

ULCX FRXHOHR16

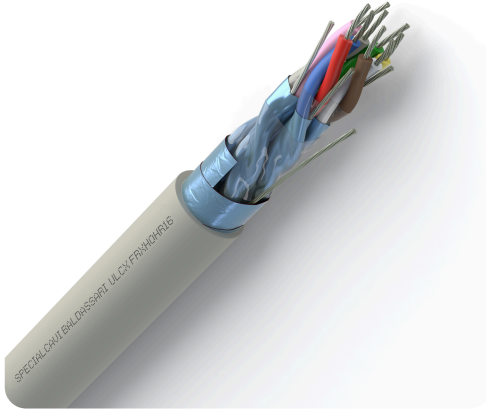
CPR CLASS: EN 50575:2014+A1:2016 Cca-s2,d0,a3

Application

Multi-core cable, with overall and single pair shielding, suitable for electronics and data transmission (RS232). Ideal for indoor civil, industrial, and machine edge applications. Compliant with EU CPR Regulation 305/11, designed to limit the spread of fire and smoke. Buried laying and outdoor laying are not permitted, even if protected.

Marking

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



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Manufacturing characteristics

Conductor: tinned copper

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
- Galvanized steel braid armour

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

Nominal voltage U:

- 300V

Sheath operating voltage:

- 450/750V

Test voltage:

- 1,5kV 50Hz A.C. (5 min) c-c
- 1,0kV 50Hz A.C. (1 min) c-s

Maximum voltage:

- U_0/U 410/410V D.C.
- U_0/U 320/320V A.C.

Minimum insulation resistance:

- >100M Ω xKm

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

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Nominal cross section conductor	Conductor resistance at 20°C	Capacitance (Cc Cs)	Inductance (L)
[mm ²]	[Ohm/Km]	[pF/m]	[μH/m]
AWG 24	85	110 200	0.95

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

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Article code	Formation	Twisted/stranded cores	Outer diameter approx	Weight approx	Cores colour	Cores identification standards
	[n° x mm ²]		[mm]	[Kg/Km]		
ULCX02	2 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	6,1	48	White and Brown (1° pair)-Green and Yellow (2° pair)	DIN 47100
ULCX03	3 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	6,5	60	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)	DIN 47100
ULCX04	4 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	7,0	73	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)	DIN 47100
ULCX05	5 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	7,8	93	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)-Black and Purple (5° pair)	DIN 47100
ULCX06	6 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	8,7	112	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)-Black and Purple (5° pair)-Grey/Pink and Red/Blue (6° pair)	DIN 47100
ULCX08	8 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	9,2	136	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)-Black and Purple (5° pair)-Grey/Pink and Red/Blue (6° pair)-White/Green and Brown/Green (7° pair)-White/Yellow and Yellow/Brown (8° pair)-White/Grey and Grey/Brown (9° pair)	DIN 47100
ULCX10	10 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	10,6	175	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)-Black and Purple (5° pair)-Grey/Pink and Red/Blue (6° pair)-White/Green and Brown/Green (7° pair)-White/Yellow and Yellow/Brown (8° pair)-White/Grey and Grey/Brown (9° pair)-White/Pink and Pink/Brown (10° pair)	DIN 47100
ULCX12	12 X 2 X AWG24	Cores twisted in pairs. Pairs stranded in concentric layers	11,1	199	White and Brown (1° pair)-Green and Yellow (2° pair)-Grey and Pink (3° pair)-Blue and Red (4° pair)-Black and Purple (5° pair)-Grey/Pink and Red/Blue (6° pair)-White/Green and Brown/Green (7° pair)-White/Yellow and Yellow/Brown (8° pair)-White/Grey and Grey/Brown (9° pair)-White/Pink and Pink/Brown (10° pair)-White/Blue and Brown/Blue (11° pair)-White/Red and Brown/Red (12° pair)	DIN 47100