

Industrial Ethernet cables



CATLine XL

Class D / Class E

Ethernet cable, suitable for cable chains with UL/CSA approval

30°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE



marking example:

SAB BRÖCKSKES · D-VIERSEN · CATLine XL 4x2x20AWG 1639-4020 AWM Style 20549 80°C 300V CSA AWM I/II A/B 80°C 300V FT2 CE

Application: With the new flexible CATLine XL types with reduced insertion loss, a product family is available that has been tested and validated beyond the normative limit of 100 metres. In practical tests, these cables were also able to transmit distances of over 190 m (CATLine XL / Class D - 100 MBit) or over 130 m (CATLine XL / Class E - 1GBit) - confirmed by measurements with BERT systems.

Construction:

Conductor:	bare copper wire, fine stranded
Insulation:	special polymer
Colour code:	white-blue/blue, white-orange/orange, white-green/green, white-brown/brown
Stranding:	cores twisted in pairs, pairs together class E: Pairs foil-shielded
Screen:	braiding of tinned round copper wires
Wrapping:	non-woven tape
Sheath material:	PUR
Sheath colour:	green (similar RAL 6018)

Outstanding features:

- » suitable for cable tracks
- » flame retardant and self-extinguishing
- » suitable for PoE
- » PFAS free

Technical data:

Peak operating voltage:	max. 90 V
Voltage UL/CSA:	300 V
Testing voltage:	core/core 2000 V core/screen 2000 V
Min. bending radius	
fixed laying:	5 x d
flexible application:	10 x d
permanently flexible:	15 x d
Temperature range	UL/CSA: up to +80 °C
fixed laying:	-50/+90 °C
flexible application:	-40/+90 °C
Halogen-free:	acc. to IEC 60754-1 + VDE 0482-754-1
Fire performance:	flame retardant and self-extinguishing acc. to IEC 60332-1-2 + VDE 0482-332-1-2 UL Horizontal Flame Test FT2
Oil resistance:	TMPU acc. to EN 50363-10-2 + VDE 0207-363-10-2
Characteristic impedance:	100Ω ± 10Ω CATline XL / Class D, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-2-2 / CAT 5 CATline XL / Class E, fulfils the electrical and transmission requirements with high frequency with reference to EN 50288-5-2 / CAT 6
Sunlight and weather resistance:	very good - acc. to HD 605 (VDE 0276-605)
Flexibility:	very good
UL Style:	20549
Absence of harmful substances:	acc. to RoHS directive of the European Union, see chapter N „Technical data“

item no.	type	dimension	outer-ø ± 10% mm	copper figure kg/km	cable weight ≈ kg/km
15394020	CATLine XL / Class D	4 x 2 x 20 AWG	11,6	100,7	158
16394020	CATLine XL / Class E	4 x 2 x 20 AWG	15,7	144,3	266

Other dimensions and colours are possible on request.