

# Industrial robots: MELFA

## RV-35/50/80 FR

High-payload models added to the RV-FR series

New products



### USE MITSUBISHI ELECTRIC PRODUCTS THROUGHOUT ALL PROCESS AVAILABLE TO SUIT YOUR WORKPLACE AND PROCESS

- Three payload types are available: 35 kg, 50 kg, and 80 kg.
- Automation is supported for a wide range of fields such as automobile parts, heavy objects transportation, and loading/unloading for processing.



### ENSURE IMPROVED WORKABILITY WITHOUT COMPROMISING SAFETY SAFETY AND WORKABILITY ACHIEVED IN NO-FENCE SITUATION

- Collaborative situation are enabled by the combination of safety option and sensors.
- Operating rates and work environments are improved by ISO compliant human-collaborative situation.



### HANDLE THE DATA REQUIRED FOR DIGITAL MANUFACTURING, EASILY IQ PLATFORM SUPPORTED FOR FACTORY DIGITIZATION

- Easy connection with Mitsubishi Electric's MELSEC IQ-R/Q series programmable controllers.
- Mitsubishi Electric FA products are able to unify management for information of concerning traceability, visualization, and systems by less wiring.

**SPECIAL  
DISCOUNT!**

FROM STANDARD PRICE

**30-45%**

THIS PROMOTION RUNS FROM: 15 JANUARY - 16 SEPTEMBER 2024

\*Remark:

- For more information, please contact your Mitsubishi Electric dealer or sales representative.
- The Promotion Price offer in Promotion period only.
- The company reserves the right to make changes without prior notice
- The promotion on 15 January - 16 September 2024



FOR CATALOG



FOR WEBSITE

“ WE PROVIDING  
**INTELLIGENT ROBOT**  
FOR GROW YOUR BUSINESS! ”





# SPECIFICATION

Item	Unit	RV-35FR	RV-50FR	RV-80FR	
Environmental specifications			Standard/ Oil mist		
Protection degree			Wrist equivalent to IP67, Body equivalent to IP65(standard) Whole body equivalent to IP67(oil mist)		
Installation			Floor type		
Structure			Vertical articulated robot		
Degrees of freedom			6		
Drive system			AC servo motor		
Position detection method			Absolute encoder		
Maximum load capacity	kg	35	50	80	
Arm length	mm		870+1080		
Maximum reach radius	mm		2100		
Operating range	J1		360 (±180)		
	J2		245 (-105~140)		
	J3	deg	290 (-135~155)		
	J4		720 (±360)		
	J5		290 (±145)		
	J6		900 (±450)		
Maximum speed*1	J1	deg/sec	180	180	180
	J2		180	180	180
	J3		185	185	160
	J4		260	260	185
	J5		260	260	165
	J6		360	360	280
Maximum composite speed*2	mm/sec	13400	13400	12700	
Position repeatability	mm		±0.06		
Ambient temperature	°C		0 to 45		
Mass	kg		560		
Tolerable moment	J4	Nm	210	210	336
	J5		210	210	336
	J6		130	130	194
Tolerable amount of inertia	J4	kgm <sup>2</sup>	19.6	28	34
	J5		19.6	28	34
	J6		7.7	11	13.7
Tool wiring			12 input points/8 output points LAN × 1 <Category 5e-compliant>		
Tool pneumatic pipes			Φ10×2		
Connected controller			CR860-D/CR860-R/CR860-Q		

\*1 Values in the table indicate the maximum speed, and the actual speed of each axis varies depending on factors such as the posture, load, and the amount of movement.

\*2 This is the value at the center point of the mechanical interface when all axes are combined. The value is a theoretical value calculated from the maximum speed of each joint.

## STUDY CASE



- Signals/data required for operation
- Reading data from sensors
- Maintenance data/service life data

RV-12CRL  
Assembly

RV-7FR  
Transportation  
during production

RV-80FR  
Palletizing Heavy object  
transportation

Less Wiring

No-fence

## MELFA Products for The Entire Life

