



## MATERIAL FACT SHEET

313086 RV-4FR-D

### General Data

Product Hierarchy	IAG25201
	ROBOT
	RV-4FR-D
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	B (Limited Availability from Stock)

e-shop: <https://emea-fa.mitsubishielectric.com/fa/shop/material-page/00000000000313086>

### Product Components

<a href="#">732908 / RV-4FR-D-SN</a>	1 pc required
<a href="#">410994 / 1F-05UCBL-41</a>	1 pc required

### FA-Robot: Robotssystem

Series	RV-FR SERIES
Type	VERTICAL
Payload (kg)	4
Max. Reach Radius (mm)	515
Environment specification	STANDARD
Controller Type	CR800-D
Cycle Time (s)	0,36
Speed (mm/s)	9027
Repeatability (mm)	0,02
Installation Method	FLOOR, CEILING, WALL
Protection Class	IP40
Power Supply (VAC)	1PHASE 200-230V
Power Consumption (VA)	1000
Operating Range J1 (deg)	480
Operating Range J2 (deg)	240
Operating Range J3 (deg)	161
Operating Range J4 (deg)	400
Operating Range J5 (deg)	240
Operating Range J6 (deg)	720

### Product Dimensions & Weight

Width (mm)	241
Height (mm)	690
Depth (mm)	543
Weight (kg)	39

### Logistic Dimensions & Gross Weight

Length (cm)	103,0
Width (cm)	59,0
Height (cm)	91,0
Gross Weight (kg)	108,000
Volume (cdm)	553,007

### Stock Data

Planned Delivery Time (Days)	122
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### Life Cycle

Sales Start	01.07.2017
Predecessor	255265 / RV-4F-D1-S15

### Additional Product Information

Binding Tariff Information	DEBT1-1027/26-1
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BTI validity date	12.02.2029
Battery included	YES - CHECK SPARE PART LIST
Product Code	INDUSTRIAL ROBOTS

### Export Data

Commodity Code	84795000
Legal Control (Dual Use List)	Not Listed
Country of Origin	Japan (JP)
Preference Status (Supplier Declaration)	Non EU

### Environmental

REACH Limit Exceeded	YES
REACH Substance CAS Number	<a href="#">10124-43-3</a>
REACH Substance CAS Number (2)	<a href="#">108-78-1</a>
REACH Substance CAS Number (3)	<a href="#">110-71-4</a>
REACH Substance CAS Number (4)	<a href="#">110-80-5</a>
REACH Substance CAS Number (5)	<a href="#">119313-12-1</a>
REACH Substance CAS Number (6)	<a href="#">12060-00-3</a>
REACH Substance CAS Number (7)	<a href="#">127-19-5</a>
REACH Substance CAS Number (8)	<a href="#">1303-86-2</a>
REACH Substance CAS Number (9)	<a href="#">13560-89-9</a>
REACH Substance CAS Number (10)	<a href="#">540-97-6</a>
REACH Substance CAS Number (11)	<a href="#">541-02-6</a>
REACH Substance CAS Number (12)	<a href="#">556-67-2</a>
REACH Substance CAS Number (13)	<a href="#">71868-10-5</a>
REACH Substance CAS Number (14)	<a href="#">7439-92-1</a>
REACH Substance CAS Number (15)	<a href="#">79-94-7</a>
REACH Substance CAS Number (16)	<a href="#">80-05-7</a>
REACH Substance CAS Number (17)	<a href="#">80-43-3</a>
REACH Substance CAS Number (18)	<a href="#">9036-19-5</a>
REACH Substance CAS Number (19)	<a href="#">96-13-9</a>
REACH Substance CAS Number (20)	<a href="#">98-54-4</a>
Dangerous Goods Class	9
Dangerous Goods Identifier	UN3091
RoHS Compliance	NOT IN SCOPE
WEEE	B2B

### Conformity

CE	COMPLIANT
EAC	NON-COMPLIANT
UKCA	COMPLIANT

### Documentation & Media Data

Manual URL Indicator	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2f94&amp;q=RV-4FR-D&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=bltdae25c2bd5f2f94&amp;q=RV-4FR-D&amp;doc-lang=en</a>
Certificates URL Indicator	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=RV-4FR-D&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt8050dd1408c11cc2&amp;q=RV-4FR-D&amp;doc-lang=en</a>
CAD URL Indicator	<a href="https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=RV-4FR-D&amp;doc-lang=en">https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&amp;doc-cats=blt26ecc97a31a841c1&amp;q=RV-4FR-D&amp;doc-lang=en</a>

### Product Packaging

Cardboard (g)	17626
Other paper (g)	120
Aluminum (g)	0
Steel (g)	70
Styrofoam (g)	0
Other plastic (g)	1288
Wood (g)	26500
Glass (g)	0
Others (g)	500

### Spare parts

Material	Description	Quantity	Unit
<a href="#">502664</a>	RV-4F/7F MOTOR HG-KR43BK-S920052(400W)	2	PC
<a href="#">598367</a>	RV-4F/7F MOTOR HG-KR13D-S920061	2	PC
<a href="#">598317</a>	RV-4F/7F MOTOR HG-KR053D-S920060	1	PC
<a href="#">265181</a>	RV4-FRL/M HARMONIC DRIVE J1	2	PC
<a href="#">265183</a>	RV-4FR/M HAMONIC DRIVE J3	1	PC
<a href="#">265195</a>	RV-4FR(L)/M HAMONIC DRIVE J4	1	PC
<a href="#">410993</a>	RV-4/7FR HARMONIC DRIVE J5 New type	1	PC

Material	Description	Quantity	Unit
265197	RV-8CRL HARMONIC DRIVE J6	1	PC
415461	RV-4FR CRB J1 (RH3FH J1)(RH-12/20FRH J2)	1	PC
415462	RV-4FR CRB J3 (RH-12/20FRH J1)	1	PC
265201	RV-4F/L/J2 7F/L/J3 CROSS ROLLER BEARING	1	PC
237502	RV-8CRL CROSS ROLLER BEARING	1	PC
265204	RV-4F/7F BALL BEARING 6902DD	2	PC
262550	RH-12/20FRH BALL BEARING 6815ZZ/A2	1	PC
265205	RV-4F/7F BALL BEARING 626	1	PC
164946	RH-13/20/7FL(L) BALL BEARING 6809DD	1	PC
415463	RV/RH-FR BALL BEARING 6809ZZ	1	PC
265206	RV-4F/7F BALL BEARING 6812DD	1	PC
265207	RV-4F/7F BALL BEARING 606	1	PC
249950	RV-5AS-D BALL BEARING 6805ZZ	2	PC
243685	RV-4F/7F BALL BEARING 6808ZZU76UG	1	PC
154921	RV-6S/SL BEARING 688AZZ1	1	PC
415464	RV-4/7FR BALL BEARING F696DD1MC3PS2S	2	PC
415465	RV-4/7FR BALL BEARING 6905DDUCMEA7L	1	PC
164945	RV-3SB/3SJB BALL BEARING 687MC3	2	PC
415467	RV-4FR BRG INNER RACE STOPPER J1 SET	1	PC
265204	RV-4F/7F BALL BEARING 6902DD	1	PC
308838	RV-4FRL/7FRL(L) GEAR R	1	PC
308839	RV-4FRL/7FRL(L) GEAR L	1	PC
265213	RV-4FR(L)/M TIMING PULLEY J1	2	PC
265215	RV-5AS-D TIMING PULLEY J5	1	PC
265219	RV-4/7FR(L)/M TIMING PULLEY J4AJ5A	2	PC
265220	RV-4/7FR(L)/M TIMING PULLEY J4B	1	PC
278321	RV-7FRLL TIMING PULLEY J6B	2	PC
265223	RV-4/7FR(L)/M TIMING PULLEY J6A	1	PC
415473	RV-4FR PULLEY J5B SET	1	PC
415475	RV-4FR TIMING BELT J1	1	PC
415476	RV-4FR TIMING BELT J3	1	PC
415477	RV-4FR TIMING BELT J4	1	PC
415478	RV-4FR TIMING BELT J5	1	PC
415479	RV-4FR/7FR TIMING BELT J6	1	PC
262607	RH-1FHR OILSEAL AD70857	1	PC
265232	RV-4/7FR(L)/M OILSEAL AD 23 32 5	1	PC
265233	RV-4/7FR(L)/M OILSEAL AD 38 50 7	1	PC
265234	RV-4/7/13/20FRL(L) OILSEAL AD 10 20 5	2	PC
262605	RH-3CH/6CH/6CRH OILSEAL AC1314F0	2	PC
265241	RV-4/7/13/20FRL/M OILSEAL M-110	1	PC
265242	RV-4/13/20FRL/M OILSEAL M-84	1	PC
237529	RV-2FR(L)/FR(L)B OILSEAL J5,J6	1	PC
265245	RV-4/7FR(L)/M O RING CO0522A	1	PC
237538	RH-13F/20F/7FLL O RING CO0200-A0	1	PC
154943	RV-6S/SL O RING 51,38x1	1	PC
415484	RV-4/7FR O RING	1	PC
265246	RV-4/7FR(L)/M FELT J1	1	PC
265247	RV-4FR(L)/M FELT J2	1	PC
265249	RV-4FR(L)/M FELT J3	1	PC
265253	RV-4FR/M FELT J4	1	PC
278411	RV-7FRLL FELT J5 NO M-TYPE	1	PC
265255	RV-4/7FR(L)/M FELT J5 2/2	1	PC
301335	RV-4F/L/M FELT J3C	2	PC
415486	RV-4FR FELT J3D	1	PC
415320	RV-FR INTERNAL PCB DQ392	1	PC
415321	RV-FR INTERNAL PCB DQ006	1	PC
415452	RV-FR BATTERY HOLDER	4	PC
278335	RV-7FRLL/13FR(L)/20FR CARD SPACER	2	PC
262558	RH-12/20FRH CONNECTOR IL-2S-S3L(N)	1	PC
237583	RH-12/20FRH GREASE NIPPLE WA610 NYLON	2	PC
164980	RH-12/20FRH GREASE NIPPLE CAP	2	PC
249980	RH-13F/20F/7FLL AIR JOINT UKB6	2	PC
249983	RH-12/20FRH GROMMET C-30SG-16A-UL	1	PC
265260	RV-4/7/13/20FRL(L)/M CABLE CLAMP -WS10M	2	PC
276668	RH-2FH CABLE GLAND 3	1	PC
164975	RH-12/20FRH PARALLEL PIN H74x8	5	PC
415487	RV-4/7FR HD RING J2/PIN SET	2	PC
265262	RV-4FR(L)/M PIN	4	PC
265263	RV-4/7FR(L)/M IPPAN KEY 5X5X16	2	PC
237579	RH-6CRHK KEY IPPAN W-MARU 3X3X6	2	PC

Material	Description	Quantity	Unit
<a href="#">249376</a>	RH-13F/20F/7FLL SNAP RING ANA-C37	2	PC
<a href="#">278339</a>	RV-7FRL SNAP RING C40	1	PC
<a href="#">265265</a>	RV-4/7FRL(L)/M SHIM J6 0,1mm	2	PC
<a href="#">265266</a>	RV-4/7FRL(L)/M SHIM J6 0,3mm	1	PC
<a href="#">265267</a>	RV-4/7FRL(L)/M SHIM J6 0,5mm	1	PC
<a href="#">237540</a>	RV-5AS-D SEAL WASHER(M6)	5	PC
<a href="#">237585</a>	RV-8CRL LOW HEAD CAP SCREW SSH-EL-M6	5	PC
<a href="#">278352</a>	RV-4FRL/7FRL BRAKE CABLE ASSY (7F-J6)	3	PC
<a href="#">415493</a>	RV-4FR INTERNAL CABLE ASSY(4FR)	1	PC
<a href="#">415319</a>	RV-2FR/L/B INTERNAL HARNESS 1	1	PC
<a href="#">237552</a>	RV-4FR/7FR STOPPER J1	2	PC
<a href="#">265273</a>	RV-4/7FR(L)/M STOPPER J1	1	PC
<a href="#">237553</a>	RV-4FR/7FR STOPPER J4	1	PC
<a href="#">278359</a>	RV-8CRL STOPPER A	4	PC
<a href="#">265276</a>	RV-4FRL/M BOTTOM PLATE (STANDARD)	1	PC
<a href="#">278372</a>	RV-7FRL/13FR(L)/20FR COVER CONBOX	1	PC
<a href="#">265285</a>	RV-4FR(L)/M COVER SHOULDER U (STANDARD)	1	PC
<a href="#">265291</a>	RV-4FR/M COVER ARM NO1 B	1	PC
<a href="#">265305</a>	RV-7FRL/M COVER ARM NO2 U	1	PC
<a href="#">278390</a>	RV-7FRL CABLE CLAMP BOX	1	PC
<a href="#">265308</a>	RV-4/7FRL/M COVER CONBOX R1	1	PC
<a href="#">597105</a>	RV-4/7FR BRAND NAMEPLATE	2	PC
237636	RV-5AS-D DIRECTION MARK	1	PC
237602	RH-3CH/6CH/6CRH ALIGNMENT MARK (MINI)	12	PC
237606	RH-12/20FRH EARTH NAMEPLATE	1	PC
237604	RH-12/20FRH COORDINATES DIRECTION MARK a	1	PC
237605	RH-12/20FRH COORDINATES DIRECTION MARK b	1	PC
<a href="#">415497</a>	RV-4/7FR RUBBER SHEET 1	1	PC
<a href="#">237596</a>	RH-13F/20F/7FLL RUBBER SHEET	2	PC
237626	RV-5AS-D RUBBER SHEET (124-169)	1	PC
<a href="#">278340</a>	RV-7FRL/13FR(L)/20FR RUBBER SHEET 6	4	PC
<a href="#">278341</a>	RV-7FRL/13FR(L)/20FR RUBBER SHEET 7	3	PC
164988	RH-13F/20F/7FLL RUBBER SHEET 450x30	1	PC
<a href="#">405791</a>	CR800 PCB CONVERTER DQ801B	1	PC
<a href="#">600134</a>	FERRITE CORE E04SR170730A	6	PC
<a href="#">278350</a>	RV-7FRL/13FR(L)/20FR CONBOX WIRING ASSY	1	PC
134302	GLUE 242 LOCTITE 250ml	1	PC
<a href="#">405793</a>	CR800 PCB INVERTER DQ855A FOR RV-4FR	1	PC
<a href="#">220273</a>	CR800 TB CONNECTOR	1	PC
<a href="#">134305</a>	LIQUID GASKET WHITE THREE BOND 1212	1	PC
<a href="#">278338</a>	RV-7FRL/13FR(L)/20FR PLUG UP6	2	PC
<a href="#">405788</a>	CR800 PCB SERVO CPU DQ865B	1	PC
<a href="#">405790</a>	CR800 PCB OPTIONAL SLOT DQ332A	1	PC
<a href="#">405801</a>	CR800 POWER SUPPLY UNTIL RV-7FR/RH20FR	2	PC
<a href="#">262774</a>	NARC 750 FILTER DUST	1	PC
<a href="#">410994</a>	1F-05UCBL-41	1	PC
<a href="#">405803</a>	CR800 NOISE FILTER UNTIL RV-7FR/RH20FR	1	PC
220184	CR2D CR2Q OPTION COVER	2	PC
<a href="#">405809</a>	CR800 CABLE BKOFA1078H02	1	PC
220243	CR800 RUBBER MOUNT KG-010	7	PC
<a href="#">405805</a>	CR800 FUSE 500SF-20UL	2	PC
<a href="#">405806</a>	CR800 FUSE HOLDER	2	PC
<a href="#">405810</a>	CR800 CABLE BKOFA1078H03	1	PC
<a href="#">405811</a>	CR800 CABLE BKOFA1078H04	3	PC
<a href="#">220304</a>	CR800 SPACER MPS-08-0	1	PC
<a href="#">262786</a>	NARC 750/751 LOCK EDGING SADDLE	1	PC
<a href="#">237852</a>	CR800 SEAL ATT. (ELECTRIFIC.) 114-406	1	PC
<a href="#">405812</a>	RV-5AS-D CONNECTOR U794D030G51	1	PC
<a href="#">405814</a>	CR800 ACIN CABLE BKOFA1006H53	1	PC
<a href="#">405813</a>	RV-5AS-D CONNECTOR U794D030G52	1	PC
<a href="#">405817</a>	CR800 FAN 1	1	PC
405818	CR800 FAN 2	1	PC
<a href="#">487082</a>	CR800 TB CABLE U793C004G51	1	PC
<a href="#">248692</a>	MR-BAT6V1	4	PC
<a href="#">130879</a>	RP-1AH BALL BEARING F608DD	1	PC

**Compatible products**

Material	Description / Price List Text / Classification
<a href="#">47389</a>	1E-ST0404C RV-2F/FB Spiral hose for dual pneumatic hand 1E-ST0404C Class 100100606: FA-Robot: Tube
<a href="#">47390</a>	1E-ST0402C Robot option Tube for single pneumatic hand Class 100100606: FA-Robot: Tube
<a href="#">124658</a>	2A-RZ371 Robot option I/O-Interface 32 inputs /32 Outputs (decentral I/O's) type 2A-RZ371 Class 100100604: FA-Robot: Interface Card
<a href="#">214968</a>	R32TB Robot Teaching Box R32TB; Narc controller (standard version) Class 100100602: FA-Robot: Teachingbox
<a href="#">218862</a>	2D-TZ378 Robot option I/O-Interface: 32 inputs /32 Outputs (internal I/O's expansion) Class 100100604: FA-Robot: Interface Card
<a href="#">219063</a>	2D-TZ576 Robot option CC-Link-Interface-card Class 100100604: FA-Robot: Interface Card
<a href="#">225756</a>	R32TB-15 Teaching box R32TB with 7 lines display and 15m cable length Class 100100602: FA-Robot: Teachingbox
<a href="#">232808</a>	2D-TZ368 Robot option E/A-Interface: 32 inputs /32 Outputs SINK (internal I/O's ) Class 100100604: FA-Robot: Interface Card
<a href="#">255281</a>	1F-VD01E-02 RV-F Pneumatic single valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
<a href="#">255282</a>	1F-VD02E-02 RV-F Pneumatic double valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
<a href="#">255283</a>	1F-VD03E-02 RV-F Pneumatic triple valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
<a href="#">255284</a>	1F-VD04E-02 RV-F Pneumatic quadruple valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
<a href="#">255285</a>	1F-GR35S-02 RV-4F/RV-7F Hand output cable Class 100100605: FA-Robot: Cable
<a href="#">255286</a>	1F-HC35S-02 RV-4F/RV-7F Hand input cable Class 100100605: FA-Robot: Cable
<a href="#">257935</a>	1F-HA01S-01 RV-F External wiring set 1 for the robot base Class 100100605: FA-Robot: Cable
<a href="#">257936</a>	1F-HB01S-01 RV-F External wiring set 1 for the forearm Class 100100605: FA-Robot: Cable
259885	2D-TZ535 Network Interface for CompactCom module Class 100100604: FA-Robot: Interface Card
<a href="#">268039</a>	RV-F / RV-FR Connector Set RV-4/7/13/20F(R) Connector Set Class 100100607: FA-Robot: Other Option
<a href="#">271212</a>	2F-YZ581 Encoder Distribution Unit 2F-YZ581 for robot controller Class 100100604: FA-Robot: Interface Card
<a href="#">271513</a>	1F-HA02S-01 RV-F External wiring set 2 for the robot base Class 100100605: FA-Robot: Cable
<a href="#">271514</a>	1F-HB02S-01 RV-F External wiring set 2 for the forearm Class 100100605: FA-Robot: Cable
<a href="#">273786</a>	1F-DH-03 RV-4F J1 Stopper Class 100100607: FA-Robot: Other Option
<a href="#">313061</a>	4F-SF002-01 Safety option unit MELFA SafePlus for CR800 Controller Class 100100604: FA-Robot: Interface Card

Material	Description / Price List Text / Classification
<a href="#">313062</a>	CR800-MB Protection Box IP54 for CR800 Controller CR800-MB Class 100100607: FA-Robot: Other Option
<a href="#">313063</a>	2F-DQ535 Network Interface for CompactCom module CC-Link IE Filed AB6709 Class 100100604: FA-Robot: Interface Card
<a href="#">313064</a>	4F-FS002H-W200 Force Sensor Set 200N incl. Interface unit (2F-DQ561) for FR Series 4F-FS002H-W2 Class 100100607: FA-Robot: Other Option
<a href="#">313105</a>	4F-FS002H-W1000 Force Sensor Set 1000N incl. Interface unit (2F-DQ561) for FR Series 4F-FS002H-W Class 100100607: FA-Robot: Other Option
<a href="#">313106</a>	1F-10UCBL-41 Machine cable for CR800 controller, standard, 10m Class 100100605: FA-Robot: Cable
<a href="#">313107</a>	1F-15UCBL-41 Machine cable for CR800 controller, standard, 15m Class 100100605: FA-Robot: Cable
<a href="#">313108</a>	1F-10LUCBL-41 Machine cable for CR800 controller, high flexible, 10m Class 100100605: FA-Robot: Cable
<a href="#">313109</a>	1F-15LUCBL-41 Machine cable for CR800 controller, high flexible, 15m Class 100100605: FA-Robot: Cable
<a href="#">324579</a>	RT ToolBox3 Standard 1L-USB Robot Programming/Simulation Software, Win10/11, 1 Licence USB Class 100101206: FA-Software: Software Robot
<a href="#">324580</a>	RT ToolBox3 Pro 1L-USB Robot Programming/Simulation Software, MELFA-Works, Win10/11, 1 Licence USB Class 100101206: FA-Software: Software Robot
<a href="#">325728</a>	MELFA Smart Plus Card Pack A-Typ2F-DQ510 MELFA Smart Plus Card Pack A-Type Class 100100604: FA-Robot: Interface Card
<a href="#">325729</a>	2F-DQ511 MELFA Smart Plus Card A-Type Class 100100604: FA-Robot: Interface Card
<a href="#">325730</a>	1F-02UCBL-41 Machine cable for CR800 controller, standard, 2m Class 100100605: FA-Robot: Cable
<a href="#">327863</a>	1F-20UCBL-41 Machine cable for CR800 controller, standard, 20m Class 100100605: FA-Robot: Cable
<a href="#">327864</a>	1F-20LUCBL-41 Machine cable for CR800 controller, high flexible, 20m Class 100100605: FA-Robot: Cable
<a href="#">603944</a>	4F-SF003-05 Safety option unit MELFA SafePlus II Slim for CR800 Controller Class 100100604: FA-Robot: Interface Card
<a href="#">687249</a>	R86TB Robot Teaching Box with 10,1" (Colour / Touch version) Class 100100602: FA-Robot: Teachingbox
<a href="#">736446</a>	RT ToolBox3 Pro Robot Programming/Simulation Software, MELFA-Works, Win10/11, 1 Licence Email Class 100101206: FA-Software: Software Robot
<a href="#">736447</a>	RT ToolBox3 Standard Robot Programming/Simulation Software, Win10/11, 1 Licence Email Class 100101206: FA-Software: Software Robot
<a href="#">751266</a>	2F-DQ535-CCIETSN-SET Robot Network Interface SET CC-Link IE TSN for CR800 Contr. Class 100100604: FA-Robot: Interface Card
<a href="#">752992</a>	2F-DQ535-PN-SET Robot Network Interface SET Profinet IO for CR800 Class 100100604: FA-Robot: Interface Card
<a href="#">752993</a>	2F-DQ535-EIP-SET Robot Network Interface SET EtherNet/IP for CR800 Class 100100604: FA-Robot: Interface Card