



EN 50288-7 PVC/PVC instrumentation cable

RE-Y(st)Y

Instrumentation Cable

EN 50288-7 PVC-insulated collectively or PiMF-screened PVC instrumentation cable



BS EN 50288-7

300/500 V · PVC / PVC

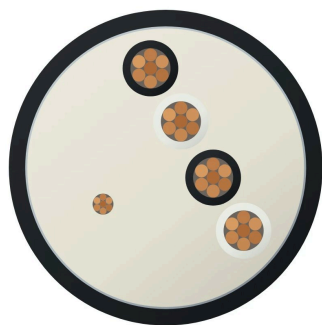
 $L/R \leq 25-40 \mu H/\Omega \cdot OS / PiMF$

Application

Flexible, economical 300/500 V process instrumentation cable built to BS EN 50288-7 with Class 2 (or Class 5) copper conductors, PVC (Y / TI1) core insulation, collective or PiMF Al/PET screen with tinned drain wire and flame-retardant PVC sheath.

Typical uses: Chemical, Water & Wastewater Treatment Plants, Power Stations, Boilers & Balance-of-Plant, PLC & DCS Marshalling Cabinet Wiring, Food, Beverage & Pharmaceutical Utilities, Cement, Steel & General Process Automation

Construction



Cross-section, not to scale

- | | | |
|---|---|-------------------------------|
| 1 | Stranded copper conductors | |
| 2 | Flame-retardant PVC core insulation (Y) | |
| 3 | Individual pair screen (PiMF option) | |
| 4 | Polyester binder tape | |
| 5 | Collective Al/PET electrostatic screen (st) | 100 % electrostatic shielding |
| 6 | Flame-retardant PVC outer sheath (Y) | |

Technical data

Typical values

Rated voltage U0/U	300/500 V	Test voltage	2000 V AC (core/core & core/screen) for 1 min
Insulation resistance	≥ 100 MΩ·km at +20 °C	Mutual capacitance (at 800 Hz)	≤ 200 nF/km (OS) · ≤ 250 nF/km (PiMF)
Max. L/R ratio	≤ 25 μH/Ω (0.5–1.0 mm ²) · ≤ 40 μH/Ω (1.5 mm ²)	Operating temperature, fixed	–30 °C to +70 °C (+90 °C HR-PVC option)
Operating temperature, installation	–5 °C to +50 °C	Min. bending radius, fixed	7.5 × OD
Min. bending radius, during pulling	10 × OD	Flame retardance	IEC 60332-1-2 & IEC 60332-3-24 (Cat C)
Oil & chemical resistance	EN 50290-2-22 TM1 oil-resistant PVC	Standards	BS EN 50288-7

Sizes

18 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Format	Screening	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
0.5 mm ² PVC/PVC — L/R ≤ 25 μH/Ω · R ₂₀ ≤ 36.7 Ω/km 5 sizes						
☐ RE-Y(st)Y 1×2×0.5	1×2×0.5 mm ²	OS	5.6	15	44	42
☐ RE-Y(st)Y 2×2×0.5	2×2×0.5 mm ²	OS	8.0	25	75	60
☐ RE-Y(st)Y 4×2×0.5 PiMF	4×2×0.5 mm ²	PiMF+OS	10.4	52	130	78
☐ RE-Y(st)Y 8×2×0.5 PiMF	8×2×0.5 mm ²	PiMF+OS	13.5	98	222	101
☐ RE-Y(st)Y 12×2×0.5 PiMF	12×2×0.5 mm ²	PiMF+OS	16.2	144	315	122
0.75 mm ² PVC/PVC — L/R ≤ 25 μH/Ω · R ₂₀ ≤ 25.0 Ω/km 4 sizes						
☐ RE-Y(st)Y 1×2×0.75	1×2×0.75 mm ²	OS	6.0	20	53	45
☐ RE-Y(st)Y 2×2×0.75	2×2×0.75 mm ²	OS	8.8	34	91	66
☐ RE-Y(st)Y 4×2×0.75 PiMF	4×2×0.75 mm ²	PiMF+OS	11.4	71	160	86
☐ RE-Y(st)Y 8×2×0.75 PiMF	8×2×0.75 mm ²	PiMF+OS	14.9	136	275	112
1.0 mm ² PVC/PVC — L/R ≤ 25 μH/Ω · R ₂₀ ≤ 18.5 Ω/km 3 sizes						
☐ RE-Y(st)Y 1×2×1.0	1×2×1.0 mm ²	OS	6.4	25	63	48
☐ RE-Y(st)Y 4×2×1.0 PiMF	4×2×1.0 mm ²	PiMF+OS	12.2	90	192	92
☐ RE-Y(st)Y 8×2×1.0 PiMF	8×2×1.0 mm ²	PiMF+OS	16.1	174	334	121
1.5 mm ² PVC/PVC — L/R ≤ 40 μH/Ω · R ₂₀ ≤ 12.3 Ω/km 6 sizes						
☐ RE-Y(st)Y 1×2×1.5	1×2×1.5 mm ²	OS	7.2	35	81	54
☐ RE-Y(st)Y 2×2×1.5	2×2×1.5 mm ²	OS	10.5	63	144	79
☐ RE-Y(st)Y 4×2×1.5 PiMF	4×2×1.5 mm ²	PiMF+OS	13.8	129	254	104
☐ RE-Y(st)Y 8×2×1.5 PiMF	8×2×1.5 mm ²	PiMF+OS	18.2	252	442	136
☐ RE-Y(st)Y 12×2×1.5 PiMF	12×2×1.5 mm ²	PiMF+OS	21.9	374	632	164
☐ RE-Y(st)Y 24×2×1.5 PiMF	24×2×1.5 mm ²	PiMF+OS	30.2	742	1,195	226

– Triads (1×3 to 24×3) for 3-wire Pt100 RTD sensors are also stocked in RE-Y(st)Y.

Electrical parameters by cross-section

4 sizes

Conductor size	Max. DC R @ 20 °C Ω/km	Max. L/R ratio μH/Ω	Max. C (OS) nF/km	Max. C (PiMF) nF/km
0.50 mm ²	36.7	25	200	250
0.75 mm ²	25.0	25	200	250
1.00 mm ²	18.5	25	200	250

Conductor size	Max. DC R @ 20 °C Ω/km	Max. L/R ratio μH/Ω	Max. C (OS) nF/km	Max. C (PiMF) nF/km
1.50 mm ²	12.3	40	200	250

– If mutual capacitance ≤ 100 nF/km is required for long Ex-i runs or high-speed digital buses, select RE-2Y(st)Y or RE-2X(st)Y.

Standards and approvals

- ✓ BS EN 50288-7 Compliant
- ✓ IEC 60332-1-2 & IEC 60332-3-24 Cat C
- ✓ CE, RoHS 2 (2011/65/EU) & REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/re-y-st-y-instrumentation-cable



Typical values for this cable type, based on BS EN 50288-7 (300/500 V). Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.