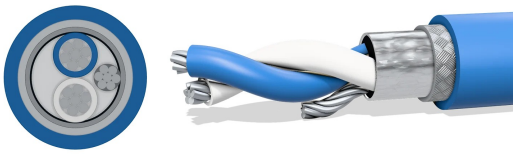
RS-485 1x2x0.22 LSZH B2ca

RS-485 bus cable, 1 pair 0.22 mm2, foil and TC braid, blue LSZH sheath, B2ca-s1a,d0,a1

CU/PE/CAM/TCWB/LSZH

Application



RS-485 1x2x0.22 LSZH B2ca is an RS-485 (EIA/TIA-485) data bus cable with a characteristic impedance of 110 Ω, for serial fieldbus communication between PLCs, drives, operator panels, meters and SCADA/RTU equipment. One twisted pair of stranded tinned-copper conductors with high-density polyethylene (HDPE) insulation is enclosed by an overall screen of aluminium/polyester (Al/PET) foil with a tinned-copper drain wire and a tinned-copper braid, which keeps the bus reliable in electrically noisy installations and over long distances. The blue sheath is a UV-resistant, low-smoke zero-halogen (LSZH) compound, for installations that call for a high reaction-to-fire class.

CONSTRUCTION

Conductor	Stranded tinned copper, 7 × 0.20 mm, approx. 0.22 mm^2.
Insulation	High-density polyethylene (HDPE), nominal diameter 1.75 mm.
Pair	One twisted pair; colours white with blue stripe and blue with white stripe.
Screen	Overall aluminium/polyester (Al/PET) foil with a stranded tinned-copper drain wire, 7 × 0.20 mm.
Braid	Tinned copper, 0.11 mm wires, 16 carriers of 7 wires.
Sheath	Low-smoke zero-halogen (LSZH) compound, UV-resistant, blue.
Cross-reference	Comparable in construction to Belden 9841 (RS-485, 1 pair). Differs in characteristic impedance (110 Ω instead of 120 Ω), rated voltage (600 V instead of 300 V) and sheath (LSZH, B2ca).

ELECTRICAL & TRANSMISSION PROPERTIES

Rated voltage	600 V.
Characteristic impedance	110 Ω ±15 Ω.
Capacitance	50 ±15 pF/m core to core; 90 ±15 pF/m core to screen.
Conductor resistance	86 Ω/km at 20 °C.
Temperature range	-30 °C to +70 °C.
Compliance	RoHS (EU 2015/863).

FIRE PERFORMANCE

Flame propagation	EN 60332-1-2.
Reaction-to-fire test	EN 50399.
Smoke density	EN 61034-2.
Halogen acid gas	IEC 60754-1.
Corrosive gases	IEC 60754-2.
Reaction to fire (CPR)	B2ca-s1a,d0,a1 (EN 50575:2014+A1:2016, AVCP system 1+).

KEY FIGURES

Pairs	1 × 2 × 0.22 mm^2
Outer diameter	6.10 mm
Characteristic impedance	110 Ω ±15 Ω

Values are the manufacturer's nominal values for this construction; tolerances as stated. Weight and minimum bending radius on request. All values are indicative and non-binding. Belden is a trademark of Belden Inc.; the name is used for identification only.

Q Cables reserves the right to modify this datasheet without prior notice. The technical data in this document has been taken from the original manufacturer. Q Cables accepts no liability whatsoever for typographical errors, inaccuracies, or deviations from the manufacturer's specifications, and makes no warranty, express or implied, as to their accuracy or completeness. All images, weights, dimensions and values are indicative only and not binding.