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

H07RN-F 4G 450/750 V

Flexible 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.

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01 Application and Product Overview

H07RN-F is the harmonised flexible rubber cable for 450/750 V that is used wherever a robust, oil-resistant connection cable is needed for medium to heavy mechanical stress.
EPR-insulated fine-wire cores are stranded and enclosed in a polychloroprene sheath that tolerates abrasion, oil and weather. The cable is used on building sites, in workshops and on agricultural and industrial equipment, indoors and outdoors.

Design

The conductors are class 5 fine-wire copper. The insulation is EPR of type EI4 for 60 °C at the conductor; multi-core cables from 7 cores, and cables from 10 mm², have a rubber inner sheath. The outer sheath is polychloroprene. Cores are identified to DIN VDE 0293-308; the G versions contain a green-yellow protective core, the × versions do not.

Typical applications

- Portable tools, power distribution and site connections on building sites
- Industrial and agricultural machinery, pumps and compressors with moving parts
- Stage and event technology, temporary installations and generators
- Connections of cranes, lifts and conveyors with limited travel
- Outdoor use in wet and damp conditions, with oil and weather exposure
- Mobile switchgear and extension cables with heavy-duty plugs
- Boats, yards and harbour installations where a robust rubber sheath is needed
- General use in dry, damp, wet and outdoor areas for medium mechanical stress

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

- Polychloroprene (CR) sheath: oil, weather and abrasion resistant
- EPR insulation, 60 °C at the conductor; short-circuit temperature 200 °C
- Rated voltage 450/750 V, test voltage 2.5 kV
- Class 5 fine-wire conductors for flexible routing
- Flame-retardant to IEC 60332-1-2
- Harmonised type: recognised across the CENELEC area
- 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: green-yellow, brown, black, grey (DIN VDE 0293-308); the green-yellow core is the protective conductor. 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.

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Standard background

H07RN-F is a harmonised type: the H stands for a cable whose design has been agreed in the CENELEC area (HAR). The 07 stands for the rated voltage of 450/750 V, R for rubber insulation, N for a polychloroprene sheath and F for flexible conductors. The type is covered by DIN EN 50525-2-21 (VDE 0285-525-2-21), which replaced the former DIN VDE 0282 part 4.

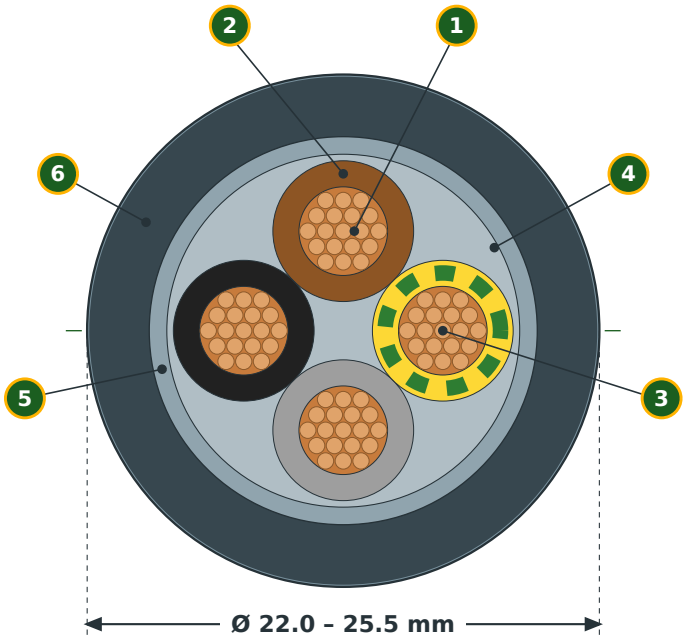
450/750 V is the common rating for industrial and building-site distribution on 400 V systems and allows a margin for DC and rectified supplies. The test voltage is 2.5 kV.

02 Construction

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

H07RN-F

Sample size 4G10 · 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	Protective (PE) core	Green-yellow insulation, same cross-section as the power cores
4	Filler and binder tape	Rubber or compound filler with polyester binder tape
5	Inner sheath	Rubber compound, extruded over the stranded core
6	Outer sheath	Polychloroprene (CR) rubber, type 5GM5

The drawing shows size 4G10. 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	Green-yellow, 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

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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

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	Damp and wet areas, spray water

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
4G1	FC-H07R-0740-01	1.4	9.0	10.9	33	44	166	38	60	19.5	12	0.141
4G1.5	FC-H07R-0740-02	1.7	10.3	12.4	50	62	218	58	90	13.3	16	0.211
4G2.5	FC-H07R-0740-03	2.2	12.1	14.5	58	72	299	96	150	7.98	22	0.352
4G4	FC-H07R-0740-04	2.7	14.7	17.5	70	88	350	154	240	4.95	29	0.564
4G6	FC-H07R-0740-05	3.3	16.6	19.6	78	98	490	230	360	3.30	38	0.846
4G10	FC-H07R-0740-06	4.1	22.0	25.5	102	128	870	384	600	1.91	52	1.41
4G16	FC-H07R-0740-07	5.2	25.5	29.0	116	145	1,300	610	960	1.21	70	2.26
4G25	FC-H07R-0740-08	6.5	31.0	35.0	140	175	2,020	960	1,500	0.780	93	3.52
4G35	FC-H07R-0740-09	7.7	32.5	36.5	146	182	2,370	1,340	2,100	0.554	114	4.93
4G50	FC-H07R-0740-10	9.2	37.5	42.0	168	210	3,280	1,920	3,000	0.386	143	7.05
4G70	FC-H07R-0740-11	10.8	42.5	47.0	188	235	4,340	2,690	4,200	0.272	176	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).

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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
4G1	12	22.6	37.62	9.41	0.97	0.446	0.199	0.141	0.081
4G1.5	16	15.4	34.25	8.56	1.18	0.669	0.299	0.211	0.122
4G2.5	22	9.23	28.33	7.08	1.34	1.11	0.499	0.352	0.204
4G4	29	5.73	23.26	5.81	1.45	1.78	0.798	0.564	0.326
4G6	38	3.82	20.42	5.11	1.65	2.68	1.20	0.846	0.488
4G10	52	2.21	16.36	4.09	1.79	4.46	1.99	1.41	0.814
4G16	70	1.40	14.16	3.54	2.06	7.13	3.19	2.26	1.30
4G25	93	0.903	12.40	3.10	2.34	11.15	4.99	3.52	2.04
4G35	114	0.641	11.07	2.77	2.50	15.61	6.98	4.93	2.85
4G50	143	0.447	10.04	2.51	2.74	22.29	9.97	7.05	4.07
4G70	176	0.315	9.14	2.28	2.92	31.21	13.96	9.87	5.70

06 Selection Guide and Sizing Aid

H07RN-F 4G covers 11 sizes. The smallest, 4G1, has an outer diameter of up to 10.9 mm and weighs about 166 kg/km; the largest, 4G70, 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 12 A to 176 A at 30 °C and the fixed bending radius from 33 mm to 188 mm.

Example 1. A circuit draws 17 A continuously at 40 °C ambient temperature, in a group of two cables. Temperature factor 0.82, grouping factor 0.80: required table current = 17 / (0.82 × 0.80) = 27 A. The smallest suitable size is 4G4 with 29 A.

Example 2. A circuit draws 78 A continuously at 35 °C ambient temperature, on its own. Temperature factor 0.91: required table current = 78 / (0.91) = 86 A. The smallest suitable size is 4G25 with 93 A.

07 Engineering Profile by Size

Every size of H07RN-F 4G with the dimensions that decide how it behaves in a circuit: layers, weight, copper share, heat, voltage drop, bending, termination and pull.

4G1. 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 12 A at 30 °C; at that load the voltage drop is 37.62 V per 100 m (9.41 % of 400 V) and the loss 0.97 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.

4G1.5. 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 16 A at 30 °C; at that load the voltage drop is 34.25 V per 100 m (8.56 % of 400 V) and the loss 1.18 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.

4G2.5. 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 22 A at 30 °C; at that load the voltage drop is 28.33 V per 100 m (7.08 % of 400 V) and the loss 1.34 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.

4G4. 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 29 A at 30 °C; at that load the voltage drop is 23.26 V per 100 m (5.81 % of 400 V) and the loss 1.45 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.

4G6. 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 38

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A at 30 °C; at that load the voltage drop is 20.42 V per 100 m (5.11 % of 400 V) and the loss 1.65 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.

4G10. 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 52 A at 30 °C; at that load the voltage drop is 16.36 V per 100 m (4.09 % of 400 V) and the loss 1.79 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.

4G16. 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 70 A at 30 °C; at that load the voltage drop is 14.16 V per 100 m (3.54 % of 400 V) and the loss 2.06 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.

4G25. 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 93 A at 30 °C; at that load the voltage drop is 12.40 V per 100 m (3.10 % of 400 V) and the loss 2.34 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.

4G35. 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 114 A at 30 °C; at that load the voltage drop is 11.07 V per 100 m (2.77 % of 400 V) and the loss 2.50 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.

4G50. 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 143 A at 30 °C; at that load the voltage drop is 10.04 V per 100 m (2.51 % of 400 V) and the loss 2.74 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.

4G70. 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 176 A at 30 °C; at that load the voltage drop is 9.14 V per 100 m (2.28 % of 400 V) and the loss 2.92 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 4G1 to 62 % at 4G70, 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, %
4G1	1.35	2.75	0.70	7.2	–	1.37	–	27
4G1.5	1.65	3.25	0.80	8.5	–	1.44	–	25
4G2.5	2.13	3.93	0.90	10.1	–	1.62	–	24
4G4	2.70	4.70	1.00	11.9	–	2.08	–	26
4G6	3.30	5.30	1.00	13.4	–	2.34	–	26
4G10	4.08	6.48	1.20	16.2	0.81	2.86	–	31
4G16	5.16	7.56	1.20	18.9	0.84	3.37	–	31
4G25	6.45	9.25	1.40	22.9	0.90	4.11	–	30
4G35	7.63	10.43	1.40	25.8	0.93	3.33	–	25
4G50	9.12	12.32	1.60	30.3	0.99	3.73	–	24
4G70	10.79	13.99	1.60	34.4	1.04	4.09	–	23

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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
4G1	10.9	M20	M5	10	15
4G1.5	12.4	M25	M5	10	25
4G2.5	14.5	M25	M5	10	30
4G4	17.5	M32	M5	10	35
4G6	19.6	M32	M5	11	40
4G10	25.5	M40	M6	11	50
4G16	29.0	M40	M6	12	60
4G25	35.0	M50	M8	14	70
4G35	36.5	M50	M8	16	75
4G50	42.0	M63	M10	19	85
4G70	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 4G10

Variant	Differs in	Outer Ø / H mm	Weight kg/km	Pull N	Current A
This datasheet H07RN-F 4G 450/750 V	–	25.5	870	600	52
H07RN-F 4× 450/750 V 4×10	core configuration	25.5 (+0%)	870 (+0%)	600 (+0%)	44 (-15%)
H07RN-F 5× 450/750 V 5×10	core configuration	27.5 (+8%)	1,030 (+18%)	750 (+25%)	39 (-25%)
H07RN-F 4G 450/750 V 4G10	tinned vs bare copper	25.5 (+0%)	870 (+0%)	600 (+0%)	52 (+0%)
H07RN-F 4G 450/750 V 4G10	low-temperature sheath	25.5 (+0%)	870 (+0%)	600 (+0%)	52 (+0%)
H07RN-F 3G 450/750 V 3G10	core configuration	22.7 (-11%)	670 (-23%)	450 (-25%)	52 (+0%)
H07RN-F 5G 450/750 V 5G10	core configuration	27.5 (+8%)	1,030 (+18%)	750 (+25%)	44 (-15%)
H07RN-F 3× 450/750 V 3×10	core configuration	22.7 (-11%)	670 (-23%)	450 (-25%)	52 (+0%)
H07RN-F 6G 450/750 V 6G4	core configuration	21.4 (-16%)	500 (-43%)	360 (-40%)	22 (-58%)

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 EN 50525-2-21 (VDE 0285-525-2-21)	Flexible elastomer-insulated cables for general applications
DIN EN 50525-1	General requirements
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 and protective earth
- 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.

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The design follows DIN EN 50525-2-21. 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

- Do not exceed the tensile load of 15 N/mm² of the total copper cross-section.
- Keep to the bending radii of section 04: fixed 3 × D up to 12 mm, 4 × D above; free movement 3 × D up to 8 mm, 4 × D up to 12 mm, 5 × D above.
- Unwind cables from a drum or reel completely before loading them with more than half the rated current.
- Use cable glands with a clamping range that matches the outer diameter.
- Protect the cable against permanent mechanical damage and avoid contact with hot surfaces above 60 °C.
- Where the cable is exposed to sunlight for years, check the sheath at regular intervals.

Sheath marking

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FEICHUN H07RN-F [cross-section] 450/750 V [year] [serial no.] [metre mark]
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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: H07RN-F 4G10 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.

- H07RN-F 4× 450/750 V – core configuration, CR rubber
- H07RN-F 5× 450/750 V – core configuration, CR rubber
- H07RN-F 4G 450/750 V – tinned vs bare copper, CR rubber, tinned
- H07RN-F 4G 450/750 V – low-temperature sheath, CR rubber, low-temp
- H07RN-F 3G 450/750 V – core configuration, CR rubber
- H07RN-F 5G 450/750 V – core configuration, CR rubber
- H07RN-F 3× 450/750 V – core configuration, CR rubber
- H07RN-F 6G 450/750 V – core configuration, CR rubber

Overview of all H07RN-F datasheets: H07 Series Flexible Cables 450/750 V

Frequently asked questions

What does H07RN-F stand for?
Harmonised type, 450/750 V, rubber insulation, polychloroprene sheath, flexible conductors.

Can H07RN-F be used outdoors?
Yes. The polychloroprene sheath resists weather, ozone and oil; for permanent burial a cable designed for direct burial is required.

What sizes are available for H07RN-F 4G?
11 sizes from 1 to 70 mm². The outer dimension of the largest size, 4G70, is 47.0 mm and the weight is about 4,340 kg/km.

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What current can 4G10 carry?
52 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 H07RN-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.

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