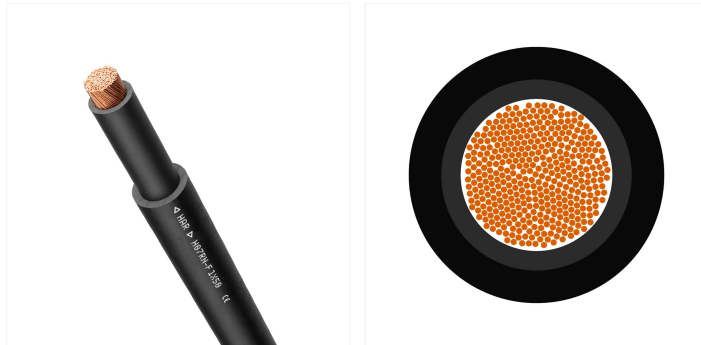


## H07RN-F 1X70

**Article No.:** 1600189

Power and control cable; 1X70; HAR-certified;  $U_0/U$ : 450/750 V; Rubber; Flexible



### Details

#### Benefits

- Made according to harmonized 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-conductor 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 cable conduits.
- In the case of fixed and protected installation, operation is also possible up to 1000 V.
- Can be used in dry, wet 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 additional charges and VAT. Sales only to business customers.

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional 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
Copper index	4515.16 lb/10000 ft
Industry segment	<ul style="list-style-type: none"> <li>Agricultural &amp; Farm Machinery</li> <li>Assembly Machines</li> <li>Automotive</li> <li>Construction Machinery</li> <li>Energy</li> <li>Food &amp; Beverage</li> <li>Healthcare &amp; Pharma</li> <li>Heating, Ventilation, Air Conditioning &amp; Refrigeration</li> <li>Intralogistics &amp; Material handling</li> <li>Lifts &amp; Elevators</li> <li>Machine Tools</li> <li>Packaging</li> <li>Process Industry</li> <li>Robotics</li> <li>Rolling Stock</li> <li>Ships &amp; boats</li> <li>Solar</li> </ul>

**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

**Product design**

Harmonized product type	H07RN-F
Cable dimension	1X70
Nominal cross section conductor (mm <sup>2</sup> )	70 mm <sup>2</sup>
Conductor material	Bare Copper
Conductor design	IEC 60228 class 5: fine-wire
Including protective ground	No
Number of cores	1
Shielded	No
Min. outer diameter	0.732 in
Max. outer diameter	0.917 in
Cable form	Round
Core insulation base material	Rubber
Insulation color	black
Basic material of outer jacket	Rubber
Outer jacket color	black

**Product features**

Application area	Flexible Fixed Installation
For torsional load	No
Protected against short circuits and earth faults	Yes
Minimum bending radius, stationary	4 x outer diameter
Minimum bending radius in inch, fixed installation	3.669 in
Minimum bending radius, occasionally moved	6 x outer diameter

Minimum bending radius in mm, occasionally moved	5.504 in
Temperature, fixed installation	-40 °C to 60 °C max. conductor temperature
Temperature, occasionally moved	-25 °C to 60 °C max. conductor temperature
Installation temperature min.	-25 °C
Storage temperature max.	-25 °C
Storage temperature maximum	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 jacket 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 marking	Yes
EAC certified	Yes
EAC certification number	EAЭC RU C-DE.AЮ64.B.00091/19, EAЭC RU C-DE.AЮ64.B.00110/20
UL recognized	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
Resistance to flame propagation tested according to UN/ECE-R118	No

---

**H07RN-F**

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm <sup>2</sup> )	Min. outer diameter	Max. outer diameter	Copper index
1600086	H07RN-F 5G95	5	Yes	95 mm <sup>2</sup>	2.126 in	2.638 in	30674.03 lb/10000 ft
16000883	H07RN-F 4G150	4	Yes	150 mm <sup>2</sup>	2.283 in	2.874 in	38705.4 lb/10000 ft
1600096	H07RN-F 1X1,5	1	No	1.5 mm <sup>2</sup>	0.224 in	0.28 in	96.75 lb/10000 ft
1600097	H07RN-F 1X4	1	No	4 mm <sup>2</sup>	0.283 in	0.354 in	258 lb/10000 ft
1600098	H07RN-F 1X6	1	No	6 mm <sup>2</sup>	0.311 in	0.386 in	387 lb/10000 ft
1600099	H07RN-F 1X2,5	1	No	2.5 mm <sup>2</sup>	0.248 in	0.311 in	161.26 lb/10000 ft
1600103	H07RN-F 3G1,5	3	Yes	1.5 mm <sup>2</sup>	0.362 in	0.469 in	290.26 lb/10000 ft
16001043	H07RN-F 5G1,5	5	Yes	1.5 mm <sup>2</sup>	0.441 in	0.567 in	483.76 lb/10000 ft
16001053	H07RN-F 4G2,5	4	Yes	2.5 mm <sup>2</sup>	0.476 in	0.61 in	645 lb/10000 ft
16001063	H07RN-F 4G4	4	Yes	4 mm <sup>2</sup>	0.551 in	0.705 in	1032.03 lb/10000 ft
16001073	H07RN-F 4G6	4	Yes	6 mm <sup>2</sup>	0.618 in	0.787 in	1548.05 lb/10000 ft
16001083	H07RN-F 4G10	4	Yes	10 mm <sup>2</sup>	0.823 in	1.043 in	2580.1 lb/10000 ft
16001093	H07RN-F 5G10	5	Yes	10 mm <sup>2</sup>	0.902 in	1.146 in	3225.1 lb/10000 ft
16001103	H07RN-F 4G16	4	Yes	16 mm <sup>2</sup>	0.937 in	1.185 in	4128.15 lb/10000 ft
16001113	H07RN-F 5G16	5	Yes	16 mm <sup>2</sup>	1.039 in	1.311 in	5160.2 lb/10000 ft
16001123	H07RN-F 4G25	4	Yes	25 mm <sup>2</sup>	1.138 in	1.441 in	6450.24 lb/10000 ft
16001133	H07RN-F 5G25	5	Yes	25 mm <sup>2</sup>	1.26 in	1.591 in	8062.8 lb/10000 ft
16001143	H07RN-F 4G35	4	Yes	35 mm <sup>2</sup>	1.28 in	1.63 in	9030.33 lb/10000 ft
16001153	H07RN-F 4G50	4	Yes	50 mm <sup>2</sup>	1.484 in	1.87 in	12900.5 lb/10000 ft
16001163	H07RN-F 4G70	4	Yes	70 mm <sup>2</sup>	1.681 in	2.126 in	18060.7 lb/10000 ft
1600117	H07RN-F 3G1	3	Yes	1 mm <sup>2</sup>	0.327 in	0.421 in	193.5 lb/10000 ft
1600118	H07RN-F 3G2,5	3	Yes	2.5 mm <sup>2</sup>	0.429 in	0.551 in	483.76 lb/10000 ft
1600119	H07RN-F 3G4	3	Yes	4 mm <sup>2</sup>	0.5 in	0.638 in	774.02 lb/10000 ft
1600120	H07RN-F 3G6	3	Yes	6 mm <sup>2</sup>	0.555 in	0.709 in	1161.04 lb/10000 ft
1600121	H07RN-F 3G10	3	Yes	10 mm <sup>2</sup>	0.752 in	0.953 in	1935.1 lb/10000 ft
1600122	H07RN-F 3G16	3	Yes	16 mm <sup>2</sup>	0.858 in	1.087 in	3096.1 lb/10000 ft
16001233	H07RN-F 4G1,5	4	Yes	1.5 mm <sup>2</sup>	0.402 in	0.516 in	387 lb/10000 ft
1600124	H07RN-F 3G35	3	Yes	35 mm <sup>2</sup>	1.154 in	1.461 in	6772.75 lb/10000 ft
1600126	H07RN-F 5G50	5	Yes	50 mm <sup>2</sup>	1.646 in	2.087 in	16127.25 lb/10000 ft
16001283	H07RN-F 4G95	4	Yes	95 mm <sup>2</sup>	1.906 in	2.402 in	24510.9 lb/10000 ft

Article No.	Name	Number of cores	Including protective ground	Nominal cross section conductor (mm <sup>2</sup> )	Min. outer diameter	Max. outer diameter	Copper index
16001293	H07RN-F 5G2,5	5	Yes	2.5 mm <sup>2</sup>	0.524 in	0.669 in	806.3 lb/10000 ft
16001303	H07RN-F 5G4	5	Yes	4 mm <sup>2</sup>	0.614 in	0.783 in	1290 lb/10000 ft
16001313	H07RN-F 5G6	5	Yes	6 mm <sup>2</sup>	0.689 in	0.874 in	1935.07 lb/10000 ft
16001323	H07RN-F 4G120	4	Yes	120 mm <sup>2</sup>	2.087 in	2.598 in	30964.32 lb/10000 ft
16001363	H07RN-F 5G35	5	Yes	35 mm <sup>2</sup>	1.406 in	1.776 in	11287.9 lb/10000 ft
1600148	H07RN-F 12G1,5	12	Yes	1.5 mm <sup>2</sup>	0.693 in	0.882 in	1161 lb/10000 ft
1600151	H07RN-F 7G1,5	7	Yes	1.5 mm <sup>2</sup>	0.579 in	0.736 in	677.3 lb/10000 ft
1600152	H07RN-F 7G2,5	7	Yes	2.5 mm <sup>2</sup>	0.673 in	0.858 in	1128.8 lb/10000 ft
1600154	H07RN-F 12G2,5	12	Yes	2.5 mm <sup>2</sup>	0.811 in	1.031 in	1935.1 lb/10000 ft
1600157	H07RN-F 24G2,5	24	Yes	2.5 mm <sup>2</sup>	1.134 in	1.433 in	3870.1 lb/10000 ft
1600161	H07RN-F 7G4	7	Yes	4 mm <sup>2</sup>	0.791 in	1.004 in	1806.25 lb/10000 ft
1600166	H07RN-F 24G1,5	24	Yes	1.5 mm <sup>2</sup>	0.957 in	1.209 in	2322.32 lb/10000 ft
1600175	H07RN-F 1X185	1	No	185 mm <sup>2</sup>	1.087 in	1.354 in	11932.9 lb/10000 ft
1600177	H07RN-F 1X240	1	No	240 mm <sup>2</sup>	1.205 in	1.508 in	15480.6 lb/10000 ft
1600186	H07RN-F 2X4	2	No	4 mm <sup>2</sup>	0.465 in	0.594 in	516 lb/10000 ft
1600187	H07RN-F 2X2,5	2	No	2.5 mm <sup>2</sup>	0.402 in	0.516 in	322.5 lb/10000 ft
1600189	H07RN-F 1X70	1	No	70 mm <sup>2</sup>	0.732 in	0.917 in	4515.16 lb/10000 ft
1600190	H07RN-F 1X95	1	No	95 mm <sup>2</sup>	0.819 in	1.024 in	6127.7 lb/10000 ft
1600191	H07RN-F 1X150	1	No	150 mm <sup>2</sup>	0.992 in	1.236 in	9675.4 lb/10000 ft
1600193	H07RN-F 1X35	1	No	35 mm <sup>2</sup>	0.563 in	0.705 in	2257.6 lb/10000 ft
1600194	H07RN-F 1X10	1	No	10 mm <sup>2</sup>	0.374 in	0.469 in	645 lb/10000 ft
1600195	H07RN-F 1X16	1	No	16 mm <sup>2</sup>	0.425 in	0.528 in	1032 lb/10000 ft
1600196	H07RN-F 1X25	1	No	25 mm <sup>2</sup>	0.5 in	0.622 in	1612.6 lb/10000 ft
1600197	H07RN-F 1X50	1	No	50 mm <sup>2</sup>	0.65 in	0.811 in	3225.1 lb/10000 ft
1600198	H07RN-F 1X120	1	No	120 mm <sup>2</sup>	0.898 in	1.126 in	7740.3 lb/10000 ft
1600199	H07RN-F 2X1,5	2	No	1.5 mm <sup>2</sup>	0.335 in	0.433 in	193.5 lb/10000 ft
1600259	H07RN-F 19G1,5	19	Yes	1.5 mm <sup>2</sup>	0.815 in	1.209 in	1838.3 lb/10000 ft
1600263	H07RN-F 25G1,5	25	Yes	1.5 mm <sup>2</sup>	0.988 in	1.386 in	2419.09 lb/10000 ft
30015435	H07RN-F 1X300	1	No	300 mm <sup>2</sup>	1.319 in	1.65 in	19350.7 lb/10000 ft
38102227	H07RN-F 5G70	5	Yes	70 mm <sup>2</sup>	1.87 in	2.362 in	22578.28 lb/10000 ft

V1.1