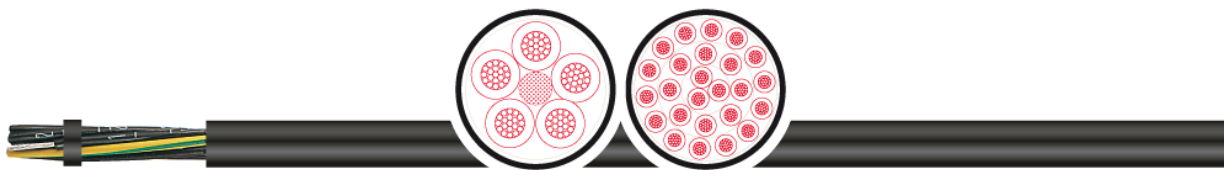




0,6/1kV (IEC), 600V (UL:TC-ER & MTW), 1.000V (UL: WTTC & AWM)  
unshielded, black, UV-resistant, direct burial, UL/CSA, NFPA 79 2007, CPR Eca



## 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).
- 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

<b>Conductor material</b>	bare copper strand
<b>Conductor class</b>	acc. to IEC 60228 cl. 5, UL 83 standard
<b>Core insulation</b>	PVC
<b>Core identification</b>	acc. to DIN VDE 0293, black cores with white numerals with GNYE from 3 cores
<b>Stranding</b>	stranded in layers
<b>Protection against contact</b>	polyester-foil
<b>Overall shielding</b>	copper braid tinned, coverage approx. 85%
<b>Outer sheath material</b>	PVC
<b>Outer sheath color</b>	black, RAL 9005

### ELECTRICAL PROPERTIES

<b>Rated voltage</b>	600 V (TC und MTW); 1000 V (WTTC & AWM); IEC: 0,6/1 kV
<b>Testing voltage</b>	6 kV
<b>Conductor resistance</b>	acc. to IEC 60228 cl. 5

### MECHANICAL & DYNAMIC PROPERTIES

<b>Min. bending radius fixed</b>	4 x d
<b>Min. bending radius moved</b>	13 x d

### THERMAL PROPERTIES

<b>Operat. temp. fixed min/max</b>	-40 °C / +90 °C (Tray Cable - MTW); +105 °C (cUR AWM)
<b>Operat. temp. moved min/max</b>	-5 °C / +90 °C (Tray Cable - MTW); +105 °C (cUR AWM)

### FIRE BEHAVIOR

<b>Burning behavior</b>	flame-retardant acc. to IEC 60332-1, IEC 60332-3A and UL category FT4/IEEE
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## CHEMICAL RESISTANCE &amp; 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 &amp; APPROVALS

**Standards**  
**Approvals**

UL 1277, UL 1063 (MTW), NEC 336.10 (7) class1, 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+UV DB TC-ER MTW UL/CSA

Item no.	Dimension [n x mm <sup>2</sup> ]	Conductor structure	Outer-Ø [mm] nom.	Outer-Ø. [inch] nom.	Weight [~lbs/mft]
1004282	2 X 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	7,9	0,311	58,5
1004283	3 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	8,3	0,327	67,9
1004284	4 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	9,1	0,359	84,0
1004285	5 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	9,9	0,390	100,1
1004286	7 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	10,8	0,426	124,3
1004287	12 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	14,6	0,575	225,1
1004288	18 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	17,0	0,670	312,5
1004289	25 G 1 (AWG 18)	▶ AWG 18 (~ 32/AWG 32) - 1 mm <sup>2</sup>	19,4	0,764	414,0
1004290	2 X 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	8,6	0,339	71,9
1004291	3 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	9,1	0,359	86,0
1004292	4 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	9,9	0,390	104,8
1004293	5 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	10,8	0,426	126,3
1004294	7 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	11,8	0,465	157,9
1004295	12 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	16,0	0,630	286,3
1004296	18 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	18,7	0,737	401,9
1004297	25 G 1,5 (AWG 16)	▶ AWG 16 (~ 28/AWG 30) - 1,5 mm <sup>2</sup>	22,6	0,890	574,6
1004298	2 X 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	9,4	0,370	92,7
1004299	3 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	9,9	0,390	111,6
1004300	4 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	10,8	0,426	137,8
1004301	5 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	11,9	0,469	169,3
1004302	7 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	13,0	0,512	213,7
1004303	12 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	17,6	0,693	384,4
1004304	18 G 2,5 (AWG 14)	▶ AWG 14 (~ 46/AWG 30) - 2,5 mm <sup>2</sup>	20,8	0,820	547,7
1004305	3 G 4 (AWG 12)	▶ AWG 12 (~ 52/AWG 28) - 4 mm <sup>2</sup>	11,3	0,445	155,9
1004306	4 G 4 (AWG 12)	▶ AWG 12 (~ 52/AWG 28) - 4 mm <sup>2</sup>	12,4	0,489	194,9
1004307	5 G 4 (AWG 12)	▶ AWG 12 (~ 52/AWG 28) - 4 mm <sup>2</sup>	14,4	0,567	254,7
1004308	7 G 4 (AWG 12)	▶ AWG 12 (~ 52/AWG 28) - 4 mm <sup>2</sup>	15,6	0,615	322,6
1004309	4 G 6 (AWG 10)	▶ AWG 10 (~ 78/AWG 28) - 6 mm <sup>2</sup>	14,4	0,567	275,5
1004310	5 G 6 (AWG 10)	▶ AWG 10 (~ 78/AWG 28) - 6 mm <sup>2</sup>	15,7	0,619	342,7
1004311	4 G 10 (AWG 8)	▶ AWG 8 (~ 74/AWG 26) - 10 mm <sup>2</sup>	18,6	0,733	456,3
1004312	5 G 10 (AWG 8)	▶ AWG 8 (~ 74/AWG 26) - 10 mm <sup>2</sup>	20,6	0,812	563,8
1004313	4 G 16 (AWG 6)	▶ AWG 6 (~ 115/AWG 26) - 16 mm <sup>2</sup>	23,8	0,938	741,2
1004314	5 G 16 (AWG 6)	▶ AWG 6 (~ 115/AWG 26) - 16 mm <sup>2</sup>	26,3	1,036	913,9
1004315	4 G 25 (AWG 4)	▶ AWG 4 (~ 182/AWG 26) - 25 mm <sup>2</sup>	27,3	1,076	1.048,3
1004316	4 G 35 (AWG 2)	▶ AWG 2 (~ 259/AWG 26) - 35 mm <sup>2</sup>	30,2	1,190	1.364,2
1004317	4 G 50 (AWG 1)	▶ AWG 1 (~ 372/AWG 26) - 50 mm <sup>2</sup>	36,7	1,446	1.984,4
1004318	4 G 70 (AWG 2/0)	▶ AWG 2/0 (~ 550/AWG 26) - 70 mm <sup>2</sup>	41,7	1,643	2.668,5