



UNITRONIC® RE-2Y(ST)Yv

Instrumentation cable with reinforced outer sheath



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
- Electrically 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 versions with a black outer sheath, also for outdoor use
- Thanks to reinforced, nominal/ minimum average wall thickness of the outer sheath of at least 1.8 mm, for applications, where a reinforced outer sheath may turn out to be advantageous.

Product features

- Outer sheath colour: black for outdoor applications or blue for intrinsically safe systems
- Flame-retardant according IEC 60332-1-2

Norm references / Approvals

- In the style of EN 50288-7

Product Make-up

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

Technical data

Classification ETIM 5/6
ETIM 5.0/6.0 Class-ID: EC000104
ETIM 5.0/6.0 Class-Description:
Control cable



Core identification code
a-core: black; b-core: white
with consecutive numbers:
1-1, 2-2, 3-3, 4-4 etc.
Three-way version: black, white, red



Mutual capacitance
(guideline values at 800 Hz):
C/C: 0.5 mm²: max. 75 nF/km
(guideline values at 800 Hz):
C/C: 1.3 mm²: max. 100 nF/km



Peak operating voltage
(not for power applications)
300 V



Conductor resistance
0.5 mm²: max. 39.2 Ω/km
1.3 mm²: max. 14.3 Ω/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. 0.88 dB/km



Test voltage
Core/core: 2000 V
Core/screen: 1000 V



Characteristic impedance
approx. 100 ohms



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

Article number	Dimension and cross section in mm²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
RE-2Y(ST)Yv				
0.5 mm² blue				
0032400	1 x 2 x 0,50	7.2	15	74
0032401	2 x 2 x 0,50	9.5	30	117
0.5 mm² black				
0032411	1 x 2 x 0,50	7.2	15	74
0032412	2 x 2 x 0,50	9.5	30	117
0032413	4 x 2 x 0,50	11.1	50	140
0032415	10 x 2 x 0,50	14.5	110	240
0032418	20 x 2 x 0,50	17.9	210	385
0032420	36 x 2 x 0,50	22.6	370	656
0032421	48 x 2 x 0,50	27.1	490	854
1.3 mm² blue				
0032422	1 x 2 x 1,30	8.6	31	102
0032423	2 x 2 x 1,30	11.5	62	161
0032424	4 x 2 x 1,30	13.8	114	230
0032428	24 x 2 x 1,30	27.5	684	952
1.3 mm² black				
0032430	1 x 2 x 1,30	8.6	31	102
0032431	2 x 2 x 1,30	11.5	62	161
0032432	4 x 2 x 1,30	13.8	114	230
0032433	8 x 2 x 1,30	16.9	218	377
0032434	12 x 2 x 1,30	19.3	322	520
0032436	24 x 2 x 1,30	27.5	684	952

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 and graphics are not to scale and do not represent detailed images of the respective products.

Similar products

- UNITRONIC® RE-2Y(ST)Yv PiMF refer to page 315

Accessories

- Cable shears with double edge refer to page 980
- Ratchet cutter refer to page 980
- KS 20 cable shears
- KT cable shears



UNITRONIC® RE-2Y(ST)Yv PiMF

Instrumentation cable with reinforced outer sheath and pairs in metalfoil

Technical data

	Classification ETIM 5/6 ETIM 5.0/6.0 Class-ID: EC000104 ETIM 5.0/6.0 Class-Description: Control 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 mm²: 75 nF/km (at 800 Hz max): C/C: 1.3 mm²: 100 nF/km
	Peak operating voltage (not for power applications) 300 V
	Inductivity max. 0.75 mH/km
	Conductor resistance 0.5 mm²: max. 39.2 Ω/km 1.3 mm²: max. 14.2 Ω/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



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
- Electrically 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 versions with a black outer sheath, also for outdoor use
- Thanks to reinforced, nominal/ minimum average wall thickness of the outer sheath of at least 1.8 mm, for applications, where a reinforced outer sheath may turn out to be advantageous.

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

- In the style of 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)

Article number	Dimension and cross section in mm²	Outer diameter [mm]	Copper index [kg/km]	Weight [kg/km]
RE-2Y(ST)Yv PiMF				
0.5 mm² blue				
0032438	2 x 2 x 0,50	10	35	128
0032442	12 x 2 x 0,50	16.7	161	325
0.5 mm² black				
0032448	2 x 2 x 0,50	10	35	128
0032449	4 x 2 x 0,50	11.6	60	170
0032450	8 x 2 x 0,50	14.4	121	261
0032451	10 x 2 x 0,50	15.9	136	285
0032453	16 x 2 x 0,50	19.1	212	430
1.3 mm² blue				
0032458	2 x 2 x 1,30	12.4	68	184
1.3 mm² black				
0032464	2 x 2 x 1,30	12.4	68	184
0032465	4 x 2 x 1,30	14.2	124	269
0032466	8 x 2 x 1,30	18.5	239	442
0032467	12 x 2 x 1,30	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 and graphics are not to scale and do not represent detailed images of the respective products.

Accessories

- Ratchet cutter refer to page 290
- KT cable shears