

Application

RE-2X(St)Y is an instrumentation and process-control cable to EN 50288-7 (VDE 0819-7) for measuring, control, signal and alarm circuits. The copper conductors are insulated with cross-linked polyethylene (XLPE) and stranded into pairs or triples, which are assembled and enclosed by a collective (overall) screen of aluminium/polyester foil in contact with a tinned copper drain wire. A polyvinyl chloride (PVC) outer sheath protects the cable for fixed installation indoors and outdoors, in cable trays, ducts and trunking. The overall screen protects the assembled signal pairs against electromagnetic interference; the cable is not intended for power distribution.



CONSTRUCTION

Conductor	Plain or tinned annealed copper, solid class 1 or stranded class 2 acc. to IEC 60228.
Insulation	Cross-linked polyethylene (XLPE) acc. to EN 50290-2-29.
Screen	Collective (overall) screen of aluminium/polyester foil in contact with a tinned copper drain wire (0.5 mm ²).
Sheath	Polyvinyl chloride (PVC) acc. to EN 50290-2-22; black (UV-resistant) or blue for intrinsically safe circuits.
Core identification	Pair: black / white; triple: black / white / red; elements progressively numbered.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage U₀/U	300 V (500 V on request).
Test voltage	1.5 kV.
Standard	EN 50288-7 (VDE 0819-7); conductor IEC 60228; insulation EN 50290-2-29; sheath EN 50290-2-22.
Flame-retardant	Acc. to IEC 60332-1-2 (and IEC 60332-3-24).
Max. conductor temperature	+90 °C.
Permitted outer cable temperature, fixed	-30 °C to +70 °C.
Min. bending radius, fixed	7.5 × overall diameter.
Reaction to fire (CPR)	Dca-s3,d2,a3 (EN 50575); the halogen-free version (RE-2XH) reaches Cca / B2ca on request.

DIMENSIONS & TECHNICAL DATA

Pairs × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.5	36.7	5.5	40
2 × 0.5	36.7	7.7	67
3 × 0.5	36.7	8.3	89
4 × 0.5	36.7	9	109
5 × 0.5	36.7	10.1	134
8 × 0.5	36.7	11.8	190
10 × 0.5	36.7	13.7	233
12 × 0.5	36.7	14.4	274
16 × 0.5	36.7	15.9	346
20 × 0.5	36.7	17.4	425
24 × 0.5	36.7	19.8	504
1 × 0.75	25	5.8	47
2 × 0.75	25	8.5	85
3 × 0.75	25	8.9	109
4 × 0.75	25	10	139
5 × 0.75	25	10.9	166
8 × 0.75	25	12.7	240
10 × 0.75	25	15.1	302
12 × 0.75	25	15.6	347
16 × 0.75	25	17.5	451
20 × 0.75	25	19.1	554
24 × 0.75	25	21.8	657
1 × 1	18.5	6.2	57
2 × 1	18.5	9.2	104
3 × 1	18.5	9.9	140
4 × 1	18.5	10.8	174
5 × 1	18.5	11.8	208
8 × 1	18.5	14.1	313
10 × 1	18.5	16.5	386
12 × 1	18.5	17.2	454
16 × 1	18.5	19.3	590
20 × 1	18.5	20.9	715
24 × 1	18.5	24.1	863
1 × 1.5	12.3	7.2	74
2 × 1.5	12.3	10.9	144
3 × 1.5	12.3	11.5	190
4 × 1.5	12.3	12.9	244
5 × 1.5	12.3	14.1	294
8 × 1.5	12.3	16.8	443
10 × 1.5	12.3	20	557
12 × 1.5	12.3	20.6	644
16 × 1.5	12.3	23.2	839
20 × 1.5	12.3	25.3	1032
24 × 1.5	12.3	29.1	1243

Triples × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.5	36.7	8.4	91
4 × 0.5	36.7	9.8	123
5 × 0.5	36.7	10.8	155
6 × 0.5	36.7	12.1	185
8 × 0.5	36.7	13.1	221
10 × 0.5	36.7	14.7	275
12 × 0.5	36.7	15.2	316
16 × 0.5	36.7	17.4	414
20 × 0.5	36.7	19.1	508
24 × 0.5	36.7	20.9	594
2 × 0.75	25	9.3	114
4 × 0.75	25	10.9	163
5 × 0.75	25	12	199
6 × 0.75	25	13.7	245
8 × 0.75	25	14.7	296
10 × 0.75	25	16.7	366
12 × 0.75	25	17.3	423
16 × 0.75	25	19.7	555
20 × 0.75	25	21.7	681
24 × 0.75	25	23.7	802
2 × 1	18.5	10.4	135
4 × 1	18.5	11.9	202
5 × 1	18.5	13.2	251
6 × 1	18.5	15	303
8 × 1	18.5	16.1	379
10 × 1	18.5	18.4	461
12 × 1	18.5	19	544
16 × 1	18.5	21.7	717
20 × 1	18.5	24.1	880
24 × 1	18.5	26.1	1048
2 × 1.5	12.3	11.9	191
4 × 1.5	12.3	14	287
5 × 1.5	12.3	15.4	355
6 × 1.5	12.3	17.6	432
8 × 1.5	12.3	19.1	540
10 × 1.5	12.3	21.6	672
12 × 1.5	12.3	22.5	779
16 × 1.5	12.3	25.7	1031
20 × 1.5	12.3	28.6	1265
24 × 1.5	12.3	31.1	1508

Outer diameters, weights and conductor resistances are nominal manufacturer values for the collective-screened pair ($n \times 2 \times \text{mm}^2$) and triple ($n \times 3 \times \text{mm}^2$) constructions; all values are indicative and non-binding.