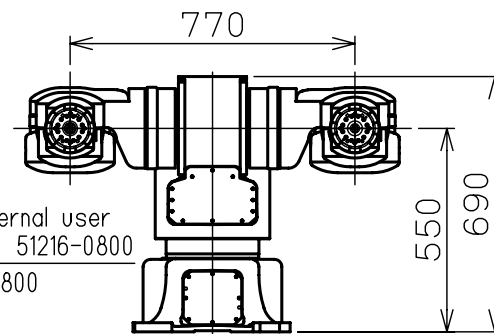
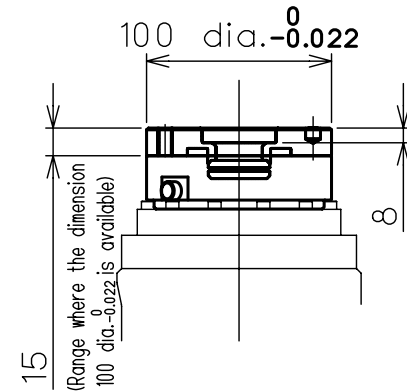
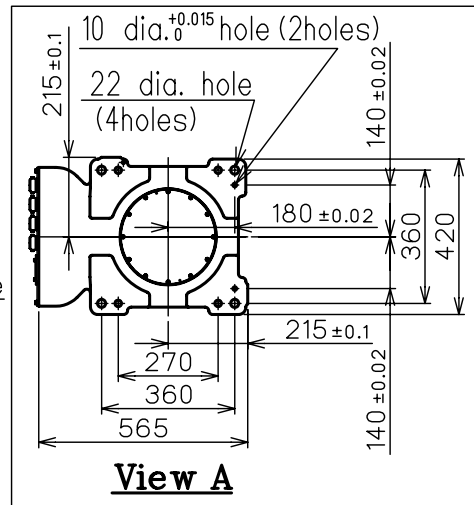
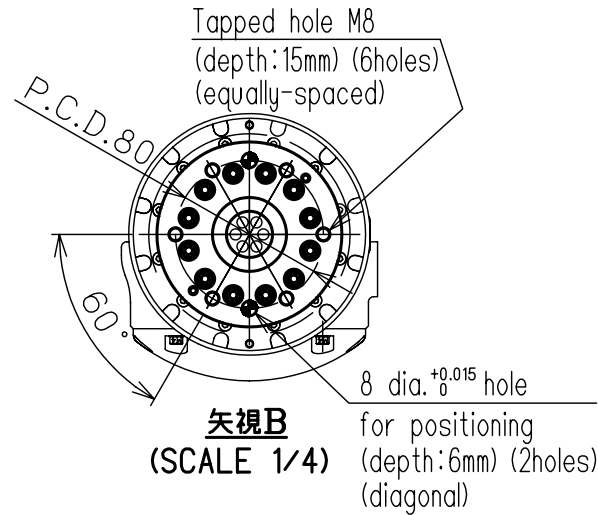
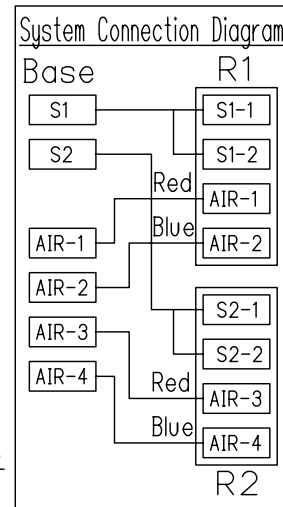
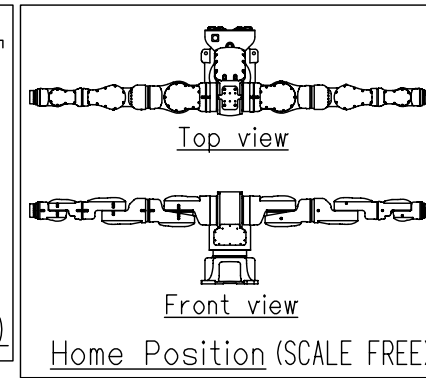
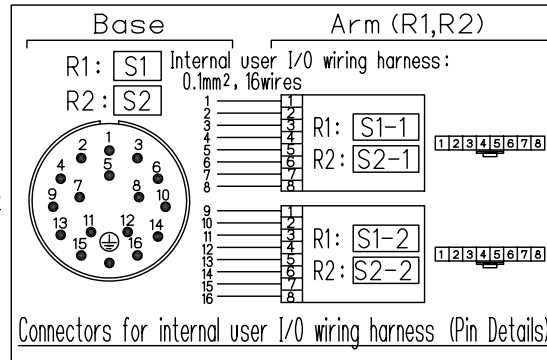
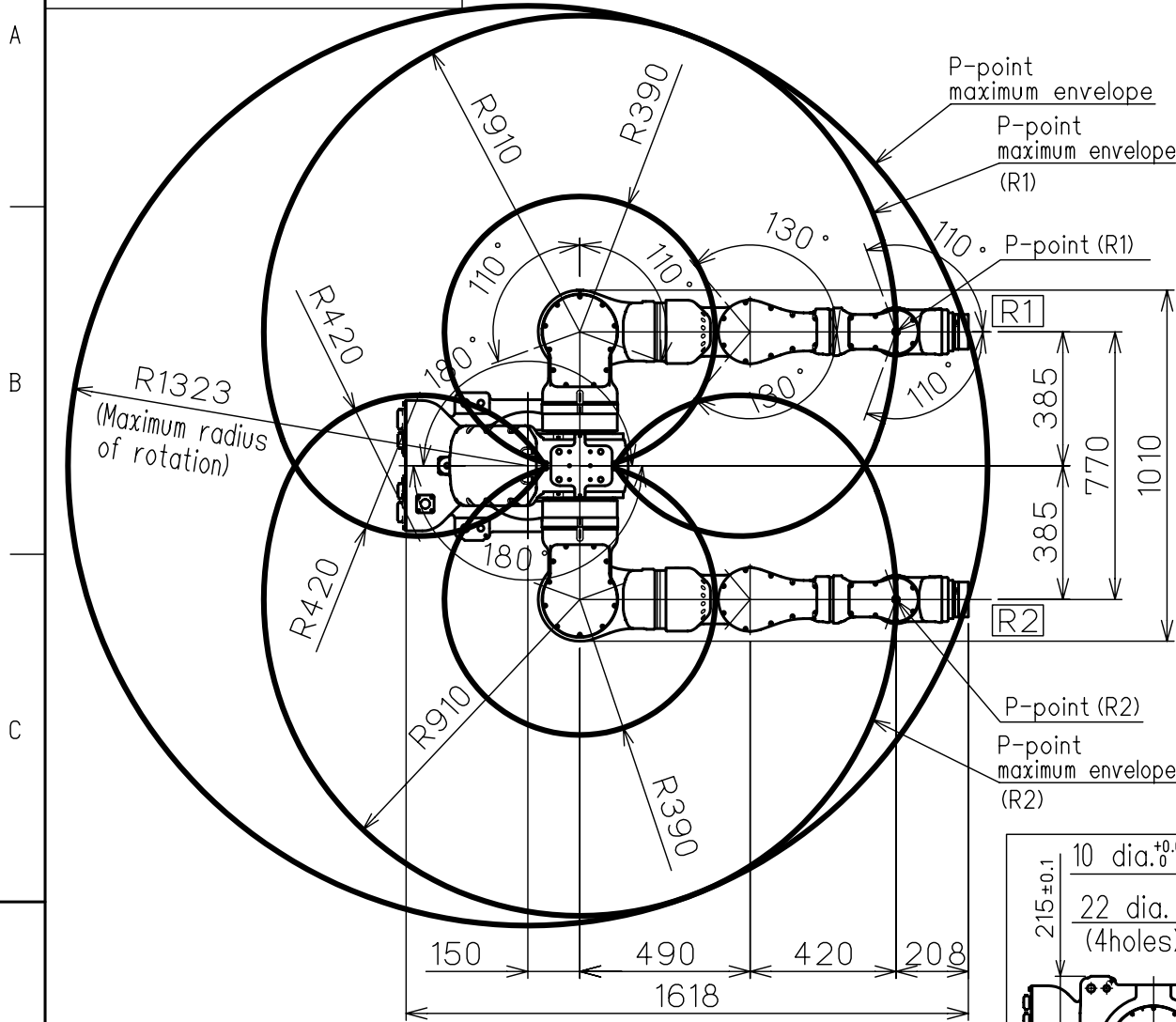
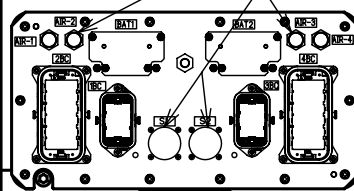


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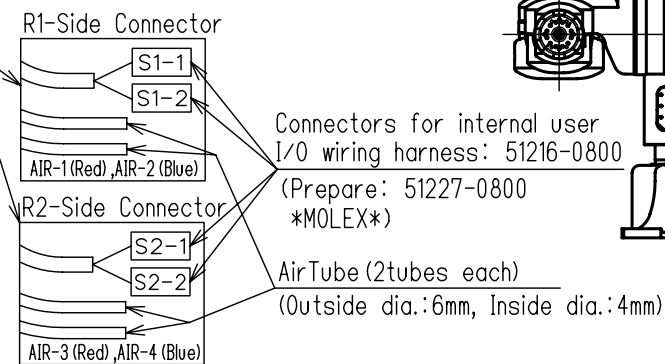
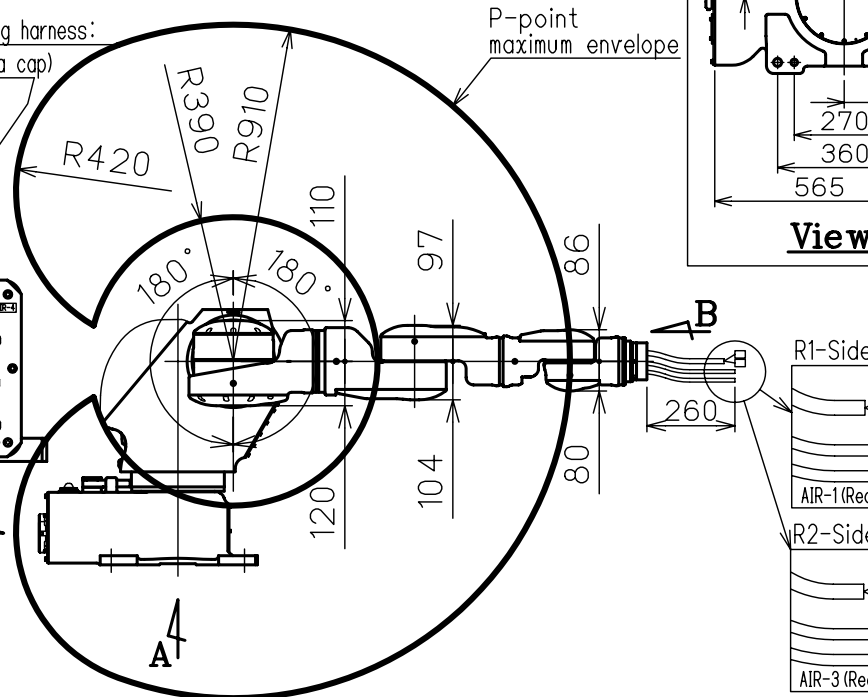


Connector for internal user I/O wiring harness:  
JL05-2A20-29PC (Pin Connector with a cap)  
(Prepare socket connector:  
JL05-6A20-29SC)

Air inlet (4 inlets):  
Tapped hole PT3/8  
with a pipe plug



View C  
(SCALE 1/8)



Item	Model	MOTOMAN-SDA20D, SDA20F
Configuration	Articulated	
Degree of Freedom	7 axes for the left arm (R1); 7 axes for the right arm (R2); 1 turning axis	
Payload	20kg/arm	
Repetitive Positioning Accuracy *3	±0.1mm	
Range of Motion	Rotation-axis	-180° - +180°
	S-axis (lifting)	-180° - +180°
	L-axis (lower arm)	-110° - +110°
	E-axis (lower arm twist)	-170° - +170°
	U-axis (upper arm)	-130° - +130°
	R-axis (upper arm twist)	-180° - +180°
	B-axis (wrist pitch/yaw)	-110° - +110°
T-axis (wrist twist)	-180° - +180°	
Maximum Speed	Rotation-axis	2.18rad/s (125° /s)
	S-axis	2.27rad/s (130° /s)
	L-axis	2.27rad/s (130° /s)
	E-axis	2.97rad/s (170° /s)
	U-axis	2.97rad/s (170° /s)
	R-axis	3.49rad/s (200° /s)
Allowable Moment	B-axis	58.8N·m (6.0kgf·m)
	T-axis	29.4N·m (3.0kgf·m)
	R-axis	4.0kg·m <sup>2</sup>
Allowable Inertia (GD <sup>2</sup> /4)	B-axis	4.0kg·m <sup>2</sup>
	T-axis	2.0kg·m <sup>2</sup>
	R-axis	4.0kg·m <sup>2</sup>
Mass	380 kg	
Ambient Conditions	Temperature	0-40°C
	Humidity	20-80%RH
	Vibration acceleration	4.9m/s <sup>2</sup> (0.5G) or less
	Others	•Free from corrosive gas or liquid, or explosive gas •Free from exposure to water, oil, or dust •Free from excessive electrical noise (plasma)
Power Capacity	DX100	3.5 kVA
	FS100	3.0 kVA

SI units are used in this table. However, gravitational unit is used in ( ).  
\*3: Conformed to ISO9283

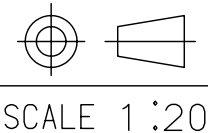
This drawing is applicable with following type

Type	Note
YR-SDA020D-A11	Drip-proof Spec. with Waterproof Flange·DX100
YR-SDA020F-A11	Drip-proof Spec. with Waterproof Flange·FS100

<NOTE> The connectors for internal user I/O wiring harness are not drip-proofed; depending on the ambient conditions, perform drip-proof treatment after connecting the wiring harness. (E.g., treating the connections with waterproof tape, or connecting the wiring harness inside the drip-proof box.)

FOR STUDY PURPOSE ONLY

Note:  
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3. No warranty is given in relation to the data including the specification.  
4. We are not responsible for any damages or loss caused by the use of the data.



**YASKAWA**  
株式会社 安川電機

Reference Drawing

TITLE MOTOMAN-SDA20D, SDA20F  
DIMENSION DIAGRAM

DWG.NO.

HW1381976

SIZE A3