

FACTORY AUTOMATION

MITSUBISHI ELECTRIC INDUSTRIAL/COLLABORATIVE ROBOT

**Specifications for Food and Pharmaceutical
Environments**



MELFA

*Peace of mind
in demanding environments*

MELFA Food and Pharmaceutical Environment Specifications



Pharmaceutical environment specifications

The robots feature special coatings and seals that are suitable for sterile environments containing hydrogen peroxide gas (concentration of 120 ppm), and wipe-down cleaning with hydrogen peroxide solution (6% concentration).



Food environment specifications

Food-grade machine grease is used for improved hygiene.



A Stainless steel for improved corrosion resistance

C NSF H1 certified food-grade grease is used. Highly chemically resistant packing and rubber improves sealing, thereby reducing the risk of product contamination.

The robot is coated with a chemically resistant surface coating (FDA and Food Sanitation Act compliant).

B Special flange bolts prevent the adherence of foreign matter and improve cleanliness.

D Vertical articulated robots: IP67 compliant
Horizontal articulated robots: IP65 compliant
External air flow to the interior of the robot is controlled.

Select from three Specifications to meet your use case

Three types of specifications for pharmaceutical and food environments are available to meet your application needs.

	Pharmaceutical environment specifications	Food environment specifications	Food-grade grease specifications
Stainless steel flange	●	●	—
Specially shaped SUS bolts	●	—	—
Food-grade machine grease	●	●	●
Chemically resistant surface coating	●	—	—
J3 axis bellows (FRH series only)	● (PTFE)	● (Urethane)	—
IP performance	IP65	RV: IP67 / RH: IP65	IP54

Robots compatible with Pharmaceutical and Food Specifications

Pharmaceutical environment specifications	Food environment specifications	Food-grade grease specifications
RV-4/7FR series RH-6FRH series	RV-4/7/13/20FR series RH-6/12/20FRH series	RV-5AS

* Contact us for information on compatibility with models that are not mentioned.

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BLDG., 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN