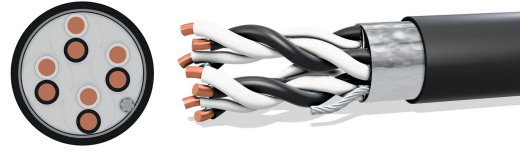


Application

RE-2X(St)H is a halogen-free 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 low-smoke, zero-halogen (LSZH) outer sheath protects the cable for fixed installation indoors and outdoors, in cable trays, ducts and trunking, and limits smoke density and corrosive gas emission in the event of fire. 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	Halogen-free, low-smoke (LSZH) thermoplastic compound acc. to BS 7655-6.1 (type LTS3); 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.
Flame-retardant	Acc. to IEC 60332-1-2 and IEC 60332-3-24.
Halogen-free	Acc. to IEC 60754-1/-2 (halogen-free) and IEC 61034-1/-2 (low smoke).
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-s2,d2,a1 (EN 50575, halogen-free); Cca / B2ca on request.

DIMENSIONS & TECHNICAL DATA

Pairs × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.5	36.7	7.6	66
4 × 0.5	36.7	8.8	98
5 × 0.5	36.7	9.8	112
6 × 0.5	36.7	10.6	133
8 × 0.5	36.7	11.3	161
10 × 0.5	36.7	12.9	200
12 × 0.5	36.7	13.5	242
16 × 0.5	36.7	15.2	288
20 × 0.5	36.7	16.9	376
24 × 0.5	36.7	18.3	426
2 × 0.75	25	8.5	87
3 × 0.75	25	10	122
4 × 0.75	25	10.9	154
5 × 0.75	25	11.8	174
8 × 0.75	25	12.8	213
10 × 0.75	25	14.5	266
12 × 0.75	25	15.1	304
16 × 0.75	25	17.3	398
20 × 0.75	25	19.2	478
24 × 0.75	25	20.8	559
2 × 1	18.5	9.2	101
3 × 1	18.5	10.9	157
4 × 1	18.5	11.9	194
5 × 1	18.5	13	223
8 × 1	18.5	14	272
10 × 1	18.5	15.9	334
12 × 1	18.5	16.8	390
16 × 1	18.5	19	511
20 × 1	18.5	21.1	617
24 × 1	18.5	23.1	749
2 × 1.5	12.3	10.8	139
3 × 1.5	12.3	12.7	214
4 × 1.5	12.3	14	259
5 × 1.5	12.3	15.2	305
8 × 1.5	12.3	16.4	385
10 × 1.5	12.3	18.8	460
12 × 1.5	12.3	19.7	558
16 × 1.5	12.3	22.5	725
20 × 1.5	12.3	25	881
24 × 1.5	12.3	27.1	1470

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

Triplex × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
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.