

Application

RE-2X(St)YSWBY is a braid-armoured 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 with a tinned copper drain wire. A galvanised steel wire braid over an inner PVC bedding provides mechanical protection and additional magnetic screening, and a polyvinyl chloride (PVC) outer sheath completes the cable. The cable is intended for fixed installation and is not 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).
Armour	Galvanised steel wire braid, over a PVC 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; triple: black / white / red; elements progressively numbered.

ELECTRICAL & THERMAL PROPERTIES

Rated voltage Uo/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	10 × 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 × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
1 × 0.5	36	9	115
4 × 0.5	36	12.7	215
8 × 0.5	36	15.7	315
12 × 0.5	36	17.7	410
16 × 0.5	36	19.2	490
24 × 0.5	36	22.9	670
1 × 0.75	24.5	9.3	125
2 × 0.75	24.5	12	190
4 × 0.75	24.5	13.7	255
8 × 0.75	24.5	17	385
12 × 0.75	24.5	18.7	480
16 × 0.75	24.5	20.5	595
24 × 0.75	24.5	24.6	820
1 × 1.3	14.2	10.6	160
2 × 1.3	14.2	14.3	255
4 × 1.3	14.2	16.2	355
8 × 1.3	14.2	20.3	550
12 × 1.3	14.2	22.9	730
16 × 1.3	14.2	25.4	925
24 × 1.3	14.2	30.7	1280

Triples × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
6 × 1.3	14.2	20.4	605

Outer diameters and weights are the nominal manufacturer values of the leading reference source for the braid-armoured collective-screened pair ($n \times 2 \times \text{mm}^2$) and triple ($n \times 3 \times \text{mm}^2$) constructions; conductor resistance is the IEC 60228 value for the stated class at 0.5 and 0.75 mm² and the manufacturer value at 1.3 mm², which is not an IEC 60228 size; all values are indicative and non-binding.