



USE OF CABLE

increased oil-resistant control and power supply cables for use in cable trays or cable channels, especially for export-orientated machinery. 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). For outdoor use and also for direct burial. 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 // direct burial
- UV-resistant acc. to EN 50396 and HD 605 A1; SUN RES acc. to UL 1581
- 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)
- recommended for EMC-applications

REMARKS

- conform to RoHS, conform to 2014/35/EU-Guideline ("Low-Voltage Directive") CE
- UL listed acc. to UL1277 and 1063 & UL/CSA recognized acc. to UL 10012 and 21179 and CSA AWM I/II A/B
- 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
Shield3:	Copper braid tinned, coverage approx 85%
Outer sheath:	PVC
Sheath colour:	Black, RAL 9005
Rated voltage:	600 V (TC and MTW); 1000 V (WTTC & AWM); 0,6/1 kV (IEC)
Testing voltage:	6 kV
Conductor resistance:	Acc. to IEC 60228 cl. 5
Min. bending radius fixed:	6 x d
Min. bending radius moved:	20 x d
Operat. temp. fixed min/max:	-40 °C / +90 °C (Tray Cable - MTW); +105 °C (cUR AWM)
Operat. temp. moved min/max:	-5 °C / +90 °C (Tray Cable - MTW); +105 °C (cUR AWM)
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 mm ²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1004319	2 X 1 (AWG 18)	8,5	44,00	101,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004320	3 G 1 (AWG 18)	8,9	59,00	122,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004321	4 G 1 (AWG 18)	9,7	69,00	145,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004322	5 G 1 (AWG 18)	10,5	83,00	175,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA

2-NORM TRAY-CY+UV DB TC-ER MTW BLACK

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1004323	7 G 1 (AWG 18)	11,4	107,00	214,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004324	12 G 1 (AWG 18)	15,5	186,00	355,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004325	18 G 1 (AWG 18)	17,9	261,00	492,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004326	25 G 1 (AWG 18)	20,3	337,00	618,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004327	2 X 1,5 (AWG 16)	9,2	59,00	123,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004328	3 G 1,5 (AWG 16)	9,7	73,00	145,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004329	4 G 1,5 (AWG 16)	10,5	93,00	182,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004330	5 G 1,5 (AWG 16)	11,4	112,00	216,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004331	7 G 1,5 (AWG 16)	12,4	146,00	268,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004332	12 G 1,5 (AWG 16)	16,9	252,00	448,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004333	18 G 1,5 (AWG 16)	19,6	356,00	627,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004334	25 G 1,5 (AWG 16)	23,4	474,00	768,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004335	2 X 2,5 (AWG 14)	10,0	83,00	156,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004336	3 G 2,5 (AWG 14)	10,5	107,00	189,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004337	4 G 2,5 (AWG 14)	11,4	136,00	240,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004338	5 G 2,5 (AWG 14)	12,5	165,00	286,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004339	7 G 2,5 (AWG 14)	14,6	230,00	386,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004340	12 G 2,5 (AWG 14)	18,5	376,00	606,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004341	18 G 2,5 (AWG 14)	22,6	538,00	848,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004342	3 G 4 (AWG 12)	11,9	155,00	257,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004343	4 G 4 (AWG 12)	13,0	199,00	330,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004344	5 G 4 (AWG 12)	15,2	262,00	435,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004345	7 G 4 (AWG 12)	16,5	348,00	546,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004346	4 G 6 (AWG 10)	15,3	301,00	475,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004347	5 G 6 (AWG 10)	16,7	367,00	569,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004348	4 G 10 (AWG 8)	20,1	481,00	765,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA

2-NORM TRAY-CY+UV DB TC-ER MTW BLACK

Product No.	Dimension [n x mm ²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
1004349	5 G 10 (AWG 8)	22,4	586,00	958,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004350	4 G 16 (AWG 6)	24,6	738,00	1201,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004351	5 G 16 (AWG 6)	27,1	900,00	1446,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004352	4 G 25 (AWG 4)	28,1	1101,00	1692,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004353	4 G 35 (AWG 2)	31,0	1502,00	2197,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004354	4 G 50 (AWG 1)	37,7	2167,00	3195,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA
1004355	4 G 70 (AWG 2/0)	44,2	2976,00	4369,00	black	V0: 2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA