

Application

RE-2Y(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 polyethylene (PE) 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 (bare) annealed copper, solid class 1 or stranded class 2 acc. to IEC 60228.
Insulation	Polyethylene (PE) acc. to EN 50290-2-23.
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 U_o/U	300 V (500 V on request).
Test voltage	1.5 kV.
Standard	EN 50288-7 (VDE 0819-7); conductor IEC 60228; insulation EN 50290-2-23; sheath EN 50290-2-22.
Flame-retardant	Acc. to IEC 60332-1-2 (and IEC 60332-3-24).
Max. conductor temperature	+70 °C.
Permitted outer cable temperature, fixed	-30 °C to +70 °C.
Min. bending radius, fixed	7.5 × overall diameter.
Reaction to fire (CPR)	Eca acc. to EN 50575 / EN 13501-6; Cca-s3,d2,a3 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	7.6	66
4 × 0.5	36.7	8.8	98
5 × 0.5	36.7	9.8	118
6 × 0.5	36.7	10.6	138
8 × 0.5	36.7	11.3	160
10 × 0.5	36.7	12.9	201
12 × 0.5	36.7	13.5	236
16 × 0.5	36.7	15.2	300
20 × 0.5	36.7	16.9	367
24 × 0.5	36.7	18.3	419
2 × 0.75	25	8.5	87
3 × 0.75	25	10	123
4 × 0.75	25	10.9	150
5 × 0.75	25	11.8	175
8 × 0.75	25	12.8	220
10 × 0.75	25	14.5	267
12 × 0.75	25	15.1	298
16 × 0.75	25	17.3	409
20 × 0.75	25	19.2	480
24 × 0.75	25	20.8	561
2 × 1	18.5	9.2	102
3 × 1	18.5	10.9	156
4 × 1	18.5	11.9	183
5 × 1	18.5	13	224
8 × 1	18.5	14	273
10 × 1	18.5	15.9	324
12 × 1	18.5	16.8	383
16 × 1	18.5	19	513
20 × 1	18.5	21.1	619
24 × 1	18.5	23.1	738
2 × 1.5	12.3	10.8	139
3 × 1.5	12.3	12.7	212
4 × 1.5	12.3	14	259
5 × 1.5	12.3	15.2	312
8 × 1.5	12.3	16.4	378
10 × 1.5	12.3	18.8	473
12 × 1.5	12.3	19.7	548
16 × 1.5	12.3	22.5	727
20 × 1.5	12.3	25	903
24 × 1.5	12.3	27.1	1051

Triples × mm2	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.5	36.7	8.4	92
4 × 0.5	36.7	9.8	124
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	186
8 × 0.5	36.7	13.1	222
10 × 0.5	36.7	14.7	276
12 × 0.5	36.7	15.2	325
16 × 0.5	36.7	17.4	416
20 × 0.5	36.7	19.1	510
24 × 0.5	36.7	20.9	597
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	246
8 × 0.75	25	14.7	297
10 × 0.75	25	16.7	368
12 × 0.75	25	17.3	425
16 × 0.75	25	19.7	558
20 × 0.75	25	21.7	685
24 × 0.75	25	23.7	806
2 × 1	18.5	10.4	135
4 × 1	18.5	11.9	203
5 × 1	18.5	13.2	252
6 × 1	18.5	15	304
8 × 1	18.5	16.1	381
10 × 1	18.5	18.4	463
12 × 1	18.5	19	546
16 × 1	18.5	21.7	720
20 × 1	18.5	24.1	884
24 × 1	18.5	26.1	1053
2 × 1.5	12.3	11.9	192
4 × 1.5	12.3	14	288
5 × 1.5	12.3	15.4	356
6 × 1.5	12.3	17.6	433
8 × 1.5	12.3	19.1	543
10 × 1.5	12.3	21.6	675
12 × 1.5	12.3	22.5	782
16 × 1.5	12.3	25.7	1035
20 × 1.5	12.3	28.6	1271
24 × 1.5	12.3	31.1	1514

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.