













H07RN-F, enhanced version

Halogen-free; Long-run submersion; Bending/Loop Torsion (WTG): -40°C to +90°C; UV/Ozone resistant
 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 und NSSHÖU



-  Suitable for outdoor use
-  Good chemical resistance
-  Single halogen-free cable
-  Cold-resistant
-  Industrial machinery and plant engineering
-  Mechanical resistance
-  Assembly time
-  Oil-resistant
-  Torsion-resistant
-  UV-resistant
-  Waterproof
-  Wind Energy

Info

Halogen-free & Low Smoke density
 Loop Torsion/Flexible: -40°C to +90°C
 100m long-run submersion, UV/ Ozone resistant

Application range

Medium, mechanical stress and industrial and agricultural use as well as for handheld and power supply devices (H07RN-F according to EN 50565-2)
 Drip loop torsion between the nacelle and the tower of wind turbine generators/ windmills
 Outdoors acc. EN 50565-2
 For buildings or industrial plants with a high density of people or valuable assets

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Product Make-up

Strands of bare copper wires
Core insulation: special rubber
Outer sheath: special rubber compound

Norm references / Approvals

<HAR> H07RN-F cable type approval according to EN 50525-2-21

Product features

Oil resistant according to EN 60811-404; Good resistance to abrasion, atmospheric agents, grease and mineral oils
UV-, Ozone- (acc. 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-time 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 acc. EN 50267-2 (sub-parts -1 and -2), flame-retardant according to IEC 60332-1-2 and low smoke density (LS) acc. EN 61034-2

Technical Data

Core identification code:	Up to 5 cores: colour-coded according to VDE 0293-308, refer to Appendix T9 From 6 cores: black with white numbers
Classification:	ETIM 5.0 Class-ID: EC001578 ETIM 5.0 Class-Description: Flexible cable
Conductor stranding:	Fine wire according to VDE 0295 Class 5/ IEC 60228 Class 5
Torsion movement in WTG:	TW-0 & TW-2, refer to Appendix T0
Minimum bending radius:	Moved: 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 rating:	According to IEC 60364-5-52/ VDE 0298-4 EN 50565-1/ VDE 0298-565-1
Temperature range:	Moved: -40 °C to +90 °C Fixed installation: -50 °C to +90 °C

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

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.

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Part number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
4533027	3 G 1,0	8,3 - 10,7	28.8	140
4533061	4 G 1,0	9,2 - 11,9	38.4	160
4533062	4 X 1,0	9,2 - 11,9	38.4	160
4533091	5 G 1,0	10,2 - 13,1	48.0	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	72.0	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	24.0	72
4533021	2 X 2,5	10,2 - 13,1	48.0	173
4533031	3 G 2,5	10,9 - 14	72.0	225
4533065	4 G 2,5	12,1 - 15,5	96.0	285
4533066	4 X 2,5	12,1 - 15,5	96.0	285
4533095	5 G 2,5	13,3 - 17	120.0	345
4533115	12 G 2,5	20,6 - 26,2	288.0	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	192.0	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	288.0	648
4533004	1 X 10	9,5 - 11,9	96.0	192
4533024	2 X 10	17,7 - 22,6	192.0	590
4533037	3 G 10	19,1 - 24,2	288.0	712
4533071	4 G 10	20,9 - 26,5	384.0	920
4533005	1 X 16	10,8 - 13,4	153.6	262

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Part number	Number of cores and mm ² per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
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	240.0	375
4533041	3 G 25	26,1 - 33	720.0	1395
4533075	4 G 25	28,9 - 36,6	960.0	1930
4533101	5 G 25	32 - 40,4	1200.0	2500
4533007	1 X 35	14,3 - 17,9	336.0	493
4533043	3 G 35	29,3 - 37,1	1008.0	1815
4533077	4 G 35	32,5 - 41,4	1344.0	2470
4533103	5 G 35	35,7 - 45,1	1680.0	3250
4533008	1 X 50	16,5 - 20,6	480.0	675
4533045	3 G 50	34,1 - 42,9	1440.0	2470
4533079	4 G 50	37,7 - 47,5	1920.0	3320
4533105	5 G 50	41,8 - 53	2400.0	4408
4533009	1 X 70	18,6 - 23,3	672.0	914
4533081	4 G 70	42,7 - 54	2688.0	4420
4533107	5 G 70	47,5 - 60	3360.0	5863
4533010	1 X 95	20,8 - 26	912.0	1200
4533083	4 G 95	48,4 - 61	3648.0	5750
4533109	5 G 95	54 - 67	4560.0	7537
4533011	1 X 120	22,8 - 28,6	1152.0	1481
4533085	4 G 120	53 - 66	4608.0	6990
4533012	1 X 150	25,2 - 31,4	1440.0	1833
4533087	4 G 150	58 - 73	5760.0	8650
4533013	1 X 185	27,6 - 34,4	1776.0	2190
4533089	4 G 185	64 - 80	7104.0	9785
4533014	1 X 240	30,6 - 38,3	2304.0	2780
4533015	1 X 300	33,5 - 41,9	2880.0	3310
4533016	1 X 400	37,4 - 46,8	3840.0	4320
4533017	1 X 500	41,3 - 52	4800.0	5342