**EXAPP GROUP** 

Low frequency data transmission cables • Computer cables (RE)





# RE-2Y(ST)Yv PiMF

Instrumentation cable with reinforced outer sheath and pairs in metalfoil



#### **Benefits**

- Aluminium-laminated plastic foil static screen with tin-plated drain wire minimises the interference of high frequency, electromagnetic fields
- Decoupling of circuits by means of twisted-pair (TP) design (crosstalk effects)
- Low capacitance due to polyolefin-based insulation

# **Application range**

- · In measurement and control engineering
- Intended for use when modern process computers have to process large volumes of data, e.g. high-capacity computer systems in waste incineration plants or sewage treatment plants
- These cables are suitable for fixed installation in dry or damp rooms and, in case of the black jacketed versions, also for outdoor operation, while they all feature enhanced suitability for direct burial in the ground

# **Product features**

- Computer cable with screened pairs and reinforced outer sheath
- Outer sheath colour: black for outdoor applications or blue for intrinsically safe systems
- Flame-retardant according IEC 60332-1-2

### Norm references / Approvals

Based on EN 50288-7

# **Product Make-up**

- 7-wire bare stranded copper conductor, core insulation made of polyethylene (PE), cores twisted into pairs, pair screening made of aluminium-laminated plastic foil with bare copper drain wire, PiMF marking using numbered foil, pairs stranded in layers
- Complete stranding contains 1 core for communication (core colour orange); the communication core is omitted on single-pair versions
- Aluminium-laminated plastic foil static screen with tinned drain wire
- · Reinforced outer sheath made of PVC
- Outer sheath colour: black (RAL 9005) or blue (RAL 5015)

#### **Technical data**



#### Classification

ETIM 5.0 Class-ID: EC000830 ETIM 5.0 Class-Description: Data cable



#### Core identification code

a-core: black; b-core: white with consecutive numbers: 1-1, 2-2, 3-3, 4-4 etc.



# Mutual capacitance (at 800 Hz max):

C/C: 0.5 mm<sup>2</sup>: 75 nF/km (at 800 Hz max): C/C: 1.3 mm<sup>2</sup>: 100 nF/km



Peak operating voltage (not for power applications) 300 V



Inductivity

max. 0.75 mH/km



Conductor resistance 0.5 mm<sup>2</sup>: max. 39.2 ohm/km

1.3 mm<sup>2</sup>: max. 14.2 ohm/km



Minimum bending radius

Occasional flexing: 15 x outer diameter Fixed installation: 7.5 x outer diameter

**Short-range crosstalk attenuation** At 60 kHz: min. 1.02 dB/km



Test voltage

Core/core: 2000 V Core/screen: 600 V



Characteristic impedance approx. 100 ohms



Temperature range

Occasional flexing: -5°C to +50°C Fixed installation: -40°C to +80°C

Article number	Number of pairs and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
RE-2Y(ST)Yv PiMF 0.5 mm <sup>2</sup> blue				
0032438	2 x 2 x 0.5	10	35	128
0032442	12 x 2 x 0.5	16.7	161	325
0.5 mm² black				
0032448	2 x 2 x 0.5	10	35	128
0032449	4 x 2 x 0.5	11.6	60	170
0032450	8 x 2 x 0.5	14.4	121	230
0032451	10 x 2 x 0.5	15.9	136	270
0032453	16 x 2 x 0.5	19.1	212	430
1.3 mm² blue				
0032458	2 x 2 x 1.3	12.4	68	184
1.3 mm² black				
0032464	2 x 2 x 1.3	12.4	68	184
0032465	4 x 2 x 1.3	14.2	124	269
0032466	8 x 2 x 1.3	18.5	239	442
0032467	12 x 2 x 1.3	22.2	353	593

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges. Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils). Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

KT cable shears refer to page 999