

TRAYCONTROL® 300-C TP twisted pair, flexible, shielded, oil-resistant, EMC-preferred type, exposed run PLTC-ER, ITC-ER, NFPA 79



Technical data

- Shielded, PVC signal and control cable
- **Temperature range**
flexing +5°C to +50°C
static -25°C to +105°C
- **Nominal voltage**
300 V
- **Test voltage**
2000 V
- **Minimum bending radius**
flexing 6x cable Ø
- **Coupling resistance**
max. 250 Ohm/km
- **Radiation resistance**
up to 80x10⁶ cJ/kg (up to 80 Mrad)

Cable structure

- Finely stranded, tinned copper acc. to AWG standards
- Conductor insulation:
Special PVC (28-24 AWG)
Special PVC with transparent nylon coating (22-16 AWG)
- Conductor pair identification to international color code
- Conductors stranded in pairs with optimal lay length
- Pairs stranded in layers with optimal lay length
- 1. Special aluminum foil shield
- Drain wire
- 2. Braided, tinned copper shield, approx. 85% coverage
- Separator
- Special PVC outer jacket
- Gray (RAL 7001) jacket
- With length marking in feet

Properties

- Self-extinguishing and flame retardant acc. to CSA FT4
- The materials used during manufacturing are cadmium-free, contain no silicone and are free from substances harmful to the wetting properties of lacquers
- UV-resistant (22-18 AWG only)
- Direct burial rated (18 AWG only)
- Resistant to cleaning and disinfecting agents acc. to ECOLAB®

Tests

- **UL (28-24 AWG)**
AWM 2517, CM, NFPA 79, NEC Art. 725, 760 & 800, -40°C Cold Bend
- **UL (22-16 AWG)**
PLTC-ER, ITC-ER, AWM 2517, CM, NFPA 79, NEC Art. 725, 760 & 800, Oil Res I/II, -40°C Cold Bend
- **CSA:**
CMG FT4, C22.2 No. 210 - AWM I/II A/B FT4

Application

TRAYCONTROL® 300-C TP is a shielded, twisted pair signal and control cable. PLTC-ER and ITC-ER approvals make it suitable for open, unprotected installation in cable trays to the machine. Their outstanding oil resistance (Oil Res I/II) makes them ideally suited as a connecting cable and also for control, signal and measuring systems in industrial plants. A flexible cable structure facilitates installation inside and outside of machines and switch cabinets. The double-shielding with aluminum foil (100% coverage) and copper braid (approx. 85% coverage) guarantee superior EMC protection. Applications: machine tools, control panels, control and instrumentation technology, production automation, cable ducts, and renewable energy.

EMC = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product conforms to EC Low-Voltage Directive 2006/95/EC.

Part no.	Cross section mm ²	No. pairs x No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
61999	0,154	1 x 2 x 26	4,4	10,9	30,0
59760	0,154	2 x 2 x 26	5,7	17,9	45,0
59761	0,154	3 x 2 x 26	6,0	21,5	51,0
59762	0,154	4 x 2 x 26	6,4	25,7	58,0
59763	0,154	5 x 2 x 26	6,9	30,0	65,0
59764	0,154	6 x 2 x 26	7,6	34,4	79,0
59765	0,154	7 x 2 x 26	7,6	37,2	83,0
59766	0,154	8 x 2 x 26	8,1	41,7	92,0
59767	0,154	10 x 2 x 26	9,2	50,9	110,0
59768	0,154	12 x 2 x 26	9,4	57,3	122,0
59769	0,154	14 x 2 x 26	10,4	64,3	147,0
59770	0,154	15 x 2 x 26	10,9	68,7	158,0
59771	0,154	16 x 2 x 26	10,9	71,5	162,0
59772	0,154	18 x 2 x 26	11,4	78,6	176,0
59773	0,154	20 x 2 x 26	11,9	85,9	189,0
59774	0,154	22 x 2 x 26	12,4	93,2	204,0

Part no.	Cross section mm ²	No. pairs x No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
59775	0,154	24 x 2 x 26	13,0	100,8	219,0
59776	0,154	25 x 2 x 26	13,0	103,6	223,0
59777	0,241	1 x 2 x 24	4,7	14,4	34,0
59778	0,241	2 x 2 x 24	6,2	23,6	52,0
59779	0,241	3 x 2 x 24	6,5	28,9	61,0
59780	0,241	4 x 2 x 24	7,2	35,0	76,0
59781	0,241	5 x 2 x 24	7,8	41,2	86,0
59782	0,241	6 x 2 x 24	8,3	47,5	98,0
59783	0,241	7 x 2 x 24	8,3	51,9	104,0
59784	0,241	8 x 2 x 24	8,9	58,2	116,0
59785	0,241	10 x 2 x 24	10,8	71,3	153,0
59786	0,241	12 x 2 x 24	11,0	81,1	170,0
59787	0,241	14 x 2 x 24	11,5	91,6	188,0
59788	0,241	15 x 2 x 24	12,1	97,8	199,0
59789	0,241	16 x 2 x 24	12,1	102,3	205,0
59790	0,241	18 x 2 x 24	12,6	113,0	225,0

Continuation ►

TRAYCONTROL® 300-C TP twisted pair, flexible, shielded, oil-resistant, EMC-preferred type, exposed run PLTC-ER, ITC-ER, NFPA 79



Part no.	Cross section mm ²	No. pairs x No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
59791	0,241	20 x 2 x 24	13,2	123,7	243,0
59792	0,241	22 x 2 x 24	13,8	134,5	262,0
59793	0,241	24 x 2 x 24	14,5	145,7	281,0
59794	0,241	25 x 2 x 24	14,5	150,1	287,0
59795	0,382	1 x 2 x 22	6,9	22,7	65,0
59796	0,382	2 x 2 x 22	9,3	37,5	101,0
59797	0,382	3 x 2 x 22	9,7	46,0	121,0
59798	0,382	4 x 2 x 22	10,5	55,6	141,0
59799	0,382	5 x 2 x 22	11,4	65,5	164,0
59800	0,382	6 x 2 x 22	12,3	75,5	186,0
59801	0,382	7 x 2 x 22	12,3	82,5	199,0
59802	0,382	8 x 2 x 22	13,2	92,6	222,0
59803	0,382	10 x 2 x 22	15,9	113,5	292,0
59804	0,382	12 x 2 x 22	16,6	129,1	333,0
59805	0,382	14 x 2 x 22	17,5	159,7	384,0
59806	0,382	15 x 2 x 22	18,4	170,5	409,0
59807	0,382	16 x 2 x 22	18,4	177,6	423,0
59808	0,382	18 x 2 x 22	19,3	195,6	460,0
59809	0,382	20 x 2 x 22	20,2	213,7	499,0
59810	0,382	22 x 2 x 22	21,2	231,8	537,0
59811	0,382	24 x 2 x 22	23,3	250,8	634,0
59812	0,382	25 x 2 x 22	23,3	257,9	647,0
59813	0,616	1 x 2 x 20	7,5	30,5	77,0

Part no.	Cross section mm ²	No. pairs x No. conductors x AWG No.	Outer Ø app. mm	Cop. weight kg / km	Weight app. kg / km
59814	0,616	2 x 2 x 20	10,0	50,4	122,0
59815	0,616	3 x 2 x 20	10,5	63,3	144,0
59816	0,616	4 x 2 x 20	11,4	77,4	171,0
59817	0,616	5 x 2 x 20	12,4	91,8	199,0
59818	0,616	6 x 2 x 20	13,4	106,4	228,0
59819	0,616	7 x 2 x 20	13,4	117,6	246,0
59820	0,616	8 x 2 x 20	15,3	132,3	304,0
59821	0,616	10 x 2 x 20	17,6	162,4	368,0
59822	0,616	12 x 2 x 20	18,3	201,3	426,0
59823	0,616	14 x 2 x 20	19,2	227,6	473,0
59824	0,616	15 x 2 x 20	20,1	243,1	504,0
59825	0,616	16 x 2 x 20	20,1	254,3	522,0
59826	0,616	18 x 2 x 20	21,2	281,2	571,0
59827	0,616	20 x 2 x 20	23,2	308,2	677,0
59828	0,616	22 x 2 x 20	24,3	335,2	729,0
59829	0,616	24 x 2 x 20	25,7	384,6	808,0
59830	0,616	25 x 2 x 20	25,7	395,9	826,0
59831	0,963	1 x 2 x 18	7,8	42,1	92,0
59832	0,963	2 x 2 x 18	10,8	69,8	149,0
59833	0,963	3 x 2 x 18	11,3	89,6	180,0
59834	0,963	6 x 2 x 18	15,4	154,2	338,0
59835	0,963	9 x 2 x 18	17,9	230,3	440,0
59836	0,963	15 x 2 x 18	21,9	356,1	649,0

Dimensions and specifications may be changed without prior notice. (RN02)