



## USE OF CABLE

increased oil-resistant control and power supply cables for use in cable trays or cable channels, especially for plant & machinery destined for the North American Market. For medium mechanical stresses, for fixed or flexible installation where free movement is required without tensile stress and without forced guidance systems, in dry, damp and wet interiors (incl. water-oil mixtures). TC-ER (Tray Cable - Exposed Run) approval open wiring between cable tray and industrial machines/plants acc. NEC 336.10(7)



## SPECIAL FEATURES

- increased resistance to oil by special PVC outer sheath, largely resistant to acids and bases
- oil-resistant acc. to UL OIL RES I // water-resistant acc. to UL wet approval 75°C
- due to UL/CSA approval up to 600 V resp. 1000 V parallel laying with other cables with identical current voltage is permitted
- TC-ER (Tray Cable - Exposed Run) approval (no ER approval for 2-core dimensions)
- WTTC (WindTurbine Tray Cable) approval
- machine tools compliant with UL (Machine Tool Wire)

## REMARKS

- conform to RoHS // conform to 2014/35/EU-Guideline ("Low-Voltage Directive") CE
- UL listed acc. to UL1277+1063 & UL/CSA recognized acc. to UL 10012+2587
- conform to NFPA 79 2007 wiring norms and NEC 336.10 (7) Class1,Div.2 in acc. to NEC "National Electric Code" Art. 336, 392, 501

## PRODUCT INFORMATION

Conductor material:	Bare copper strand
Conductor class:	Acc. to IEC 60228 cl. 5, UL 83 standard
Core insulation:	PVC
Core identification:	Acc. to DIN VDE 0293 black cores with white numerals with GNYE from 3 cores
Stranding:	Stranded in layers
Outer sheath:	PVC
Sheath colour:	Grey, RAL 7001
Rated voltage:	600 V (TC und MTW); 1000 V (WTTC & AWM); IEC: 0,6/1 kV
Testing voltage:	6 kV
Conductor resistance:	Acc. to IEC 60228 cl. 5
Min. bending radius fixed:	4 x d
Min. bending radius moved:	13 x d
Operat. temp. fixed min/max:	-40 °C / +90 °C
Operat. temp. moved min/max:	-5 °C / +90 °C
Burning behavior:	Flame-retardant acc. to IEC 60332-1, IEC 60332-3A and UL category FT4/IEEE
Resistant to oil:	UL 1277 and UL 1063 (oil-resistant acc. to UL OIL RES I and water-resistant, UL wet approval 75 °C)
Standard:	UL 1277, UL 1063 (MTW), NEC 336.10 (7) class1, Div. 2 in acc. to NEC Art. 336, 392, 501
Approvals:	UL listed acc. to UL 1277 and 1063 - UL/CSA recognized acc. to UL 10012 und 2587

## ITEM OVERVIEW

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1003402	2 X 1 (AWG 18)	7,9	19,20	87,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1003568	3 G 1 (AWG 18)	8,3	28,80	102,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1005425	3 X 1 (AWG 18)	8,3	28,80	101,30	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004069	4 G 1 (AWG 18)	9,1	38,40	125,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004396	4 X 1 (AWG 18)	9,1	38,40	125,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004170	5 G 1 (AWG 18)	9,9	48,00	150,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA

# 2-NORM TRAY TC-ER MTW GREY

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1004135	7 G 1 (AWG 18)	10,8	67,20	218,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004397	7 X 1 (AWG 18)	12,0	67,20	218,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004136	12 G 1 (AWG 18)	14,7	115,20	335,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004137	18 G 1 (AWG 18)	17,1	172,80	466,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004138	25 G 1 (AWG 18)	19,5	240,00	617,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004858	34 G 1 (AWG 18)	23,8	326,00	897,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004139	2 X 1,5 (AWG 16)	8,6	28,80	106,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004140	3 G 1,5 (AWG 16)	9,1	43,20	127,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004857	3 X 1,5 (AWG 16)	9,0	43,20	127,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004141	4 G 1,5 (AWG 16)	9,9	57,60	155,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004142	5 G 1,5 (AWG 16)	10,8	72,00	187,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004398	5 X 1,5 (AWG 16)	10,8	72,00	187,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004143	7 G 1,5 (AWG 16)	11,8	100,80	272,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004374	8 G 1,5 (AWG 16)	14,6	115,20	357,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004144	12 G 1,5 (AWG 16)	16,1	172,80	421,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004145	18 G 1,5 (AWG 16)	18,8	259,20	594,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004146	25 G 1,5 (AWG 16)	22,6	360,00	847,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004147	2 X 2,5 (AWG 14)	9,4	48,00	137,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004148	3 G 2,5 (AWG 14)	9,9	72,00	166,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004149	4 G 2,5 (AWG 14)	10,8	96,00	205,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004150	5 G 2,5 (AWG 14)	11,9	120,00	251,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004151	7 G 2,5 (AWG 14)	13,0	168,00	393,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004375	8 G 2,5 (AWG 14)	16,0	192,00	489,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004152	12 G 2,5 (AWG 14)	17,7	288,00	568,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004153	18 G 2,5 (AWG 14)	20,8	432,00	807,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004154	3 G 4 (AWG 12)	11,3	115,20	231,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004155	4 G 4 (AWG 12)	12,4	153,60	290,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004156	5 G 4 (AWG 12)	14,4	192,00	379,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004157	7 G 4 (AWG 12)	15,7	268,80	550,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004167	3 G 6 (AWG 10)	12,5	172,80	307,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004158	4 G 6 (AWG 10)	14,5	230,40	410,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004159	5 G 6 (AWG 10)	15,9	288,00	501,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004168	3 G 10 (AWG 8)	17,0	288,00	543,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004160	4 G 10 (AWG 8)	18,6	384,00	679,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004161	5 G 10 (AWG 8)	20,6	480,00	840,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004169	3 G 16 (AWG 6)	20,7	460,80	833,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004162	4 G 16 (AWG 6)	23,8	614,40	1109,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004163	5 G 16 (AWG 6)	26,3	768,00	1362,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA

# 2-NORM TRAY TC-ER MTW GREY

Product No.	Dimension [n x mm <sup>2</sup> ]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1004164	4 G 25 (AWG 4)	27,3	960,00	1569,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004165	4 G 35 (AWG 2)	30,2	1344,00	2041,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1004166	4 G 50 (AWG 1)	36,7	1920,00	2967,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1005166	4 G 70 (AWG 2/0)	41,7	2688,00	3971,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1005427	4 G 95 (AWG 3/0)	46,7	3648,00	5198,00	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA
1005858	4 G 120 (AWG 4/0)	49,3	4608,00	6169,10	grey	V0: 2-NORM TRAY TC-ER MTW UL/CSA