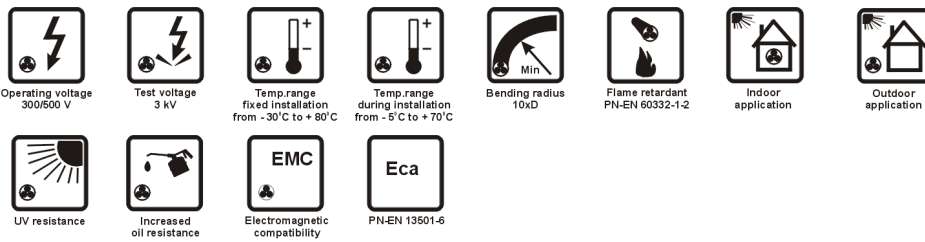


TECHNOKONTROL IB-YSLCY



APPLICATIONS

TECHNOKONTROL IB-YSLCY are overall shielded cables, intended for intrinsically safe circuits and explosive conditions zones, designed for the operating voltage 300/500 V.

The overall shield protects the cables against external electromagnetic interferences and prevents emission of interferences produced in the cables.

The cables are designed to offer high flexibility combined with tensile strength.

Sheathing PVC of high oxygen index is UV radiation and weather resistant, is self-extinguishing and flame retardant. The cables pass combustibility test according to PN-EN 60332-3 standard.

The cables are oil-resistant and designed for frequent contact with petroleum products, as in petrol stations and stores, where engine fuels and lubricants are pumped or handled.

The cables are suitable for fixed indoor and outdoor installations.

CONSTRUCTION

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 2 per PN-EN 60228,
- black PVC insulation and white conductor numbers printed on it for identification,
- insulated conductors laid-up in layers,
- cable core wrapped in polyester tape,
- tinned copper wire braid shield of effective density coverage,
- oil, petrol and UV radiation resistant and self-extinguishing (oxygen index bigger than 29%) PVC cable sheath, blue RAL 5015 according to VDE 0165 6.1.3.2.3.

AVAILABLE UPON REQUEST

TECHNOKONTROL IB-YSLCEY - cables with drain wire stranded of tin-plated annealed copper wires (class 2), laid under a shield.

TECHNOKONTROL IB-YSLCYv - intrinsically safe cables with enhanced PVC sheath, suitable for outdoor installations and direct earth burial.

| Conductor cross-section | mm ² | 0.5 | 0.75 | 1.0 | 1.5 | 2.5 |
|--|-----------------|------|------|------|------|------|
| DC conductor resistance at 20°C, maximum | Ω/km | 36.0 | 24.5 | 18.1 | 12.1 | 7.41 |
| Capacitance between conductors at 1 kHz, appr. | nF/km | 160 | 170 | 180 | 180 | 200 |



| | |
|-------------------------------------|---------------------|
| Operating voltage U ₀ /U | 300/500 V |
| Voltage test | 3.0 kV rms |
| Insulation resistance, minimum | 20 MΩ·km |
| Inductance, approximate | 0.7 mH/km |
| Operating temperature range | |
| for fixed installation | from - 30 to + 80°C |
| for movable installation | from - 5 to + 70°C |
| Minimum bending radius | 10 x cable diameter |
| Cable combustibility | flame retardant |

| | |
|-----------------------------------|--|
| Combustibility tests | PN-EN 60332-1-2, IEC 60332-1-2 |
| Oil resistance | PN-EN 60811-404 |
| Reference standards | DT 28/01/04 |
| CPR – class reaction on fire | Eca |
| DoP declarations are available at | technokabel.com.pl |

The cable meets requirements of the low voltage direction 2014/35/EU

| Product No. | Number of conductors x conductors cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | | | | |
| 0581 057 | 1 x 0,5 | 3.5 | 8.8 | 21 |
| 0581 001 | 2 x 0,5 | 5.1 | 17.6 | 36 |
| 0581 022 | 3 x 0,5 | 5.4 | 22.5 | 44 |
| 0581 042 | 4 x 0,5 | 5.8 | 28.9 | 54 |
| 0581 058 | 5 x 0,5 | 6.3 | 33.7 | 64 |
| 0581 012 | 6 x 0,5 | 6.8 | 39.4 | 75 |
| 0581 040 | 7 x 0,5 | 6.8 | 44.2 | 78 |
| 0581 059 | 8 x 0,5 | 7.3 | 50.0 | 91 |
| 0581 043 | 10 x 0,5 | 8.6 | 67.0 | 113 |
| 0581 050 | 12 x 0,5 | 8.8 | 76.6 | 128 |
| 0581 060 | 14 x 0,5 | 9.3 | 87.2 | 144 |
| 0581 047 | 16 x 0,5 | 10.1 | 98.5 | 171 |
| 0581 061 | 18 x 0,5 | 10.6 | 108.7 | 190 |
| 0581 062 | 19 x 0,5 | 10.6 | 113.5 | 193 |
| 0581 063 | 21 x 0,5 | 11.1 | 124.4 | 212 |
| 0581 064 | 24 x 0,5 | 12.5 | 142.3 | 245 |
| 0581 065 | 27 x 0,5 | 12.8 | 157.1 | 267 |
| 0581 044 | 30 x 0,5 | 13.2 | 172.5 | 290 |
| 0581 066 | 36 x 0,5 | 14.4 | 203.9 | 348 |
| 0581 067 | 37 x 0,5 | 14.4 | 208.7 | 352 |
| 0581 068 | 40 x 0,5 | 14.9 | 224.4 | 379 |
| 0581 069 | 44 x 0,5 | 16.1 | 253.6 | 419 |
| 0581 070 | 48 x 0,5 | 16.4 | 273.8 | 449 |
| 0581 071 | 52 x 0,5 | 16.8 | 294.2 | 479 |
| 0581 072 | 56 x 0,5 | 17.3 | 314.9 | 512 |
| 0581 073 | 60 x 0,5 | 17.8 | 335.9 | 546 |
| 0581 074 | 1 x 0,75 | 3.7 | 12.0 | 25 |

| Product No. | Number of conductors x conductors cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | | | | |
| 0581 016 | 2 x 0,75 | 5.5 | 22.5 | 43 |
| 0581 008 | 3 x 0,75 | 5.8 | 31.3 | 54 |
| 0581 002 | 4 x 0,75 | 6.3 | 38.5 | 65 |
| 0581 007 | 5 x 0,75 | 6.8 | 46.6 | 79 |
| 0581 033 | 6 x 0,75 | 7.4 | 55.0 | 95 |
| 0581 017 | 7 x 0,75 | 7.4 | 62.2 | 99 |
| 0581 030 | 8 x 0,75 | 8.0 | 74.2 | 118 |
| 0581 075 | 10 x 0,75 | 9.3 | 92.0 | 141 |
| 0581 028 | 12 x 0,75 | 10.0 | 107.1 | 170 |
| 0581 076 | 14 x 0,75 | 10.5 | 122.9 | 192 |
| 0581 077 | 16 x 0,75 | 11.0 | 138.6 | 216 |
| 0581 026 | 18 x 0,75 | 11.6 | 154.5 | 241 |
| 0581 078 | 19 x 0,75 | 11.6 | 161.7 | 246 |
| 0581 079 | 21 x 0,75 | 12.3 | 177.4 | 277 |
| 0581 054 | 24 x 0,75 | 13.6 | 202.4 | 311 |
| 0581 080 | 27 x 0,75 | 13.9 | 224.7 | 341 |
| 0581 081 | 30 x 0,75 | 14.6 | 247.6 | 378 |
| 0581 082 | 36 x 0,75 | 15.8 | 300.7 | 454 |
| 0581 083 | 37 x 0,75 | 15.8 | 307.9 | 459 |
| 0581 084 | 40 x 0,75 | 16.3 | 331.4 | 494 |
| 0581 085 | 44 x 0,75 | 17.6 | 363.9 | 538 |
| 0581 086 | 1 x 1,0 | 3.8 | 14.4 | 28 |
| 0581 010 | 2 x 1,0 | 5.9 | 28.9 | 51 |
| 0581 021 | 3 x 1,0 | 6.2 | 38.5 | 64 |
| 0581 003 | 4 x 1,0 | 6.7 | 48.8 | 78 |
| 0581 004 | 5 x 1,0 | 7.3 | 59.6 | 97 |
| 0581 053 | 6 x 1,0 | 8.0 | 74.2 | 119 |

| Product No. | Number of conductors x conductors cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | mm ² | mm | kg/km | kg/km |
| 0581 024 | 7 x 1,0 | 8.0 | 83.8 | 125 |
| 0581 025 | 8 x 1,0 | 8.6 | 95.8 | 145 |
| 0581 052 | 10 x 1,0 | 10.4 | 117.8 | 183 |
| 0581 051 | 12 x 1,0 | 10.8 | 138.1 | 209 |
| 0581 087 | 14 x 1,0 | 11.3 | 158.8 | 237 |
| 0581 035 | 16 x 1,0 | 12.1 | 179.3 | 273 |
| 0581 088 | 18 x 1,0 | 12.7 | 200.0 | 304 |
| 0581 089 | 19 x 1,0 | 12.7 | 209.6 | 311 |
| 0581 090 | 21 x 1,0 | 13.3 | 230.4 | 343 |
| 0581 048 | 24 x 1,0 | 14.9 | 262.8 | 393 |
| 0581 091 | 27 x 1,0 | 15.3 | 299.2 | 438 |
| 0581 092 | 30 x 1,0 | 15.9 | 329.8 | 479 |
| 0581 093 | 36 x 1,0 | 17.0 | 390.8 | 566 |
| 0581 094 | 37 x 1,0 | 17.0 | 400.4 | 572 |
| 0581 095 | 40 x 1,0 | 17.7 | 431.4 | 618 |
| 0581 096 | 1 x 1,5 | 4.1 | 19.8 | 34 |
| 0581 005 | 2 x 1,5 | 6.4 | 38.6 | 63 |
| 0581 006 | 3 x 1,5 | 6.8 | 53.8 | 82 |
| 0581 032 | 4 x 1,5 | 7.4 | 69.4 | 102 |
| 0581 009 | 5 x 1,5 | 8.1 | 88.9 | 130 |
| 0581 097 | 6 x 1,5 | 8.8 | 105.4 | 155 |
| 0581 018 | 7 x 1,5 | 8.8 | 119.8 | 165 |
| 0581 098 | 8 x 1,5 | 9.9 | 135.7 | 200 |
| 0581 099 | 10 x 1,5 | 11.5 | 168.6 | 239 |
| 0581 034 | 12 x 1,5 | 12.1 | 198.5 | 282 |

| Product No. | Number of conductors x conductors cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | mm ² | mm | kg/km | kg/km |
| 0581 049 | 14 x 1,5 | 12.7 | 228.8 | 320 |
| 0581 038 | 16 x 1,5 | 13.4 | 259.4 | 363 |
| 0581 100 | 18 x 1,5 | 14.3 | 290.1 | 412 |
| 0581 015 | 19 x 1,5 | 14.3 | 304.5 | 422 |
| 0581 101 | 21 x 1,5 | 15.1 | 341.8 | 473 |
| 0581 102 | 24 x 1,5 | 16.7 | 389.9 | 532 |
| 0581 055 | 27 x 1,5 | 17.0 | 434.0 | 586 |
| 0581 103 | 30 x 1,5 | 17.6 | 479.1 | 642 |
| 0581 104 | 34 x 1,5 | 19.2 | 541.0 | 752 |
| 0581 105 | 1 x 2,5 | 4.7 | 30.4 | 47 |
| 0581 011 | 2 x 2,5 | 7.7 | 60.4 | 91 |
| 0581 013 | 3 x 2,5 | 8.2 | 89.1 | 124 |
| 0581 014 | 4 x 2,5 | 9.0 | 115.2 | 156 |
| 0581 056 | 5 x 2,5 | 10.2 | 141.7 | 203 |
| 0581 106 | 6 x 2,5 | 11.1 | 167.6 | 242 |
| 0581 107 | 7 x 2,5 | 11.1 | 191.6 | 258 |
| 0581 108 | 8 x 2,5 | 12.2 | 217.9 | 305 |
| 0581 109 | 10 x 2,5 | 14.4 | 271.1 | 373 |
| 0581 110 | 12 x 2,5 | 14.9 | 320.4 | 432 |
| 0581 111 | 14 x 2,5 | 15.7 | 377.2 | 499 |
| 0581 041 | 16 x 2,5 | 16.6 | 427.9 | 567 |
| 0581 112 | 18 x 2,5 | 17.5 | 478.8 | 635 |
| 0581 113 | 19 x 2,5 | 17.5 | 502.8 | 651 |
| 0581 114 | 21 x 2,5 | 18.5 | 553.2 | 729 |
| 0581 115 | 24 x 2,5 | 20.6 | 631.8 | 821 |

Other cross-sections and conductor counts available on request.
 TECHNOKABEL S.A. reserves the right to change specifications without prior notice.