

# TRAY CABLES



High-flex  
NFPA 79 for  
Industrial Machinery

## TR 600 Auto CY black

Type TC,  
MTW and  
WTTC

Shielded UV and oil resistant 90°C  
flexible tray cable and machine-tool cable  
which could be used in cable track



CIC SHIELDED 90°C dry 600V FT1 FT2 FT4 C

Marking for TR 600 Auto CY black 32261612:

SAB BRÖCKSKES · D-VIERSEN · TR 600 Auto CY black 16 AWG/12c 32261612 TFFN (UL) Type TC-ER 90°C 600V, Oil Resistant I, Sunlight Resistant, Direct Burial, FT4 (UL) WTTC 90°C 1000V (UL) MTW 16 AWG/12c 600V AWM Style 21179 600V c(UL) Type CIC SHIELDED 90°C dry 600V FT1 FT2 FT4 CE

TR 600 Auto CY is a multi-conductor, 600 V, 90°C, UL approved, UV and oil resistant flexible tray cable. Also machine-tool cable for use as specified in the National Electrical Code (NFPA 70) and in the National Fire Protection Association Electrical Standard for Industrial Machinery (NFPA 79). This cable can be used without conduit (exposed runs). The reduced outer diameter permits easy handling and installation in confined areas. Our specially designed PVC jacket passes the stringent requirements of the VDE test 0281 part 1 and HD 21.1 oil test providing the best oil resistance available for a PVC jacket. An overall tinned copper braid is recommended whenever electrical interference distorts signal transmission, or when EMI emissions need to be suppressed. TR 600 Auto CY tray cable is designed for use in all electrical equipment in dry, damp and wet conditions. Recommended applications are machine tools, control systems, assembly lines, CNC machining centers, grinding machines, bottling equipment, data processing equipment and connections between control panels and machines. TR 600 Auto CY is permitted to be used in hazardous (classified) locations class I, Division 2 per NEC Article 501.4 (B), UL Type TC is in acc. to UL standard 1277 and NEC Article 336 (392, 501). Wind turbine power and control cable is intended to be installed in cable trays or raceways within a wind turbine generator. MTW listed cables can be used in NFPA 79 Machine areas.

### Construction:

|                         |   |
|-------------------------|---|
| <b>Conductor:</b>       | bare copper strands<br>acc. to IEC 60228 class 6  |
| <b>Insulation:</b>      | special formulated PVC/Nylon  |
| <b>Color code:</b>      | black conductors with<br>consecutive white numbers;<br>green-yellow earth wire from 3 conductors.<br>Also available with blue, red<br>or other color conductors |
| <b>Stranding:</b>       | in layers   |
| <b>Wrapping:</b>        | non-woven tape  |
| <b>Inner jacket:</b>    | special formulated PVC, color black   |
| <b>Screen:</b>          | tinned copper braiding  |
| <b>Jacket material:</b> | special sunlight and oil resistant PVC  |
| <b>Jacket color:</b>    | black   |

### Outstanding features:

- ▶ Flexible cable for cable tray use even where sunlight resistance and open wiring is required
- ▶ NFPA 79 for Industrial Machinery
- ▶ New improved with WTTC
- ▶ WTTC: UL Subject 2277
- ▶ TC: UL Standard 1277

### Technical data:

|                                       |  |                              |
|---------------------------------------|--|------------------------------|
| <b>Voltage:</b>                       | UL-AWM / (UL) / c(UL): 600 V<br>(UL) WTTC: 1000 V  |                              |
| <b>Testing voltage:</b>               | 4000 V   |                              |
| <b>Min. bending radius</b>            |  |                              |
| <i>fixed installation:</i>            | 5 x O.D.   |                              |
| <i>free movement:</i>                 | 10 x O.D.  |                              |
| <i>continuous flexing:</i>            | 12 x O.D.  |                              |
| <b>Radiation resistance:</b>          | 8 x 10 <sup>7</sup> cJ/kg  |                              |
| <b>Temperature:</b>                   | UL-AWM:<br>up to +105°C  | (UL) / c(UL):<br>up to +90°C |
| <i>static:</i>                        | -25°C  |                              |
| <b>Burning characteristics:</b>       | (UL) FT4 and c(UL) FT1, FT2, FT4   |                              |
| <b>Oil resistance I:</b>              | yes  |                              |
| <b>Sunlight resistance:</b>           | yes  |                              |
| <b>Exposed Runs:</b>                  | yes  |                              |
| <b>Direct Burial:</b>                 | yes  |                              |
| <b>Machinery Area:</b>                | yes  |                              |
| <b>Absence of harmful substances:</b> | acc. to RoHS-guideline 2002/95/EG as well as GefStoffV appendix IV-no. 24, see page N/25 |                              |

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| item no.        | no. of conductors incl. ground | nominal outer-ø inch | nominal outer-ø mm | cable weight ≈ lbs/mft |
|-----------------|--------------------------------|----------------------|--------------------|------------------------|
| <b>▶ 18 AWG</b> |                                |                      |                    |                        |
| 32261803        | 3                              | 0.323                | 8.2                | 78                     |
| 32261804        | 4                              | 0.386                | 9.8                | 91                     |
| 32261805        | 5                              | 0.413                | 10.5               | 107                    |
| 32261807        | 7                              | 0.480                | 12.2               | 151                    |
| 32261809        | 9                              | 0.563                | 14.3               | 199                    |
| 32261812        | 12                             | 0.594                | 15.1               | 227                    |
| 32261816        | 16                             | 0.681                | 17.3               | 303                    |
| 32261818        | 18                             | 0.709                | 18.0               | 331                    |
| 32261819        | 19                             | 0.736                | 18.7               | 346                    |
| 32261825        | 25                             | 0.819                | 20.8               | 414                    |
| <b>▶ 16 AWG</b> |                                |                      |                    |                        |
| 32261603        | 3                              | 0.386                | 9.8                | 93                     |
| 32261604        | 4                              | 0.413                | 10.5               | 110                    |
| 32261605        | 5                              | 0.453                | 11.5               | 136                    |
| 32261607        | 7                              | 0.547                | 13.9               | 198                    |
| 32261608        | 8                              | 0.587                | 14.9               | 233                    |
| 32261609        | 9                              | 0.618                | 15.7               | 241                    |
| 32261612        | 12                             | 0.677                | 17.2               | 306                    |
| 32261616        | 16                             | 0.736                | 18.7               | 368                    |

| item no.        | no. of conductors incl. ground | nominal outer-ø inch | nominal outer-ø mm | cable weight ≈ lbs/mft |
|-----------------|--------------------------------|----------------------|--------------------|------------------------|
| <b>▶ 16 AWG</b> |                                |                      |                    |                        |
| 32261618        | 18                             | 0.768                | 19.5               | 405                    |
| 32261619        | 19                             | 0.799                | 20.2               | 432                    |
| 32261625        | 25                             | 0.933                | 23.7               | 557                    |
| <b>▶ 14 AWG</b> |                                |                      |                    |                        |
| 32261403        | 3                              | 0.441                | 11.2               | 132                    |
| 32261404        | 4                              | 0.476                | 12.1               | 159                    |
| 32261405        | 5                              | 0.520                | 13.2               | 192                    |
| 32261407        | 7                              | 0.665                | 16.9               | 301                    |
| 32261409        | 9                              | 0.740                | 18.8               | 346                    |
| 32261412        | 12                             | 0.776                | 19.7               | 416                    |
| 32261418        | 18                             | 0.929                | 23.6               | 609                    |
| 32261425        | 25                             | 1.106                | 28.1               | 808                    |
| <b>▶ 12 AWG</b> |                                |                      |                    |                        |
| 32261203        | 3                              | 0.492                | 12.5               | 182                    |
| 32261204        | 4                              | 0.531                | 13.5               | 216                    |
| 32261205        | 5                              | 0.614                | 15.6               | 286                    |
| 32261207        | 7                              | 0.736                | 18.7               | 384                    |

| item no.        | no. of conductors incl. ground | nominal outer-ø inch | nominal outer-ø mm | cable weight ≈ lbs/mft |
|-----------------|--------------------------------|----------------------|--------------------|------------------------|
| <b>▶ 10 AWG</b> |                                |                      |                    |                        |
| 32261003        | 3                              | 0.587                | 14.9               | 260                    |
| 32261004        | 4                              | 0.677                | 17.2               | 329                    |
| 32261005        | 5                              | 0.732                | 18.6               | 391                    |
| 32261007        | 7                              | 0.894                | 22.7               | 536                    |
| <b>▶ 8 AWG</b>  |                                |                      |                    |                        |
| 32260804        | 4                              | 0.886                | 22.5               | 581                    |
| 32260805        | 5                              | 0.961                | 24.4               | 702                    |
| <b>▶ 6 AWG</b>  |                                |                      |                    |                        |
| 32260604        | 4                              | 1.031                | 26.2               | 784                    |
| 32260605        | 5                              | 1.122                | 28.5               | 918                    |
| <b>▶ 4 AWG</b>  |                                |                      |                    |                        |
| 32260404        | 4                              | 1.232                | 31.3               | 1125                   |
| 32260405        | 5                              | 1.350                | 34.3               | 1333                   |
| <b>▶ 2 AWG</b>  |                                |                      |                    |                        |
| 32260204        | 4                              | 1.402                | 35.6               | 1538                   |
| 32260205        | 5                              | 1.539                | 39.1               | 1831                   |

Other dimensions and colors are possible on request.

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Web site: [www.sabcable.com](http://www.sabcable.com)