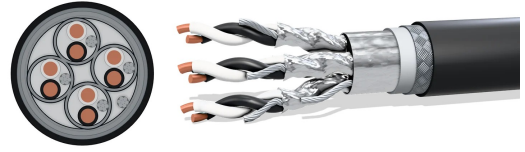


Application

RE-2X(St)YSWBY PiMF is a steel-wire-braid armoured instrumentation and process-control cable to EN 50288-7 (VDE 0819-7) for measuring, control, signal and alarm circuits with high requirements for interference immunity between individual signal circuits. The plain copper conductors are insulated with cross-linked polyethylene (XLPE) and stranded into pairs; each pair is individually screened (PiMF) with an aluminium/polyester foil in contact with a tinned copper drain wire, and all screened elements are enclosed by an overall (collective) foil screen with a further drain wire. A galvanized steel wire braid beneath the polyvinyl chloride (PVC) outer sheath adds mechanical protection and flexibility for demanding routing. The individual pair screens suppress crosstalk between circuits; the cable is not intended for power distribution.



CONSTRUCTION

Conductor	Plain annealed copper, stranded class 2 acc. to IEC 60228 (solid class 1 or tinned on request).
Insulation	Cross-linked polyethylene (XLPE) acc. to EN 50290-2-29.
Screen	Individual screen on every pair: aluminium/polyester foil in contact with a tinned copper drain wire (0.5 mm ²); the assembled pairs are enclosed by an overall (collective) aluminium/polyester foil screen with a further tinned copper drain wire (0.5 mm ²).
Armour	Galvanized steel wire braid, over a PVC bedding/inner sheath.
Sheath	Polyvinyl chloride (PVC) acc. to EN 50290-2-22; black (UV-resistant) or blue for intrinsically safe circuits.
Core identification	Pair: black / white; pairs 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	-25 °C to +70 °C.
Min. bending radius, fixed	14 × 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)
2 × 0.5	36.7	13.2	263
3 × 0.5	36.7	13.9	294
4 × 0.5	36.7	14.9	350
5 × 0.5	36.7	16.3	407
6 × 0.5	36.7	17.5	468
7 × 0.5	36.7	17.5	497
8 × 0.5	36.7	18.6	554
10 × 0.5	36.7	21	678
12 × 0.5	36.7	21.9	754
16 × 0.5	36.7	24.4	949
20 × 0.5	36.7	27.1	1156
24 × 0.5	36.7	28.9	1333
2 × 0.75	25	14	291
3 × 0.75	25	14.7	336
4 × 0.75	25	16.1	398
5 × 0.75	25	17.3	466
6 × 0.75	25	18.8	536
7 × 0.75	25	18.8	571
8 × 0.75	25	19.9	639
10 × 0.75	25	22.6	777
12 × 0.75	25	23.6	887
16 × 0.75	25	26.4	1111
20 × 0.75	25	28.9	1337
24 × 0.75	25	31.3	1568
2 × 1	18.6	14.8	on request
3 × 1	18.6	15.7	on request
4 × 1	18.6	16.9	on request
5 × 1	18.6	18.6	on request
6 × 1	18.6	20	on request
7 × 1	18.6	20	on request
8 × 1	18.6	21.3	on request
10 × 1	18.6	24	on request
12 × 1	18.6	25.3	on request
16 × 1	18.6	28.4	on request
20 × 1	18.6	31.1	on request
24 × 1	18.6	33.9	on request
2 × 1.3	14.2	15.8	368
3 × 1.3	14.2	16.5	415
4 × 1.3	14.2	18	509
5 × 1.3	14.2	19.7	591
6 × 1.3	14.2	21.3	690
7 × 1.3	14.2	21.3	740
8 × 1.3	14.2	22.8	843
10 × 1.3	14.2	25.8	1017
12 × 1.3	14.2	27.2	1171

Pairs × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
16 × 1.3	14.2	30.3	1471
20 × 1.3	14.2	33.4	1783
24 × 1.3	14.2	36.3	2093
2 × 1.5	12.3	16.2	385
3 × 1.5	12.3	16.9	436
4 × 1.5	12.3	18.6	535
5 × 1.5	12.3	20.3	640
6 × 1.5	12.3	21.9	726
7 × 1.5	12.3	21.9	779
8 × 1.5	12.3	23.4	887
10 × 1.5	12.3	26.4	1082
12 × 1.5	12.3	27.8	1234
16 × 1.5	12.3	31.2	1559
20 × 1.5	12.3	34.6	1910
24 × 1.5	12.3	37.4	2230

Outer diameters, weights and conductor resistances are nominal manufacturer values for the braid-armoured individually screened pair constructions ($n \times 2 \times \text{mm}^2$). Weights at 1.0 mm^2 are given on request. Triples (TiMF) have their own datasheet. All values are indicative and non-binding.