HARMONISED FLEXIBLE CABLE 450/750 V · DIN VDE 0282 / EN 50525 | 450/750 V | 11 sizes | CR rubber | BARE COPPER

H07RN8-F 4× 450/750 V

Submersible Rubber Cable 450/750 V 450/750 V – 4 cores of equal cross-section in concentric layers with a short lay length. Polychloroprene rubber sheath. Complete technical data sheet: construction, dimensions, weights, current ratings, voltage drop and installation guidance for 11 sizes.

Document no. FC-TDS-VDE-2026-0795-EN · Revision 0 · Issued 2 November 2026 · Language: English

01 Application and Product Overview

H07RN8-F is the harmonised submersible rubber cable for 450/750 V. It is built like H07RN-F but with a water-resistant design that allows permanent immersion to a water depth of 10 m, which is why it is used for submersible pumps, fountains, dredging and drainage equipment.

Design

The conductors are class 5 fine-wire copper; the cores are insulated with EPR and stranded; multi-core cables from 7 cores and cables from 10 mm² carry a rubber inner sheath that keeps the core compact and water-resistant. The outer sheath is a polychloroprene compound qualified for permanent immersion. The cable corresponds to DIN VDE 0282 part 16 (HD 22.16).

Typical applications

- Submersible pumps in wells, shafts, sumps and dewatering applications
- Fountains, ponds and water features
- Dredging and underwater equipment with a feed cable
- Offshore and harbour installations at limited depth
- Construction-site dewatering and tunnel drainage
- Mine sump pumps and flooded workings
- Agricultural irrigation pumps
- Cable for equipment that stands permanently in water or in mud

11 sizes	450/750 V	+60 °C	CR rubber
Cross-section 1 – 70 mm²	Rated voltage U_0/U	Maximum conductor temperature	Sheath: CR rubber

Key features

- Permanent immersion to 10 m water depth
- Polychloroprene sheath with proven oil, weather and abrasion resistance
- EPR insulation, 60 °C at the conductor
- Rated voltage 450/750 V, test voltage 2.5 kV
- Class 5 conductors
- Flame-retardant to IEC 60332-1-2
- 11 sizes from 1 to 70 mm²; weight from 166 to 4,340 kg/km; copper from 38 to 2,690 kg/km

Core layout and conductor

4 cores of equal cross-section in concentric layers with a short lay length. Core colours: blue, brown, black, grey (DIN VDE 0293-308); no protective core is included. The four-core layout carries three phases and PE (4G) or three phases and neutral (4×). The conductors are bare annealed copper. Bare copper has the lowest conductor resistance of the class 5 range and is the usual choice for dry and damp indoor use. Where the cable is exposed to salt, sulphur or permanent moisture, the tinned version of the same cable is preferable.

© 2026 Anhui FeiChun Special Cable Co., Ltd.

Standard background

DIN VDE 0282-16 (HD 22.16) specifies the harmonised H07RN8-F submersible rubber cable. The 8 in the designation stands for water-resistant construction. The cable must not be used where the water depth exceeds the rated depth, and the free cable end must always be kept above the water level or properly sealed.

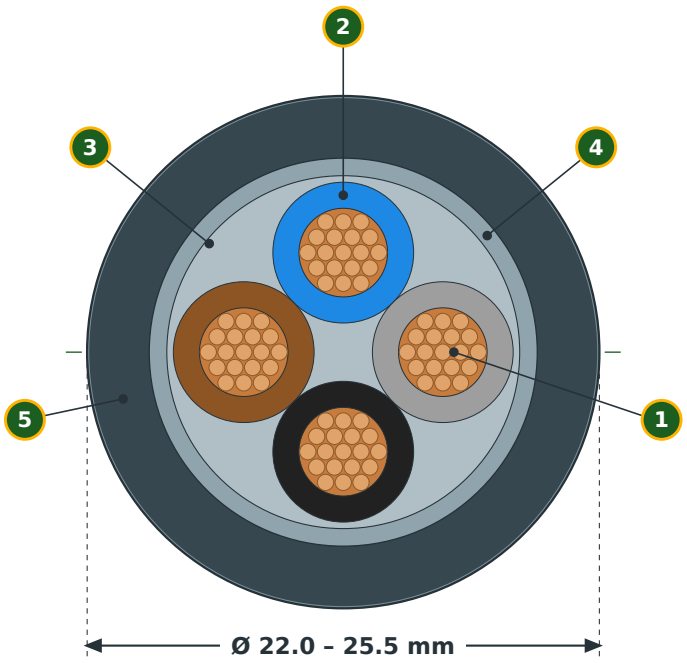
450/750 V is the common rating for industrial and building-site distribution on 400 V systems and allows a margin for DC and rectified supplies. The test voltage is 2.5 kV.

02 Construction

FEICHUN · CROSS-SECTION A-A · 450/750 V

H07RN8-F

Sample size 4×10 · Rev 0 · Illustrative, not to scale



No.	Component	Material
1	Conductor	Bare annealed fine-wire copper, class 5 to IEC 60228 / DIN VDE 0295
2	Insulation	EPR rubber, type EI4 (60 °C)
3	Filler and binder tape	Rubber or compound filler with polyester binder tape
4	Inner sheath	Rubber compound, extruded over the stranded core
5	Outer sheath	Polychloroprene (CR) rubber, type 5GM5

The drawing shows size 4×10. Other sizes have the same construction with scaled dimensions; the layout of every size is checked for non-overlap of all elements.

Construction details

Conductor	Bare annealed fine-wire copper, class 5 to DIN VDE 0295 / IEC 60228
Insulation	EPR rubber, type EI4 (60 °C), maximum conductor temperature 60 °C
Core identification	Blue, brown, black, grey to DIN VDE 0293-308
Stranding	Cores in concentric layers with a short lay length
Inner sheath	Rubber compound; thickness about 0.8 mm at this size
Outer sheath	Polychloroprene (CR) rubber, type 5GM5; thickness about 2.9 mm at this size

03 Electrical, Thermal and Mechanical Characteristics

Electrical data

Rated voltage U_0/U	450/750 V AC
Test voltage	2.5 kV AC, 5 min
Maximum operating voltage, three-phase	825 V
Maximum operating voltage, DC (core-earth / core-core)	0.45/0.75 kV (DC 0.675/1.1 kV)
Current-carrying capacity	Design values by the method of DIN VDE 0298-4, free air, 30 °C ambient
Conductor resistance	Maximum at 20 °C, class 5, bare

© 2026 Anhui FeiChun Special Cable Co., Ltd.

Thermal and mechanical data

Maximum conductor temperature	+60 °C
Maximum temperature at short circuit	+200 °C (5 s maximum)
Ambient temperature, fixed installation	−40 °C to +60 °C
Ambient temperature, in motion	−25 °C to +60 °C
Minimum bending radius	Fixed: 3 × D (D ≤ 12 mm), 4 × D (D > 12 mm); moving: 3 × D (D ≤ 8 mm), 4 × D (D ≤ 12 mm), 5 × D (D > 12 mm) (DIN VDE 0298-3)
Maximum tensile load	15 N/mm² continuous on the total copper cross-section
Flame propagation	IEC 60332-1-2 / DIN EN 60332-1-2
Halogen-free	No (CR rubber)
Mineral oil resistance	Resistant, DIN EN 60811-404
UV and ozone resistance	Resistant
Water	Permanent immersion to 10 m water depth

04 Dimensions, Weights and Rated Data – 450/750 V (11 sizes)

Type designation cores × mm²	FeiChun article no.	Cond. Ø max mm	Outer Ø min mm	Outer Ø max mm	Bend radius fixed mm	Bend radius moving mm	Weight approx. kg/km	Copper kg/km	Max. pull N	R_{20} max Ω/km	Rated current A	I_k (1 s) kA
4×1	FC-H07R-0795-01	1.4	9.0	10.9	33	44	166	38	60	19.5	10	0.141
4×1.5	FC-H07R-0795-02	1.7	10.3	12.4	50	62	218	58	90	13.3	14	0.211
4×2.5	FC-H07R-0795-03	2.2	12.1	14.5	58	72	299	96	150	7.98	19	0.352
4×4	FC-H07R-0795-04	2.7	14.7	17.5	70	88	350	154	240	4.95	25	0.564
4×6	FC-H07R-0795-05	3.3	16.6	19.6	78	98	490	230	360	3.30	32	0.846
4×10	FC-H07R-0795-06	4.1	22.0	25.5	102	128	870	384	600	1.91	44	1.41
4×16	FC-H07R-0795-07	5.2	25.5	29.0	116	145	1,300	610	960	1.21	60	2.26
4×25	FC-H07R-0795-08	6.5	31.0	35.0	140	175	2,020	960	1,500	0.780	79	3.52
4×35	FC-H07R-0795-09	7.7	32.5	36.5	146	182	2,370	1,340	2,100	0.554	97	4.93
4×50	FC-H07R-0795-10	9.2	37.5	42.0	168	210	3,280	1,920	3,000	0.386	122	7.05
4×70	FC-H07R-0795-11	10.8	42.5	47.0	188	235	4,340	2,690	4,200	0.272	150	9.87

Current-carrying capacity: design values by the method of DIN VDE 0298-4, free air, 30 °C ambient; for other ambient temperatures use the factors below and the multi-core reduction factor already included in the table. Copper weight = 9.6 kg/(km·mm²) of copper cross-section (VDE copper index). Pull force = 15 N/mm² × total copper cross-section of the power cores. Diameters, dimensions and weights are nominal design values calibrated to published type tables; they vary within manufacturing tolerances. Confirm critical dimensions before dimensioning reels, glands or festoon systems. Other sizes and configurations are produced to order.

Ambient temperature factors (conductor 60 °C)

°C	20	25	30	35	40	45	50	55	60
Factor	1.15	1.08	1.00	0.91	0.82	0.71	0.58	0.41	–

Short-circuit current rating

I_k = 0.141 kA/mm² × cross-section of the power core (conductor 60 °C → 200 °C). For another duration t: $I_{k,t} = I_{k,1s} / \sqrt{t}$ (0.1 s ≤ t ≤ 5 s).

© 2026 Anhui FeiChun Special Cable Co., Ltd.

05 Voltage Drop, Losses and Short-Circuit Data

Voltage drop per 100 m of cable at rated current with the conductor at 60 °C, cos φ = 0.8 and reactance 0.08 Ω/km (three-phase). The percentage refers to a system voltage of 400 V. Loss is the total I²R loss of the loaded cores per 100 m. The short-circuit columns give the permitted current for four durations.

Type designation cores × mm²	Rated current A	R at 60 °C Ω/km	Voltage drop V / 100 m	Voltage drop % of 400 V	Loss kW / 100 m	I_k 0.1 s kA	I_k 0.5 s kA	I_k 1 s kA	I_k 3 s kA
4×1	10	22.6	31.35	7.84	0.68	0.446	0.199	0.141	0.081
4×1.5	14	15.4	29.97	7.49	0.90	0.669	0.299	0.211	0.122
4×2.5	19	9.23	24.47	6.12	1.00	1.11	0.499	0.352	0.204
4×4	25	5.73	20.05	5.01	1.07	1.78	0.798	0.564	0.326
4×6	32	3.82	17.20	4.30	1.17	2.68	1.20	0.846	0.488
4×10	44	2.21	13.84	3.46	1.28	4.46	1.99	1.41	0.814
4×16	60	1.40	12.14	3.03	1.51	7.13	3.19	2.26	1.30
4×25	79	0.903	10.54	2.63	1.69	11.15	4.99	3.52	2.04
4×35	97	0.641	9.42	2.36	1.81	15.61	6.98	4.93	2.85
4×50	122	0.447	8.57	2.14	1.99	22.29	9.97	7.05	4.07
4×70	150	0.315	7.79	1.95	2.12	31.21	13.96	9.87	5.70

06 Selection Guide and Sizing Aid

H07RN8-F 4× covers 11 sizes. The smallest, 4×1, has an outer diameter of up to 10.9 mm and weighs about 166 kg/km; the largest, 4×70, has an outer diameter of up to 47.0 mm and weighs about 4,340 kg/km, 26.1 times as much. Across the range the rated current rises from 10 A to 150 A at 30 °C and the fixed bending radius from 33 mm to 188 mm.

Example 1. A circuit draws 15 A continuously at 40 °C ambient temperature, in a group of two cables. Temperature factor 0.82, grouping factor 0.80: required table current = 15 / (0.82 × 0.80) = 23 A. The smallest suitable size is 4×4 with 25 A.

Example 2. A circuit draws 66 A continuously at 35 °C ambient temperature, on its own. Temperature factor 0.91: required table current = 66 / (0.91) = 73 A. The smallest suitable size is 4×25 with 79 A.

07 Engineering Profile by Size

Every size of H07RN8-F 4× with the dimensions that decide how it behaves in a circuit: layers, weight, copper share, heat, voltage drop, bending, termination and pull.

4×1. This size has with a conductor of Ø 1.3 mm under 0.70 mm of insulation (core Ø 2.7 mm) and an outer sheath of 1.4 mm; outer diameter 9.0–10.9 mm, weight about 166 kg/km of which copper 38 kg/km (23 %). Rated current 10 A at 30 °C; at that load the voltage drop is 31.35 V per 100 m (7.84 % of 400 V) and the loss 0.68 kW per 100 m. Bending radius 33 mm fixed, 44 mm moving; gland M20, lug bolt M5. Short-circuit rating 0.141 kA for 1 s; permitted pull 60 N, free-hanging length 36 m.

4×1.5. This size has with a conductor of Ø 1.7 mm under 0.80 mm of insulation (core Ø 3.3 mm) and an outer sheath of 1.4 mm; outer diameter 10.3–12.4 mm, weight about 218 kg/km of which copper 58 kg/km (27 %). Rated current 14 A at 30 °C; at that load the voltage drop is 29.97 V per 100 m (7.49 % of 400 V) and the loss 0.90 kW per 100 m. Bending radius 50 mm fixed, 62 mm moving; gland M25, lug bolt M5. Short-circuit rating 0.211 kA for 1 s; permitted pull 90 N, free-hanging length 42 m.

4×2.5. This size has with a conductor of Ø 2.1 mm under 0.90 mm of insulation (core Ø 3.9 mm) and an outer sheath of 1.6 mm; outer diameter 12.1–14.5 mm, weight about 299 kg/km of which copper 96 kg/km (32 %). Rated current 19 A at 30 °C; at that load the voltage drop is 24.47 V per 100 m (6.12 % of 400 V) and the loss 1.00 kW per 100 m. Bending radius 58 mm fixed, 72 mm moving; gland M25, lug bolt M5. Short-circuit rating 0.352 kA for 1 s; permitted pull 150 N, free-hanging length 51 m.

4×4. This size has with a conductor of Ø 2.7 mm under 1.00 mm of insulation (core Ø 4.7 mm) and an outer sheath of 2.1 mm; outer diameter 14.7–17.5 mm, weight about 350 kg/km of which copper 154 kg/km (44 %). Rated current 25 A at 30 °C; at that load the voltage drop is 20.05 V per 100 m (5.01 % of 400 V) and the loss 1.07 kW per 100 m. Bending radius 70 mm fixed, 88 mm moving; gland M32, lug bolt M5. Short-circuit rating 0.564 kA for 1 s; permitted pull 240 N, free-hanging length 69 m.

4×6. This size has with a conductor of Ø 3.3 mm under 1.00 mm of insulation (core Ø 5.3 mm) and an outer sheath of 2.3 mm; outer diameter 16.6–19.6 mm, weight about 490 kg/km of which copper 230 kg/km (47 %). Rated current 32

© 2026 Anhui FeiChun Special Cable Co., Ltd.

A at 30 °C; at that load the voltage drop is 17.20 V per 100 m (4.30 % of 400 V) and the loss 1.17 kW per 100 m. Bending radius 78 mm fixed, 98 mm moving; gland M32, lug bolt M5. Short-circuit rating 0.846 kA for 1 s; permitted pull 360 N, free-hanging length 74 m.

4×10. This size has with a conductor of Ø 4.1 mm under 1.20 mm of insulation (core Ø 6.5 mm) and 0.8 mm inner and 2.9 mm outer sheath; outer diameter 22.0–25.5 mm, weight about 870 kg/km of which copper 384 kg/km (44 %). Rated current 44 A at 30 °C; at that load the voltage drop is 13.84 V per 100 m (3.46 % of 400 V) and the loss 1.28 kW per 100 m. Bending radius 102 mm fixed, 128 mm moving; gland M40, lug bolt M6. Short-circuit rating 1.41 kA for 1 s; permitted pull 600 N, free-hanging length 70 m.

4×16. This size has with a conductor of Ø 5.2 mm under 1.20 mm of insulation (core Ø 7.6 mm) and 0.8 mm inner and 3.4 mm outer sheath; outer diameter 25.5–29.0 mm, weight about 1,300 kg/km of which copper 610 kg/km (47 %). Rated current 60 A at 30 °C; at that load the voltage drop is 12.14 V per 100 m (3.03 % of 400 V) and the loss 1.51 kW per 100 m. Bending radius 116 mm fixed, 145 mm moving; gland M40, lug bolt M6. Short-circuit rating 2.26 kA for 1 s; permitted pull 960 N, free-hanging length 75 m.

4×25. This size has with a conductor of Ø 6.5 mm under 1.40 mm of insulation (core Ø 9.3 mm) and 0.9 mm inner and 4.1 mm outer sheath; outer diameter 31.0–35.0 mm, weight about 2,020 kg/km of which copper 960 kg/km (48 %). Rated current 79 A at 30 °C; at that load the voltage drop is 10.54 V per 100 m (2.63 % of 400 V) and the loss 1.69 kW per 100 m. Bending radius 140 mm fixed, 175 mm moving; gland M50, lug bolt M8. Short-circuit rating 3.52 kA for 1 s; permitted pull 1,500 N, free-hanging length 75 m.

4×35. This size has with a conductor of Ø 7.6 mm under 1.40 mm of insulation (core Ø 10.4 mm) and 0.9 mm inner and 3.3 mm outer sheath; outer diameter 32.5–36.5 mm, weight about 2,370 kg/km of which copper 1,340 kg/km (57 %). Rated current 97 A at 30 °C; at that load the voltage drop is 9.42 V per 100 m (2.36 % of 400 V) and the loss 1.81 kW per 100 m. Bending radius 146 mm fixed, 182 mm moving; gland M50, lug bolt M8. Short-circuit rating 4.93 kA for 1 s; permitted pull 2,100 N, free-hanging length 90 m.

4×50. This size has with a conductor of Ø 9.1 mm under 1.60 mm of insulation (core Ø 12.3 mm) and 1.0 mm inner and 3.7 mm outer sheath; outer diameter 37.5–42.0 mm, weight about 3,280 kg/km of which copper 1,920 kg/km (59 %). Rated current 122 A at 30 °C; at that load the voltage drop is 8.57 V per 100 m (2.14 % of 400 V) and the loss 1.99 kW per 100 m. Bending radius 168 mm fixed, 210 mm moving; gland M63, lug bolt M10. Short-circuit rating 7.05 kA for 1 s; permitted pull 3,000 N, free-hanging length 93 m.

4×70. This size has with a conductor of Ø 10.8 mm under 1.60 mm of insulation (core Ø 14.0 mm) and 1.0 mm inner and 4.1 mm outer sheath; outer diameter 42.5–47.0 mm, weight about 4,340 kg/km of which copper 2,690 kg/km (62 %). Rated current 150 A at 30 °C; at that load the voltage drop is 7.79 V per 100 m (1.95 % of 400 V) and the loss 2.12 kW per 100 m. Bending radius 188 mm fixed, 235 mm moving; gland M75, lug bolt M10. Short-circuit rating 9.87 kA for 1 s; permitted pull 4,200 N, free-hanging length 98 m.

Averaged over all sizes copper makes up 54 % of the cable weight; the share rises from 23 % at 4×1 to 62 % at 4×70, which is why the larger sizes are costed mostly on the copper market price.

08 Construction Dimensions by Size

Wall thicknesses and diameters of the layers at each size, taken from the validated cross-section layout; the overall diameter in section 04 is the sum of these layers within tolerance. The insulation wall follows the voltage class 450/750 V.

Type designation cores × mm²	Conductor Ø mm	Core Ø over insulation, mm	Insulation wall mm	Laid-up core Ø mm	Inner sheath mm	Outer sheath mm	Screen + braid mm	Sheath share of Ø, %
4×1	1.35	2.75	0.70	7.2	–	1.37	–	27
4×1.5	1.65	3.25	0.80	8.5	–	1.44	–	25
4×2.5	2.13	3.93	0.90	10.1	–	1.62	–	24
4×4	2.70	4.70	1.00	11.9	–	2.08	–	26
4×6	3.30	5.30	1.00	13.4	–	2.34	–	26
4×10	4.08	6.48	1.20	16.2	0.81	2.86	–	31
4×16	5.16	7.56	1.20	18.9	0.84	3.37	–	31
4×25	6.45	9.25	1.40	22.9	0.90	4.11	–	30
4×35	7.63	10.43	1.40	25.8	0.93	3.33	–	25
4×50	9.12	12.32	1.60	30.3	0.99	3.73	–	24
4×70	10.79	13.99	1.60	34.4	1.04	4.09	–	23

© 2026 Anhui FeiChun Special Cable Co., Ltd.

09 Termination Planning (indicative)

Type designation cores × mm²	Outer Ø or W × H mm	Cable gland thread	Lug / ferrule bolt	Strip length mm	Straight length behind gland, mm
4×1	10.9	M20	M5	10	15
4×1.5	12.4	M25	M5	10	25
4×2.5	14.5	M25	M5	10	30
4×4	17.5	M32	M5	10	35
4×6	19.6	M32	M5	11	40
4×10	25.5	M40	M6	11	50
4×16	29.0	M40	M6	12	60
4×25	35.0	M50	M8	14	70
4×35	36.5	M50	M8	16	75
4×50	42.0	M63	M10	19	85
4×70	47.0	M75	M10	26	95

Gland threads, lug bolts and strip lengths are planning guides computed from the dimensions above; confirm them with the accessory manufacturer.

10 Comparison with Related Variants at Size 4×10

Variant	Differs in	Outer Ø / H mm	Weight kg/km	Pull N	Current A
This datasheet H07RN8-F 4× 450/750 V	–	25.5	870	600	44
H07RN8-F 3G 450/750 V 3G10	core configuration	22.7 (-11%)	670 (-23%)	450 (-25%)	52 (+18%)
H07RN8-F 4G 450/750 V 4G10	core configuration	25.5 (+0%)	870 (+0%)	600 (+0%)	52 (+18%)
H07RN8-F 4× 450/750 V 4×10	tinned vs bare copper	25.5 (+0%)	870 (+0%)	600 (+0%)	44 (+0%)
H07RN8-F 4× 450/750 V 4×10	low-temperature sheath	25.5 (+0%)	870 (+0%)	600 (+0%)	44 (+0%)
H07RN8-F 3× 450/750 V 3×10	core configuration	22.7 (-11%)	670 (-23%)	450 (-25%)	52 (+18%)
H07RN8-F 5× 450/750 V 5×10	core configuration	27.5 (+8%)	1,030 (+18%)	750 (+25%)	39 (-11%)
H07RN8-F 2× 450/750 V 2×10	core configuration	21.2 (-17%)	480 (-45%)	300 (-50%)	52 (+18%)
H07RN8-F 5G 450/750 V 5G10	core configuration	27.5 (+8%)	1,030 (+18%)	750 (+25%)	44 (+0%)

Percentages show the change against this datasheet; where a variant does not offer the exact size, the nearest listed size is used.

11 Standards and Testing

Standard	Scope
DIN VDE 0282-16 (HD 22.16)	Submersible flexible rubber cables H07RN8-F
DIN VDE 0293-308	Core identification
DIN VDE 0295 / IEC 60228	Conductors, class 5
DIN VDE 0298-3 / -4	Application and current-carrying capacity
DIN EN 60332-1-2 / IEC 60332-1-2	Flame propagation

Routine and type tests

- AC voltage test on every drum length (routine test): 2.5 kV, 5 min
- Conductor resistance and checks of dimensions, insulation thickness and sheath thickness
- Continuity of conductors
- Flame propagation test (IEC 60332-1-2) and mineral-oil resistance on type-test samples

Test documentation: every delivery is accompanied by a test certificate from FeiChun’s own laboratory. Third-party witnessed tests can be arranged at the buyer’s cost.

© 2026 Anhui FeiChun Special Cable Co., Ltd.

The design follows DIN VDE 0282-16. This datasheet does not claim the VDE approval mark; mark or approval certificates, where required for a project, are arranged on request and apply only to the type tested.

12 Installation, Marking and Delivery

Installation guidance

- Never terminate the cable under water; keep the cable end above the water level or seal it in a watertight enclosure.
- Hang heavy pumps on a separate rope, never by the cable.
- Respect the water depth rating of 10 m.
- Seal the cable entry of the pump with a gland that matches the maximum outer diameter.
- Inspect the sheath regularly for cuts and abrasion at the water line.
- Do not exceed the tensile load of 15 N/mm² of the copper cross-section.

Sheath marking

FEICHUN H07RN8-F [cross-section] 450/750 V [year] [serial no.] [metre mark]

Packing and delivery

Drum	Steel or fumigated wooden drums; cable ends sealed with heat-shrink caps
Delivery length	As ordered, in one continuous length without joints
Lead time	2–3 weeks after technical approval
Warranty	At least 3 years against manufacturing defects
Drum label	Type, cross-section, length, gross/net weight, batch no., drum no.

Ordering information

Order example: H07RN8-F 4×10 450/750 V – 500 m on one drum. When requesting a quotation, state the cable type, configuration, cross-section, voltage, conductor (bare copper), length per piece, required standards and installation conditions.

13 Certification and Quality

All cable is subject to FeiChun’s quality control, with routine testing over 100 % of the delivered length. Declarations of conformity, type-test reports and third-party tests (for example for a mine, a tunnel or a rail project) are provided per project requirement; copies of the records are available on request. FeiChun holds CE, EAC and UKCA documentation for certain product groups. Whether a certificate covers this specific construction must be confirmed with FeiChun before it is quoted in a tender.

VDE, mine-specific (for example coal-mine safety marks, MSHA) and ATEX / IECEx approvals are not implied by this datasheet. They depend on the project, the machine and the country and are arranged with the end user.

14 Related Datasheets and Frequently Asked Questions

Variants of this cable with a different configuration, conductor, temperature grade, screen or voltage. All datasheets are PDF files.

- H07RN8-F 3G 450/750 V – core configuration, CR rubber
- H07RN8-F 4G 450/750 V – core configuration, CR rubber
- H07RN8-F 4× 450/750 V – tinned vs bare copper, CR rubber, tinned
- H07RN8-F 4× 450/750 V – low-temperature sheath, CR rubber, low-temp
- H07RN8-F 3× 450/750 V – core configuration, CR rubber
- H07RN8-F 5× 450/750 V – core configuration, CR rubber
- H07RN8-F 2× 450/750 V – core configuration, CR rubber
- H07RN8-F 5G 450/750 V – core configuration, CR rubber

Overview of all H07RN8-F datasheets: H07 Series Flexible Cables 450/750 V

Frequently asked questions

How deep can H07RN8-F be submerged?
To a water depth of 10 m, continuously.

What is the difference to H07RN-F?
H07RN8-F has a design that is qualified for permanent immersion; H07RN-F is designed for water spray and temporary immersion only.

What sizes are available for H07RN8-F 4×?
11 sizes from 1 to 70 mm². The outer dimension of the largest size, 4×70, is 47.0 mm and the weight is about 4,340 kg/km.

© 2026 Anhui FeiChun Special Cable Co., Ltd.

What current can 4×10 carry?
44 A in free air at 30 °C ambient, with the conductor at 60 °C. Other temperatures and grouping change the value; use the factors in section 04.

15 Trademark Notice and Intellectual Property

Cable type designations such as H07RN8-F are standardised, descriptive designations defined in DIN VDE and EN standards; they are used to state which standard this product is designed to. References to other manufacturers' trade names, where made, serve only for technical comparison; FeiChun Cables is not affiliated with them.

© 2026 Anhui FeiChun Special Cable Co., Ltd. — All rights reserved. This document, including its drawings, tables and layout, is the intellectual property of FeiChun and is protected under the Copyright Law and the Anti-Unfair Competition Law of the People's Republic of China and the Copyright Act 1968 (Cth) of Australia. Reproduction, distribution or modification of the whole or any part without written consent is prohibited. Technical data may change without notice as part of continuous product improvement.

Technical and commercial contacts

Anhui FeiChun Special Cable Co., Ltd.
International Business Department
Park No. 1, Private Science and Technology Park, Hefei National Economic and Technological Development Zone, Hefei, Anhui, China
Technical support: Tech@feichuncables.com
Zihao Yang, Global Sales Manager: zihao.yang@feichuncables.com
WhatsApp: +86 138 5512 3218
Web: www.feichuncables.com

Document control

Document no. FC-TDS-VDE-2026-0795-EN
Revision 0 — first issue
Date 2 November 2026
Product H07RN8-F 450/750 V

Prepared — Engineering | Checked — QC | Approved — International Business

© 2026 Anhui FeiChun Special Cable Co., Ltd.