

# **Nexans H07RN-F**



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### 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.

### **STANDARDS**

Product EN 50525-2-21; HD 22.4; HD 516; IEC 60245-4 type 66; NF C32-102-4

### **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**

#### 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  $30^{\circ}$ C and a maximum operating and conductor temperature of  $60^{\circ}$ C . For other temperature please refer to correction factors .

European Directive RoHS: Compliant

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



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



Mechanical resistance to impacts Very good



Cable flexibility Flexible



Water proof Good



Max.conductor temp.in service



Oil resistance Yes



RoHS compliant Yes



## **CHARACTERISTICS**

Construction characteristics	
Conductor shape	Circular
Insulation	Cross-linked synthetic elastomer type EI 4
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	
Water proof	Good
Max. conductor temperature in service	85 °C
Oil resistance	Yes
RoHS compliant	Yes

## **SINGLE CORE**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.	
10	77	3.4	9.5	11.9	182	1.91	10056059	
16	102	2.2	10.8	13.4	256	1.21	10056087	
25	136	1.4	12.7	15.8	369	0.78	10055844	
35	168	1.04	14.3	17.9	482	0.554	10056084	
50	203	0.75	16.5	20.6	662	0.386	10055845	
70	254	0.56	18.6	23.3	895	0.272	10056086	
95	315	0.44	20.8	26.0	1144	0.206	10056088	
120	363	0.36	22.8	28.6	1430	0.161	10056089	
150	416	0.31	25.2	31.4	1740	0.129	10056129	
185	475	0.28	27.6	34.4	2160	0.106	10044024	
240	559	0.23	30.6	38.3	2730	0.0801	10044035	
300	637	0.2	33.5	41.9	3480	0.0641	10044025	
500	833	0.16	41.3	52.0	5700	0.0384	10056493	



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Mechanical resistance to impacts
Very good



Cable flexibility Flexible



Water proof **Good** 



Max.conductor temp.in service 85 °C



Oil resistance Yes



RoHS compliant **Yes** 



## **TWO CORES**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.	
1.5	23	27.0	8.5	11.0	111	13.3	10056097	
2.5	32	16.2	10.2	13.1	161	7.98	10056187	
4	43	10.1	11.8	15.1	238	4.95	10056131	

## **THREE CORES**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	23	27.0	9.2	11.9	134	13.3	10056797
2.5	32	16.2	10.9	14.0	195	7.98	10056143
4	43	10.1	12.7	16.2	290	4.95	10056120
6	56	7.0	14.1	18.0	346	3.3	10055972
10	77	4.0	19.1	24.2	663	1.91	10056144
16	102	2.5	21.8	27.6	924	1.21	10056188
25	136	1.7	26.1	33.0	1345	0.78	10044017
35	168	1.21	29.3	37.1	1760	0.554	10056207
50	203	0.87	34.1	42.9	2390	0.386	10056092
70	262	0.64	38.4	48.3	3110	0.272	10056093
95	320	0.5	43.3	54.0	4170	0.206	10056191

## **FOUR CORES**

section rating open air single phase diam. diam. [kg/km] [Ohm/km] [mm] [mm]		
1.5 21 23.3 10.2 13.1 165 13.3	10056102	
2.5 29 14.0 12.5 15.5 245 7.98	10056137	
4 38 8.71 14.0 18.0 357 4.95	10056051	
6 50 5.84 15.7 20.0 443 3.3	10056046	
10 68 3.42 20.8 26.5 818 1.91	10056109	
16 92 2.2 23.8 30.1 1150 1.21	10056146	
25 122 1.44 28.9 36.6 1700 0.78	10055848	



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



Mechanical resistance to impacts
Very good



Cable flexibility Flexible



Water proof **Good** 



Max.conductor temp.in service 85 °C



Oil resistance Yes



RoHS compliant **Yes** 



Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
35	150	1.04	32.5	41.1	2180	0.554	10055849
50	182	0.75	37.7	47.5	3030	0.386	10044032
70	232	0.56	42.7	54.0	3990	0.272	10056155
95	281	0.44	48.4	61.0	5360	0.206	10056189
120	325	0.36	53.0	66.0	6500	0.161	10056247
150	373	0.31	58.0	73.0	7990	0.129	10056211
150	373	0.31	58.0	73.0	7990	0.129	10278420
185	425	0.28	64.0	80.0	9910	0.106	10056248

## **FIVE CORES**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.
1.5	21	23.6	11.2	14.4	238	13.3	10056106
2.5	29	14.0	13.3	17.0	297	7.98	10056126
6	50	5.84	17.5	22.2	557	3.3	10056154
10	68	3.43	22.9	29.1	1001	1.91	10056163
16	92	2.2	26.4	33.3	1430	1.21	10056158
25	122	1.44	32.0	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	54.0	67.0	6637	0.206	10056309

## **SEVEN CORES**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.	
1.5	16	23.3	14.7	18.7	349	13.3	10056165	
2.5	19	13.9	17.1	21.8	487	7.98	10056156	
4	31	8.7	20.3	25.8	715	4.95	10056358	



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Mechanical resistance to impacts
Very good



Cable flexibility Flexible



Water proof **Good** 



Max.conductor temp.in service 85 °C



Oil resistance Yes



RoHS compliant **Yes** 



## **TWELVE CORES**

Cross section [mm²]	Perm. current rating open air [A]	Voltage drop, single phase [V/A.km]	Min. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]	Max. linear resistance, phase conductor [Ohm/km]	Nexans Ref.	
1.5	11	23.3	17.6	22.14	510	13.3	10056182	
2.5	15	13.9	20.6	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 mm<sup>2</sup>







Mechanical resistance to impacts Very good



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Cable flexibility Flexible



Water proof Good

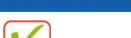


Max.conductor temp.in service 85 °C

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Oil resistance Yes



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RoHS RoHS compliant Yes