


Low voltage - Energy and cabling

H07BQ-F

Structure and electrical, physical, EN 50525-2-21 mechanical requirements:

Halogen free:	IEC 60754-1
No corrosive gases:	IEC 60754-2
Oil resistant:	according to EN 50363-10-2 EN 60811-404 (24 Std. / 100 °C) (ex EN 60811-2-1)
Low Voltage Directive:	2014/35/EU
RoHS Directive:	2011/65/EU

REACTION TO FIRE



CPR COMPLIANT

REGULATION 305/2011/EU

Standard:	EN 50575:2014+A1:2016
Class:	E _{ca}
Classification:	EN 13501-6
Flame propagation:	EN 60332-1-2
Notified Body:	0051 - IMQ
CE	2017



Description

- Conductor: class 5, flexible, plain copper wire
- Insulation: EPR rubber compound, quality EI6
- Filler (optional): LS0H rubber, penetrating between the cores
- Sheath: LS0H TMPU polyurethane
- Colour: orange

LS0H = Low Smoke Zero Halogen

Functional characteristics

- Rated voltage U₀/U:
450/750 V (max 480/820 V a.c.)
560/1120 V (max 620/1240 V d.c.)
- Max. operating temperature: 90°C
- Min. operating temperature: -60°C
(without mechanical shocks)
- Max. short circuit temperature: 250°C


Special features



Good resistance to mechanical stress and abrasion.
Good flexibility and behaviour at low temperatures.
Good resistance to UV (ISO 4892-2).
Absence of halogens. Sea water resistant.



Installation conditions



- Minimum installation temperature: -40°C
- Recommended minimum bending radius: 6 times the cable diameter for mobile use, 4 times for static use
- Recommended maximum tensile stress: 15 N/mm² of the cross-section of the copper for mobile use, 50 N/mm² for static use.

Colours of the cores

TWO-CORE 

THREE-CORE  or 

FOUR-CORE  or 

FIVE-CORE  or 

Marking

▲ LTC IEMMEQU ◀HAR▶ H07BQ-F [form.] Eca [order number] [year] Made in Italy [metric]

Use and installation method

Reference Guide EN 50565:

They can be used both indoors and outdoors, in dry, damp or wet conditions. Suitable for heavy-duty uses and to power industrial and farm machinery. For connections undergoing moderate mechanical stresses, such as those in power tools (drills, circular saws, electrical home appliances) and heaters, as long as they do not touch hot parts and are not exposed to heat radiation. Avoid skin contact if they are used at high operating temperatures. Suitable to be used for fixed installations on temporary building fronts and workmen's shelter at work sites. Suitable up to 1000 V A.C. for fixed installations and duly shielded (in ducts and equipment). Not suitable for underground laying, even if shielded.

Reference Construction Products Regulation 305/2011 EU and Standard EN 50575:

The cable is suitable for the supply of electricity in buildings and other civil engineering works.

Two-core

Formation	Approx. conductor Ø	Average insulation thickness	Average sheath thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Free laying at 30°
n° x mm ²	mm	mm	mm	mm	Ω/km	kg/km	A
2 x 1	1,3	0,6	0,9	9,0	19,5	75	19
2 x 1,5	1,5	0,8	1,0	9,8	13,3	90	26
2 x 2,5	2,0	0,9	1,1	11,6	7,98	130	36
2 x 4	2,5	1,0	1,2	13,7	4,95	185	49
2 x 6	3,0	1,0	1,3	15,1	3,30	235	63
2 x 10	4,0	1,2	2,0	19,9	1,91	390	86
2 x 16	5,0	1,2	2,1	22,8	1,21	550	115

N.B. Permissible current rating values are according to:
 - two-phase circuit for two-core cables

Three-core

Formation (*)	Approx. conductor Ø	Average insulation thickness	Average sheath thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Free laying at 30°
n° x mm ²	mm	mm	mm	mm	Ω/km	kg/km	A
3G1	1,3	0,6	0,9	9,5	19,5	90	17
3G1,5	1,5	0,8	1,0	10,4	13,3	110	23
3G2,5	2,0	0,9	1,1	12,4	7,98	160	32
3G4	2,5	1,0	1,2	14,5	4,95	220	42
3G6	3,0	1,0	1,4	16,3	3,30	305	54
3G10	4,0	1,2	2,1	21,4	1,91	500	75
3G16	5,0	1,2	2,3	24,7	1,21	720	100

(*) also available without the green/yellow
 N.B. Permissible current rating values are according to:
 - three-phase circuit for three-core cables

Four-core

Formation (*)	Approx. conductor Ø	Average insulation thickness	Average sheath thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Free laying at 30°
n° x mm ²	mm	mm	mm	mm	Ω/km	kg/km	A
4G1	1,3	0,6	0,9	10,7	19,5	115	17
4G1,5	1,5	0,8	1,1	11,6	13,3	140	23
4G2,5	2,0	0,9	1,2	13,8	7,98	195	32
4G4	2,5	1,0	1,3	16,2	4,95	280	42
4G6	3,0	1,0	1,5	18,1	3,30	385	54
4G10	4,0	1,2	2,2	23,6	1,91	630	75
4G16	5,0	1,2	2,3	27,0	1,21	900	100

(*) also available without the green/yellow
 N.B. Permissible current rating values are according to:
 - three-phase circuit for three-core cables

Five-core

Formation (*)	Approx. conductor Ø	Average insulation thickness	Average sheath thickness	Max. external Ø	Max. electrical resistance at 20°C	Approx. cable weight	Free laying at 30°
n° x mm ²	mm	mm	mm	mm	Ω/km	kg/km	A
5G1	1,3	0,8	1,0	11,9	19,5	145	17
5G1,5	1,5	0,8	1,1	12,7	13,3	170	23
5G2,5	2,0	0,9	1,3	15,3	7,98	240	32
5G4	2,5	1,0	1,4	17,9	4,95	350	42
5G6	3,0	1,0	1,6	20,0	3,30	475	54
5G10	4,0	1,2	2,3	25,9	1,91	775	75
5G16	5,0	1,2	2,5	30,0	1,21	1110	100

(*) also available without the green/yellow
 N.B. Permissible current rating values are according to:
 - three-phase circuit for three-core cables