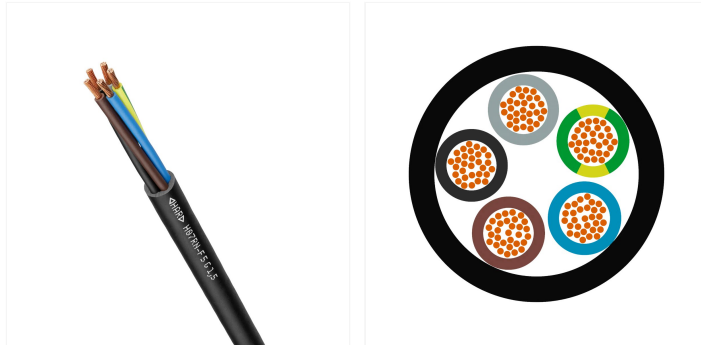


H07RN-F 4G4**Article No.:** 16001063

Power and control cable; 4G4; HAR-certified; U_0/U : 450/750 V; Rubber; Core identification: Colours; Flexible

**Details****Benefits**

- Made according to harmonised European type H07RN-F, with <HAR> testing mark for proven reliability and quality.
- <HAR> cables are widely accepted and can be used in Europe.
- Single-core cables of this type can be used for short circuit-proof and short-to-ground-proof installation.
- Versatile use in various applications and environments.

Application

- For use with hand-held or power supply devices as well as commercial and agricultural machine tools.
- For fixed or free installation or installation in protective conduits.
- In the case of fixed and protected installation, operation is also possible up to 1000 V.
- Can be used in dry and wet conditions, and especially in harsh and oily environments.
- Withstands heavy mechanical stress.
- Suitable for outdoor use, subject to the temperature range.
- Flexible use at temperatures down to -25°C.

Notes

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

If applicable, the prices are solid metal prices without surcharges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive further values, such as tolerances, upon request if they are available and have been released for publication.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

Trade product, not a LAPP product.

Remarks

Trade product, not a Lapp product.

Technical Data

General information

Product type	Power and control cable
Weight	395 kg/km
Copper index	153.6 kg/km
Industry segment	<ul style="list-style-type: none"> Agricultural & Farm Machinery Assembly Machines Automotive Construction Machinery Power Grids Food & Beverage Healthcare & Pharma HVAC Intralogistics Lifts & Elevators Machine tools Packaging Processing Industries Robotics Rolling Stock Ships & boats Renewable Energy: Solar

Electrical parameters

Nominal voltage	U_0/U : 450/750 V AC rms according to IEC
Test voltage	2.5 kV
Current rating according to	VDE 0298-4
Max. conductor resistance at 20°C	4.95 Ω /km

Product design

Harmonised design	H07RN-F
Cable dimension	4G4
Nominal conductor cross-section (metric)	4 mm ²
Conductor material	Bare copper
Conductor design	IEC 60228 class 5: fine-wire
Including protective earth	Yes
Number of cores	4
Shielded	No
Min. outer diameter	14 mm
Max. outer diameter	17.9 mm
Shape of cable	Round
Core insulation basic material	Rubber
Basic material of outer sheath	Rubber
Outer sheath colour	black
Core identification	Colours
Conductor colour code	VDE 0293-308

Product features

Application area	Flexible Fixed installation
For torsional load	No
Minimum bending radius, stationary	4 x outer diameter

Minimum bending radius in mm, fixed installation	71.6 mm
Minimum bending radius, occasionally flexing	5 x outer diameter
Minimum bending radius in mm, occasionally flexing	89.5 mm
Temperature, fixed installation	-40 °C to 60 °C max. conductor temperature:
max. conductor temperature, occasionally moved	-25 °C to 60 °C max. conductor temperature:
Installation temperature min.	-25 °C
Storage temperature min.	-25 °C
Max. storage temperature	40 °C
Flame-retardant	Yes
Flame retardance according to	IEC 60332-1-2
UV-resistant	Yes
UV-resistant according to	EN 50525-1 (cables with a black sheath are suitable for permanent outdoor use)
Halogenfree	No
Oil-resistant	Yes
Oil resistance according to	EN 50363-2-1
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L
Permanently immersible in water	No

Certifications and standards

CE marked	Yes
EAC-certified	Yes
EAC certification number	EA3C RU C-DE.A1064.B.00091/19, EA3C RU C-DE.A1064.B.00110/20
UL recognised	No
UL listed	No
cUR recognized	No
cUL listed	No
CSA certified	No

VDE certified	No
HAR-certified	Yes
Product standard DIN / EN	EN 50525-2-21
CPR fire class	Eca
Flame retardance tested according to UN /ECE-R118	No

H07RN-F

Article No.	Name	Number of cores	Including protective earth	Nominal conductor cross-section (metric)	Min. outer diameter	Max. outer diameter	Copper index	Weight
1600086	H07RN-F 5G95	5	Yes	95 mm ²	54 mm	67 mm	4564.8 kg/km	6600 kg/km
1600088	H07RN-F 4G1	4	Yes	1 mm ²	9.2 mm	11.9 mm	38.4 kg/km	129 kg/km
16000883	H07RN-F 4G150	4	Yes	150 mm ²	58 mm	73 mm	5760 kg/km	8320 kg/km
1600096	H07RN-F 1X1,5	1	No	1.5 mm ²	5.7 mm	7.1 mm	14.4 kg/km	59 kg/km
1600097	H07RN-F 1X4	1	No	4 mm ²	7.2 mm	9 mm	38.4 kg/km	99 kg/km
1600098	H07RN-F 1X6	1	No	6 mm ²	7.9 mm	9.8 mm	57.6 kg/km	130 kg/km
1600099	H07RN-F 1X2,5	1	No	2.5 mm ²	6.3 mm	7.9 mm	24 kg/km	72 kg/km
1600103	H07RN-F 3G1,5	3	Yes	1.5 mm ²	9.2 mm	11.9 mm	43.2 kg/km	130 kg/km
16001043	H07RN-F 5G1,5	5	Yes	1.5 mm ²	11.2 mm	14.4 mm	72 kg/km	240 kg/km
16001053	H07RN-F 4G2,5	4	Yes	2.5 mm ²	12.1 mm	15.5 mm	96 kg/km	290 kg/km
16001063	H07RN-F 4G4	4	Yes	4 mm ²	14 mm	17.9 mm	153.6 kg/km	395 kg/km
16001073	H07RN-F 4G6	4	Yes	6 mm ²	15.7 mm	20 mm	230.4 kg/km	475 kg/km
16001083	H07RN-F 4G10	4	Yes	10 mm ²	20.9 mm	26.5 mm	384 kg/km	1060 kg/km
16001093	H07RN-F 5G10	5	Yes	10 mm ²	22.9 mm	29.1 mm	480 kg/km	945 kg/km
16001103	H07RN-F 4G16	4	Yes	16 mm ²	23.8 mm	30.1 mm	614.4 kg/km	1345 kg/km
16001113	H07RN-F 5G16	5	Yes	16 mm ²	26.4 mm	33.3 mm	768 kg/km	1680 kg/km
16001123	H07RN-F 4G25	4	Yes	25 mm ²	28.9 mm	36.6 mm	960 kg/km	1995 kg/km
16001133	H07RN-F 5G25	5	Yes	25 mm ²	32 mm	40.4 mm	1200 kg/km	2470 kg/km
16001143	H07RN-F 4G35	4	Yes	35 mm ²	32.5 mm	41.4 mm	1344 kg/km	2645 kg/km
16001153	H07RN-F 4G50	4	Yes	50 mm ²	37.7 mm	47.5 mm	1920 kg/km	3635 kg/km
16001163	H07RN-F 4G70	4	Yes	70 mm ²	42.7 mm	54 mm	2688 kg/km	4830 kg/km
1600117	H07RN-F 3G1	3	Yes	1 mm ²	8.3 mm	10.7 mm	28.8 kg/km	130 kg/km
1600118	H07RN-F 3G2,5	3	Yes	2.5 mm ²	10.9 mm	14 mm	72 kg/km	235 kg/km
1600119	H07RN-F 3G4	3	Yes	4 mm ²	12.7 mm	16.2 mm	115.2 kg/km	320 kg/km
1600120	H07RN-F 3G6	3	Yes	6 mm ²	14.1 mm	18 mm	172.8 kg/km	360 kg/km
1600121	H07RN-F 3G10	3	Yes	10 mm ²	19.1 mm	24.2 mm	288 kg/km	880 kg/km
1600122	H07RN-F 3G16	3	Yes	16 mm ²	21.8 mm	27.6 mm	460.8 kg/km	1090 kg/km
16001233	H07RN-F 4G1,5	4	Yes	1.5 mm ²	10.2 mm	13.1 mm	57.6 kg/km	180 kg/km
1600124	H07RN-F 3G35	3	Yes	35 mm ²	29.3 mm	37.1 mm	1008 kg/km	1910 kg/km
1600126	H07RN-F 5G50	5	Yes	50 mm ²	41.8 mm	53 mm	2400 kg/km	4050 kg/km

Article No.	Name	Number of cores	Including protective earth	Nominal conductor cross-section (metric)	Min. outer diameter	Max. outer diameter	Copper index	Weight
16001283	H07RN-F 4G95	4	Yes	95 mm ²	48.4 mm	61 mm	3648 kg/km	6320 kg/km
16001293	H07RN-F 5G2,5	5	Yes	2.5 mm ²	13.3 mm	17 mm	120 kg/km	300 kg/km
16001303	H07RN-F 5G4	5	Yes	4 mm ²	15.6 mm	19.9 mm	192 kg/km	485 kg/km
16001313	H07RN-F 5G6	5	Yes	6 mm ²	17.5 mm	22.2 mm	288 kg/km	560 kg/km
16001323	H07RN-F 4G120	4	Yes	120 mm ²	53 mm	66 mm	4608 kg/km	6830 kg/km
16001363	H07RN-F 5G35	5	Yes	35 mm ²	35.7 mm	45.1 mm	1680 kg/km	2810 kg/km
1600141	H07RN-F 4G185	4	Yes	185 mm ²	64 mm	80 mm	7104 kg/km	9800 kg/km
1600148	H07RN-F 12G1,5	12	Yes	1.5 mm ²	17.6 mm	22.4 mm	172.8 kg/km	516 kg/km
1600151	H07RN-F 7G1,5	7	Yes	1.5 mm ²	14.7 mm	18.7 mm	100.8 kg/km	385 kg/km
1600152	H07RN-F 7G2,5	7	Yes	2.5 mm ²	17.1 mm	21.8 mm	168 kg/km	520 kg/km
1600154	H07RN-F 12G2,5	12	Yes	2.5 mm ²	20.6 mm	26.2 mm	288 kg/km	810 kg/km
1600156	H07RN-F 19G2,5	19	Yes	2.5 mm ²	25.5 mm	36.4 mm	456 kg/km	1200 kg/km
1600157	H07RN-F 24G2,5	24	Yes	2.5 mm ²	28.8 mm	36.4 mm	576 kg/km	1298 kg/km
1600161	H07RN-F 7G4	7	Yes	4 mm ²	20.1 mm	25.5 mm	268.8 kg/km	610 kg/km
1600166	H07RN-F 24G1,5	24	Yes	1.5 mm ²	24.3 mm	30.7 mm	345.6 kg/km	882 kg/km
1600175	H07RN-F 1X185	1	No	185 mm ²	27.6 mm	34.4 mm	1776 kg/km	2274 kg/km
1600177	H07RN-F 1X240	1	No	240 mm ²	30.6 mm	38.3 mm	2304 kg/km	2955 kg/km
1600183	H07RN-F 4G240	4	Yes	240 mm ²	72 mm	91 mm	9216 kg/km	12800 kg/km
1600186	H07RN-F 2X4	2	No	4 mm ²	11.8 mm	15.1 mm	76.8 kg/km	270 kg/km
1600187	H07RN-F 2X2,5	2	No	2.5 mm ²	10.2 mm	13.1 mm	48 kg/km	195 kg/km
1600189	H07RN-F 1X70	1	No	70 mm ²	18.6 mm	23.3 mm	672 kg/km	1090 kg/km
1600190	H07RN-F 1X95	1	No	95 mm ²	20.8 mm	26 mm	912 kg/km	1405 kg/km
1600191	H07RN-F 1X150	1	No	150 mm ²	25.2 mm	31.4 mm	1440 kg/km	1887 kg/km
1600193	H07RN-F 1X35	1	No	35 mm ²	14.3 mm	17.9 mm	336 kg/km	605 kg/km
1600194	H07RN-F 1X10	1	No	10 mm ²	9.5 mm	11.9 mm	96 kg/km	230 kg/km
1600195	H07RN-F 1X16	1	No	16 mm ²	10.8 mm	13.4 mm	153.6 kg/km	320 kg/km
1600196	H07RN-F 1X25	1	No	25 mm ²	12.7 mm	15.8 mm	240 kg/km	450 kg/km
1600197	H07RN-F 1X50	1	No	50 mm ²	16.5 mm	20.6 mm	480 kg/km	825 kg/km
1600198	H07RN-F 1X120	1	No	120 mm ²	22.8 mm	28.6 mm	1152 kg/km	1745 kg/km
1600199	H07RN-F 2X1,5	2	No	1.5 mm ²	8.5 mm	11 mm	29 kg/km	135 kg/km

Article No.	Name	Number of cores	Including protective earth	Nominal conductor cross-section (metric)	Min. outer diameter	Max. outer diameter	Copper index	Weight
1600259	H07RN-F 19G1,5	19	Yes	1.5 mm ²	20.7 mm	30.7 mm	273.6 kg/km	800 kg/km
1600263	H07RN-F 25G1,5	25	Yes	1.5 mm ²	25.1 mm	35.2 mm	360 kg/km	920 kg/km
30015435	H07RN-F 1X300	1	No	300 mm ²	33.5 mm	41.9 mm	2880 kg/km	3479 kg/km
38102227	H07RN-F 5G70	5	Yes	70 mm ²	47.5 mm	60 mm	3360 kg/km	6449 kg/km

V1.1