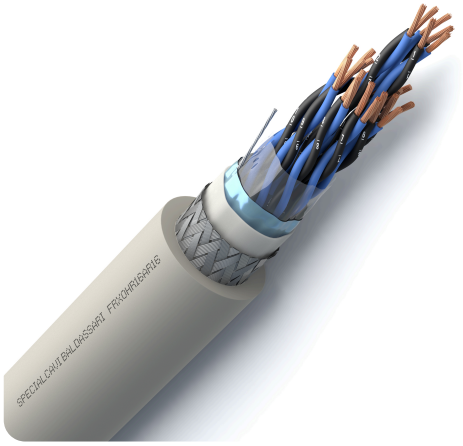
FRXOHR16AR16

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



The product render is for illustration only.
Copyright Specialcavi Baldassari S.r.l. (C.F. 01387320466) – all rights reserved.

Application

Galvanized steel braid armoured cable with overall shielding, ideal for data transmission in industrial and residential use. Compliant with EU CPR Regulation 305/11, designed to limit the spread of fire and smoke. Suitable for fixed installation indoors (even wet) and outdoors on walkways, in pipes, etc. Buried laying (direct and with protection) and outdoor laying are allowed (AD7 water presence condition).

Marking

<meters> CE 0987 SPECIALCAVI BALDASSARI FRXOHR16AR16 <formazione> GUAINA 0,6/1kV 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: polyester tape

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

Inner sheath: polyvinyl chloride (PVC) compound, flame retardant

Armour: galvanized steel braiding (braid wire nominal diameter ≥ 0,24mm)

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

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_o:
- 300V sections ≤ 0,75 mm²
- 450V sections ≥ 1,00 mm²

Nominal voltage U:
- 500V sections ≤ 0,75 mm²
- 750V sections ≥ 1,00 mm²

Sheath operating voltage:
- 600/1000V

Test voltage:
- 2,0kV 50Hz A.C. (5min) c-c sec≤0,75mm²
- 1,5kV 50Hz A.C. (1min) c-s sec≤ 0,75mm²
- 2,5kV 50Hz A.C. (5min) c-c sec≥1mm²
- 2,0kV 50Hz A.C. (1min) c-s sec≥1mm²

Maximum voltage:
- U_o/U 410/820V D.C. sec ≤ 0,75 mm²
- U_o/U 320/550V A.C. sec ≤ 0,75 mm²
- U_o/U 620/1240V D.C. sec ≥ 1,00 mm²
- U_o/U 480/825V A.C. sec ≥ 1,00 mm²

Minimum insulation resistance:
- >200MΩxKm

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	AD7
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
14 times the outer diameter

FRXOHR16AR16

Nominal cross section conductor [mm²]	Conductor resistance at 20°C [Ohm/Km]
0.50	39,0
0.75	26,0
1.00	19,5
1.50	13,3

FRXOHR16AR16

Article code	Formation [n° x mm²]	Twisted/stranded cores	Diameter under armour approx [mm]	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
FXHAZ05002	2 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	7,5	11,6	211	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05003	3 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	7,9	12,1	222	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05004	4 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	8,8	13,1	265	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05005	5 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	9,9	14,2	307	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05006	6 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	10,7	15,0	343	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05008	8 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	11,3	15,7	384	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05010	10 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	13,1	17,6	470	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05012	12 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	13,9	18,4	521	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05016	16 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	15,6	20,3	633	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05020	20 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	17,3	22,0	736	Blue-Black cores with progressive numbering (for each pair)
FXHAZ05024	24 X 2 X 0,50	Cores twisted in pairs. Pairs stranded in concentric layers	19,1	23,8	851	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07502	2 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	8,9	13,2	268	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07503	3 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	9,7	14,0	296	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07504	4 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	10,6	14,9	342	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07505	5 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	11,8	16,4	402	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07506	6 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	12,9	17,4	452	Blue-Black cores with progressive numbering (for each pair)

FRXOHR16AR16

Article code	Formation [n° x mm²]	Twisted/stranded cores	Diameter under armour approx [mm]	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
FXHAZ07508	8 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	13,9	18,4	524	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07510	10 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	16,0	20,7	637	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07512	12 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	16,8	21,5	699	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07516	16 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	19,1	23,8	855	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07520	20 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	21,1	26,1	1024	Blue-Black cores with progressive numbering (for each pair)
FXHAZ07524	24 X 2 X 0,75	Cores twisted in pairs. Pairs stranded in concentric layers	23,2	28,3	1188	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10002	2 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	9,9	14,2	308	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10003	3 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	10,4	14,7	332	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10004	4 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	11,6	16,0	388	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10005	5 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	12,8	17,3	455	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10006	6 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	14,1	18,6	515	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10008	8 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	15,0	19,6	590	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10010	10 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	17,2	21,9	716	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10016	16 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	20,8	25,8	1005	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10020	20 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	23,1	28,2	1205	Blue-Black cores with progressive numbering (for each pair)
FXHAZ10024	24 X 2 X 1,00	Cores twisted in pairs. Pairs stranded in concentric layers	25,2	30,8	1425	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15002	2 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	11,6	15,7	317	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15003	3 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	12,5	17,0	416	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15004	4 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	13,9	18,4	496	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15005	5 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	15,2	19,8	563	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15006	6 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	16,8	21,5	660	Blue-Black cores with progressive numbering (for each pair)

FRXOHR16AR16

Article code	Formation [n° x mm²]	Twisted/stranded cores	Diameter under armour approx [mm]	Outer diameter approx [mm]	Weight approx [Kg/Km]	Cores colour
FXHAZ15008	8 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	18,1	22,9	787	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15010	10 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	20,8	25,8	948	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15012	12 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	21,8	27,0	1075	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15016	16 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	25,0	30,6	1376	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15020	20 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	27,7	33,7	1656	Blue-Black cores with progressive numbering (for each pair)
FXHAZ15024	24 X 2 X 1,50	Cores twisted in pairs. Pairs stranded in concentric layers	31,7	37,9	1934	Blue-Black cores with progressive numbering (for each pair)