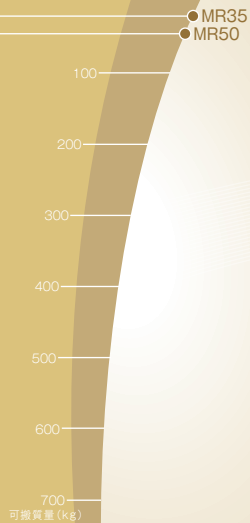


Flexible motion "Arm" robot with 7-axes

MR35/50



7-axes structure

- Automation with robot can be possible without enough space.

Harsh production environment

- The new MR (35/50kg) has a std.IP67.
Available IP ratings make the MR Series ideal for various applications that include harsh environments that previously required expensive robot covers.

MR35/50

Robot specifications

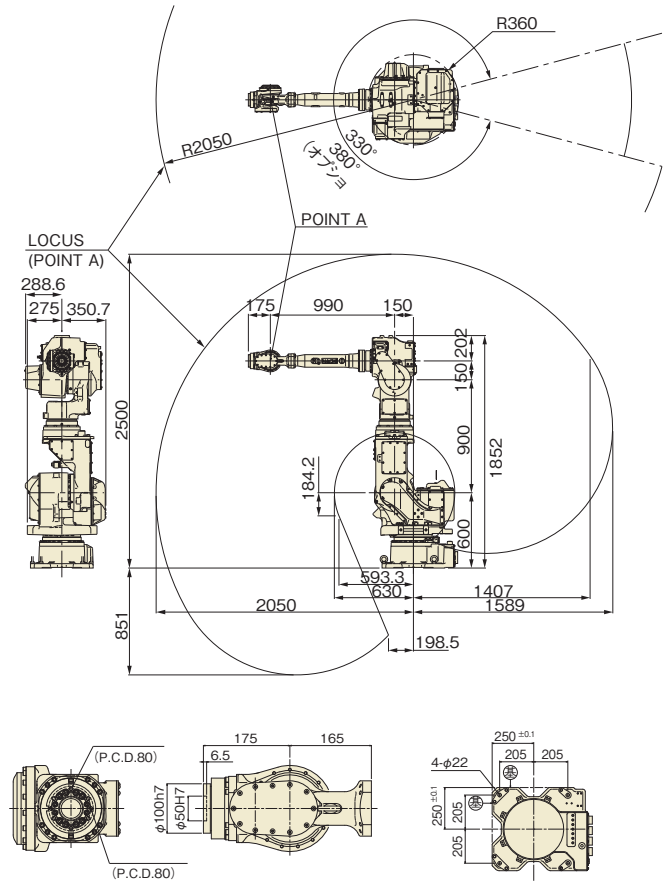
Item		Specifications	
Robot model		MR35-01	MR50-01
Construction		Articulated construction	
Number of axes		7	
Drive system		AC servo system	
Max. operating area	J1	$\pm 2.88\text{rad}(\pm 165^\circ)$	
	J2	$+0.96 \sim -2.09\text{rad}(+55 \sim -120^\circ)$	
	J3	$+2.44 \sim -2.55\text{rad}(+140 \sim -146^\circ)$	
	J4	$\pm 6.28\text{rad}(\pm 360^\circ)$	
	J5	$\pm 2.18\text{rad}(\pm 125^\circ)$	
	J6	$\pm 7.84\text{rad}(\pm 450^\circ)$	
	J7	$\pm 3.32\text{rad}(\pm 190^\circ)$	
Max. speed	J1	3.14rad/s(180°/s)	3.05rad/s(175°/s)
	J2	3.05rad/s(175°/s)	2.44rad/s(140°/s)
	J3	3.14rad/s(180°/s)	2.88rad/s(165°/s)
	J4	5.32rad/s(305°/s)	4.45rad/s(255°/s)
	J5	5.32rad/s(305°/s)	4.45rad/s(255°/s)
	J6	7.33rad/s(420°/s)	6.46rad/s(370°/s)
	J7	2.27rad/s(130°/s)	
Payload	Wrist	35kg	50kg
	Forearm	15kg	
Allowable static load torque for wrist	J4	160N·m	210N·m
	J5	160N·m	210N·m
	J6	90N·m	130N·m
Allowable moment of inertia for wrist ^{※1}	J4	16kg·m ²	30kg·m ²
	J5	16kg·m ²	30kg·m ²
	J6	5kg·m ²	12kg·m ²
Position repeat accuracy ^{※2}		$\pm 0.07\text{mm}$	
Maximum working air pressure		0.49MPa (5.0kgf/cm ²) 以下 0.49MPa (5.0kgf/cm ²) or less	
Ambient temperature		0~45°C	
Installation ^{※3}		Floor mounted	
Environmental resistance ^{※4}	Body	Meets the IP67 standard (for dust and waterproofing)	
	Wrist	Meets the IP67 standard (for dust and waterproofing)	
本体質量 Robot mass		745kg	

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

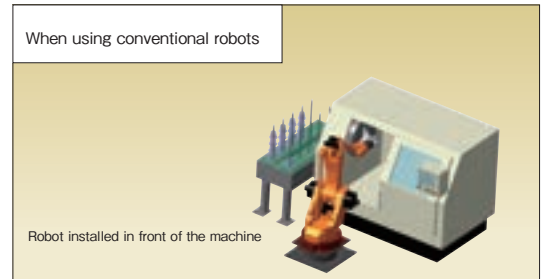
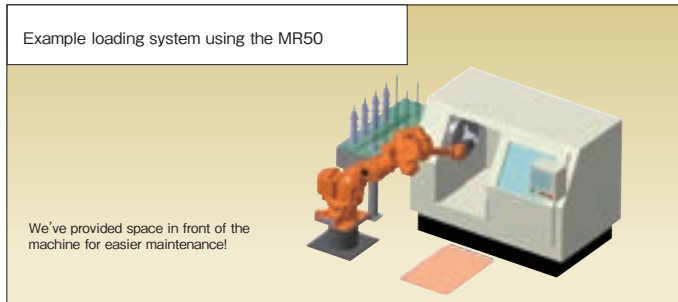
- ※1: Note that wrist moment of inertia varies depending on wrist load conditions.
- ※2: JIS B 8432 compliant.
- ※3: Inverted, wall, and inclined installations are options.
- ※4: Fluids that corrode the seal material, such as organic solvents, acids, alkalis, salts, and petroleum-based cutting fluids, cannot be used.

◆ 外形寸法及び動作範囲

Exterior dimensions and operating envelope



Operating Case



*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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CATALOG NO.

7331-3

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