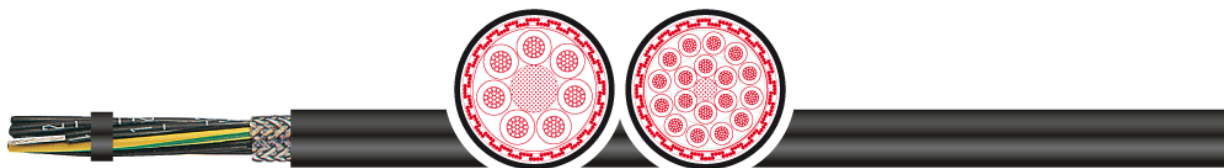




0,6/1kV IEC), 600V (UL:TC-ER & MTW), 1.000V (UL: WTTC & AWM)
 shielded, black, UV-resistant, direct burial, UL/CSA, NFPA 79 2007, CPR Eca



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; direct burial.
- UV-resistant acc. to EN 50396 and HD 605 A1; SUN RES acc. to UL 1581.
- 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+21179 and CSA AWM I/II A/B.
- 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	black, RAL 9005

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 (Tray Cable - MTW); +105 °C (cUR AWM)
Operat. temp. moved min/max	-5 °C / +90 °C (Tray Cable - MTW); +105 °C (cUR AWM)

FIRE BEHAVIOR

Burning behavior	flame-retardant acc. to IEC 60332-1, IEC 60332-3A and UL category FT4/IEEE
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2-NORM TRAY-CY+UV DB TC-ER MTW UL/CSA

CHEMICAL RESISTANCE & OTHER

Oil resistance UV resistance

UL 1277 and UL 1063 (oil-resistant acc. to UL OIL RES I and water-resistant, UL wet approval 75 °C) acc. to EN 50396 and HD 605 A1; SUN RES acc. to UL 1581.

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+UV DB TC-ER MTW UL/CSA

Item no.	Dimension [n x mm²]	Conductor structure	Outer-Ø [mm] nom.	Outer-Ø. [inch] nom.	Weight [~lbs/mft]
1004319	2 X 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	8,5	0,335	67,9
1004320	3 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	8,9	0,351	82,0
1004321	4 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	9,7	0,382	97,4
1004322	5 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	10,5	0,414	117,6
1004323	7 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	11,4	0,449	143,8
1004324	12 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	15,5	0,611	238,6
1004325	18 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	17,9	0,705	330,6
1004326	25 G 1 (AWG 18)	► AWG 18 (~ 32/AWG 32) - 1 mm²	20,3	0,800	415,3
1004327	2 X 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	9,2	0,362	82,7
1004328	3 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	9,7	0,382	97,4
1004329	4 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	10,5	0,414	122,3
1004330	5 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	11,4	0,449	145,2
1004331	7 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	12,4	0,489	180,1
1004332	12 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	16,9	0,666	301,1
1004333	18 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	19,6	0,772	421,3
1004334	25 G 1,5 (AWG 16)	► AWG 16 (~ 28/AWG 30) - 1,5 mm²	23,4	0,922	516,1
1004335	2 X 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	10,0	0,394	104,8
1004336	3 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	10,5	0,414	127,0
1004337	4 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	11,4	0,449	161,3
1004338	5 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	12,5	0,493	192,2
1004339	7 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	14,6	0,575	259,4
1004340	12 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	18,5	0,729	407,2
1004341	18 G 2,5 (AWG 14)	► AWG 14 (~ 46/AWG 30) - 2,5 mm²	22,6	0,890	569,9
1004342	3 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm²	11,9	0,469	172,7
1004343	4 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm²	13,0	0,512	221,8
1004344	5 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm²	15,2	0,599	292,3
1004345	7 G 4 (AWG 12)	► AWG 12 (~ 52/AWG 28) - 4 mm²	16,5	0,650	366,9
1004346	4 G 6 (AWG 10)	► AWG 10 (~ 78/AWG 28) - 6 mm²	15,3	0,603	319,2
1004347	5 G 6 (AWG 10)	► AWG 10 (~ 78/AWG 28) - 6 mm²	16,7	0,658	382,4
1004348	4 G 10 (AWG 8)	► AWG 8 (~ 74/AWG 26) - 10 mm²	20,1	0,792	514,1
1004349	5 G 10 (AWG 8)	► AWG 8 (~ 74/AWG 26) - 10 mm²	22,4	0,883	643,8
1004350	4 G 16 (AWG 6)	► AWG 6 (~ 115/AWG 26) - 16 mm²	24,6	0,969	807,1
1004351	5 G 16 (AWG 6)	► AWG 6 (~ 115/AWG 26) - 16 mm²	27,1	1,068	971,7
1004352	4 G 25 (AWG 4)	► AWG 4 (~ 182/AWG 26) - 25 mm²	28,1	1,107	1.137,0
1004353	4 G 35 (AWG 2)	► AWG 2 (~ 259/AWG 26) - 35 mm²	31,0	1,221	1.476,4
1004354	4 G 50 (AWG 1)	► AWG 1 (~ 372/AWG 26) - 50 mm²	37,7	1,485	2.147,0
1004318	4 G 70 (AWG 2/0)	► AWG 2/0 (~ 550/AWG 26) - 70 mm²	41,7	1,643	2.936,0