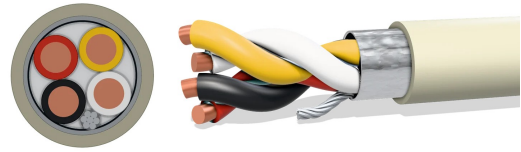


Application

J-Y(St)Y (Lg) is a German indoor telephone, signalling and measuring installation cable ('Fernmeldeleitung') to DIN VDE 0815 for fixed installation in dry and damp rooms inside buildings. Solid bare-copper conductors, specified by diameter (0.6 mm or 0.8 mm), are insulated with PVC and stranded into pairs; the assembled pairs are enclosed by a collective (overall) electrostatic screen (St) of plastic-coated aluminium/polyester foil in contact with a tinned copper drain wire, which protects the signal pairs against electromagnetic interference. A flame-retardant PVC outer sheath (grey) completes the cable. It is used for telephone extensions, signal and data transmission, bell/intercom and low-voltage measuring circuits; it is not intended for power distribution.



CONSTRUCTION

Conductor	Solid bare (plain) annealed copper, 0.6 mm or 0.8 mm diameter, class 1 acc. to IEC 60228 / DIN VDE 0815.
Insulation	PVC core insulation (compound Y11 acc. to DIN VDE 0207-4).
Stranding	Cores stranded to pairs (the 2-pair sizes $2 \times 2 \times 0.6$ and $2 \times 2 \times 0.8$ are stranded as a star quad); pairs stranded in layers, colour-coded and numbered.
Screen (St)	Collective (overall) electrostatic screen of plastic-coated aluminium/polyester (Al/PET) foil in contact with a tinned copper drain wire (CAM).
Sheath	Flame-retardant PVC outer sheath (compound YM1 acc. to DIN VDE 0207-5); grey.

ELECTRICAL & THERMAL PROPERTIES

Peak operating voltage	300 V (0.6 mm and 0.8 mm; not for power distribution).
Test voltage	800 V AC core/core and core/screen (50 Hz).
Standard	DIN VDE 0815 (telecom/installation cables); conductors acc. to IEC 60228 class 1; flame test IEC 60332-1-2 / DIN VDE 0482-332-1-2.
Conductor resistance	0.8 mm: max. 36.6 Ω /km (loop max. 73.2 Ω /km); 0.6 mm: max. 65 Ω /km (loop max. 130 Ω /km) at 20 °C.
Mutual capacitance	max. 100 nF/km at 800 Hz.
Capacitance unbalance	max. 300 pF/100 m (k1).
Insulation resistance	min. 100 M Ω $\times$ km.
Max. conductor temperature	+70 °C (fixed installation).
Permitted temperature, fixed	-30 °C to +70 °C (in motion -5 °C to +50 °C).
Min. bending radius, fixed	7.5 $\times$ overall diameter.
Reaction to fire (CPR)	Eca (EN 50575).

DIMENSIONS & TECHNICAL DATA

Pairs × mm	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.8	36.6	7	60
3 × 0.8	36.6	8.5	80
4 × 0.8	36.6	9	100
5 × 0.8	36.6	9.5	120
6 × 0.8	36.6	11	140
8 × 0.8	36.6	11.5	170
10 × 0.8	36.6	13.2	220
12 × 0.8	36.6	14.2	250
16 × 0.8	36.6	16	320
20 × 0.8	36.6	17	380
24 × 0.8	36.6	19	460
30 × 0.8	36.6	20.8	560
40 × 0.8	36.6	23	710

Pairs × mm (0.6 mm dia)	Cond. R @20°C (Ω/km)	Nominal O.D. (mm)	Weight (kg/km)
2 × 0.6	65	5	40
3 × 0.6	65	6.3	50
4 × 0.6	65	6.5	60
5 × 0.6	65	7.2	70
6 × 0.6	65	7.5	80
8 × 0.6	65	8	90
10 × 0.6	65	10	110
12 × 0.6	65	10.2	130
16 × 0.6	65	11	160
20 × 0.6	65	12	190
24 × 0.6	65	13	220
30 × 0.6	65	14	280
40 × 0.6	65	15	350

The pairs column lists number of pairs × conductor diameter; every pair is 2 × d mm solid bare copper (main table d = 0.8 mm, second table d = 0.6 mm). Conductor resistance is per conductor at 20 °C (loop resistance is twice this value). Nominal outer diameters and weights are the manufacturer values of the leading reference source; higher pair counts (50 up to 100 pairs) are also available. All figures are indicative and non-binding.