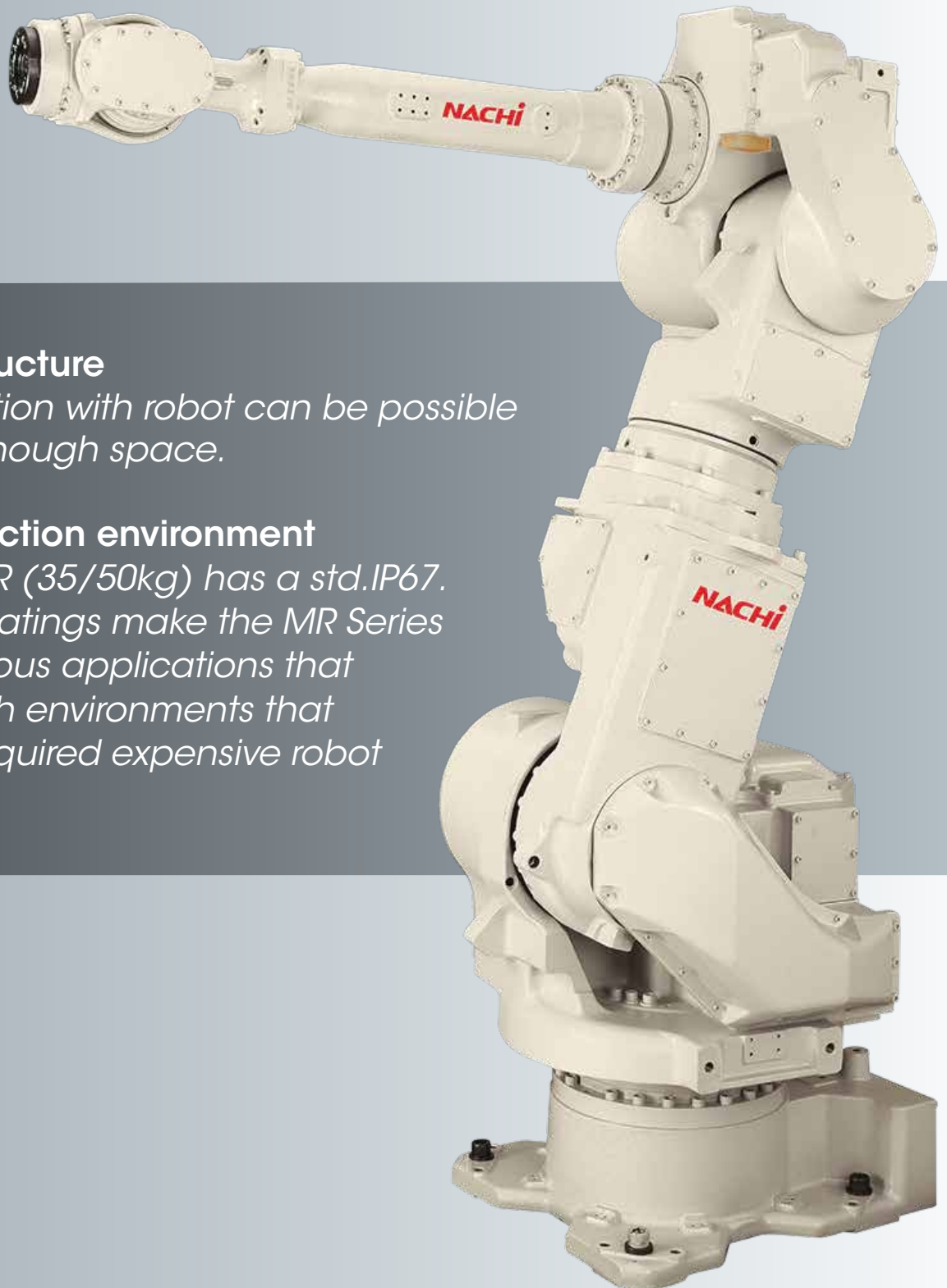


MR35/50

Flexible motion "Arm" robot with 7-axes



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.*

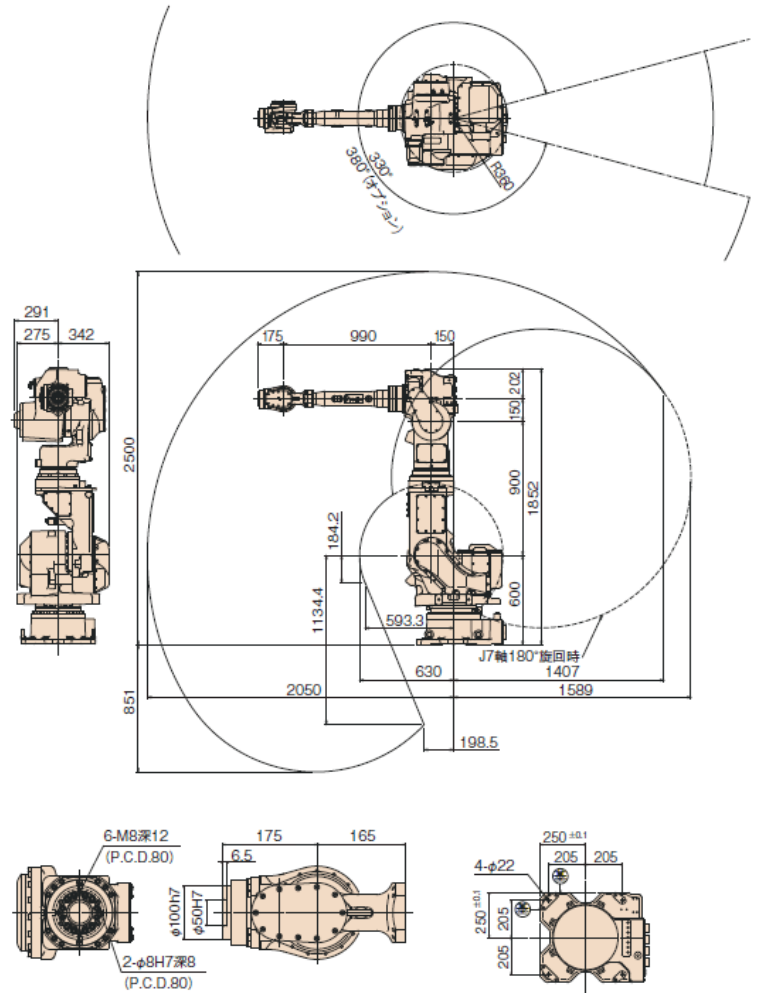
Robot specifications

Robot model		MR35	MR50
Construction		Articulated	
Number of axes		7	
Drive system		AC servo system	
Max. operating area	J1	+/-2.88rad (+/-165°)	
	J2	+0.96~-2.09rad (+55~-120°)	
	J3	+2.44~-2.55rad (+140~-146°)	
	J4	±6.28rad (±360°)	
	J5	+/-2.18rad (+/-125°)	
	J6	±7.84rad (±450°)	
	J7	±3.32rad (±190°)	
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		±0.07mm	
Maximum working air pressure		0.49MPa (5.0kgf/cm ²) 0.49MPa (5.0kgf/cm ²) or less	
Ambient temperature		0~45°C	
Installation*3		Floor mounted	
Environmental resistance*3	Body	Meets the IP67 standard (for dust and waterproofing)	
	Wrist	Meets the IP67 standard (for dust and waterproofing)	
Robot mass		745kg	

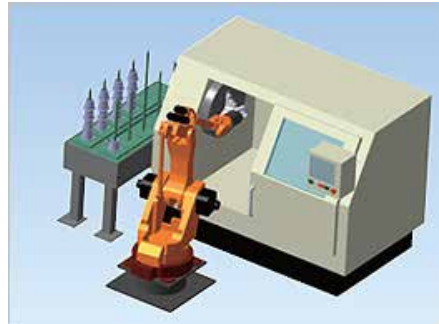
1[rad] = 180/π[°], 1[N·m] = 1/9.8[kgf·m]

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

Exterior dimensions and working envelope

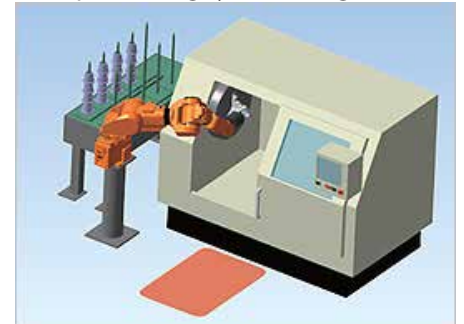


When using conventional robots



Robot installed in front of the machine

Example loading system using the MR50



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

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Tel: +1-905-660-0088
Tel: +52-442-153-2424
Tel: +55-11-4793-8800
Tel: +49-(0)2151-65046-0
Tel: +66(38)961679
Tel: +65-65587393
Tel: +62-21-527-2841
Tel: +91-(0)14-9467-1300
Tel: +86-(0)21-6915-2200

Fax: +1-248-305-6542
Fax: +1-317-530-1011
Fax: +1-905-660-1146
Fax: +52-442-153-2435
Fax: +55-11-4793-8870
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Fax: +65-65587371
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●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 Act. Please go through careful investigation and necessary formalities for export.