



MATERIAL FACT SHEET

312985 RH-6FRH5520N-D

General Data

Product Hierarchy	IAG24801
	ROBOT
	RH-6FRH-D
Ext. Material Group	10 STANDARD ITEM
ABC Indicator	A (Available from Stock)

e-shop: https://mitsubishi-electric-eshop.mee.com/mee/FA_I/A/EUR/en/p/000000000000736447

Product Components

732928 / RH-6FRH5520N-D-SN	1 pc required
410994 / 1F-05UCBL-41	1 pc required

FA-Robot: Robotssystem

Series	RH-FR SERIES
Type	SCARA
Payload (kg)	6
Max. Reach Radius (mm)	550
Z Axis Stroke (mm)	200
Environment specification	OIL MIST
Controller Type	CR800-D
Cycle Time (s)	0,29
Speed (mm/s)	8300
Repeatability (mm)	0,012
Installation Method	FLOOR
Protection Class	IP54
Power Supply (VAC)	1PHASE 200-230V
Power Consumption (VA)	1000
Operating Range J1 (deg)	340
Operating Range J2 (deg)	290
Operating Range J4 (deg)	720

Product Dimensions & Weight

Width (mm)	174
Height (mm)	798
Depth (mm)	775
Weight (kg)	37

Logistic Dimensions & Gross Weight

Length (cm)	72,0
Width (cm)	65,0
Height (cm)	139,0
Gross Weight (kg)	80,200
Volume (cdm)	650,520

Stock Data

Planned Delivery Time (Days)	136
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Life Cycle

Sales Start	01.07.2017
Predecessor	250383 / RH-6FH5520-D1-S15

Additional Product Information

Binding Tariff Information	DEBIT-10890/21-1
BTI validity date	20.06.2024
Battery included	YES - CHECK SPARE PART LIST

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	101-14-4
REACH Substance CAS Number (2)	108-78-1
REACH Substance CAS Number (3)	110-71-4
REACH Substance CAS Number (4)	117-81-7
REACH Substance CAS Number (5)	119313-12-1
REACH Substance CAS Number (6)	12060-00-3
REACH Substance CAS Number (7)	127-19-5
REACH Substance CAS Number (8)	1303-86-2
REACH Substance CAS Number (9)	13560-89-9
REACH Substance CAS Number (10)	26523-78-4
REACH Substance CAS Number (11)	540-97-6
REACH Substance CAS Number (12)	541-02-6
REACH Substance CAS Number (13)	556-67-2
REACH Substance CAS Number (14)	71868-10-5
REACH Substance CAS Number (15)	7439-92-1
REACH Substance CAS Number (16)	79-94-7
REACH Substance CAS Number (17)	80-05-7
REACH Substance CAS Number (18)	80-43-3
REACH Substance CAS Number (19)	110-80-5
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	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=bltdae25c2bd5f2ff94&q=RH-6FRH5520N-D&doc-lang=en
Certificates URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt8050dd1408c11cc2&q=RH-6FRH5520N-D&doc-lang=en
CAD URL Indicator	https://emea.mitsubishielectric.com/fa/advanced-search?ct=document&doc-cats=blt26ecc97a31a841c1&q=RH-6FRH5520N-D&doc-lang=en

Product Packaging

Cardboard (g)	26926
Other paper (g)	120
Aluminum (g)	0
Steel (g)	70
Styrofoam (g)	0
Other plastic (g)	1288
Wood (g)	36900
Glass (g)	0
Others (g)	500

Spare parts

Material	Description	Quantity	Unit
262546	RH-12/20FRH MOTOR J1/2 RH-6FRH MOTOR J1	1	PC
415508	RH-6FRH MOTOR J2	1	PC
598367	RV-4F/7F MOTOR HG-KR13D-S920061	1	PC
262821	RH-12/20FRH HARMONIC DRIVE J2	1	PC
262575	RH-1FHR HARMONIC DRIVE J2	1	PC
415509	RH-3/6FRH CROSS ROLLER BEARING J4	1	PC
415461	RV-4FR CRB J1 (RH3FH J1)(RH-12/20FRH J2)	1	PC
262586	RH-1FHR CROSS ROLLER BEARING J2	1	PC
262587	RH-3FH/6FH ANGULAR BEARING	1	PC
262840	RH-12FRH ANGULAR BEARING	1	PC
133738	RP-3/5AH BALL BEARING 6001ZZNR	2	PC

Material	Description	Quantity	Unit
262550	RH-12/20FRH BALL BEARING 6815ZZ/A2	2	PC
262589	RH-3FH/6FH TIMING PULLEY J3A(6FH)	1	PC
262590	RH-6FH TIMING PULLEY J3B	1	PC
262591	RH-1FHR TIMING PULLEY J4A	1	PC
262593	RH-3FH/6FH TIMING PULLEY J4C	1	PC
415510	RH-6FRH TIMING BELT J3	1	PC
415511	RH-6FRH TIMING BELT J4A	1	PC
415512	RH-6FRH TIMING BELT J4B	1	PC
262823	RH-12/20FRH V-SEAL J2 VR100A	1	PC
262835	RH-1FHR V-SEAL J2	1	PC
262552	RH-12/20FRH OILSEAL AC1880H1	1	PC
262604	RH-6CRHK OILSEAL J2	1	PC
262607	RH-1FHR OILSEAL AD70857	1	PC
262553	RH-12/20FRH OILSEAL KD 40 52 5	1	PC
262608	RH-3FH/6FH OILSEAL KD15224	1	PC
415516	RH/RV-FR PIN J1	3	PC
415517	RH-6FRH HD RING J1	1	PC
415502	RH-FR PIN J2	2	PC
415503	RH-FR HD RING J2	1	PC
164954	RH-12/20FRH AIR JOINT UKBL6	2	PC
278338	RV-7FRLL/13FR(L)/20FR PLUG UP6	2	PC
249984	RH-12/20FRH GROMMET C-30SG-22A-UL	1	PC
237583	RH-12/20FRH GREASE NIPPLE WA610 NYLON	1	PC
262555	RH-12/20FRH GREASE NIPPLE WB610 NYLON	1	PC
415518	RH-6FRH GROMMET	1	PC
237585	RV-8CRL LOW HEAD CAP SCREW SSH-EL-M6	1	PC
237540	RV-5AS-D SEAL WASHER(M6)	1	PC
164980	RH-12/20FRH GREASE NIPPLE CAP	1	PC
164975	RH-12/20FRH PARALLEL PIN H74x8	1	PC
237579	RH-6CRHK KEY IPPAN W-MARU 3X3X6	1	PC
276699	RH-2FH RUBBER MOUNT	1	PC
262558	RH-12/20FRH CONNECTOR IL-2S-S3L(N)	1	PC
262615	RH-6FH COVER ARM NO2 U	1	PC
262674	RH-12/20FRH COVER BATTERY	1	PC
262623	RH-3FH/6FH COVER BASE R	1	PC
278359	RV-8CRL STOPPER A	4	PC
262825	RH-12FRH RUBBER STOPPER J3U	1	PC
262826	RH-12FRH RUBBER STOPPER J3D	1	PC
278335	RV-7FRLL/13FR(L)/20FR CARD SPACER	2	PC
415505	RH-1FRHR INTERNAL HARNESS 2	1	PC
276672	RH-2FH2515 Ferritic core2	2	PC
278372	RV-7FRLL/13FR(L)/20FR COVER CONBOX	1	PC
262833	RH-12/20FRH COVER ADD	1	PC
262627	RH-3FH/6FH COVER ARM NO2 B	1	PC
262628	RH-3FH/6FH SUPPORT PLATE SET H	1	PC
249965	RH-12/20FRH DIRECTION NAMEPLATE J1,2,3,4	1	PC
276681	RH-2FH BRAKE RELEASE MARK	1	PC
249967	RH-12/20FRH ALIGNMENT MARK	6	PC
237607	RH-12/20FRH CHARGING PART CAUTIONS NAMEP	1	PC
134305	LIQUID GASKET WHITE THREE BOND 1212	1	PC
134302	GLUE 242 LOCTITE 250ml	1	PC
276679	RH-1FHR BRAKE CABLE ASSY	1	PC
237886	CR1D BUSH CE-012, L=0.18M 114-18	1	PC
410994	1F-05UCBL-41	1	PC
602876	CR800 PCB CPU DQ171D	1	PC
405788	CR800 PCB SERVO CPU DQ865B	1	PC
405789	CR800 PCB SYSTEM IO DQ331B	1	PC
405790	CR800 PCB OPTIONAL SLOT DQ332A	1	PC
405791	CR800 PCB CONVERTER DQ801B	1	PC
405801	CR800 POWER SUPPLY UNTIL RV-7FR/RH20FR	2	PC
405803	CR800 NOISE FILTER UNTIL RV-7FR/RH20FR	1	PC
405805	CR800 FUSE 500SF-20UL	2	PC
405806	CR800 FUSE HOLDER	2	PC
220184	CR2D CR2Q OPTION COVER	2	PC
405807	CR800 OPTION CASE	1	PC
220273	CR800 TB CONNECTOR	1	PC
262774	NARC 750 FILTER DUST	1	PC
262774	NARC 750 FILTER DUST	1	PC
405808	CR800 CABLE BK0FA1078H01	1	PC
405810	CR800 CABLE BK0FA1078H03	1	PC

Material	Description	Quantity	Unit
405809	CR800 CABLE BKOFA1078H02	1	PC
405811	CR800 CABLE BKOFA1078H04	2	PC
262786	NARC 750/751 LOCK EDGING SADDLE	1	PC
220314	CR2D CR2Q CABLE GUIDE WS-1NS	8	PC
220243	CR800 RUBBER MOUNT KG-010	7	PC
220304	CR800 SPACER MPS-08-0	1	PC
237852	CR800 SEAL ATT. (ELECTRIFIC.) 114-406	1	PC
405812	RV-5AS-D CONNECTOR U794D030G51	1	PC
405813	RV-5AS-D CONNECTOR U794D030G52	1	PC
64687	FUSE 1,6A	1	PC
405814	CR800 ACIN CABLE BKOFA1006H53	1	PC
405817	CR800 FAN 1	1	PC
405818	CR800 FAN 2	1	PC
248692	MR-BAT6V1	4	PC
589542	RH-6FRH MOTOR J3 (200W)	1	PC
722207	INVERTER CR800 PCB DQ847A FOR RH-6FRH	1	PC
222205	ROBOT SILICONE GREASE G501 80g	1	PC
581888	ROBOT GREASE 300G: MULTEMP PS No.2	1	PC

Compatible products

Material	Description / Price List Text / Classification
214968	R32TB Robot Teaching Box R32TB; Narc controller (standard version) Class 100100602: FA-Robot: Teachingbox
218862	2D-TZ378 Robot option I/O-Interface: 32 inputs /32 Outputs (internal I/O's expansion) Class 100100604: FA-Robot: Interface Card
219063	2D-TZ576 Robot option CC-Link-Interface-card Class 100100604: FA-Robot: Interface Card
225756	R32TB-15 Teaching box R32TB with 7 lines display and 15m cable length Class 100100602: FA-Robot: Teachingbox
232808	2D-TZ368 Robot option E/A-Interface: 32 inputs /32 Outputs SINK (internal I/O's) Class 100100604: FA-Robot: Interface Card
250467	1F-GR60S-01 RH-FH Hand output cable Class 100100605: FA-Robot: Cable
250469	1F-HS408S-01 RH-6FH Internal Wiring/Piping set for hand Class 100100607: FA-Robot: Other Option
250470	1F-VD01E-01 RH-FH Pneumatic single valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250471	1F-VD02E-01 RH-FH Pneumatic double valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250472	1F-VD03E-01 Pneumatic triple valve set incl. valve block and noise reducer 1F-VD03E-01 Class 100100603: FA-Robot: Valve
250473	1F-VD04E-01 RH-FH Pneumatic quadruple valve set incl. noise-inferior Class 100100603: FA-Robot: Valve
250474	1F-HC35C-01 RH-FH Hand input cable Class 100100605: FA-Robot: Cable
251104	1F-UT-BOX RH-3/6FH-3/6FRH External Wiring/Piping box Class 100100607: FA-Robot: Other Option
251454	1F-HS408S-02 RH-6FH Internal Wiring/Piping set for hand (340mm Z-Stroke) Class 100100607: FA-Robot: Other Option
259885	2D-TZ535 Network Interface for CompactCom module Class 100100604: FA-Robot: Interface Card
269546	2D-TZ535-PN-SET Robot Network Interface Profinet IO Class 100100604: FA-Robot: Interface Card

Material	Description / Price List Text / Classification
269555	2D-TZ535-PN Network Interface for CompactCom Modul Profinet Class 100100604: FA-Robot: Interface Card
270236	1E-ST0408C-300 Robot Option Hand curl Tube with 4 x 4mm diameter Class 100100606: FA-Robot: Tube
271212	2F-YZ581 Encoder Distribution Unit 2F-YZ581 for robot controller Class 100100604: FA-Robot: Interface Card
273182	RH-FH / RH-FRH Connector Set RH-3/6/12/20F(R)H Hand connector set Class 100100607: FA-Robot: Other Option
273774	1F-DH-01 RH-3/6FH J1 Stopper Class 100100607: FA-Robot: Other Option
282409	2D-TZ535-EIP-SET Robot Network Interface EtherNet/IP Class 100100604: FA-Robot: Interface Card
313061	4F-SF002-01 Safety option unit MELFA SafePlus for CR800 Controller Class 100100604: FA-Robot: Interface Card
313062	CR800-MB Protection Box IP54 for CR800 Controller CR800-MB Class 100100607: FA-Robot: Other Option
313063	2F-DQ535 Network Interface for CompactCom module CC-Link IE Filed AB6709 Class 100100604: FA-Robot: Interface Card
313064	4F-FS002H-W200 Force Sensor Set 200N incl. Interface unit (2F-DQ561) for FR Series 4F-FS002H-W2 Class 100100607: FA-Robot: Other Option
313105	4F-FS002H-W1000 Force Sensor Set 1000N incl. Interface unit (2F-DQ561) for FR Series 4F-FS002H-W Class 100100607: FA-Robot: Other Option
313106	1F-10UCBL-41 Machine cable for CR800 controller, standard, 10m Class 100100605: FA-Robot: Cable
313107	1F-15UCBL-41 Machine cable for CR800 controller, standard, 15m Class 100100605: FA-Robot: Cable
313108	1F-10LUCBL-41 Machine cable for CR800 controller, high flexible, 10m Class 100100605: FA-Robot: Cable
313109	1F-15LUCBL-41 Machine cable for CR800 controller, high flexible, 15m Class 100100605: FA-Robot: Cable
324560	2F-DQ535-CCIEF-SET Network Interface SET CC-Link IE Field for CR800 Contr. Class 100100604: FA-Robot: Interface Card
324579	RT ToolBox3 Standard 1L-USB Robot Programming/Simulation Software, Win10/11, 1 Licence USB Class 100101206: FA-Software: Software Robot
324580	RT ToolBox3 Pro 1L-USB Robot Programming/Simulation Software, MELFA-Works, Win10/11, 1 Licence USB Class 100101206: FA-Software: Software Robot
325728	MELFA Smart Plus Card Pack A-Typ2F-DQ510 MELFA Smart Plus Card Pack A-Type Class 100100604: FA-Robot: Interface Card
325729	2F-DQ511 MELFA Smart Plus Card A-Type Class 100100604: FA-Robot: Interface Card
325730	1F-02UCBL-41 Machine cable for CR800 controller, standard, 2m Class 100100605: FA-Robot: Cable
327863	1F-20UCBL-41 Machine cable for CR800 controller, standard, 20m Class 100100605: FA-Robot: Cable
327864	1F-20LUCBL-41 Machine cable for CR800 controller, high flexible, 20m Class 100100605: FA-Robot: Cable

Material	Description / Price List Text / Classification
410994	1F-05UCBL-41 Machine cable for CR800 controller, standard, 5m Class 100100605: FA-Robot: Cable
603944	4F-SF003-05 Safety option unit MELFA SafePlus II Slim for CR800 Controller Class 100100604: FA-Robot: Interface Card
687249	R86TB Robot Teaching Box with 10,1" (Colour / Touch version) Class 100100602: FA-Robot: Teachingbox
736446	RT ToolBox3 Pro Robot Programming/Simulation Software, MELFA-Works, Win10/11, 1 Licence Email Class 100101206: FA-Software: Software Robot
736447	RT ToolBox3 Standard Robot Programming/Simulation Software, Win10/11, 1 Licence Email Class 100101206: FA-Software: Software Robot