

H07RN-F - Flexible rubber cables



Application

Suitable for use in dry, humid or moist rooms and outdoor for transportable motors or machines on building sites or in agricultural works. Medium mechanical stresses, e.g. for industrial and agricultural workshop appliances, large boiling installations, heating plates, inspection lamps, electric tools such as drills, circular saws, domestic electric tools. Can be used in workshops having an explosive atmosphere. When a cable is used in the presence of explosive or flammable atmosphere, guidance should be respected with reference to EN 60079 series of specifications and guidance should be sought in selecting the suitable cables. Applicable in fixed installations e.g. on rough-cast in temporary buildings for accommodation purposes, also for wiring of constructional components in lifting appliances and machinery. Usage up to 1000 V A/C is permitted for fixed, protected installation (in conduit or in appliances) and also for motor connections of hoisting motors and the like. The cables are not suitable for applications involving permanent immersion in water. In other aspects the specifications of DIN VDE 0298 part 300 apply. Oil resistant to EN 60811-404. Resistant to ozone (EN 50363-1 for insulation and EN 50363-2-1 for the outer sheath).

Global data

Standard	EN 50525-2-21
Type designation	H07RN-F
Construction product regulation (CPR)	CPR acc. to DIN EN 50575, class and DoP-Code: see data table below DoP: see www.prysmiangroup.com/cpr

Design features

Conductor	Conductor material bare copper Conductor shape round (R) Conductor copper, finely stranded (F), Cl.5 in accordance with DIN VDE 0295 / IEC 60228
Insulation	Cross-linked rubber compound (EPR) EI4 according to EN 50363-1 Color code: up to 5 cores: colored in accordance with HD 308 (DIN VDE 0293-308)
Outer sheath	Vulcanized rubber compound, basis CPE, compound EM2 in accordance with EN 50363. Inner sheath: for multicore cables with wall thickness of sheath > 2,4mm and control cables: Vulcanized rubber compound, basis EPR, compound EM6 in accordance with EN 50363; colour of sheath: light. Color code: up to 5 cores: colored in accordance with HD 308 (DIN VDE 0293-308), from 6 cores: in accordance EN50525-1.
Available colours	Black
Marking	H07RN-F 3 G 1,5 450/750V

Electrical parameters

Rated voltage	450/750 V
Test voltage (AC)	2,5 kV

Chemical parameters

Performance against fire	EN 60332-1-2
UV resistant	Yes
Lead Free	Yes

Thermal parameters

Max. operating temperature of conductor	60 °C
Max. operating temperature of the conductor	90 °C
Max. operating temperature of conductor at short-circuit	250°C
Minimum installation temperature	Fix installation -40°C. Flexible installation -25°C

Number of cores x cross section	Diameter over insulation mm	Outer diameter nom. mm	Weight (approx.) kg/km	Conductor DC resistance at 20°C Ω/km	CPR fire class	CPR DoP-Code	Delivery length m
1x1,5	3.1	5.9	49	13.3	Eca	1003569	100, 500, 1000, >=2000
1x2,5	3.7	6.5	65	7.98	Eca	1003569	100, 500, 1000
1x4	4.4	7.4	89	4.95	Eca	1003569	100, 500, 1000
1x6	5	8.2	115	3.3	Eca	1003569	100, 500, 1000
1x10	6.4	10	180	1.91	Eca	1003569	100, 500, 1000
1x16	7.4	11.2	248	1.21	Eca	1003569	100, 500, 1000, >=2000
1x25	9	13	356	0.78	Eca	1003569	100, 500, 1000, >=2000
1x35	10.6	15	482	0.554	Eca	1003569	100, 500, 1000, >=2000
1x50	13	17.8	677	0.386	Eca	1003569	100, 500, 1000, >=2000
1x70	14.9	20.1	917	0.272	Eca	1003569	500, 1000, 1500
1x95	17.1	22.7	1175	0.206	Eca	1003569	>=2000
1x120	19.1	25.1	1475	0.161	Eca	1003569	500, 1000, >=2000
1x150	21.2	27.6	1819	0.129	Eca	1003569	1000
1x185	23.3	30.1	2166	0.106	Eca	1003569	500, 1000
1x240	26.4	33.4	2791	0.0801	Eca	1003569	500, 1000
1x300	29.4	36.6	3430	0.0641	Eca	1003569	500, 1000
2x1,0	2.8	8.1	87	19.5	Eca	1003568	50, 100, 500, 1000, >=2000
2x1,5	3.1	9.4	118	13.3	Eca	1003568	100, 500, 1000
2x2,5	3.7	11.2	172	7.98	Eca	1003568	100, 500, 1000, >=2000
2x4	4.4	13	238	4.95	Eca	1003568	100, 500, 1000, >=2000
2x6	5	13.7	285	3.3	Eca	1003568	100, 500, 1000, >=2000
2x10	6.4	18.7	540	1.91	Eca	1003568	100, 500, 1000
2x16	7.4	21.2	731	1.21	Eca	1003568	100, 500, 1000
2x25	9	24.9	1049	0.78	Eca	1003568	100, 500, 1000
2x35	10.6	28.5	1395	0.554	Eca	1003568	100, 500, 1000
2x50	13	33.8	1971	0.386	Eca	1003568	100, 500, 1000
2x70	14.9	38.4	2640	0.272	Eca	1003568	100, 500, 1000
2x95	17.1	43.6	3395	0.206	Eca	1003568	100, 500, 1000
3G1,0	2.8	8.8	105	19.5	Eca	1003568	100, 500, 1000, >=2000
3G1,5	3.1	9.8	134	13.3	Eca	1003568	25, 50, 100, 500, 1000, >=2000
3G2,5	3.7	11.5	192	7.98	Eca	1003568	100, 500, 1000, >=2000
3G4	4.4	13.2	267	4.95	Eca	1003568	100, 500, 1000, >=2000
3G6	5	14.7	351	3.3	Eca	1003568	100, 500, 1000, >=2000
3G10	6.4	20	667	1.91	Eca	1003568	100, 500, 1000, >=2000
3G16	7.4	22.7	912	1.21	Eca	1003568	100, 500, 1000, >=2000
3G25	9	26.7	1317	0.78	Eca	1003568	100, 500, 1000

Number of cores x cross section	Diameter over insulation mm	Outer diameter nom. mm	Weight (approx.) kg/km	Conductor DC resistance at 20°C Ω/km	CPR fire class	CPR DoP-Code	Delivery length m
3G35	10.6	30.7	1770	0.554	Eca	1003568	100, 500, 1000
3G50	13	36.3	2495	0.386	Eca	1003568	100, 500, 1000
3G70	14.9	41.1	3338	0.272	Eca	1003568	100, 500, 1000
3G95	17.1	46.8	4312	0.206	Eca	1003568	500
3G120	19.1	51.6	5375	0.161	Eca	1003568	100, 500, 1000
3G150	21.2	56.8	6621	0.129	Eca	1003568	100, 500, 1000
3G185	23.2	62.1	7896	0.106	Eca	1003568	100, 500, 1000
4G1,0	2.8	9.7	130	19.5	Eca	1003568	100, 500, 1000, >=2000
4G1,5	3.1	10.7	166	13.3	Eca	1003568	50, 100, 500, 1000, >=2000
4G2,5	3.7	12.6	240	7.98	Eca	1003568	50, 100, 500, 1000, >=2000
4G4	4.4	14.5	335	4.95	Eca	1003568	50, 100, 500, 1000, >=2000
4G6	5	16.3	448	3.3	Eca	1003568	100, 500, 1000, >=2000
4G10	6.4	21.9	820	1.91	Eca	1003568	100, 500, 1000, >=2000
4G16	7.4	24.8	1127	1.21	Eca	1003568	100, 500, 1000, >=2000
4G25	9	29.6	1663	0.78	Eca	1003568	100, 500, 1000, 1500
4G35	10.6	34	2235	0.554	Eca	1003568	50, 100, 500, 1000, 1500
4G50	13	40.2	3149	0.386	Eca	1003568	500, 1000
4G70	14.9	45.7	4245	0.272	Eca	1003568	500
4G95	17.1	52.3	5522	0.206	Eca	1003568	500
4G120	19.1	57.2	6826	0.161	Eca	1003568	400, 500
4G150	21.2	63.2	8477	0.129	Eca	1003568	300
4G185	23.2	69.2	10131	0.106	Eca	1003568	300
5G1,0	2.8	10.7	159	19.5	Eca	1003568	100, 500, 1000
5G1,5	3.1	11.8	201	13.3	Eca	1003568	50, 100, 500, 1000, >=2000
5G2,5	3.7	13.8	290	7.98	Eca	1003568	25, 50, 100, 500, 1000, >=2000
5G4	4.4	16.2	412	4.95	Eca	1003568	50, 100, 500, 1000, >=2000
5G6	5	18.2	550	3.3	Eca	1003568	1000
5G10	6.4	24.1	990	1.91	Eca	1003568	100, 500, 1000, >=2000
5G16	7.4	27.5	1379	1.21	Eca	1003568	25, 100, 500, 1000, 1500
5G25	9	32.8	2029	0.78	Eca	1003568	100, 500, 1000, 1500
5G35	10.6	37.4	2708	0.554	Eca	1003568	100, 500, 1000
5G50	13	44.7	3899	0.386	Eca	1003568	500, 700
5G70	14.9	50.9	5273	0.272	Eca	1003568	500
5G95	17.1	57.9	6815	0.206	Eca	1003568	400
5G120	19.1	63.2	8406	0.161	Eca	1003568	100, 500, 1000
6G1,5	3.1	14.1	285	13.3	Eca	1003568	100, 500, 1000
6G2,5	3.7	16.3	400	7.98	Eca	1003568	100, 500, 1000
6G4	4.4	18.9	557	4.95	Eca	1003568	1000

Number of cores x cross section	Diameter over insulation mm	Outer diameter nom. mm	Weight (approx.) kg/km	Conductor DC resistance at 20°C Ω/km	CPR fire class	CPR DoP-Code	Delivery length m
7G1,5	3.1	15.2	329	13.3	Eca	1003568	500, 1000
7G2,5	3.7	17.6	458	7.98	Eca	1003568	500, 1000
7G4	4.4	20.6	652	4.95	Eca	1003568	100, 500, 1000
12G1,5	3.1	18.5	489	13.3	Eca	1003568	100, 500, 1000
12G2,5	3.7	21.4	691	7.98	Eca	1003568	100, 500, 1000
12G4	4.4	25.1	993	4.95	Eca	1003568	100, 500, 1000
18G1,5	3.1	21.6	683	13.3	Eca	1003568	100, 500, 1000
18G2,5	3.7	25.2	981	7.98	Eca	1003568	100, 500, 1000
18G4	4.4	29.6	1406	4.95	Eca	1003568	100, 500, 1000
24G1,5	3.1	25.3	899	13.3	Eca	1003568	100, 500, 1000
24G2,5	3.7	29.7	1303	7.98	Eca	1003568	100, 500, 1000
36G1,5	3.1	28.9	1241	13.3	Eca	1003568	100, 500, 1000
36G2,5	3.7	34.1	1821	7.98	Eca	1003568	100, 500, 1000