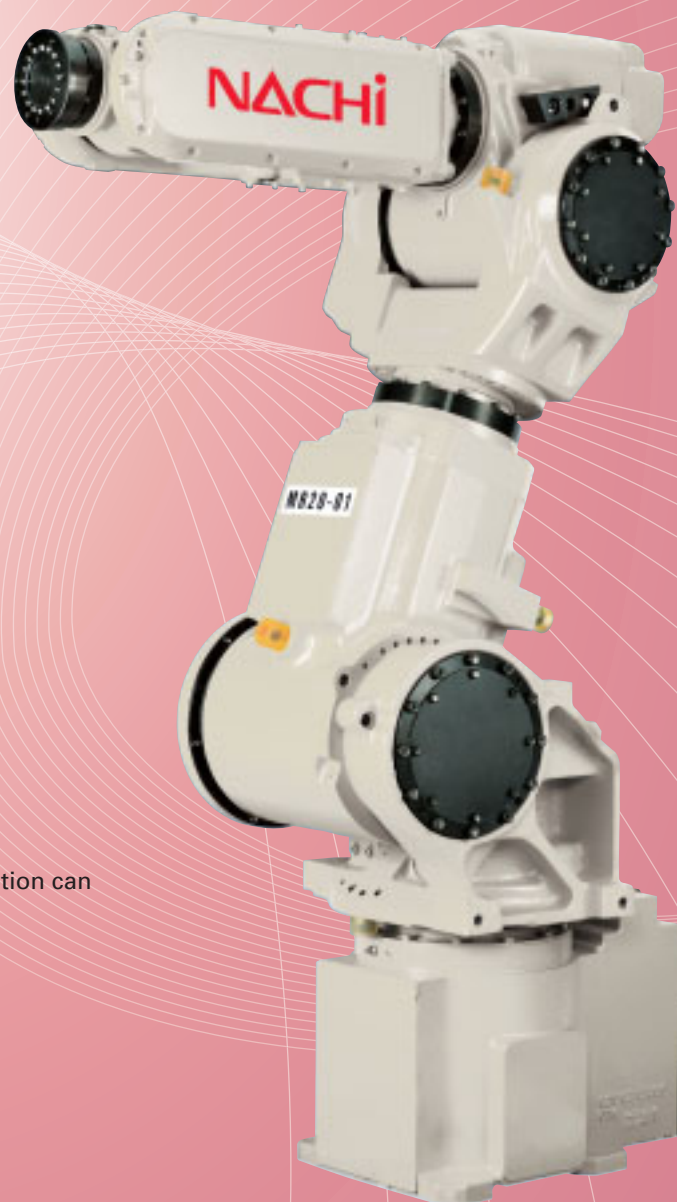
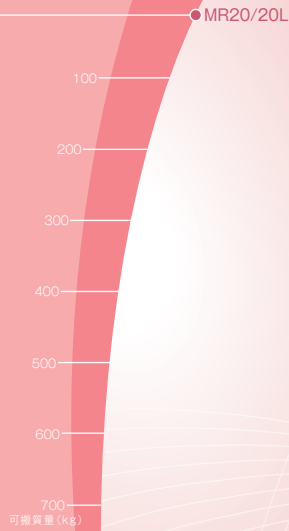


MR20/20L



7-axes structure

- Flexible and complex positioning and motion can be available by 7-axes structure.

Compact body, powerful arm

- Minimizing installation space.
- Payload 20kg MAX 30kg*1

Limited envelope within 30kg

MR20/20L

Robot specifications

Item		Specifications	
Robot model		MR20-02	MR20L-01
Construction		Articulated construction	
Number of axes		7	
Drive system		AC servo system	
Max. operating area	J1	$\pm 3.14\text{rad}(\pm 180^\circ)$	
	J2	$+0.96 \sim -2.09\text{rad}(+55 \sim -120^\circ)$	
	J3	$\pm 3.14\text{rad}(\pm 180^\circ)$	
	J4	$+2.35 \sim -2.89\text{rad}(+135 \sim -166^\circ)$	
	J5	$\pm 2.35\text{rad}(\pm 135^\circ)$	$\pm 2.42\text{rad}(\pm 139^\circ)$
	J6	$\pm 6.28\text{rad}(\pm 360^\circ)$	
Max. speed	J1	2.96rad/s(170°/s)	
	J2	2.96rad/s(170°/s)	
	J3	2.96rad/s(170°/s)	
	J4	4.36rad/s(250°/s)	6.28rad/s(360°/s)
	J5	4.36rad/s(250°/s)	6.28rad/s(360°/s)
	J6	5.23rad/s(300°/s)	10.5rad/s(600°/s)
Payload ^{*1}		20kg ^(*)	20kg
Wrist torque	J4	80.8N·m	49N·m
	J5	80.8N·m	49N·m
	J6	44.1N·m	23.5N·m
Wrist moment of inertia ^{*2}	J4	6.0kgm ²	1.6kgm ²
	J5	6.0kgm ²	1.6kgm ²
	J6	2.3kgm ²	0.8kgm ²
Position repeat accuracy ^{*3}		$\pm 0.06\text{mm}$	
Maximum working air pressure		0.49MPa(5.0kgf/cm ²)以下	
Ambient temperature		0~45°C	
Installation		Floor mounted/ceiling mounted	
Environmental resistance ^{*4}		Meets the IP65 standard (for dust and waterproofing) 230kg	
Robot mass			

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

To mount a load to the robot arm, it must be loaded either to the forearm or to the upper part of the J3 axis.

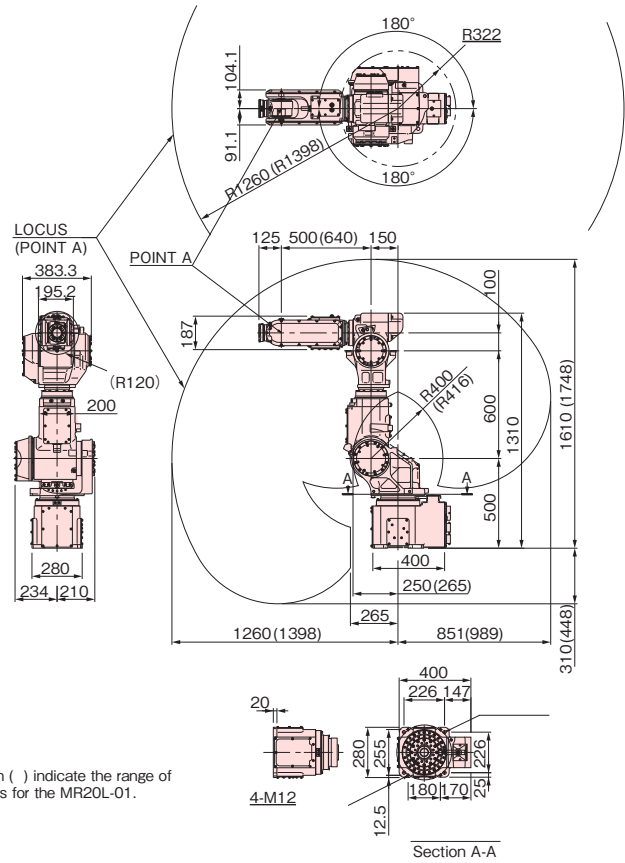
※1 : Max payload 30kg (limited envelope)

※2 : Note that wrist moment of inertia varies depending on wrist load conditions.

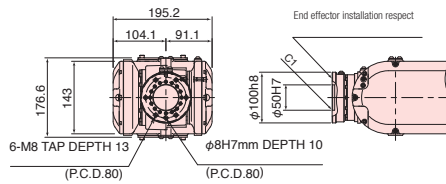
※3 : JIS B 8432 compliant.

※4 : Fluids that corrode the seal material, such as organic solvents, acids, alkalis, salts, and petroleum-based cutting fluids, cannot be used.

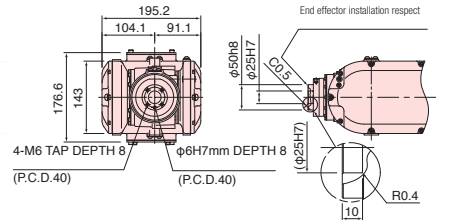
Exterior dimensions and operating envelope



MR20-02

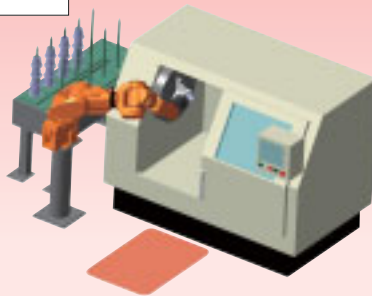


MR20L-01



Operating Case

Example loading system using the MR20



We've provided space in front of the machine for easier maintenance!

When using conventional robots



Robot installed in front of the machine

•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.

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