



# HALLEY CABLES

# RE-2X(St)YÖ-uv-fl 70° C

## CU/XLPE/OSCR/PVC

### Instrumentation Cables 500 V

XLPE insulated, collective screened, PVC sheathed cable

www.halleycables.com



### Construction:

- Conductor : plain copper wire, stranded.
- Insulation : XLPE compound (RE-2X...).
- Core identification : black / white cores numbered 1-1, 2-2,...
- Pair : two conductors twisted to a pair.
- Lay-up : pairs laid up in layers of optimum pitch.
- Separator : polyester tape.
- Screen : AL-PES tape over stranded tinned copper drain wire 0,50 mm<sup>2</sup>.
- Outer sheath : PVC compound, UV and oil resistant.
- Sheath colour : RAL 7001, grey.

### Technical data and tests:

- Rated voltage : 500 V.
- Test voltage : Urms core-core : 2000 V;  
Urms core-screen : 2000 V.
- Temperature range : operation : - 30° C ~ + 70° C;  
installation : - 5° C ~ + 50° C.
- Min. bending radius : 7,5 x D.
- Insulation resistance : min. 5000 MΩ/km.

### Standards:

- Design : DIN EN 50288-7.
- Conductor : IEC 60228 class 2, DIN EN 60228 class 2.
- Insulation : EN 50290-2-29.
- Flame retardancy : IEC 60332-1 & EN 60332-1.  
IEC 60332-3 & DIN EN 50266-2-4.
- Sunlight resistance : UL 1581 section 1200.
- Oil resistance : ICEA S-82-552.

### Applications:

These cables are used for transmission of analogue and digital signals in instrumentation and control systems at chemistry and petrochemistry industry plants, power plants, natural gas and petroleum plants, etc... . Instrumentation cables are not allowed for direct connection to a low impedance source, e.g. public mains electricity supply. With blue sheath it is suitable for intrinsically safe systems. These cables are not recommended for direct burial. They are for indoor and outdoor installation, in dry and wet locations; on racks, trays, in conduits.

No. of cores x cross section mm <sup>2</sup>	Approx. outer diameter mm	Copper weight kg/km	Approx. cable weight kg/km
2x2x1	10,9	44	121
10x2x1	18,2	201	403

### Technical data and tests:

- Conductor resistance: 0,50 mm<sup>2</sup> : 36,0 Ω/km;  
0,75 mm<sup>2</sup> : 24,5 Ω/km;  
1,0 mm<sup>2</sup> : 18,1 Ω/km;  
1,3 mm<sup>2</sup> : 13,9 Ω/km;  
1,5 mm<sup>2</sup> : 12,1 Ω/km;  
2,5 mm<sup>2</sup> : 7,4 Ω/km.
- L/R (ratio) (max) : 0,50 mm<sup>2</sup> : 25 μH/Ω;  
0,75 mm<sup>2</sup> : 25 μH/Ω;  
1,0 mm<sup>2</sup> : 25 μH/Ω;  
1,3 mm<sup>2</sup> : 40 μH/Ω;  
1,5 mm<sup>2</sup> : 40 μH/Ω;  
2,5 mm<sup>2</sup> : 60 μH/Ω.
- Mutual capacitance : max. 120 pF/m.



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