

Application

RE-2Y(St)Y TiMF is an 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 polyethylene (PE) and stranded into triples; each triple is individually screened (TiMF) with an aluminium/polyester foil in contact with a tinned copper drain wire, and all screened triples are enclosed by an overall (collective) foil screen with a further 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 individual triple screens suppress crosstalk between circuits; 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	Individual screen on every triple: aluminium/polyester foil in contact with a tinned copper drain wire (0.5 mm ²); the assembled triples are enclosed by an overall (collective) aluminium/polyester foil screen with a further 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	Triple: black / white / red; triples 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)	No product-specific Euroclass is published for this construction; the CPR class (EN 50575) is stated on the Declaration of Performance, which Q Cables can provide on request.

DIMENSIONS & TECHNICAL DATA

Triples × mm ²	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.5	36.7	9.7	104
4 × 0.5	36.7	11.1	156
5 × 0.5	36.7	12.4	183
6 × 0.5	36.7	14	236
8 × 0.5	36.7	14.9	288
10 × 0.5	36.7	17	350
12 × 0.5	36.7	17.6	386
16 × 0.5	36.7	20.1	506
20 × 0.5	36.7	22.3	619
24 × 0.5	36.7	24.4	752
2 × 0.75	25	10.6	125
4 × 0.75	25	12.4	187
5 × 0.75	25	13.7	238
6 × 0.75	25	15.4	281
8 × 0.75	25	16.7	364
10 × 0.75	25	19	448
12 × 0.75	25	19.7	497
16 × 0.75	25	22.5	655
20 × 0.75	25	24.9	802
24 × 0.75	25	27.2	970
2 × 1	18.5	11.5	154
4 × 1	18.5	13.4	228
5 × 1	18.5	14.8	287
6 × 1	18.5	16.9	350
8 × 1	18.5	18.1	445
10 × 1	18.5	20.7	547
12 × 1	18.5	21.4	624
16 × 1	18.5	24.4	822
20 × 1	18.5	27.1	1005
24 × 1	18.5	29.6	1212
2 × 1.5	12.3	13.2	199
4 × 1.5	12.3	15.4	322
5 × 1.5	12.3	17.1	397
6 × 1.5	12.3	19.5	484
8 × 1.5	12.3	21.1	616
10 × 1.5	12.3	24.1	768
12 × 1.5	12.3	24.9	870
16 × 1.5	12.3	28.4	1144
20 × 1.5	12.3	31.6	1404
24 × 1.5	12.3	34.4	1698

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