



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

Thanks to halogen-free materials and low smoke density (LS), applicable for rooms and buildings with a potentially high indoor concentration of human beings, animals, plants and assets - analogy to H07ZZ-F; 1000 V AC @ protected + static laying; 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

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

SUITABLE FOR OUTDOOR USE	GOOD CHEMICAL RESISTANCE	HALOGEN FREE	COLD RESISTANT	MACHINE INDUSTRY	MECHANICAL RESISTANCE	ASSEMBLY TIME	OIL RESISTANT	TORSION RESISTANT		UV RESISTANT	WATERPROOF	WIND ENERGY



Product description

Application range

- Medium, mechanical stress and industrial and agricultural use as well as for handheld and power supply devices (H07RN-F according to HD 516/ VDE 0298-300)
- Drip loop torsion between the nacelle and the tower of wind turbine generators/ windmills down to -40 °C cable/ ambient temperature with 2,000 cycles and the angle of +/-150 °/m at 1 revolution per minute (=TW-2) - please see catalogue appendix T0 for further information
- 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)
- Outdoors acc. HD 516
- For buildings or industrial plants with a high density of people or valuable assets

Benefits

- Thanks to halogen-free materials and low smoke density (LS), applicable for rooms and buildings with a potentially high indoor concentration of human beings, animals, plants and assets - analogy to H07ZZ-F
- 1000 V AC @ protected + static laying
- 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

Product Make-up

- Conductor made of bare, finely stranded copper strands acc. conductor class 5 in line with IEC 60228
- Core insulation of special rubber
- Outer sheath: special rubber compound
- Further dimensions from 1 mm² existent in the material master or on request

Norm references / Approvals

- 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-resistant (black outer sheath) + Ozone-resistant acc. EN 60811 + Cold resistant (-40 °C/ flexible at the conductor) + 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 - ...see catalogue appendix T0
- 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
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

H07RN-F, enhanced version



Current rating	According to IEC 60364-5-52/ VDE 0298-4 HD 516/VDE 0298-300
Temperature range	Moved: -40°C to +90°C Fixed installation: -50°C to +90°C