

H07RN-F, extended version

Halogen-free; long-term submersion; bending/loop torsion (WTG): -40 °C to +90 °C; UV/ozone-resistant

H07RN-F, HAR, power and control cable, permanent submersion to a depth of 100m, ozone-/oil-resistant, class 5/flexible -40 °C to +90 °C, halogen-free, flame-retardant

Info

Halogen-free & low smoke density

Loop torsion/flexing: -40 °C to +90 °C

100m long-term submersion, UV-/ozone-resistant



Waterproof



UV-resistant



Torsion-resistant



Oil-resistant



Assembly time



Mechanical resistance



Halogen-free



Good chemical resistance

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You can find the current technical data in the corresponding data sheet.

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Wind Energy



Industrial machinery and plant engineering



Suitable for outdoor use



Cold-resistant



Torsion load

Benefits

Arrangements made of single-core, rubber-sheathed cables H07RN-F can be used for short circuit-proof and short-to-ground-proof installations in accordance with IEC 60364-5-52/HD 60364-5-52/VDE 0100 part 520

More water-resistant than H07RN-F and H07RN8-F

Conductor temperature range more suitable for outdoor installation and wider than H07RN-F, H07ZZ-F, H07BN4-F and NSSHÖU

Application range

Medium, mechanical stress and industrial and agricultural use as well as for hand-held and power supply devices (H07RN-F according to EN 50565-2)

Drip loop torsion between the nacelle and the tower of wind power plants/wind turbines

Outdoors according to EN 50565-2

For buildings or industrial plants with a high density of people or valuable assets

Product features

Oil-resistant according to EN 60811-404; good resistance to abrasion, atmospheric agents, grease, lubricating oils and mineral oils

UV-, ozone- (according to EN 60811), cold- (-40°C flexible at the conductor) and heat-resistant (+90°C at the conductor)

Drip loop torsion-resistant (wind turbine) ==>TW-0, TW-1 and TW-2: -40°C to +90°C/ 2,000 cycles (5,000 cycles from +5°C)/ torsion angle of +/-150° per metre at one revolution per minute

Long-term water submersion (AD8) down to 100 m without interruption (no drinking water, minimum water temperature of +5°C, standing water only, no areas with boat/ship/submarine traffic)

Halogen-free according to EN 50267-2 (sub-parts -1 and -2),

flame-retardant according to IEC 60332-1-2 and low smoke density (LS) according to EN 61034-2

Norm references / approvals

<HAR> H07RN-F design certification according to EN 50525-2-21

Design

Conductor made of bare copper wires

Core insulation made of special rubber

Outer sheath made of special rubber compound

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Technical Data

Classification:	ETIM 5.0 Class-ID: EC001578 ETIM 5.0 Class-Description: Flexible cable
Core identification code:	Up to 5 cores: according to VDE 0293-308 (appendix T9) From 6 cores: black with white numbers
Conductor design:	Fine wire according to VDE 0295 class 5 / IEC 60228 class 5
Torsion application in WTG:	TW-0 & TW-2, refer to appendix T0
Minimum bending radius:	Flexing: 6 x outer diameter Fixed installation: 4 x outer diameter
Nominal voltage:	U_0/U : 450/750 V
Test voltage:	2500 V AC
Protective conductor:	G = with GN-YE protective conductor X = without protective conductor
Current load capacity:	According to IEC 60364-5-52/ VDE 0298-4 EN 50565-1/ VDE 0298-565-1
Temperature range:	Flexible: -40 °C to +90 °C Fixed installation: -50 °C to +90 °C

Note

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

Copper price basis: EUR 150/100 kg; see catalogue appendix T17 for the application and definition of "Metal price basis" and "Metal index"

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

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

* Prices are net prices without VAT and surcharges. Sale to business customers only.

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Article number	Number of cores and mm ² per conductor	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
4533027	3 G 1	8.3 - 10.7	28.8	140
4533061	4 G 1	9.2 - 11.9	38.4	160
4533062	4 X 1	9.2 - 11.9	38.4	160
4533091	5 G 1	10.2 - 13.1	48	200
4533000	1 X 1.5	5.7 - 7.1	14.4	55
4533020	2 X 1.5	8.5 - 11	28.8	125
4533029	3 G 1.5	9.2 - 11.9	43.2	172
4533063	4 G 1.5	10.2 - 13.1	57.6	200
4533064	4 X 1.5	10.2 - 13.1	57.6	200
4533093	5 G 1.5	11.2 - 14.4	72	250
4533111	7 G 1.5	14.7 - 18.7	100.8	430
4533113	12 G 1.5	17.6 - 22.4	172.8	620
4533001	1 X 2.5	6.3 - 7.9	24	72
4533021	2 X 2.5	10.2 - 13.1	48	173
4533031	3 G 2.5	10.9 - 14	72	225
4533065	4 G 2.5	12.1 - 15.5	96	285
4533066	4 X 2.5	12.1 - 15.5	96	285
4533095	5 G 2.5	13.3 - 17	120	345
4533115	12 G 2.5	20.6 - 26.2	288	850
4533002	1 X 4	7.2 - 9	38.4	98
4533022	2 X 4	11.8 - 15.1	76.8	239
4533033	3 G 4	12.7 - 16.2	115.2	325
4533067	4 G 4	14 - 17.9	153.6	395
4533097	5 G 4	15.6 - 19.9	192	485
4533003	1 X 6	7.9 - 9.8	57.6	127
4533023	2 X 6	13.1 - 16.8	115.2	330
4533035	3 G 6	14.1 - 18	172.8	415
4533069	4 G 6	15.7 - 20	230.4	535
4533099	5 G 6	17.5 - 22.2	288	648
4533004	1 X 10	9.5 - 11.9	96	192
4533024	2 X 10	17.7 - 22.6	192	590
4533037	3 G 10	19.1 - 24.2	288	712
4533071	4 G 10	20.9 - 26.5	384	920
4533005	1 X 16	10.8 - 13.4	153.6	262

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4533039	3 G 16	21.8 - 27.6	460.8	990
4533073	4 G 16	23.8 - 30.1	614.4	1290
4533006	1 X 25	12.7 - 15.8	240	375
4533041	3 G 25	26.1 - 33	720	1395
4533075	4 G 25	28.9 - 36.6	960	1930
4533101	5 G 25	32 - 40.4	1200	2500
4533007	1 X 35	14.3 - 17.9	336	493
4533043	3 G 35	29.3 - 37.1	1008	1815
4533077	4 G 35	32.5 - 41.4	1344	2470
4533103	5 G 35	35.7 - 45.1	1680	3250
4533008	1 X 50	16.5 - 20.6	480	675
4533045	3 G 50	34.1 - 42.9	1440	2470
4533079	4 G 50	37.7 - 47.5	1920	3320
4533105	5 G 50	41.8 - 53	2400	4408
4533009	1 X 70	18.6 - 23.3	672	914
4533081	4 G 70	42.7 - 54	2688	4420
4533107	5 G 70	47.5 - 60	3360	5863
4533010	1 X 95	20.8 - 26	912	1200
4533083	4 G 95	48.4 - 61	3648	5750
4533109	5 G 95	54 - 67	4560	7537
4533011	1 X 120	22.8 - 28.6	1152	1481
4533085	4 G 120	53 - 66	4608	6990
4533012	1 X 150	25.2 - 31.4	1440	1833
4533087	4 G 150	58 - 73	5760	8650
4533013	1 X 185	27.6 - 34.4	1776	2190
4533089	4 G 185	64 - 80	7104	9785
4533014	1 X 240	30.6 - 38.3	2304	2780
4533015	1 X 300	33.5 - 41.9	2880	3310
4533016	1 X 400	37.4 - 46.8	3840	4320
4533017	1 X 500	41.3 - 52	4800	5342

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