



## TECHNICAL DATASHEET

RE-2X(St)Yv PiMF

Release 2022/08

### INSTRUMENTATION CABLE

#### STANDARD EN 50288-7

Single & Multi-Pair, XLPE-Insulation,  
Individual & Collective Screen, Reinforced  
PVC-Sheath



### Application

For transmission of analogue and digital signals in instrument and control systems; allowed for use in zone 1 and zone 2 group II classified areas (IEC60079-14); not allowed for direct connection to low impedance source, e.g. the public mains electricity supply. Recommended for indoor and outdoor installation, on racks, trays, in conduits, in dry and wet locations, not suitable for direct burial. (Please note the relevant legal / local installation requirements)

### Construction

Type	RE	instrumentation cable EN 50288-7
Conductor		plain annealed copper wire, stranded class 2
Cross section		0.5 mm <sup>2</sup> , 0.75 mm <sup>2</sup> , 1 mm <sup>2</sup> , 1.3 mm <sup>2</sup> , 1.5 mm <sup>2</sup> , 2.5 mm <sup>2</sup>
Insulation	2X	cross-linked polyethylene XLPE
Colour code		black / white, continuously numbered for multi-element
Individual screen	PiMF	26 µm aluminium / PETP tape over tinned copper drain wire, 0.5 mm <sup>2</sup>
Wrapping		at least 1 layer of plastic tape
Collective screen	(St)	26 µm aluminium / PETP tape over tinned copper drain wire, 0.5 mm <sup>2</sup>
Outer sheath	Yv	polyvinyl chloride PVC, reinforced, black or blue for intrinsically safe systems
Cable marking		VOLTEC – RE-2X(St)Yv PiMF <size> – 300V – EN50288-7 IEC60332-3 IEC60332-1 EN50575:2014+A1:2016 CPR Class <class> <batch> <meter marking>

### Technical data

Fire properties	IEC 60332-1, IEC 60332-3-24	
CPR	EN 50575:2014+A1:2016	Cca-s2,d1,a3 or better
Limiting Oxygen Index (LOI)	ASTM D 2863	min. 30%
Smoke Density	IEC 61034	
Amount of halogen acid gas	IEC 60754-1	max. 15%
Acidity (ph value) and conductivity	IEC 60754-2	
Low Voltage Directive (LVD)	2014/35/EU	

### Electrical and mechanical properties

Cross section acc. IEC 60228	0.5	0.75	1.0	1.3	1.5	2.5	nom. mm <sup>2</sup>
DC resistance @20°C		25.5		14.8			max Ω/km
Insulation		1.6		2.0			nom. mmØ
Mutual Capacitance		115		120			max nF/km
Inductance		1		1			max mH/km
L/R ratio	25	25	25	40	40	60	max µH/Ω
Insulation resistance @20°C				1000			MΩ*km
Test voltage				2000			V
Operating voltage				300			V
Temperature range							
- during installation		-5 up to +50					°C
- during operation		-30 up to +90					°C
Min. bending radius		8 x cable diameter					



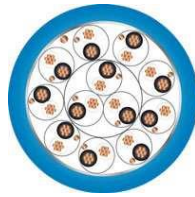
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Black



Blue  
intrinsically safe

Range	Diameter Ømm	Pulling tension max N	Cu kg/km	Weight kg/km	Part no. Black	Part no. Blue
2x2x0.75	8.9	142	36.1	118	6534 0402	6534 0403
4x2x0.75	10.2	285	71.0	178	6534 0802	6534 0803
8x2x0.75	15.3	570	129.5	446	6534 1602	6534 1603
12x2x0.75					6534 2402	6534 2403
16x2x0.75					6534 3202	6534 3203
20x2x0.75					6534 4002	6534 4003
24x2x0.75	21.2	1709	418.9	793	6534 4802	6534 4803

Range	Diameter Ømm	Pulling tension max N	Cu kg/km	Weight kg/km	Part no. Black	Part no. Blue
2x2x1.3	10.2	243	58.7	158	6537 0402	6537 0403
4x2x1.3	11.8	486	116.1	249	6537 0802	6537 0803
8x2x1.3					6537 1602	6537 1603
12x2x1.3					6537 2402	6537 2403
16x2x1.3					6537 3202	6537 3203
20x2x1.3					6537 4002	6537 4003
24x2x1.3	25.2	2913	689.8	1176	6537 4802	6537 4803

