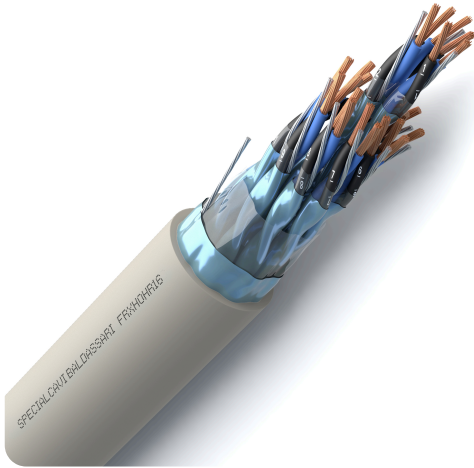


FRXHOHR16

CPR CLASS: EN 50575:2014+A1:2016 Cca-s2,d0,a3



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Application

Multi-pair cable with overall and single pair shielding, ideal for data transmission between central and peripheral units and interconnections requiring high signal quality. Compliant with EU CPR Regulation 305/11, designed to limit the spread of fire and smoke. Buried laying and outdoor laying are not allowed, even if protected.

Marking

<meters> CE 0987 SPECIALCAVI BALDASSARI FRXHOHR16 <formation> 450/750V IEC 60332-3-24 CCA-S2,D0,A3 <lot> <year>

Manufacturing characteristics

Conductor: bare copper class 5 flexible, according to CEI 20-29 EN IEC 60228

Insulation: polyvinyl chloride (PVC) compound, R2 type, according to CEI 20-11

Wrapping and protection:

First wrapping and protection: polyester tape on single pair

Second wrapping and protection: polyester tape

Screen:

First screen: aluminium/polyester tape, with flexible tinned copper drain wire

Second screen: aluminium/polyester tape, with flexible tinned copper drain wire

Outer sheath: polyvinyl chloride (PVC) compound, R16 type, according to CEI 20-11

Outer sheath colour: grey, based on RAL 7035

Cable geometry: round

On request

- Custom cores and outer sheath colouring
- Triad cable construction

Reaction to fire - EN 13501-6

Reaction to fire according to EN 13501-6: Class

Cca

Reaction to fire according to EN 13501-6: Smoke production

s2

Reaction to fire according to EN 13501-6: Flaming droplets/particles

d0

Reaction to fire according to EN 13501-6: Acidity

a3

Specify standards

Installation standard

Identification and tests to be used for cables for category 0 systems in relation to coexistence in ducts containing cables for category I systems: CEI UNEL 36762

CPR standard for reaction to fire

Common test methods for cables under fire conditions - Heat release and smoke production measurement on cables during flame spread test: EN 50399

Electrical characteristics

Nominal voltage U_0 :

- 300V sections $\leq 0,75 \text{ mm}^2$
- 450V sections $\geq 1,00 \text{ mm}^2$

Nominal voltage U :

- 500V sections $\leq 0,75 \text{ mm}^2$
- 750V sections $\geq 1,00 \text{ mm}^2$

Sheath operating voltage:

- 450/750V

Test voltage:

- 2,0kV 50Hz A.C. (5min) c-c sec $\leq 0,75 \text{ mm}^2$
- 1,5kV 50Hz A.C. (1min) c-s sec $\leq 0,75 \text{ mm}^2$
- 2,5kV 50Hz A.C. (5min) c-c sec $\geq 1 \text{ mm}^2$
- 2,0kV 50Hz A.C. (1min) c-s sec $\geq 1 \text{ mm}^2$

Maximum voltage:

- U_0/U 410/820V D.C. sec $\leq 0,75 \text{ mm}^2$
- U_0/U 320/550V A.C. sec $\leq 0,75 \text{ mm}^2$
- U_0/U 620/1240V D.C. sec $\geq 1,00 \text{ mm}^2$
- U_0/U 480/825V A.C. sec $\geq 1,00 \text{ mm}^2$

Minimum insulation resistance:

- $>200 \text{ M}\Omega \times \text{Km}$

Temperatures

Permitted cable outer temperature during assembling/handling
0°C

Operating temperature range
-15°C | +70°C

Maximum conductor temperature
+70°C








Maximum short-circuit temperature
+160°C

Product characteristics

Flame retardant	IEC 60332-1-2	✓
	IEC 60332-3-21 (Cat A F/R)	✗
	IEC 60332-3-22 (Cat A)	✗
	IEC 60332-3-23 (Cat B)	✗
	IEC 60332-3-24 (Cat C)	✓
	IEC 60332-3-25 (Cat D)	✓
Low smoke	EN IEC 61034-2	✗
Halogen Free	EN IEC 60754-1	✗
	EN IEC 60754-2	✗
	EN IEC 60754-3	✗

Oil resistant	EN IEC 60811-404	✗
Low temperature resistant	EN 60811-504+505+506	✓
UV resistant		✗
Ozone resistant		✗
Hydrocarbons resistant	ENI 181	✗
Fire resistant	IEC 60331-1 (diameter > 20 mm) or EN 50200 (diameter < 20 mm)	✗
Presence of water	HD 60364-5-54:2009	✗
Impact resistant	HD 60364-5-54:2009	✗

Laying conditions

 FIXED LAYING ✓	 INDOOR LAYING ✓	 LAYING IN AIR WITH PROTECTION ✓	 MAXIMUM TENSILE STRENGTH DURING INSTALLATION 0,050 kN copper cross-section of conductors
 MOBILE LAYING ✗	 OUTDOOR LAYING ✗	 DIRECTLY BURIED LAYING ✗	 WITH RODENT PROTECTION ✗
 OCCASIONAL MOBILE LAYING W/O STRESS ✗	 LAYING IN FREE AIR ✓	 BURIED LAYING WITH PROTECTION ✗	 MINIMUM BENDING RADIUS 10 times the outer diameter

Nominal cross section conductor	Conductor resistance at 20°C	Capacitance (Cc Cs)	Inductance (L)
[mm²]	[Ohm/Km]	[pF/m]	[µH/m]
0.50	39,0	125 225	0.9
0.75	26,0	130 235	0.85
1.00	19,5	135 245	0.8
1.50	13,3	135 245	0.85

Cc: approx. cond./cond. capacitance, measured at 800 kHz frequency between two cores, leaving the other terminals not involved in the test floating

Cs: approx. cond./shield capacitance, measured at 800 kHz frequency between core and shield, leaving the other terminals not involved in the test floating

L: approx. inductance, measured at 800 kHz frequency between two adjoining cores in short circuit, leaving the other terminals not involved in the test floating

FRXHOHR16

Article code	Formation	Twisted/stranded cores	Outer diameter approx	Weight approx	Cores colour
	[n° x mm²]		[mm]	[Kg/Km]	
FXHHZ05002	2 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	7,9	98	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05003	3 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	8,3	119	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05004	4 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	9,3	140	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05005	5 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	10,5	176	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05006	6 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	11,3	202	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05008	8 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	12,3	257	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05010	10 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	14,0	321	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05012	12 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	14,4	367	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05016	16 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	16,9	490	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05020	20 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	18,6	600	Blue-Black cores with progressive numbering (for each pair)
FXHHZ05024	24 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	20,5	715	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07502	2 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	9,3	119	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07503	3 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	10,3	156	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07504	4 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	11,3	193	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07505	5 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	12,6	237	Blue-Black cores with progressive numbering (for each pair)

Article code	Formation [n° x mm ²]	Twisted/stranded cores	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
FXHHZ07506	6 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	13,9	285	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07508	8 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	14,7	350	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07510	10 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	17,1	446	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07512	12 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	17,8	508	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07516	16 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	20,5	674	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07520	20 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	22,7	827	Blue-Black cores with progressive numbering (for each pair)
FXHHZ07524	24 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	24,8	981	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10002	2 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	10,0	134	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10003	3 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	10,8	177	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10004	4 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	12,2	228	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10005	5 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	13,5	281	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10006	6 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	14,7	318	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10008	8 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	15,9	414	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10010	10 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	18,6	524	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10012	12 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	19,4	597	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10016	16 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	22,9	810	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10020	20 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	24,7	971	Blue-Black cores with progressive numbering (for each pair)
FXHHZ10024	24 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	27,8	1194	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15002	2 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	12,2	176	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15003	3 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	12,9	236	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15004	4 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	14,5	300	Blue-Black cores with progressive numbering (for each pair)

Article code	Formation [n° x mm ²]	Twisted/stranded cores	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
FXHHZ15005	5 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	16,1	380	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15006	6 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	17,9	448	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15008	8 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	19,3	565	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15010	10 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	22,4	724	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15012	12 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	23,8	842	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15016	16 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	27,0	1110	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15020	20 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	29,8	1357	Blue-Black cores with progressive numbering (for each pair)
FXHHZ15024	24 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	32,9	1601	Blue-Black cores with progressive numbering (for each pair)