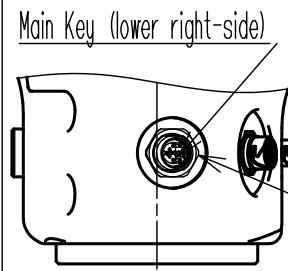
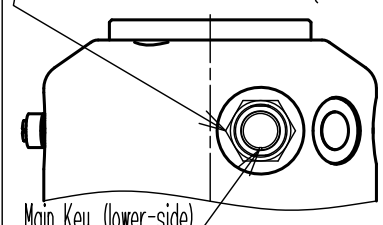


DWG.NO. HW1386378



View D (Scale=1/3)

Connector for I/O cable(S):
RM15WTRZA-8S (with cap)
Connector prepared by user:
RM15WTPZA-8P or the equivalent



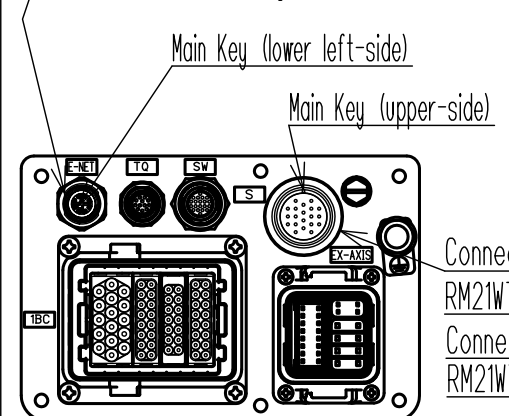
View E (Scale=1/3)

Detail of I/O Cable Connector

Connector-Base side	End-Flange side
9 0.3mm ²	1
10 0.3mm ²	2
11 0.3mm ²	3
12 0.3mm ²	4
13 0.3mm ²	5
14 0.3mm ²	6
15 0.3mm ²	7
16 0.3mm ²	8

RM21WTR-20P RM15WTRZA-8S

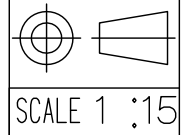
Connector for Ethernet cable:
M12 X-coded (Socket) (with cap)
Connector prepared by user:
M12 connector (Plug)



View B (Scale=1/3)

Note:
1. All rights reserved.
2. Please note that the data is subject to be deleted without advance notice.
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.

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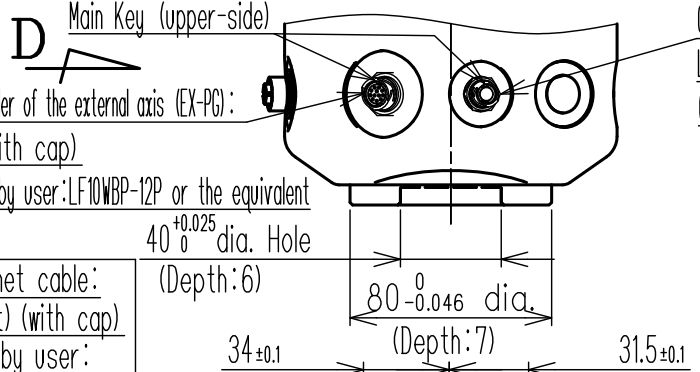
Reference Drawing

TITLE MOTOMAN-HC10DT (Dust and Drip Proof)
DIMENSION DIAGRAM

DRWN DATE Jun. 22, 2019

DWG.NO. HW1386378

SIZE A3

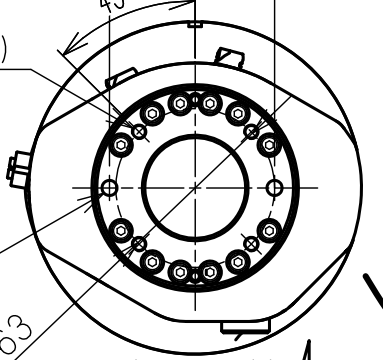


Connector for the encoder of the external axis (EX-PG):
LF10WBRB-12S (with cap)
Connector prepared by user: LF10WBP-12P or the equivalent

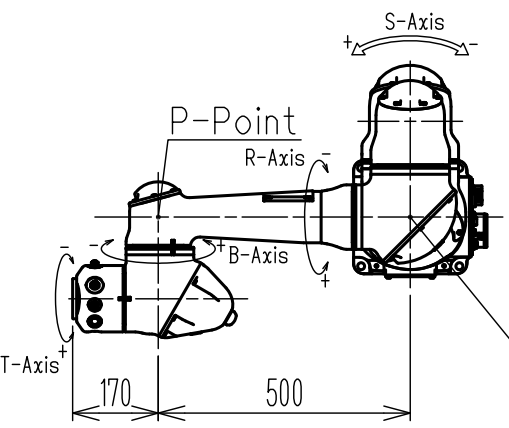
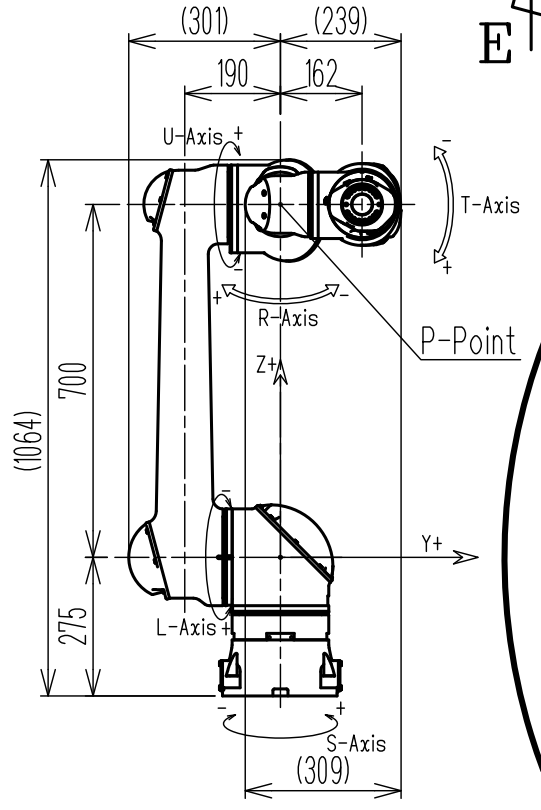
Connector for the power supply of the external axis (EX-PW):
LF07WBRB-6S (with cap)
Connector prepared by user: LF07WBP-6P or the equivalent

Tapped Holes M6 (4 Holes)
(Depth:10, Pitch:1.0)
(Tightening torque for attachment:13.7N·m)

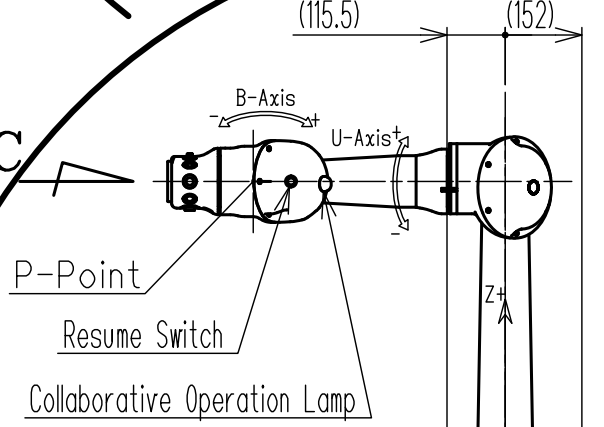
6^{+0.012} dia. Holes (2 Holes)
(Depth:6)



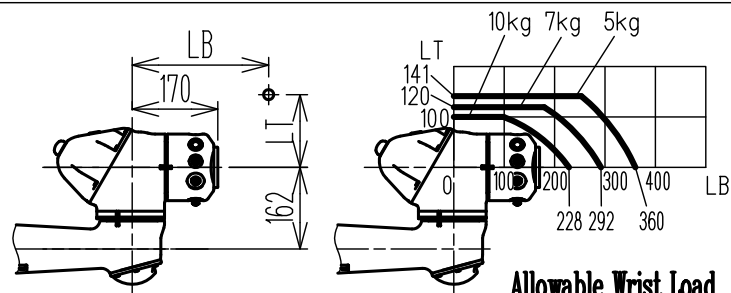
View C (Scale=1/3)



P-Point
(Maximum Envelope)



P-Point
Resume Switch
Collaborative Operation Lamp



Allowable Wrist Load

Detail of External Axis Cable Connector

For Power (EX-PW)	End-Flange side	For Encoder (EX-PG)	End-Flange side
MU 0.2mm ²	1	0V 0.2mm ²	1
MV 0.2mm ²	2	+5V 0.2mm ²	2
MW 0.2mm ²	3	DATA+ 0.2mm ²	3
ME 0.2mm ²	4	DATA- 0.2mm ²	4
BR+ 0.2mm ²	5	FG 0.3mm ²	5
BR- 0.2mm ²	6	BAT 0.2mm ²	6
		OBAT 0.2mm ²	7

EX-PW LF07WBRB-6S EX-PG LF10WBRB-12S

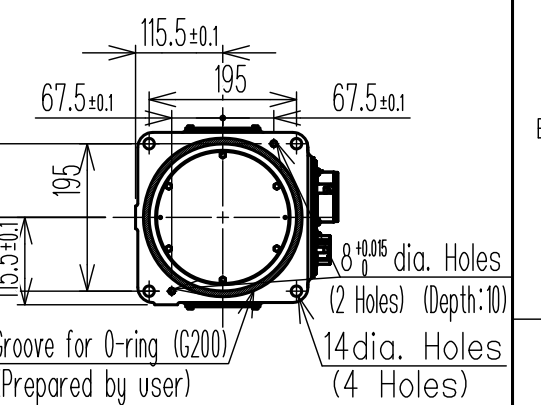
Detail of Ethernet Cable Connector

Connector-Base side	End-Flange side
1 1	1 1
2 2	2 2
3 3	3 3
4 4	4 4
5 5	5 5
6 6	6 6
7 7	7 7
8 8	8 8

M12 X-coded (Socket) M12 X-coded (Socket)

Item	Model	MOTOMAN-HC10DT (Dust and Drip Proof specification)
Configuration		Vertically Articulated
Degree of Freedom		6
Payload		10kg
Repeatability *1		0.05mm
Range of Motion	S-Axis (Turning) *3	-180° - +180°
	L-Axis (Lower Arm)	-180° - +180°
	U-Axis (Upper Arm)	-95° - +265°
	R-Axis (Roll)	-180° - +180°
	B-Axis (Pitch/Yaw)	-180° - +180°
Maximum Speed	T-Axis (Twist)	-180° - +180°
	S-Axis	2.27rad/s, 130°/s
	L-Axis	2.27rad/s, 130°/s
	U-Axis	3.14rad/s, 180°/s
	R-Axis	3.14rad/s, 180°/s
Allowable Moment	B-Axis	4.36rad/s, 250°/s
	T-Axis	4.36rad/s, 250°/s
	R-Axis	27.4N·m (2.8kgf·m)
Allowable Inertia (GD ² /4)	B-Axis	27.4N·m (2.8kgf·m)
	T-Axis	9.8N·m (1.0kgf·m)
	R-Axis	0.78 kg·m ²
Approx. Mass	B-Axis	0.78 kg·m ²
	T-Axis	0.1 kg·m ²
		58kg
		IP67
Protected Structure		IP67
Cleanliness (Reference) *5		Equivalent to ISO class 5
Mounting Method		Floor-, Tilt-, Wall-, Ceiling-mounted
Ambient Conditions	Temperature	0 °C to 40 °C
	Humidity	20%RH to 80%RH (Non-Condensing)
	Vibration	4.9m/s ² (0.5G) or less
	Altitude	1000m or less
	Others	•Free from explosive and corrosive gas or liquid. •Free from excessive electrical noise (plasma). •Free from strong magnetic field.
Power Requirements		1.0kVA
Controller		YRC1000/YRC1000micro

*1 Repeatability conforms to ISO 9283.
*2 The manipulator is in the home position on this drawing.
*3 Range of motion for S-axis will be limited when the manipulator is tilt- or wall-mounted.
*4 The tolerance applies to 8^{+0.015} dia. holes.
*5 The cleanliness is for reference and not guaranteed.



View A (Scale=1/10)

Units:mm