

# Rubber insulated cable H07RN-F acc. to EN 50525-2-21



**conductor material:** bare copper  
**conductor construction:** fine stranded, class 5  
**insulation:** rubber (EPR) EI4  
**sheathing material:** rubber (CR) EM2  
**flame retardant:** VDE 0482-332-1-2/IEC 60332-1-2  
**oil resistant:** EN 60811-2-1  
**ozone resistant:** yes  
**maximum temperature at conductor:** 80 °C  
**max. operating temperature, fixed:** -25 - +80 °C  
**temperature, moved/during installation:** -25 - +80 °C

**nominal voltage U<sub>0</sub>:** 450 V  
**nominal voltage U:** 750 V  
**test voltage:** 2,5 kV  
**core identification:** colours acc. VDE 0293 (HD 308); more than 5 cores: gn-ye + numbers

**Application:** For use at medium mechanical stress in dry, wet and damp locations, as well as in free air. Also for fixed installation on plaster or machines. The cable is resistant to oil, UV radiation and ozone.



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

bending radius acc. DIN EN 50565-1

application	< 8 mm	8-12 mm	13-20 mm	> 20 mm
fixed installation	3D	3D	4D	4D
free movement	5D	5D	6D	6D
cable entry	5D	5D	6D	6D

Table: Technical characteristics H07RN-F

p/n	part name	R <sub>l</sub> [Ω/km]	I <sub>bl</sub> [A]	D <sub>A</sub> [mm]	F <sub>ZV</sub> [N]	Cu [kg/km]	G [kg/km]
050214	H07RN-F 01X1,5 SW	13,3	18	5,9	23	14,4	50
050358	H07RN-F 01X2,5 SW	7,98	22	6,6	38	24	80
050233	H07RN-F 01X4 SW	4,95	30	7,4	60	38	100
050205	H07RN-F 01X6 SW	3,3	38	8,1	90	58	130
050033	H07RN-F 01X10 SW	1,91	53	9,7	150	96	220
050036	H07RN-F 01X16 SW	1,21	71	11	240	154	280
050037	H07RN-F 01X25 SW	0,78	94	12,9	375	240	400
050038	H07RN-F 01X35 SW	0,554	117	14,6	525	336	520
050039	H07RN-F 01X50 SW	0,386	148	16,8	750	480	720
050041	H07RN-F 01X70 SW	0,272	185	18,9	1050	672	940

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050042	H07RN-F 01X95 SW	0,206	222	21,1	1425	912	1220
050034	H07RN-F 01X120 SW	0,161	260	23,1	1800	1152	1510
050035	H07RN-F 01X150 SW	0,129	300	25,6	2250	1440	1900
050111	H07RN-F 01X185 SW	0,106	341	27,9	2775	1776	2300
050113	H07RN-F 01X240 SW	0,0801	407	31	3600	2304	2900
050195	H07RN-F 01X300 SW	0,0641	468	34,1	4500	2880	3600
050408	H07RN-F 01X400 SW	0,0486	553	38,5	60	3840	4800
050983	H07RN-F 01X630 SW	0,0287	742	48,5	9450	6048	6849
050170	H07RN-F 02X1 SW	19,5	15	7,8	30	19	100
050043	H07RN-F 02X1,5 SW	13,3	18	8,7	45	29	130
050044	H07RN-F 02X2,5 SW	7,98	26	10,4	75	48	195
050228	H07RN-F 02X4 SW	4,95	34	12	120	77	280
050229	H07RN-F 02X6 SW	3,3	43	13,3	180	115	400
050880	H07RN-F 03X1 SW	19,5	15	8,4	45	29	90
050045	H07RN-F 03G1 SW	19,5	15	8,4	45	29	125
050881	H07RN-F 03X1,5 SW	13,3	16	9,4	68	43	155
050046	H07RN-F 03G1,5 SW	13,3	16	9,4	68	43	155
050882	H07RN-F 03X2,5 SW	7,98	21	11,1	113	72	235
050048	H07RN-F 03G2,5 SW	7,98	21	11,1	113	72	235
050114	H07RN-F 03G4 SW	4,95	29	12,9	180	115	310
050883	H07RN-F 03X6 SW	3,3	36	14,3	270	173	495
050115	H07RN-F 03G6 SW	3,3	36	14,3	270	173	400
050884	H07RN-F 03X10 SW	1,9	51	19,3	450	288	730
050101	H07RN-F 03G10 SW	1,91	51	19,3	450	288	810
050885	H07RN-F 03X16 SW	1,21	67	22,1	720	461	1020
050102	H07RN-F 03G16 SW	1,21	67	22,1	720	461	1000
050886	H07RN-F 03X25 SW	0,78	89	27	1125	720	1250
050240	H07RN-F 03G25 SW	0,78	89	27	1125	720	1250
050887	H07RN-F 03X35 SW	0,554	110	29,6	1575	1008	1733
050309	H07RN-F 03G35 SW	0,554	110	29,6	1575	1008	1850
050185	H07RN-F 03G50 SW	0,386	138	36	2250	1440	3790
050375	H07RN-F 04G1 SW	19,5	15	9,5	60	38	129
050050	H07RN-F 04G1,5 SW	13,3	16	10,4	90	58	190
050054	H07RN-F 04G2,5 SW	7,98	21	12,3	150	96	280
050057	H07RN-F 04G4 SW	4,95	29	14,2	240	154	380
050059	H07RN-F 04G6 SW	3,3	36	15,9	360	230	510
050888	H07RN-F 04X10 SW	1,91	51	21,3	600	384	940
050051	H07RN-F 04G10 SW	1,91	51	21,3	600	384	940
050889	H07RN-F 04X16 SW	1,21	67	24,2	960	614,4	1250
050053	H07RN-F 04G16 SW	1,21	67	24,2	960	614	1250
050890	H07RN-F 04X25 SW	0,78	89	29,3	1500	960	1850
050055	H07RN-F 04G25 SW	0,78	89	29,3	1500	960	1850
050056	H07RN-F 04G35 SW	0,554	110	33	2100	1344	2310
050058	H07RN-F 04G50 SW	0,386	138	38,2	3000	1920	3160
050060	H07RN-F 04G70 SW	0,272	172	43,2	4200	2688	4250
050061	H07RN-F 04G95 SW	0,206	222	49	5700	3648	5590
050052	H07RN-F 04G120 SW	0,161	238	53,6	7200	4608	6790
050187	H07RN-F 04G150 SW	0,129	273	58,7	9000	5760	8230
050196	H07RN-F 04G185 SW	0,106	309	65	11100	7104	9700
050837	H07RN-F 04G240 SW	0,0801	365	74	14400	9216	13120
050062	H07RN-F 05G1,5 SW	13,3	16	11,5	113	72	230
050065	H07RN-F 05G2,5 SW	7,98	21	13,5	188	120	340
051099	H07RN-F 05X2,5 SW			11,1		120	340
050067	H07RN-F 05G4 SW	4,95	29	15,9	300	192	470
050068	H07RN-F 05G6 SW	3,3	36	17,9	450	288	630
050063	H07RN-F 05G10 SW	1,91	51	22,3	750	480	1150
050064	H07RN-F 05G16 SW	1,21	67	26,9	1200	768	1540
050066	H07RN-F 05G25 SW	0,78	89	32,5	1875	1200	2200
050160	H07RN-F 05G35 SW	0,554	110	38	2625	1680	2700

p/n	part name	R <sub>l</sub> [Ω/km]	I <sub>bl</sub> [A]	D <sub>A</sub> [mm]	F <sub>zv</sub> [N]	Cu [kg/km]	G [kg/km]
050217	H07RN-F 05G50 SW	0,386	138	44,5	3750	2400	3950
050319	H07RN-F 05G70 SW	0,272	172	47	5250	3360	4893
050352	H07RN-F 05G95 SW	0,206	204	58	7125	4560	6600
050858	07RN-F 05G120 SW	0,161	238	61	9000	5760	8051
051080	07RN-F 05G150 SW	0,129	273	73	11250	7200	10500
050216	H07RN-F 07G1,5 SW	13,3	16	14,5	158	101	370
050219	H07RN-F 07G2,5 SW	7,98	21	17	263	168	520
051140	H07RN-F 07G4 SW	4,95	29	25,8	420	269	697
050215	H07RN-F 12G1,5 SW	13,3	16	18,3	270	175	450
050204	H07RN-F 12G2,5 SW	7,98	21	19	450	288	750
050218	H07RN-F 18G2,5 SW	7,98	21	26	675	432	1032
050220	H07RN-F 19G1,5 SW	13,3	16	23,5	428	274	800
050242	H07RN-F 19G2,5 SW	7,98	21	26,6	713	456	1068
050243	H07RN-F 24G1,5 SW	13,3	16	25,5	540	346	1000
050202	H07RN-F 24G2,5 SW	7,98	21	31,5	900	576	1380
050750	H07RN-F 25G1,5 SW	13,3	16	26	563	360	889
050861	H07RN-F 27G1,5 SW	13,3	16		607	390	973
050862	H07RN-F 27G2,5 SW	7,98	21		1012	648	1365

RI	conductor resistance
Ibl	ampacity (in air) (30°C)
DA	outer diameter
Fzv	tensile strength (during installation)
Cu	copper weight (ger)
G	weight