H07BQ-F / 07BQ-F

robust, flexible in cold temperatures



TECHNICAL DATA

PUR control and connection cable, H07BQ-F acc. to DIN VDE 0285-525-2-21 / DIN EN 50525-2-21; 07BQ-F in alignment with DIN VDE 0285-525-2-21 / DIN EN 50525-2-21

Temperature range	flexible -40°C to +80°C fixed -50°C to +90°C
Permissible operating temperature of the conductor	+90°C
Nominal voltage	AC U_0/U 450/750 V
Test voltage core/core	2500 V
Minimum bending radius	flexible 5x Outer-Ø fixed 3x Outer-Ø

CABLE STRUCTURE

- Copper wire bare, finely stranded acc. to DIN VDE 0295 Class 5 / IEC 60228 Class 5
- Core insulation: rubber acc. to DIN VDE 0207-363-1 / DIN EN 50363-1 (compound type EI6)
- Core identification acc. to DIN VDE 0293-308,
  2 - 5 core(s): colour coded
  7 - 12 core(s): black cores with consecutive labeling in white digits
- Protective conductor: starting with 3 cores,
  G = with protective conductor GN-YE, in the outer layer,
  x = without protective conductor
- Cores stranded in layers with optimal lay lengths
- Filling compound: see table
- Outer sheath: Special grade of full polyurethane acc. to DIN VDE 0207-363-10-2 / DIN EN 50363-10-2 (compound type TMPU)
- Sheath colour: orange

PROPERTIES

- resistant to: oil, UV radiation, ozone, oxygen, weathering effects, hydrolysis, microbes, coolants, hydraulic fluids, acids, alkalis, greases, seawater and wastewater
- highly abrasion-resistant, notch-resistant, tear-resistant, cut-resistant, wear-resistant
- for outdoor use
- flexible in cold temperatures
- halogen-free
- the materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers

TESTS

- halogen-free acc. to DIN VDE 0482-754-1 / DIN EN 60754-1 / IEC 60754-1
- corrosiveness of combustion gases acc. to DIN VDE 0482-754-2 / DIN EN 60754-2 / IEC 60754-2
- oil-resistant acc. to DIN VDE 0473-811-404 / DIN EN 60811-404 / IEC 60811-404
- UV-resistant acc. to DIN EN ISO 4892-2
- weather-resistant acc. to DIN EN ISO 4892-2
- certifications and approvals:
  H07BQ-F: HAR
  H07BQ-F: EAC

APPLICATION

For medium mechanical stress in dry, damp or wet rooms as well as outdoors in commercial and agricultural workplaces or on construction sites for connecting equipment, e.g. hand lamps, power tools such as drills, circular saws and grinders. When laid in pipes or similar closed systems, the use of the cable is permitted up to and including 1000 V AC or 750 V DC against earth.

NOTES

- the conductor is metrically (mm²) constructed, AWG numbers are approximated, and are for reference only

H07BQ-F without filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
22058	2 x 1.5	16	7.6 - 9.8	29.0	92.0
22059	3 G 1.5	16	8.0 - 10.4	43.0	109.0
22060	4 G 1.5	16	9.0 - 11.6	58.0	145.0
22061	5 G 1.5	16	9.8 - 12.7	72.0	169.0
22064	2 x 2.5	14	9.0 - 11.6	48.0	121.0
22065	3 G 2.5	14	9.6 - 12.4	72.0	164.0
22066	4 G 2.5	14	10.7 - 13.8	96.0	207.0
22067	5 G 2.5	14	11.9 - 16.3	120.0	262.0
22072	2 x 4	12	10.6 - 13.7	77.0	194.0
22068	3 G 4	12	11.3 - 14.5	115.0	224.0
22069	4 G 4	12	12.7 - 16.2	154.0	327.0
22080	5 G 4	12	14.1 - 17.9	192.0	415.0
22073	2 x 6	10	11.8 - 15.1	115.0	311.0
22070	3 G 6	10	12.8 - 16.3	173.0	310.0

H07BQ-F with filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
220958	2 x 1.5	16	7.6 - 9.8	29.0	92.0
220959	3 G 1.5	16	8.0 - 10.4	43.0	109.0
220960	4 G 1.5	16	9.0 - 11.6	58.0	145.0
220961	5 G 1.5	16	9.8 - 12.7	72.0	169.0
220964	2 x 2.5	14	9.0 - 11.6	48.0	121.0
220965	3 G 2.5	14	9.6 - 12.4	72.0	164.0
220966	4 G 2.5	14	10.7 - 13.8	96.0	207.0
220967	5 G 2.5	14	11.9 - 16.3	120.0	262.0
220972	2 x 4	12	10.6 - 13.7	77.0	194.0
220968	3 G 4	12	11.3 - 14.5	115.0	224.0
220969	4 G 4	12	12.7 - 16.2	154.0	327.0
220980	5 G 4	12	14.1 - 17.9	192.0	415.0
220973	2 x 6	10	11.8 - 15.1	115.0	311.0
220970	3 G 6	10	12.8 - 16.3	173.0	310.0

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H07BQ-F without filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
22071	4 G 6	10	14.2 - 18.1	230.0	496.0
22081	5 G 6	10	15.7 - 20.0	288.0	586.0
22074	2 x 10	8	15.6 - 19.9	192.0	428.0
22076	3 G 10	8	16.8 - 21.4	288.0	640.0
22078	4 G 10	8	18.6 - 23.6	384.0	738.0
22082	5 G 10	8	20.4 - 25.9	480.0	968.0
22075	2 x 16	6	17.9 - 22.8	307.0	600.0
22077	3 G 16	6	19.5 - 24.7	461.0	758.0
22079	4 G 16	6	21.3 - 27.0	614.0	1187.0
22083	5 G 16	6	23.7 - 30.0	768.0	1475.0

H07BQ-F with filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
220971	4 G 6	10	14.2 - 18.1	230.0	496.0
220981	5 G 6	10	15.7 - 20.0	288.0	586.0
220974	2 x 10	8	15.6 - 19.9	192.0	428.0
220976	3 G 10	8	16.8 - 21.4	288.0	640.0
220978	4 G 10	8	18.6 - 23.6	384.0	738.0
220982	5 G 10	8	20.4 - 25.9	480.0	968.0
220975	2 x 16	6	17.9 - 22.8	307.0	600.0
220977	3 G 16	6	19.5 - 24.7	461.0	758.0
220979	4 G 16	6	21.3 - 27.0	614.0	1187.0
220983	5 G 16	6	23.7 - 30.0	768.0	1475.0

07BQ-F without filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
22062	7 G 1.5	16	12.2 - 15.1	101.0	230.0
22063	12 G 1.5	16	15.0 - 18.4	173.0	398.0
22828	4 G 25	4	26.7 - 32.6	960.0	1550.0
22829	5 G 25	4	29.6 - 36.1	1220.0	1920.0
22830	4 G 35	2	31.3 - 38.2	1344.0	2120.0
22831	5 G 35	2	34.5 - 42.0	1680.0	2600.0
22832	4 G 50	1	34.9 - 42.6	1920.0	2920.0
22833	5 G 50	1	38.6 - 47.0	2400.0	3700.0
22835	4 G 70	2/0	38.9 - 47.3	2688.0	3900.0
22836	5 G 70	2/0	43.0 - 52.3	3368.0	5020.0
22837	4 G 95	3/0	44.9 - 54.6	3648.0	5150.0
22838	5 G 95	3/0	49.7 - 60.4	4560.0	6520.0
22839	4 G 120	4/0	47.9 - 58.2	4608.0	6550.0
22840	5 G 120	4/0	53.1 - 64.5	5760.0	8050.0
22841	4 G 150	300 kcmil	53.5 - 65.0	5760.0	7950.0
22842	5 G 185	350 kcmil	65.6 - 79.6	8880.0	9350.0
22843	4 G 240	500 kcmil	68.1 - 82.6	9216.0	12200.0

07BQ-F with filling compound

Part no.	No. cores x cross-sec. mm²	AWG, approx.	Outer-Ø min - max mm	Cu factor per km	Weight kg/km, approx.
220962	7 G 1.5	16	12.2 - 15.1	101.0	230.0
220963	12 G 1.5	16	15.0 - 18.4	173.0	398.0
228928	4 G 25	4	26.7 - 32.6	960.0	1550.0
228929	5 G 25	4	29.6 - 36.1	1220.0	1920.0
228930	4 G 35	2	31.3 - 38.2	1344.0	2120.0
228931	5 G 35	2	34.5 - 42.0	1680.0	2600.0
228932	4 G 50	1	34.9 - 42.6	1920.0	2920.0
228933	5 G 50	1	38.6 - 47.0	2400.0	3700.0
228935	4 G 70	2/0	38.9 - 47.3	2688.0	3900.0
228936	5 G 70	2/0	43.0 - 52.3	3368.0	5020.0
228937	4 G 95	3/0	44.9 - 54.6	3648.0	5150.0
228938	5 G 95	3/0	49.7 - 60.4	4560.0	6520.0
228939	4 G 120	4/0	47.9 - 58.2	4608.0	6550.0
228940	5 G 120	4/0	53.1 - 64.5	5760.0	8050.0
228941	4 G 150	300 kcmil	53.5 - 65.0	5760.0	7950.0
228942	5 G 185	350 kcmil	65.6 - 79.6	8880.0	9350.0
228943	4 G 240	500 kcmil	68.1 - 82.6	9216.0	12200.0

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