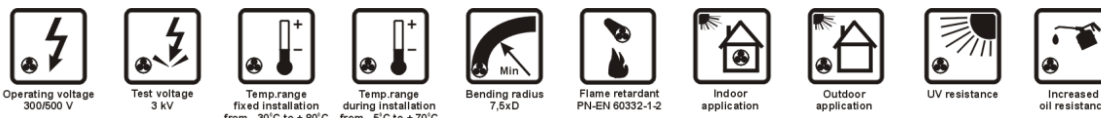


TECHNOKONTROL IB-YSLY-P**INTRINSICALLY SAFE CABLES****APPLICATIONS**

TECHNOKONTROL IB-YSLY-P are multipair cables intended for intrinsically safe circuits and explosive conditions zones, designed for operating voltage 300/500 V.

Paired structure decreases mutual influence between signals transmitted along the cable and reduces influence of outer sources of interference.

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,
- PVC insulation, identification of pairs:
 - "a" wire – black insulation and white pair number printed on it,
 - "b" wire – white insulation and black pair number printed on it,
- insulated conductors twisted into pairs,
- pairs laid-up in layers,
- cable core wrapped in polyester tape,
- 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-YSLYv-P - intrinsically safe cables with enhanced PVC sheath, suitable for direct earth burial.

TECHNOKONTROL IB-YSLY-P
CHARACTERISTICS

| | | | | | | |
|--|-----------------|------------|-------------|------------|------------|------------|
| Conductor cross-section | mm ² | 0.5 | 0.75 | 1.0 | 1.5 | 2.5 |
| DC loop resistance at 20°C, maximum | Ω/km | 72.0 | 49.0 | 36.2 | 24.2 | 14.82 |
| Mutual capacitance at 1 kHz, approximate | nF/km | 130 | 140 | 140 | 140 | 170 |

| | | | |
|-------------------------------------|------------|-----------------------------|--------------------------------|
| Operating voltage U ₀ /U | 300/500 V | Operating temperature range | |
| Voltage test | 3.0 kV rms | for fixed installation | from - 30 to + 80°C |
| Insulation resistance, minimum | 20 MΩ·km | for movable installation | from - 5 to + 70°C |
| Inductance, approximate | 0.7 mH/km | Minimum bending radius | 7.5 x cable diameter |
| | | Cable combustibility | flame retardant |
| | | Combustibility tests | PN-EN 60332-1-2, IEC 60332-1-2 |
| | | Oil resistance | PN-EN 60811-404 |

CE = the cable meets requirements of the low voltage directive 2014/35/EU

| Product No. | Number of pairs (x 2) x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | mm ² | mm | kg/km | kg/km |
| 0745 007 | 2 x 2 x 0,5 | 8.5 | 19.2 | 94 |
| 0745 015 | 3 x 2 x 0,5 | 8.9 | 28.8 | 116 |
| 0745 006 | 4 x 2 x 0,5 | 9.6 | 38.4 | 133 |
| 0745 016 | 5 x 2 x 0,5 | 10.5 | 48.0 | 153 |
| 0745 017 | 6 x 2 x 0,5 | 11.3 | 57.6 | 178 |
| 0745 009 | 7 x 2 x 0,5 | 11.3 | 67.2 | 186 |
| 0745 018 | 8 x 2 x 0,5 | 12.0 | 76.8 | 204 |
| 0745 019 | 10 x 2 x 0,5 | 13.5 | 96.0 | 246 |
| 0745 020 | 12 x 2 x 0,5 | 14.0 | 115.2 | 276 |
| 0745 021 | 16 x 2 x 0,5 | 15.8 | 153.6 | 345 |
| 0745 022 | 18 x 2 x 0,5 | 16.6 | 172.8 | 379 |
| 0745 023 | 20 x 2 x 0,5 | 17.3 | 192.0 | 411 |
| 0745 024 | 25 x 2 x 0,5 | 19.0 | 240.0 | 496 |
| 0745 025 | 30 x 2 x 0,5 | 20.6 | 288.0 | 577 |
| 0745 026 | 40 x 2 x 0,5 | 23.7 | 384.0 | 758 |
| 0745 027 | 50 x 2 x 0,5 | 26.2 | 480.0 | 915 |
| 0745 001 | 2 x 2 x 0,75 | 9.1 | 28.8 | 115 |
| 0745 028 | 3 x 2 x 0,75 | 9.6 | 43.2 | 142 |
| 0745 012 | 4 x 2 x 0,75 | 10.4 | 57.6 | 164 |
| 0745 029 | 5 x 2 x 0,75 | 11.3 | 72.0 | 188 |
| 0745 030 | 6 x 2 x 0,75 | 12.2 | 86.4 | 220 |
| 0745 031 | 7 x 2 x 0,75 | 12.2 | 100.8 | 232 |
| 0745 032 | 8 x 2 x 0,75 | 13.0 | 115.2 | 256 |
| 0745 033 | 10 x 2 x 0,75 | 14.7 | 144.0 | 310 |
| 0745 034 | 12 x 2 x 0,75 | 15.3 | 172.8 | 350 |
| 0745 010 | 16 x 2 x 0,75 | 17.2 | 230.4 | 440 |
| 0745 035 | 20 x 2 x 0,75 | 18.9 | 288.0 | 527 |
| 0745 008 | 2 x 2 x 1,0 | 9.7 | 38.4 | 134 |
| 0745 036 | 3 x 2 x 1,0 | 10.2 | 57.6 | 168 |
| 0745 037 | 4 x 2 x 1,0 | 11.1 | 76.8 | 197 |

| Product No. | Number of pairs (x 2) x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|---|------------------------------|--------------|----------------------|
| | mm ² | mm | kg/km | kg/km |
| 0745 038 | 5 x 2 x 1,0 | 12.2 | 96.0 | 229 |
| 0745 039 | 6 x 2 x 1,0 | 13.2 | 115.2 | 269 |
| 0745 040 | 7 x 2 x 1,0 | 13.2 | 134.4 | 285 |
| 0745 041 | 8 x 2 x 1,0 | 14.0 | 153.6 | 314 |
| 0745 042 | 10 x 2 x 1,0 | 15.8 | 192.0 | 381 |
| 0745 002 | 12 x 2 x 1,0 | 16.5 | 230.4 | 433 |
| 0745 010 | 16 x 2 x 1,0 | 18.7 | 307.2 | 549 |
| 0745 043 | 20 x 2 x 1,0 | 20.5 | 384.0 | 659 |
| 0745 044 | 2 x 2 x 1,5 | 10.7 | 57.6 | 167 |
| 0745 045 | 3 x 2 x 1,5 | 11.2 | 86.4 | 216 |
| 0745 046 | 4 x 2 x 1,5 | 12.3 | 115.2 | 256 |
| 0745 047 | 5 x 2 x 1,5 | 13.4 | 144.0 | 297 |
| 0745 048 | 6 x 2 x 1,5 | 14.6 | 172.8 | 351 |
| 0745 049 | 7 x 2 x 1,5 | 14.6 | 201.6 | 375 |
| 0745 050 | 8 x 2 x 1,5 | 15.5 | 230.4 | 414 |
| 0745 051 | 10 x 2 x 1,5 | 17.6 | 288.0 | 506 |
| 0745 052 | 12 x 2 x 1,5 | 18.4 | 345.6 | 579 |
| 0745 053 | 16 x 2 x 1,5 | 20.8 | 460.8 | 736 |
| 0745 005 | 20 x 2 x 1,5 | 23.4 | 576.0 | 913 |
| 0745 003 | 2 x 2 x 2,5 | 12.8 | 96.0 | 249 |
| 0745 054 | 3 x 2 x 2,5 | 13.5 | 144.0 | 324 |
| 0745 055 | 4 x 2 x 2,5 | 14.8 | 192.0 | 384 |
| 0745 056 | 5 x 2 x 2,5 | 16.3 | 240.0 | 450 |
| 0745 013 | 6 x 2 x 2,5 | 17.7 | 288.0 | 533 |
| 0745 057 | 7 x 2 x 2,5 | 17.7 | 336.0 | 572 |
| 0745 058 | 8 x 2 x 2,5 | 18.9 | 384.0 | 635 |
| 0745 004 | 10 x 2 x 2,5 | 21.6 | 480.0 | 779 |
| 0745 014 | 12 x 2 x 2,5 | 22.6 | 576.0 | 895 |
| 0745 059 | 16 x 2 x 2,5 | 26.1 | 768.0 | 1165 |
| 0745 060 | 20 x 2 x 2,5 | 29.2 | 960.0 | 1439 |

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