HARMONISED FLEXIBLE CABLE 450/750 V · DIN VDE 0282 / EN 50525 | 450/750 V | 11 sizes | PUR, low-temp | TINNED COPPER | LOW-TEMPERATURE GRADE

H07BQ-F 4G 450/750 V

PUR-Sheathed Flexible Cable 450/750 V 450/750 V – 4 cores of equal cross-section in concentric layers with a short lay length. Low-temperature polyurethane 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

H07BQ-F is the harmonised PUR-sheathed flexible cable for 450/750 V. EPR-insulated fine-wire cores are enclosed in an orange polyurethane sheath that is far more resistant to cuts, abrasion and oil than a rubber sheath. The cable is halogen-free and is used for tools, drives and machines in workshops, on building sites and in industry.

Design

The conductors are class 5 fine-wire copper, bare or tinned. The insulation is EPR (type 3GI3) rated for 90 °C at the conductor. The outer sheath is polyurethane of type TMPU (EN 50363-10-2), extruded tightly over the stranded cores. The bright orange sheath makes the cable easy to see on a site.

Typical applications

- Hand-held tools, drills and saws on building sites
- Machine connections in workshops, with oil and coolant exposure
- Cleaning, spray and wash-down equipment
- Garden, agricultural and forestry machinery
- Mobile compressors and generators
- Extension cables and cable reels for site distribution
- Production lines with abrasive floors
- Cold-climate duty: sites, cold stores and open-cast operations where the cable is moved at temperatures down to 40 °C

11 sizes	450/750 V	+90 °C	Halogen-free
Cross-section 1 – 70 mm²	Rated voltage U_0/U	Maximum conductor temperature	Sheath: PUR, low-temp

Key features

- Orange PUR sheath: high resistance to cuts, abrasion, tear and oil
- Halogen-free; hydrolysis- and microbe-resistant
- EPR insulation rated 90 °C at the conductor
- Rated voltage 450/750 V, test voltage 2.5 kV
- Flexible use from −30 °C to +80 °C, fixed use from −40 °C to +90 °C
- Bending radius 5 × D flexing, 3 × D fixed
- 11 sizes from 1 to 70 mm²; weight from 152 to 4,190 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 tinned: each copper wire carries a thin tin coating. Tinning protects the copper against oxidation and corrosion in damp, salty or sulphurous atmospheres and keeps the conductor solderable, which is an advantage in outdoor, marine and mining installations. The resistance limits of tinned class 5 conductors are marginally higher than for bare copper; the R_{20} column shows the tinned values.

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Standard background

H05BQ-F and H07BQ-F are harmonised types covered by DIN VDE 0282-10 (HD 22.10) and now by DIN EN 50525-2-21. The cable replaced the former VDE type NGMH11YÖ. H07 identifies the 450/750 V rating, B the EPR insulation, Q the polyurethane sheath and F the flexible conductor.

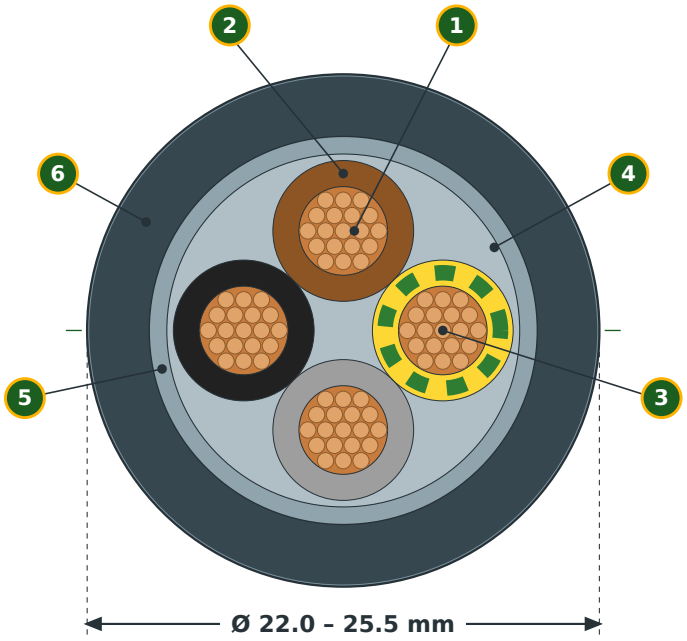
The low-temperature grade of the sheath compound remains flexible down to 40 °C in motion and 50 °C in fixed installation, so the cable can be reeled and trailed on cold sites, in cold stores and in northern open-cast operations. The mechanical and electrical ratings are those of the standard grade; only the cold-flexing limit is extended.

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

H07BQ-F
Sample size 4G10 · Rev 0 · Illustrative, not to scale



No.	Component	Material
1	Conductor	Tinned annealed fine-wire copper, class 5 to IEC 60228 / DIN VDE 0295
2	Insulation	EPR rubber, type 3GI3 (90 °C)
3	Protective (PE) core	Green-yellow insulation, same cross-section as the power cores
4	Filler and binder tape	Halogen-free filler with polyester binder tape
5	Inner sheath	Halogen-free compound, extruded over the stranded core
6	Outer sheath	Polyurethane (PUR), low-temperature grade

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	Tinned annealed fine-wire copper, class 5 to DIN VDE 0295 / IEC 60228
Insulation	EPR rubber, type 3GI3 (90 °C), maximum conductor temperature 90 °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	Halogen-free compound; thickness about 0.8 mm at this size
Outer sheath	Polyurethane (PUR), low-temperature grade; 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, tinned

Thermal and mechanical data

Maximum conductor temperature	+90 °C
Maximum temperature at short circuit	+250 °C (5 s maximum)
Ambient temperature, fixed installation	−50 °C to +90 °C
Ambient temperature, in motion	−40 °C to +90 °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	Yes (insulation and sheath), IEC 60754-1/-2
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-H07B-0878-01	1.4	9.0	10.9	33	44	152	38	60	20.0	17	0.143
4G1.5	FC-H07B-0878-02	1.7	10.3	12.4	50	62	202	58	90	13.7	22	0.214
4G2.5	FC-H07B-0878-03	2.2	12.1	14.5	58	72	279	96	150	8.21	31	0.357
4G4	FC-H07B-0878-04	2.7	14.7	17.5	70	88	329	154	240	5.09	41	0.572
4G6	FC-H07B-0878-05	3.3	16.6	19.6	78	98	460	230	360	3.39	53	0.858
4G10	FC-H07B-0878-06	4.1	22.0	25.5	102	128	830	384	600	1.95	73	1.43
4G16	FC-H07B-0878-07	5.2	25.5	29.0	116	145	1,230	610	960	1.24	98	2.29
4G25	FC-H07B-0878-08	6.5	31.0	35.0	140	175	1,910	960	1,500	0.795	130	3.58
4G35	FC-H07B-0878-09	7.7	32.5	36.5	146	182	2,280	1,340	2,100	0.565	160	5.00
4G50	FC-H07B-0878-10	9.2	37.5	42.0	168	210	3,150	1,920	3,000	0.393	200	7.15
4G70	FC-H07B-0878-11	10.8	42.5	47.0	188	235	4,190	2,690	4,200	0.277	247	10.01

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 90 °C)

°C	20	25	30	35	40	45	50	55	60
Factor	1.08	1.04	1.00	0.96	0.91	0.87	0.82	0.76	0.71

Short-circuit current rating

I_k = 0.143 kA/mm² × cross-section of the power core (conductor 90 °C → 250 °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 90 °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 90 °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	17	25.5	60.21	15.05	2.21	0.452	0.202	0.143	0.083
4G1.5	22	17.5	53.44	13.36	2.54	0.678	0.303	0.214	0.124
4G2.5	31	10.5	45.23	11.31	3.02	1.13	0.506	0.357	0.206
4G4	41	6.49	37.21	9.30	3.27	1.81	0.809	0.572	0.330
4G6	53	4.32	32.19	8.05	3.64	2.71	1.21	0.858	0.495
4G10	73	2.49	25.76	6.44	3.98	4.52	2.02	1.43	0.826
4G16	98	1.58	22.29	5.57	4.56	7.24	3.24	2.29	1.32
4G25	130	1.01	19.34	4.84	5.14	11.31	5.06	3.58	2.06
4G35	160	0.720	17.30	4.33	5.53	15.83	7.08	5.00	2.89
4G50	200	0.501	15.55	3.89	6.01	22.61	10.11	7.15	4.13
4G70	247	0.353	14.14	3.54	6.46	31.65	14.16	10.01	5.78

06 Selection Guide and Sizing Aid

H07BQ-F 4G covers 11 sizes. The smallest, 4G1, has an outer diameter of up to 10.9 mm and weighs about 152 kg/km; the largest, 4G70, has an outer diameter of up to 47.0 mm and weighs about 4,190 kg/km, 27.6 times as much. Across the range the rated current rises from 17 A to 247 A at 30 °C and the fixed bending radius from 33 mm to 188 mm.

Example 1. A circuit draws 28 A continuously at 40 °C ambient temperature, in a group of two cables. Temperature factor 0.91, grouping factor 0.80: required table current = 28 / (0.91 × 0.80) = 39 A. The smallest suitable size is 4G4 with 41 A.

Example 2. A circuit draws 115 A continuously at 35 °C ambient temperature, on its own. Temperature factor 0.96: required table current = 115 / (0.96) = 121 A. The smallest suitable size is 4G25 with 130 A.

07 Engineering Profile by Size

Every size of H07BQ-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 152 kg/km of which copper 38 kg/km (25 %). Rated current 17 A at 30 °C; at that load the voltage drop is 60.21 V per 100 m (15.05 % of 400 V) and the loss 2.21 kW per 100 m. Bending radius 33 mm fixed, 44 mm moving; gland M20, lug bolt M5. Short-circuit rating 0.143 kA for 1 s; permitted pull 60 N, free-hanging length 40 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 202 kg/km of which copper 58 kg/km (29 %). Rated current 22 A at 30 °C; at that load the voltage drop is 53.44 V per 100 m (13.36 % of 400 V) and the loss 2.54 kW per 100 m. Bending radius 50 mm fixed, 62 mm moving; gland M25, lug bolt M5. Short-circuit rating 0.214 kA for 1 s; permitted pull 90 N, free-hanging length 45 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 279 kg/km of which copper 96 kg/km (34 %). Rated current 31 A at 30 °C; at that load the voltage drop is 45.23 V per 100 m (11.31 % of 400 V) and the loss 3.02 kW per 100 m. Bending radius 58 mm fixed, 72 mm moving; gland M25, lug bolt M5. Short-circuit rating 0.357 kA for 1 s; permitted pull 150 N, free-hanging length 54 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 329 kg/km of which copper 154 kg/km (47 %). Rated current 41 A at 30 °C; at that load the voltage drop is 37.21 V per 100 m (9.30 % of 400 V) and the loss 3.27 kW per 100 m. Bending radius 70 mm fixed, 88 mm moving; gland M32, lug bolt M5. Short-circuit rating 0.572 kA for 1 s; permitted pull 240 N, free-hanging length 74 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 460 kg/km of which copper 230 kg/km (50 %). Rated current 53

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A at 30 °C; at that load the voltage drop is 32.19 V per 100 m (8.05 % of 400 V) and the loss 3.64 kW per 100 m. Bending radius 78 mm fixed, 98 mm moving; gland M32, lug bolt M5. Short-circuit rating 0.858 kA for 1 s; permitted pull 360 N, free-hanging length 79 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 830 kg/km of which copper 384 kg/km (46 %). Rated current 73 A at 30 °C; at that load the voltage drop is 25.76 V per 100 m (6.44 % of 400 V) and the loss 3.98 kW per 100 m. Bending radius 102 mm fixed, 128 mm moving; gland M40, lug bolt M6. Short-circuit rating 1.43 kA for 1 s; permitted pull 600 N, free-hanging length 73 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 1,230 kg/km of which copper 610 kg/km (50 %). Rated current 98 A at 30 °C; at that load the voltage drop is 22.29 V per 100 m (5.57 % of 400 V) and the loss 4.56 kW per 100 m. Bending radius 116 mm fixed, 145 mm moving; gland M40, lug bolt M6. Short-circuit rating 2.29 kA for 1 s; permitted pull 960 N, free-hanging length 79 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 1,910 kg/km of which copper 960 kg/km (50 %). Rated current 130 A at 30 °C; at that load the voltage drop is 19.34 V per 100 m (4.84 % of 400 V) and the loss 5.14 kW per 100 m. Bending radius 140 mm fixed, 175 mm moving; gland M50, lug bolt M8. Short-circuit rating 3.58 kA for 1 s; permitted pull 1,500 N, free-hanging length 80 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 2,280 kg/km of which copper 1,340 kg/km (59 %). Rated current 160 A at 30 °C; at that load the voltage drop is 17.30 V per 100 m (4.33 % of 400 V) and the loss 5.53 kW per 100 m. Bending radius 146 mm fixed, 182 mm moving; gland M50, lug bolt M8. Short-circuit rating 5.00 kA for 1 s; permitted pull 2,100 N, free-hanging length 93 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 3,150 kg/km of which copper 1,920 kg/km (61 %). Rated current 200 A at 30 °C; at that load the voltage drop is 15.55 V per 100 m (3.89 % of 400 V) and the loss 6.01 kW per 100 m. Bending radius 168 mm fixed, 210 mm moving; gland M63, lug bolt M10. Short-circuit rating 7.15 kA for 1 s; permitted pull 3,000 N, free-hanging length 97 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 4,190 kg/km of which copper 2,690 kg/km (64 %). Rated current 247 A at 30 °C; at that load the voltage drop is 14.14 V per 100 m (3.54 % of 400 V) and the loss 6.46 kW per 100 m. Bending radius 188 mm fixed, 235 mm moving; gland M75, lug bolt M10. Short-circuit rating 10.01 kA for 1 s; permitted pull 4,200 N, free-hanging length 102 m.

Averaged over all sizes copper makes up 56 % of the cable weight; the share rises from 25 % at 4G1 to 64 % 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 H07BQ-F 4G 450/750 V	–	25.5	830	600	73
H07BQ-F 4× 450/750 V 4×10	core configuration	25.5 (+0%)	830 (+0%)	600 (+0%)	62 (-15%)
H07BQ-F 5× 450/750 V 5×10	core configuration	27.5 (+8%)	980 (+18%)	750 (+25%)	55 (-25%)
H07BQ-F 4G 450/750 V 4G10	tinned vs bare copper	25.5 (+0%)	830 (+0%)	600 (+0%)	74 (+1%)
H07BQ-F 4G 450/750 V 4G10	low-temperature sheath	25.5 (+0%)	830 (+0%)	600 (+0%)	73 (+0%)
H07BQ-F 3G 450/750 V 3G10	core configuration	22.7 (-11%)	630 (-24%)	450 (-25%)	73 (+0%)
H07BQ-F 5G 450/750 V 5G10	core configuration	27.5 (+8%)	980 (+18%)	750 (+25%)	62 (-15%)
H07BQ-F 3× 450/750 V 3×10	core configuration	22.7 (-11%)	630 (-24%)	450 (-25%)	73 (+0%)
H07BQ-F 6G 450/750 V 6G4	core configuration	21.4 (-16%)	470 (-43%)	360 (-40%)	31 (-58%)

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

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11 Standards and Testing

Standard	Scope
DIN VDE 0282-10 (HD 22.10) / DIN EN 50525-2-21	Flexible EPR/PUR cables
DIN EN 50363-10-2	Sheathing compound TMPU
DIN VDE 0293-308	Core identification
DIN VDE 0295 / IEC 60228	Conductors, class 5
DIN EN 60754-1 / -2	Halogen content of the compounds
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) on type-test samples
- Verification of the halogen-free compounds (IEC 60754-1/-2)

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.

The design follows DIN VDE 0282-10. 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

- Keep to the bending radii of section 04: flexing 5 × D, fixed 3 × D.
- Do not exceed the tensile load of 15 N/mm² of the copper cross-section.
- Avoid prolonged contact with hot surfaces above the rated conductor temperature.
- Cut and strip the PUR sheath with a sharp, round-blade tool.
- Use cable glands with a clamping range that matches the outer diameter.
- Store the cable dry and away from direct sunlight for long periods.

Sheath marking

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FEICHUN H07BQ-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: H07BQ-F 4G10 450/750 V – 500 m on one drum. When requesting a quotation, state the cable type, configuration, cross-section, voltage, conductor (tinned), 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.

- H07BQ-F 4× 450/750 V – core configuration, PUR, low-temp, tinned
- H07BQ-F 5× 450/750 V – core configuration, PUR, low-temp, tinned

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- H07BQ-F 4G 450/750 V – tinned vs bare copper, PUR, low-temp
- H07BQ-F 4G 450/750 V – low-temperature sheath, PUR, tinned
- H07BQ-F 3G 450/750 V – core configuration, PUR, low-temp, tinned
- H07BQ-F 5G 450/750 V – core configuration, PUR, low-temp, tinned
- H07BQ-F 3× 450/750 V – core configuration, PUR, low-temp, tinned
- H07BQ-F 6G 450/750 V – core configuration, PUR, low-temp, tinned

Overview of all H07BQ-F datasheets: H07 Series Flexible Cables 450/750 V

Frequently asked questions

What is the difference between H07BQ-F and H07RN-F?
H07BQ-F has a PUR sheath (cut- and abrasion-resistant, halogen-free); H07RN-F has a polychloroprene sheath.

Is H07BQ-F halogen-free?
Yes. Insulation and sheath are halogen-free compounds.

What sizes are available for H07BQ-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 4,190 kg/km.

What current can 4G10 carry?
73 A in free air at 30 °C ambient, with the conductor at 90 °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 H07BQ-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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