



0,6/1kV (IEC), 600V (UL:TC-ER & MTW), 1.000V (UL: WTTC & AWM)
 shielded, grey, UL/CSA, NFPA 79 2007, CPR Eca



APPLICATION

Increased oil-resistant power and control cable designed for installation in cable trays or ducts, particularly suited for machines and systems targeting the North American market. Ideal for medium mechanical stress environments and is suitable for both fixed and flexible applications that involve free movement without tensile stress or forced guidance. It can be installed in dry, damp, or wet conditions, including environments with water-oil mixtures. TC-ER (Tray Cable – Exposed Run) certification, allows a free, open installation between cable trays and industrial machines or plants as per NEC 336.10(7).



SPECIAL FEATURES

- Increased oil resistance due to a specialized PVC outer sheath, which also offers substantial resistance to acids and alkalis.
- Oil resistance in accordance with UL OIL RES I; water resistance per UL wet approval at 75°C.
- Approved by UL/CSA for use up to 600 V, or 1000 V for parallel installation with other cables operating at the same voltage.
- TC-ER (Tray Cable - Exposed Run) certification, except for 2-core configurations, which do not have ER approval.
- WTTC (Wind Turbine Tray Cable) certification.
- Complies with UL standards for machine tools (Machine Tool Wire).

REMARKS

- Complies with RoHS and the 2014/35/EU Directive (Low Voltage Directive) CE.
- LABS-/silicone-free (during production).
- Recommended for EMC-compliant use.
- UL listed in accordance with UL1277+1063 and UL/CSA recognized per UL Style 10012+2587.
- Complies with NFPA 79 2007 wiring standards and NEC 336.10 (7) Class 1, Div. 2 according to NEC (National Electric Code) Art. 336, 392, 501.

PRODUCT DETAILS

DESIGN

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
Protection against contact	polyester-foil
Overall shielding	copper braid tinned, coverage approx. 85%
Outer sheath material	PVC
Outer sheath color	grey, RAL 7001

ELECTRICAL PROPERTIES

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

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	6 x d
Min. bending radius moved	20 x d

THERMAL PROPERTIES

Operat. temp. fixed min/max	-40 °C / +90 °C
Operat. temp. moved min/max	-5 °C / +90 °C

FIRE BEHAVIOR

Burning behavior	flame-retardant acc. to IEC 60332-1, IEC 60332-3A and UL category FT4/IEEE
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CHEMICAL RESISTANCE & OTHER

Oil resistance	UL 1277 and UL 1063 (oil-resistant acc. to UL OIL RES I and water-resistant, UL wet approval 75 °C)
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2-NORM TRAY-CY TC-ER MTW UL/CSA

STANDARDS & APPROVALS

Standards
Approvals

UL 1277, UL 1063 (MTW), NEC 336.10 (7) class], Div. 2 in acc. to NEC Art. 336, 392, 501
UL listed acc. to UL 1277 and 1063 - UL/CSA recognized acc. to UL 10012 and 2587

ITEM OVERVIEW

2-NORM TRAY-CY TC-ER MTW UL/CSA

Item no.	Dimension [n x mm ²]	Conductor structure	Outer-Ø [mm] nom.	Outer-Ø. [inch] nom.	Weight [~lbs/mft]
1004171	2 X 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	8,5	0,335	65,9
1006036	3 X 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	8,9	0,351	80,6
1004172	3 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	8,9	0,351	80,6
1004173	4 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	9,7	0,382	95,4
1004174	5 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	10,5	0,414	114,9
1004175	7 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	11,4	0,449	151,2
1006012	12 X 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	15,5	0,611	234,2
1004176	12 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	15,5	0,611	245,3
1004177	18 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	17,9	0,705	340,7
1004178	25 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm ²	20,3	0,800	428,7
1004179	2 X 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	9,2	0,362	79,3
1004181	3 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	9,7	0,382	94,8
1004180	4 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	10,5	0,414	118,9
1004182	5 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	11,4	0,449	141,1
1004183	7 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	12,4	0,489	186,8
1004184	12 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	16,9	0,666	303,1
1004185	18 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	19,6	0,772	424,7
1004186	25 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm ²	23,4	0,922	582,0
1004187	2 X 2,5 (AWG 16)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	10,0	0,394	96,1
1004188	3 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	10,5	0,414	121,6
1004189	4 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	11,4	0,449	153,2
1004190	5 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	12,5	0,493	183,5
1004191	7 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	14,6	0,575	270,1
1004192	12 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	18,5	0,729	398,5
1004193	18 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm ²	22,3	0,879	600,1
1004194	3 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm ²	11,9	0,469	162,6
1004195	4 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm ²	13,0	0,512	235,2
1004196	5 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm ²	15,2	0,599	280,9
1004197	7 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm ²	16,5	0,650	374,3
1004198	4 G 6 (AWG 10)	► AWG 10 (~ 78/AWG 28) - 6 mm ²	15,3	0,603	302,4
1004199	5 G 6 (AWG 10)	► AWG 10 (~ 78/AWG 28) - 6 mm ²	16,7	0,658	362,2
1004200	4 G 10 (AWG 8)	► AWG 8 (~ 74/AWG 26) - 10 mm ²	19,4	0,764	482,5
1004201	5 G 10 (AWG 8)	► AWG 8 (~ 74/AWG 26) - 10 mm ²	22,4	0,883	616,2
1004202	4 G 16 (AWG 6)	► AWG 6 (~ 115/AWG 26) - 16 mm ²	24,6	0,969	780,9
1004203	5 G 16 (AWG 6)	► AWG 6 (~ 115/AWG 26) - 16 mm ²	27,1	1,068	939,5
1004204	4 G 25 (AWG 4)	► AWG 4 (~ 182/AWG 26) - 25 mm ²	28,1	1,107	1.086,0
1004205	4 G 35 (AWG 2)	► AWG 2 (~ 259/AWG 26) - 35 mm ²	31,0	1,221	1.383,6
1004206	4 G 50 (AWG 1)	► AWG 1 (~ 372/AWG 26) - 50 mm ²	37,6	1,481	1.974,3
1004856	4 G 70 (AWG 2/0)	► AWG 2/0 (~ 550/AWG 26) - 70 mm ²	44,2	1,741	2.954,8
1006037	4 G 95 (AWG 3/0)	► AWG 3/0 (~ 720/AWG 26) - 95 mm ²	47,7	1,879	3.741,7