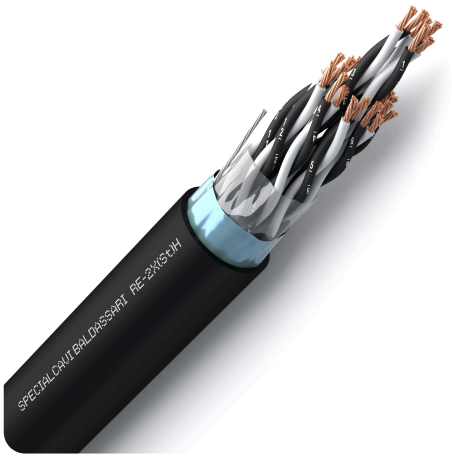
# Re-2X(St)H

CPR CLASS: EN 50575:2014+A1:2016 Eca




*The product render is for illustration only.*


## Application

Data transmission multi-pair LSZH cable with overall shielding, suitable for data transmission and instrumentation. Ideal for heavy industrial environments such as refineries and chemical plants. 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 Re-2X(St)H <formation> mm2 ECA <lot> <year>

## Manufacturing characteristics

**Conductor:** bare copper class 2 stranded, according to CEI 20-29 EN IEC 60228

**Insulation:** crosslinked polyethylene (XLPE) compound

**Wrapping and protection:** polyester tape

**Screen:** aluminium/polyester tape, with flexible tinned copper drain wire (section 0,50 mm²)

**Outer sheath:** LSZH thermoplastic compound

**Outer sheath colour:** black, based on RAL 9005

**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

**Eca**

## Specify standards

**Product standard**

Multi-element metallic cables used in analogue and digital communication and control. Sectional specification for instrumentation and control cables: EN 50288-7 P.Q.A.

**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

## Electrical characteristics

**Nominal voltage $U_o$:**
- 300V

**Nominal voltage U:**
- 500V

**Sheath operating voltage:**
- 300/500V

**Test voltage:**
- 2,0kV 50Hz A.C. (5 min) c-c
- 1,5kV 50Hz A.C. (1 min) c-s

**Maximum voltage:**
- $U_o$/U 410/820V D.C.
- $U_o$/U 320/550V A.C.

**Minimum insulation resistance:**
- >200MΩxKm

## Temperatures

Permitted cable outer temperature during assembling/handling
**0°C**

Operating temperature range
**-40°C | +90°C**

Maximum conductor temperature
**+90°C**

Maximum short-circuit temperature
**+250°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

# Re-2X(St)H

| Nominal cross section conductor [mm²] | Conductor resistance at 20°C [Ohm/Km] |
|---|---|
| 0.50 | 36,7 |
| 0.75 | 25,0 |
| 1.00 | 18,6 |
| 1.30 | 14,2 |
| 1.50 | 12,3 |

## Re-2X(St)H

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour |
|---|---|---|---|---|---|
| RE2XSTH05001 | 1 X 2 X 0,50 | Cores twisted in a pair | 6,0 | 55 | White-Black |
| RE2XSTHT05001 | 1 X 3 X 0,50 | Cores twisted in a triple | 6,2 | 63 | White-Black-Red |
| RE2XSTH05002 | 2 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 9,2 | 93 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05003 | 3 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 9,9 | 107 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05004 | 4 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 10,8 | 130 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05005 | 5 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 12,1 | 158 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05006 | 6 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 13,3 | 189 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05007 | 7 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 13,3 | 205 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05008 | 8 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 14,1 | 227 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05010 | 10 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 16,4 | 290 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05012 | 12 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 17,2 | 329 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05016 | 16 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 19,5 | 421 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05020 | 20 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 21,7 | 525 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH05024 | 24 X 2 X 0,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 23,7 | 622 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07501 | 1 X 2 X 0,75 | Cores twisted in a pair | 6,4 | 63 | White-Black |
| RE2XSTHT07501 | 1 X 3 X 0,75 | Cores twisted in a triple | 6,7 | 75 | White-Black-Red |
| RE2XSTH07502 | 2 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 10,1 | 118 | White-Black cores with progressive numbering (for each pair) |

## Re-2X(St)H

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour |
|---|---|---|---|---|---|
| RE2XSTH07503 | 3 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 10,6 | 131 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07504 | 4 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 11,8 | 166 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07505 | 5 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 13,2 | 203 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07506 | 6 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 14,3 | 233 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07507 | 7 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 14,3 | 255 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07508 | 8 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 15,5 | 293 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07510 | 10 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 17,7 | 362 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07512 | 12 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 18,8 | 427 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07516 | 16 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 21,5 | 557 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07520 | 20 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 22,6 | 611 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH07524 | 24 X 2 X 0,75 | Cores twisted in pairs. Pairs stranded in concentric layers | 23,8 | 681 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10001 | 1 X 2 X 1,00 | Cores twisted in a pair | 6,8 | 73 | White-Black |
| RE2XSTHT10001 | 1 X 3 X 1,00 | Cores twisted in a triple | 7,1 | 87 | White-Black-Red |
| RE2XSTH10002 | 2 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 10,8 | 137 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10003 | 3 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 11,6 | 162 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10004 | 4 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 12,9 | 204 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10005 | 5 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 14,1 | 242 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10006 | 6 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 15,6 | 289 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10007 | 7 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 15,6 | 317 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10008 | 8 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 16,8 | 362 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10010 | 10 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 19,3 | 451 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10012 | 12 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 20,4 | 526 | White-Black cores with progressive numbering (for each pair) |

## Re-2X(St)H

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour |
|---|---|---|---|---|---|
| RE2XSTH10016 | 16 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 23,3 | 691 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10020 | 20 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 25,8 | 841 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH10024 | 24 X 2 X 1,00 | Cores twisted in pairs. Pairs stranded in concentric layers | 28,0 | 991 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13001 | 1 X 2 X 1,30 | Cores twisted in a pair | 7,2 | 82 | White-Black |
| RE2XSTHT13001 | 1 X 3 X 1,30 | Cores twisted in a triple | 7,7 | 105 | White-Black-Red |
| RE2XSTH13002 | 2 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 11,6 | 164 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13003 | 3 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 12,4 | 189 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13004 | 4 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 13,8 | 240 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13005 | 5 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 15,3 | 295 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13006 | 6 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 16,9 | 350 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13007 | 7 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 16,9 | 385 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13008 | 8 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 18,1 | 442 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13010 | 10 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 20,7 | 544 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13012 | 12 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 22,0 | 638 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13016 | 16 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 25,1 | 836 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13020 | 20 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 27,8 | 1020 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH13024 | 24 X 2 X 1,30 | Cores twisted in pairs. Pairs stranded in concentric layers | 30,4 | 1220 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15001 | 1 X 2 X 1,50 | Cores twisted in a pair | 7,4 | 87 | White-Black |
| RE2XSTHT15001 | 1 X 3 X 1,50 | Cores twisted in a triple | 7,9 | 113 | White-Black-Red |
| RE2XSTH15002 | 2 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 12,1 | 176 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15003 | 3 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 13,0 | 211 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15004 | 4 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 14,2 | 259 | White-Black cores with progressive numbering (for each pair) |

## Re-2X(St)H

| Article code | Formation [n° x mm²] | Twisted/stranded cores | Outer diameter approx [mm] | Weight approx [Kg/Km] | Cores colour |
|---|---|---|---|---|---|
| RE2XSTH15005 | 5 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 15,8 | 318 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15006 | 6 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 17,4 | 378 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15007 | 7 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 17,4 | 417 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15008 | 8 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 18,7 | 479 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15010 | 10 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 21,6 | 603 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15012 | 12 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 22,8 | 692 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15016 | 16 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 26,0 | 908 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15020 | 20 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 28,8 | 1124 | White-Black cores with progressive numbering (for each pair) |
| RE2XSTH15024 | 24 X 2 X 1,50 | Cores twisted in pairs. Pairs stranded in concentric layers | 31,4 | 1330 | White-Black cores with progressive numbering (for each pair) |