

Product Information

**New product**

# MB Series ZW axis unit HMW(Z)-L05/H20

RPI-0166A

Date of issue : 25<sup>th</sup> August 2020

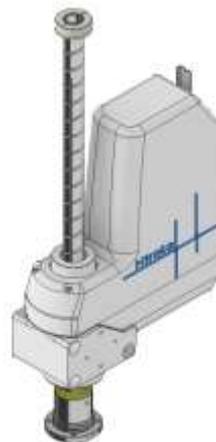
Revision Date: 11<sup>st</sup> September 2020

This is a new release information of 『HMW(Z)-L05/H20』 which is the succession type of the ZW axis unit 『HMW(Z)-S270/S350』 of MB series.

Features and robot specification of this product is shown below.



HMW(Z)-L05



HMW(Z)-H20

## ■ Main features

- 2 types of ZW axis units are on the line-up.
  - HMW(Z)-L05 …Compact・Light payload type (Maximum payload : 5kg)
  - HMW(Z)-H20 …High payload type (Maximum payload : 20kg)
- Possible to combine with Cartesian robot, MB series.
  - Possible to combine with MB series as a standard unit, maximum 4 axis configuration is available as a standard configuration.
- High acceleration/deceleration makes realize short time positioning.
  - Z axis … 1.15G(Maximum)
  - W axis … 0.61G(Maximum)
- Support for cleanliness class
  - ISO class 4

■ Model description

Details of model are shown below.

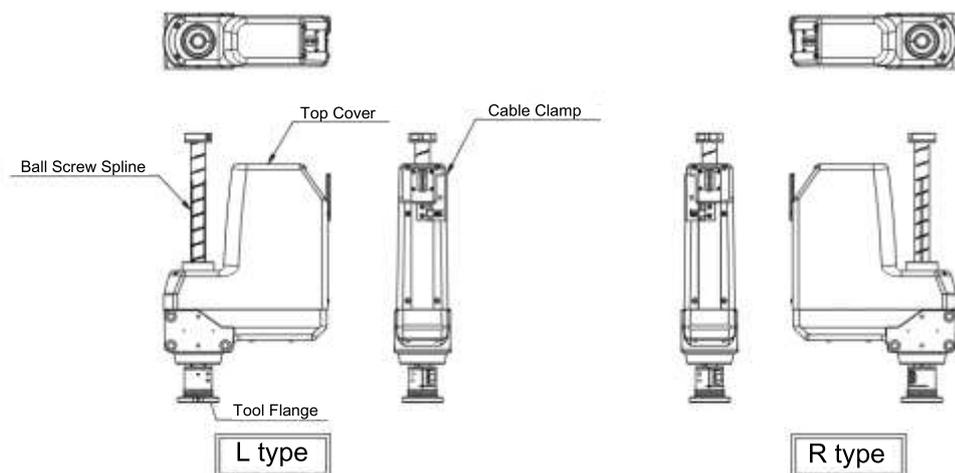
HM W – H20 – □□□ – L – □  
 ①      ②                      ③                      ④      ⑤

Number	Item name	Symbol	Contents
①	Axis specification	W	2 axis specification: Z axis + W axis
		Z	1 axis specification: Z axis only
②	Series name	H20	Maximum payload: 20kg type
		L05	Maximum payload: 5kg type
③	Z axis stroke	200	L05, H20: Standard
		350	H20: Long type
		160	L05: Cleanliness specification
		150	H20: Cleanliness specification
		300	H20: Cleanliness specification (Long
④	Combination direction (*1)	L	L type
		R	R type
⑤	Optional	No	Standard specification
		C	Cleanliness specification (*2)

\*1: This robot has two different types depending on a combination way in the installation.

L type: At the front view, cable comes out from right side.

R type: At the front view, cable comes out from left side.

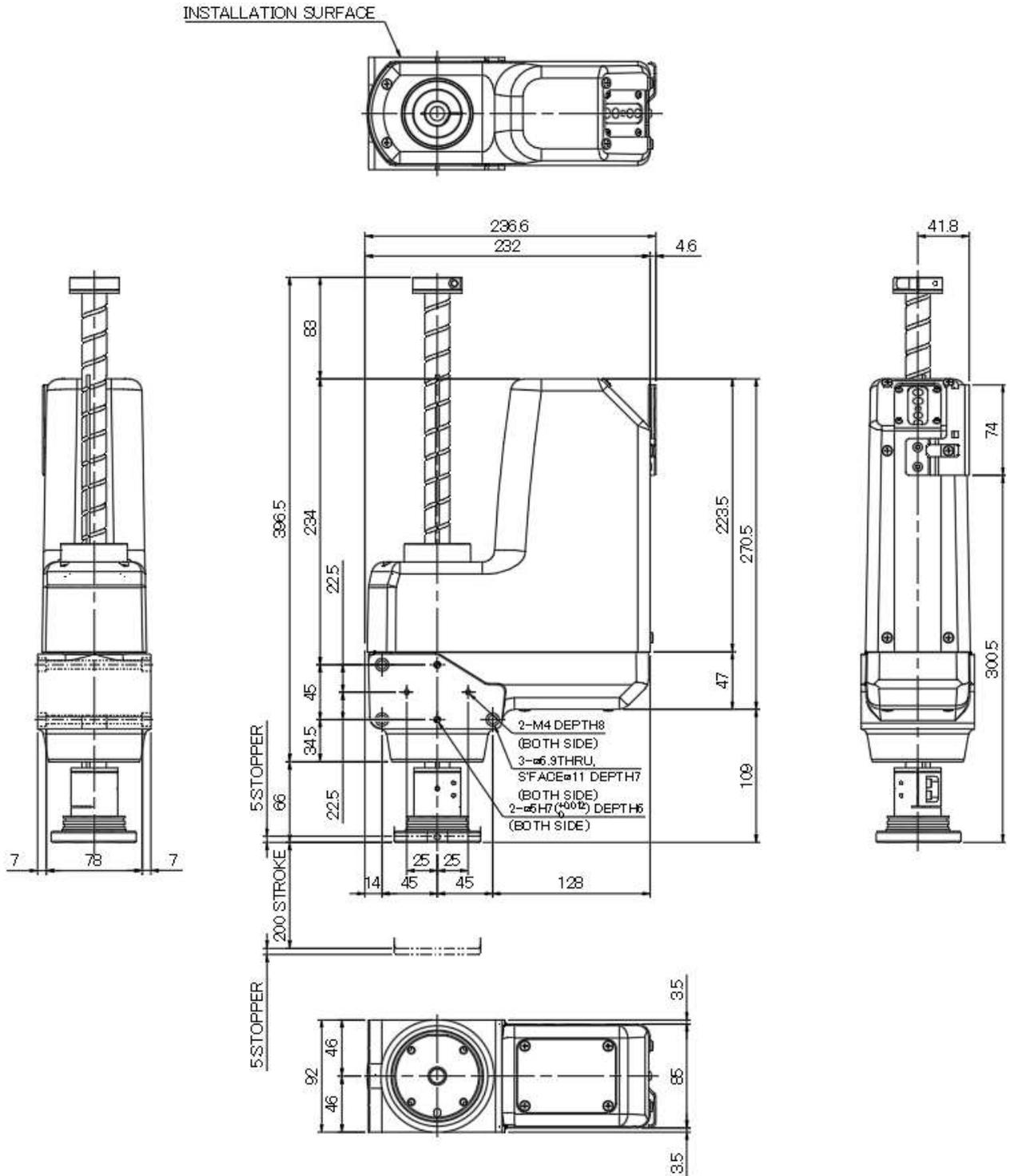


Combination direction (The case of HMW-H20-200)

\*2: Cleanliness specification is available for only ZW single unit, the ball screw spline is covered by hose of bellows.

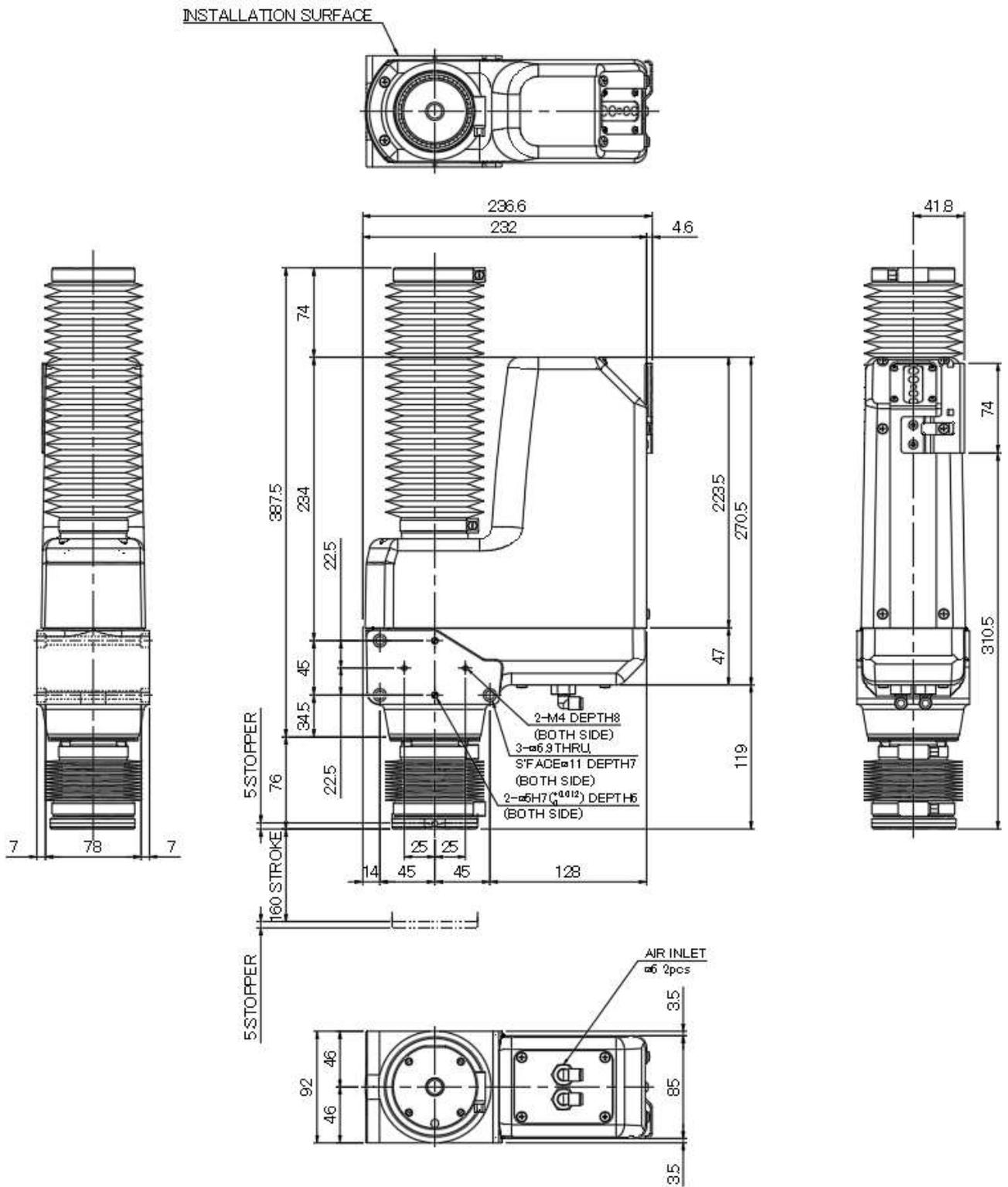
■ Appearance diagram

HMW(Z)-L05 (Standard specification)



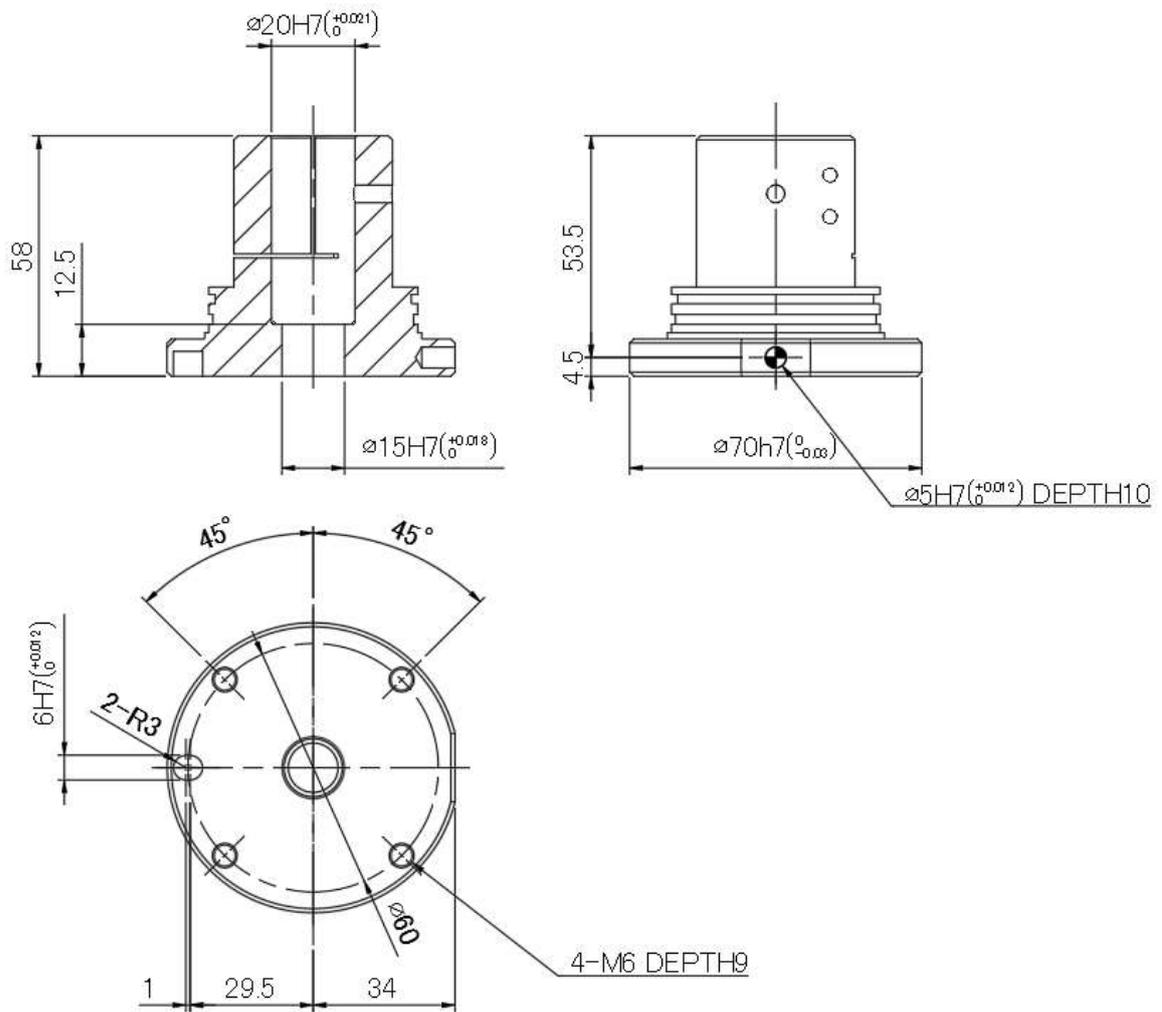
Combination direction : L

HMW(Z)-L05 (Cleanliness specification)

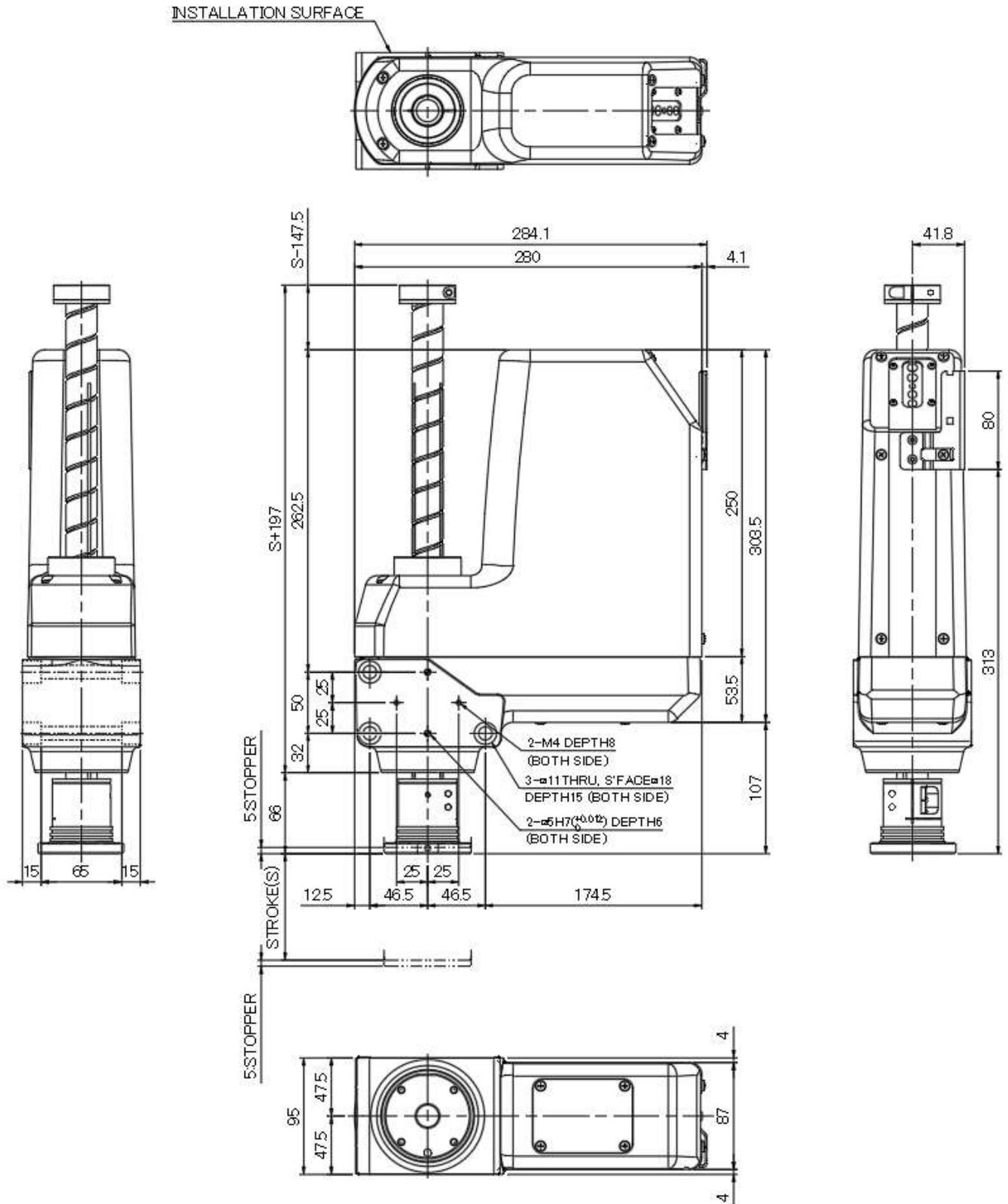


Combination direction : L

HMW(Z)-L05 Application attach portion details (Common for Standard/Cleanliness specification)

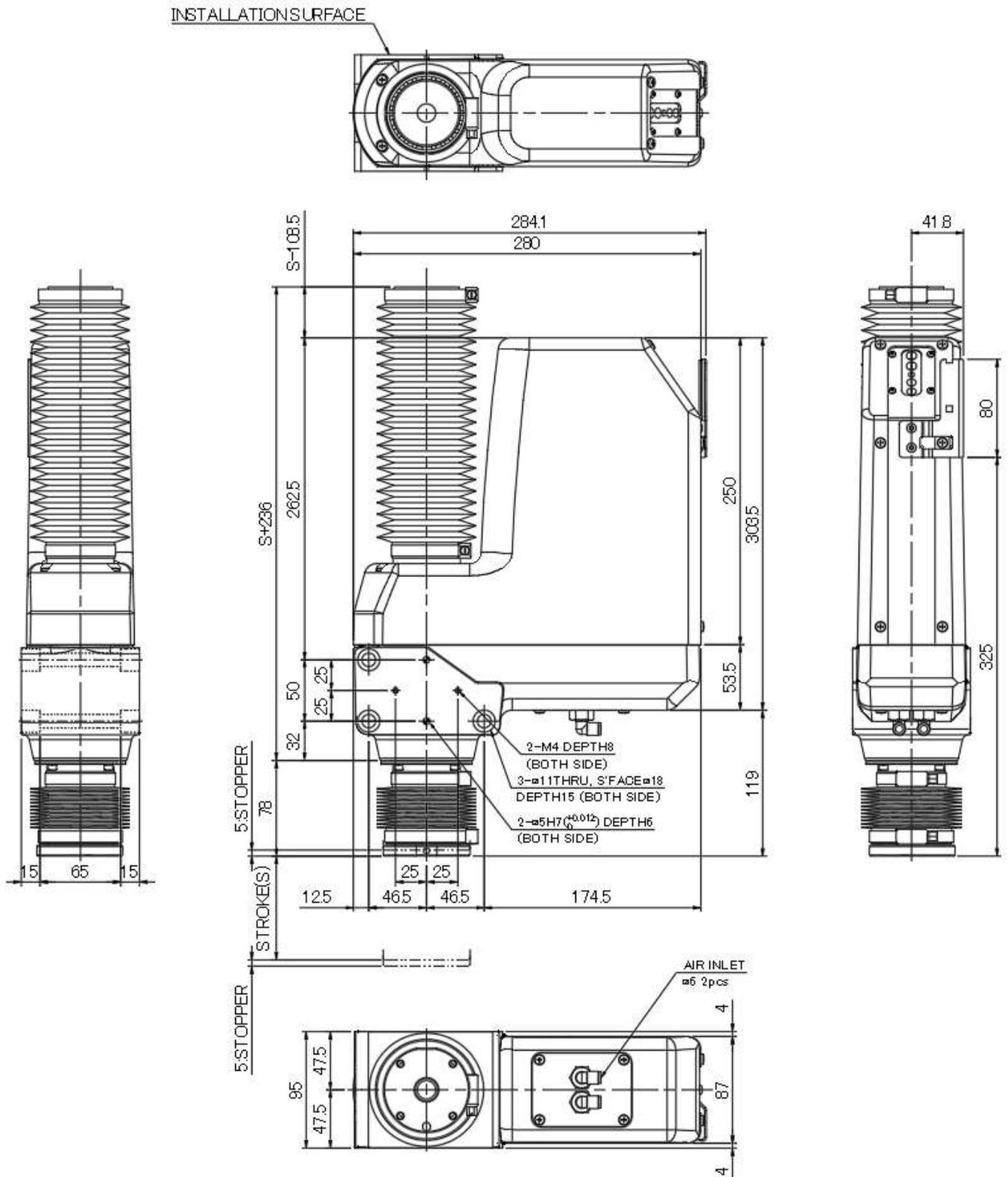


HMW(Z)-H20 (Standard specification)



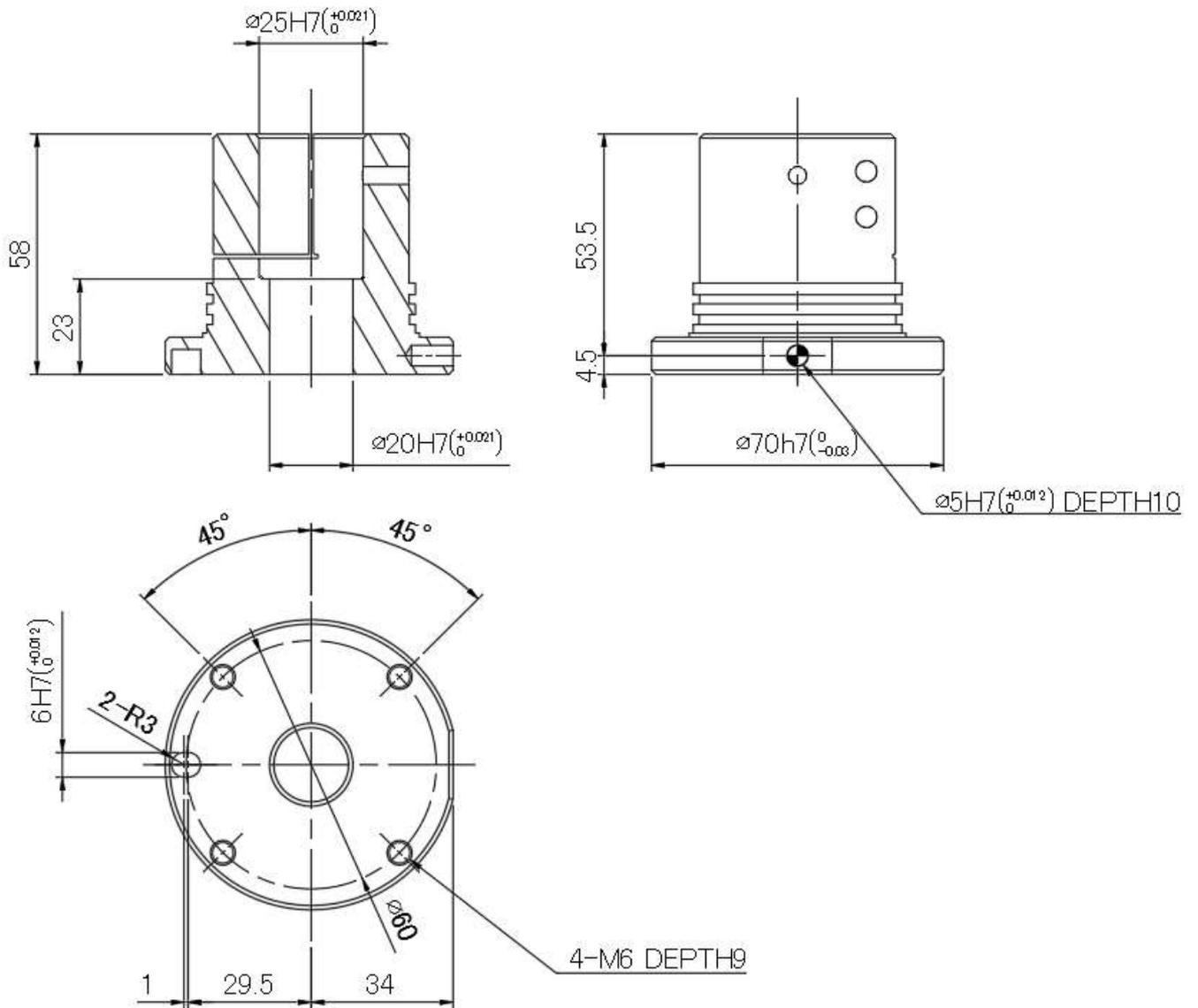
Combination direction : L  
Stroke (S) : 200 or 350 mm

HMW(Z)-H20 (Cleanliness specification)



Combination direction : L  
Stroke (S) : 150 or 300 mm

HMW(Z)-H20 Application attach portion details (Common for Standard/Cleanliness specification)



■ Standard specification

Model		HMW(Z)-L05	HMW(Z)-H20
Position detecting method		Absolute encoder with battery	
Weight capacity	Rating	2 kg	10 kg
	Maximum	5 kg	20 kg
Movable range (*1)	Z axis	200 mm	200 mm or 350 mm
		(160 mm)	(150 mm or 300 mm)
	W axis	540 deg	540 deg
Maximum speed	Z axis : Rating	1000 mm/sec	1125 mm/sec
	Z axis : Maximum	500 mm/sec	550 mm/sec
	W axis : Rating	1200 deg/sec	1200 deg/sec
	W axis : Maximum	600 deg/sec	540 deg/sec
Repeatability	Z axis	±0.01 mm	
	W axis	±0.005 deg	±0.005 deg
W axis allowable inertia moment	Rating	0.008 kg·m <sup>2</sup>	0.055 kg·m <sup>2</sup>
	Maximum	0.045 kg·m <sup>2</sup>	0.289 kg·m <sup>2</sup>
Allowable thrust force (Z axis)		70.8 N	144.1 N
Installation method		Wall hangings	
Robot weight	Standard specification	Z200:7.3 kg(7.9kg)	Z350:10.5 kg(11.4kg)
			Z200:10.2 kg(10.9kg)
Cleanliness class (*2)		ISO class 4	
Vacuum amount (*3)		60 L/min	

\*1: Inside of ( ) is a stroke for cleanliness specification.

\*2: ISO 14644-1 standard

\*3: The demanded suction amount toward the inside of a robot to meet the cleanliness specification.

(= Demanded suction amount in the conditions of operation at the maximum speed and the maximum acceleration/deceleration.)

■ Release date

September, 2020

Specification described on this notice is as of the issue date and might be changed without notice.