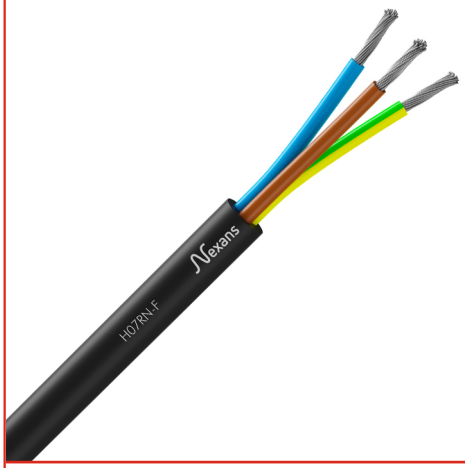
H07RN-F

Contact
Building Products Information
contact.fr@nexans.com

Industrial flexible rubber cable range with an insulation and sheath in elastomers. Cables for heavy duty uses, Oil resistant and Flame retardancy according to IEC/EN 60332-1-2 standard.



DESCRIPTION

Application

H07RN-F flexible cable is intended for installations with moving equipments, electric appliances and for building sites also for motors in lifting appliances -machine tools, etc ... The cable may be rated up to 0,6/1 kV where the installation has built-in protection.

This range of cables is recommended in dry, damp or wet workshops, indoor and outdoor, for example in explosive atmosphere(as ATEX) according to regulation of the country and with some additional recommendations and also for industrial devices and agricultures workshops ...

This cable can be used in refrigerating installations.

Installation

This cable can be installed in open air or be buried but with extra mechanical protection.

Conductors laid up

Assembled conductors.

Nota

Max continuous operating conductor temperature in normal use :

+60°C (in every case of mobile installation)

+85°C (in fixed and protected installation)

+200°C (in short circuit)

Permissible current rating is measured for an ambient temperature of 30°C and a maximum operating and conductor temperature of 60°C . For other temperature please refer to correction factors .

European Directive RoHS : Compliant

SY+ : French directive for lead free materials in materials.

STANDARDS

International EN 50525-2-21; HD 22.4; HD 516; IEC 60245-4 type 66

National NF C32-102-4

Lead free
Yes

Rated Voltage Uo/U (Um)
450/750 V

Mechanical resistance to impacts
Very good

Cable flexibility
Flexible

Chemical resistance
Accidental

Water proof
Good

Max.conductor temp.in service
85 °C

Oil resistance
Yes

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CHARACTERISTICS

Construction characteristics	
Conductor material	Bare annealed copper stranded
Conductor shape	Circular
Insulation	Cross-linked synthetic elastomer type EI 4
Lead free	Yes
Outer sheath	Cross-linked synthetic elastomer type EM 2
Sheath colour	Black
Electrical characteristics	
Phase reactance 50 Hz - trefoil formation	- Ohm/km
Rated Voltage Uo/U (Um)	450/750 V
Mechanical characteristics	
Mechanical resistance to impacts	Very good
Cable flexibility	Flexible
Usage characteristics	
Chemical resistance	Accidental
Water proof	Good
Max. conductor temperature in service	85 °C
Oil resistance	Yes
Operating temperature, range	-25 ... 55 °C
RoHS compliant	Yes
Short-circuit max. conductor temperature	200 °C

SINGLE CORE

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
10	77	3.4	11.9	182	1.91	10056059
16	102	2.2	13.4	256	1.21	10056087
25	136	1.4	15.8	369	0.78	10055844
35	168	1.04	17.9	482	0.554	10056084
50	203	0.75	20.6	662	0.386	10055845
70	254	0.56	23.3	895	0.272	10056086
95	315	0.44	26.0	1144	0.206	10056088
120	363	0.36	28.6	1430	0.161	10056089
150	416	0.31	31.4	1740	0.129	10056129

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185	475	0.28	34.4	2160	0.106	10044024
240	559	0.23	38.3	2730	0.0801	10044035
300	637	0.2	41.9	3480	0.0641	10044025
500	833	0.16	52.0	5700	0.0384	10056493

TWO CORES

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	23	27.0	11.0	111	13.3	10056097
2.5	32	16.2	13.1	161	7.98	10056187
4	43	10.1	15.1	238	4.95	10056131

THREE CORES

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	23	27.0	11.9	134	13.3	10056797
2.5	32	16.2	14.0	195	7.98	10056143
4	43	10.1	16.2	290	4.95	10056120
6	56	7.0	18.0	346	3.3	10055972
10	77	4.0	24.2	663	1.91	10056144
16	102	2.5	27.6	924	1.21	10056188
25	136	1.7	33.0	1345	0.78	10044017
35	168	1.21	37.1	1760	0.554	10056207
50	203	0.87	42.9	2390	0.386	10056092
70	262	0.64	48.3	3110	0.272	10056093
95	320	0.5	54.0	4170	0.206	10056191

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FOUR CORES

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1.5	21	23.3	13.1	165	13.3	10056102
2.5	29	14.0	15.5	245	7.98	10056137
4	38	8.71	18.0	357	4.95	10056051
6	50	5.84	20.0	443	3.3	10056046
10	68	3.42	26.5	818	1.91	10056109
16	92	2.2	30.1	1150	1.21	10056146
25	122	1.44	36.6	1700	0.78	10055848
35	150	1.04	41.1	2180	0.554	10055849
50	182	0.75	47.5	3030	0.386	10044032
70	232	0.56	54.0	3990	0.272	10056155
95	281	0.44	61.0	5360	0.206	10056189
120	325	0.36	66.0	6500	0.161	10056247
150	373	0.31	73.0	7990	0.129	10056211
150	373	0.31	73.0	7990	0.129	10278420
185	425	0.28	80.0	9910	0.106	10056248

FIVE CORES

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	21	23.6	14.4	238	13.3	10056106
2.5	29	14.0	17.0	297	7.98	10056126
6	50	5.84	22.2	557	3.3	10056154
10	68	3.43	29.1	1001	1.91	10056163
16	92	2.2	33.3	1430	1.21	10056158
25	122	1.44	40.4	2096	0.78	10056107
35	153	1.04	45.1	2716	0.554	10044018
50	187	1.04	53.0	3809	0.386	10056190
70	241	0.56	60.0	5087	0.272	10056218
95	293	0.44	67.0	6637	0.206	10056309

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SEVEN CORES

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1.5	16	23.3	18.7	349	13.3	10056165
2.5	19	13.9	21.8	487	7.98	10056156
4	31	8.7	25.8	715	4.95	10056358

TWELVE CORES

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	11	23.3	22.14	510	13.3	10056182
2.5	15	13.9	26.2	705	7.98	10044033

SELLING AND DELIVERY INFORMATION

Marking
USE <'HAR> H07RN-F N (x or G) S mm²
N = number of cores

G = with Green-Yellow
x = without Green-Yellow
S = section in mm²

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