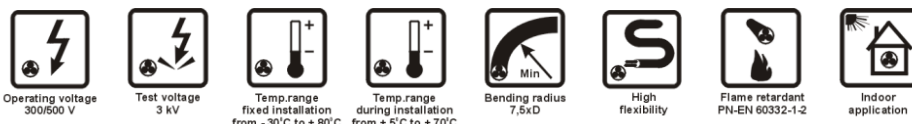


**TECHNOFLEKS LiYY-Nr 300/500 V**  
**TECHNOFLEKS LiYYżo-Nr 300/500 V**

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**CONTROL AND POWER SUPPLY FLEXIBLE CABLES****APPLICATIONS**

**TECHNOFLEKS LiYY-Nr 300/500 V** and **TECHNOFLEKS LiYYżo-Nr 300/500 V** are flexible cables designed for wet or dry locations and intended for control, protection and monitoring systems or power supply, all in power engineering. The cables are also intended for wiring industrial plants, such as production lines, air-conditioning equipment etc.

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

The cables are suitable for indoor installations connecting fixed and movable equipment.

Cable outer sheath is oil-resistant.

**CONSTRUCTION**

- flexible, multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 5 per PN-EN 60228,
- black PVC insulation and white conductor numbers printed on it for identification, additional green-yellow protective conductor in **TECHNOFLEKS LiYYżo-Nr 300/500 V** cable,
- insulated conductors laid-up in layers in to a cable core, green-yellow protective conductor located in the outer layer in **TECHNOFLEKS LiYYżo-Nr 300/500 V** cable,
- PVC cable sheath, grey RAL 7001, other colours also available.

**AVAILABLE UPON REQUEST**

**TECHNOFLEKS LiYY-Nr-O 300/500 V** and **TECHNOFLEKS LiYYżo-Nr-O 300/500 V** – cables designed for frequent contact with petroleum products, as in petrol stations and stores, where engine fuels and lubricants are pumped or handled. The cable sheath is then made of special PVC compound meeting oil resistance requirements of Polish standard PN-EN 60811-404.

**TECHNOFLEKS LiY11Y-Nr 300/500 V** and **TECHNOFLEKS LiY11Yżo-Nr 300/500 V** – polyurethane sheathed cables of enhanced protection against mechanical damage, particularly to abrasion and tear, also resistant to oils, petrol, bacteria and ultraviolet radiation.

**TECHNOFLEKS LiHH-Nr 300/500 V** and **TECHNOFLEKS LiHHżo-Nr 300/500 V** - halogen free cables, applied when higher safety in case of fire is required. The cables are flame retardant, their smoke emission in fire is low and released gases are not corrosive.

**TECHNOFLEKS LiYYv-Nr 300/500 V** and **TECHNOFLEKS LiYYvżo-Nr 300/500 V** - cables with enhanced PVC sheath, suitable for outdoor installation and direct earth burial.

# TECHNOFLEKS LiYY-Nr 300/500 V

# TECHNOFLEKS LiYYżo-Nr 300/500 V

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## CHARACTERISTICS

|                                          |                 |            |             |            |            |            |            |
|------------------------------------------|-----------------|------------|-------------|------------|------------|------------|------------|
| Conductor cross-section                  | mm <sup>2</sup> | <b>0.5</b> | <b>0.75</b> | <b>1.0</b> | <b>1.5</b> | <b>2.5</b> | <b>4.0</b> |
| DC conductor resistance at 20°C, maximum | Ω/km            | 39.0       | 26.0        | 19.5       | 13.3       | 7.98       | 4.95       |
| Conductor cross-section                  | mm <sup>2</sup> | <b>6.0</b> | <b>10</b>   | <b>16</b>  | <b>25</b>  | <b>35</b>  | <b>50</b>  |
| DC conductor resistance at 20°C, maximum | Ω/km            | 3.30       | 1.91        | 1.21       | 0.780      | 0.554      | 0.386      |

|                                     |            |                             |                                          |
|-------------------------------------|------------|-----------------------------|------------------------------------------|
| Operating voltage U <sub>o</sub> /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                       |
| Conductor temperature limit         |            | Minimum bending radius      | 7.5 x cable diameter                     |
| in work conditions                  | + 70°C     | Cable combustibility        | flame retardant                          |
| at short-circuit                    | + 150°C    | Combustibility tests        | PN-EN 60332-1-2, IEC 60332-1-2           |
|                                     |            | Reference standards         | DIN VDE 0245, DIN VDE 0250, DIN VDE 0281 |

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

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|------------------------------------------------|------------------------------|--------------|----------------------|
|             | mm <sup>2</sup>                                | mm                           | kg/km        | kg/km                |
| 0166 001    | 2 x 0,5                                        | 4.6                          | 9.6          | 31                   |
| 0166 002    | 3 x 0,5                                        | 4.9                          | 14.4         | 37                   |
| 0166 003    | 4 x 0,5                                        | 5.3                          | 19.2         | 45                   |
| 0166 044    | 5 x 0,5                                        | 5.8                          | 24.0         | 55                   |
| 0166 004    | 6 x 0,5                                        | 6.3                          | 28.8         | 65                   |
| 0166 049    | 7 x 0,5                                        | 6.3                          | 33.6         | 67                   |
| 0166 050    | 8 x 0,5                                        | 6.8                          | 38.4         | 78                   |
| 0166 045    | 10 x 0,5                                       | 7.9                          | 48.0         | 94                   |
| 0166 051    | 12 x 0,5                                       | 8.2                          | 57.6         | 107                  |
| 0166 052    | 14 x 0,5                                       | 8.6                          | 67.2         | 121                  |
| 0166 053    | 16 x 0,5                                       | 9.1                          | 76.8         | 137                  |
| 0166 054    | 18 x 0,5                                       | 10.0                         | 86.4         | 162                  |
| 0166 055    | 19 x 0,5                                       | 10.0                         | 91.2         | 164                  |
| 0166 056    | 21 x 0,5                                       | 10.5                         | 100.8        | 181                  |
| 0166 028    | 24 x 0,5                                       | 11.6                         | 115.2        | 205                  |
| 0166 057    | 25 x 0,5                                       | 12.1                         | 120.0        | 224                  |
| 0166 058    | 27 x 0,5                                       | 12.1                         | 129.6        | 229                  |
| 0166 024    | 30 x 0,5                                       | 12.5                         | 144.0        | 250                  |
| 0166 041    | 33 x 0,5                                       | 13.0                         | 158.4        | 273                  |
| 0166 059    | 34 x 0,5                                       | 13.5                         | 163.2        | 291                  |
| 0166 060    | 37 x 0,5                                       | 13.5                         | 177.6        | 298                  |
| 0166 061    | 40 x 0,5                                       | 14.2                         | 192.0        | 328                  |
| 0166 029    | 44 x 0,5                                       | 15.3                         | 211.2        | 359                  |
| 0166 005    | 48 x 0,5                                       | 15.6                         | 230.4        | 385                  |
| 0166 062    | 50 x 0,5                                       | 16.0                         | 240.0        | 406                  |
| 0166 063    | 56 x 0,5                                       | 16.5                         | 268.8        | 441                  |
| 0166 064    | 60 x 0,5                                       | 17.0                         | 288.0        | 470                  |
| 0166 019    | 2 x 0,75                                       | 5.0                          | 14.4         | 38                   |
| 0166 047    | 3 x 0,75                                       | 5.2                          | 21.6         | 45                   |
| 0166 026    | 4 x 0,75                                       | 5.7                          | 28.8         | 56                   |
| 0166 065    | 5 x 0,75                                       | 6.2                          | 36.0         | 68                   |
| 0166 048    | 6 x 0,75                                       | 6.8                          | 43.2         | 81                   |
| 0166 066    | 7 x 0,75                                       | 6.8                          | 50.4         | 85                   |

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|------------------------------------------------|------------------------------|--------------|----------------------|
|             | mm <sup>2</sup>                                | mm                           | kg/km        | kg/km                |
| 0166 067    | 8 x 0,75                                       | 7.3                          | 57.6         | 98                   |
| 0166 068    | 10 x 0,75                                      | 8.6                          | 72.0         | 120                  |
| 0166 069    | 12 x 0,75                                      | 8.9                          | 86.4         | 137                  |
| 0166 033    | 14 x 0,75                                      | 9.8                          | 100.8        | 164                  |
| 0166 070    | 16 x 0,75                                      | 10.3                         | 115.2        | 185                  |
| 0166 034    | 18 x 0,75                                      | 10.9                         | 129.6        | 207                  |
| 0166 071    | 19 x 0,75                                      | 10.9                         | 136.8        | 211                  |
| 0166 072    | 21 x 0,75                                      | 11.4                         | 151.2        | 233                  |
| 0166 073    | 24 x 0,75                                      | 12.9                         | 172.8        | 270                  |
| 0166 074    | 25 x 0,75                                      | 13.2                         | 180          | 288                  |
| 0166 075    | 27 x 0,75                                      | 13.2                         | 194.4        | 296                  |
| 0166 035    | 30 x 0,75                                      | 13.6                         | 216.0        | 323                  |
| 0166 076    | 34 x 0,75                                      | 14.9                         | 244.8        | 382                  |
| 0166 077    | 37 x 0,75                                      | 14.9                         | 266.4        | 393                  |
| 0166 078    | 40 x 0,75                                      | 15.5                         | 288.0        | 425                  |
| 0166 046    | 44 x 0,75                                      | 16.7                         | 316.8        | 465                  |
| 0166 079    | 48 x 0,75                                      | 17.0                         | 345.6        | 500                  |
| 0166 080    | 50 x 0,75                                      | 17.5                         | 360.0        | 528                  |
| 0166 081    | 56 x 0,75                                      | 18.0                         | 403.2        | 574                  |
| 0166 082    | 60 x 0,75                                      | 18.8                         | 432.0        | 622                  |
| 0166 020    | 2 x 1,0                                        | 5.3                          | 19.2         | 45                   |
| 0166 042    | 3 x 1,0                                        | 5.6                          | 28.8         | 55                   |
| 0166 027    | 4 x 1,0                                        | 6.2                          | 38.4         | 68                   |
| 0166 036    | 5 x 1,0                                        | 6.7                          | 48.0         | 84                   |
| 0166 083    | 6 x 1,0                                        | 7.3                          | 57.6         | 100                  |
| 0166 031    | 7 x 1,0                                        | 7.3                          | 67.2         | 105                  |
| 0166 084    | 8 x 1,0                                        | 7.9                          | 76.8         | 122                  |
| 0166 032    | 10 x 1,0                                       | 9.3                          | 96.0         | 149                  |
| 0166 006    | 12 x 1,0                                       | 10.1                         | 115.2        | 180                  |
| 0166 037    | 14 x 1,0                                       | 10.6                         | 134.4        | 204                  |
| 0166 085    | 16 x 1,0                                       | 11.1                         | 153.6        | 230                  |
| 0166 086    | 18 x 1,0                                       | 12.0                         | 172.8        | 263                  |
| 0166 087    | 19 x 1,0                                       | 12.0                         | 182.4        | 269                  |

# **TECHNOFLEKS LiYY-Nr 300/500 V** **TECHNOFLEKS LiYYżo-Nr 300/500 V**

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| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|------------------------------------------------|------------------------------|--------------|----------------------|
|             | mm <sup>2</sup>                                | mm                           | kg/km        | kg/km                |
| 0166 088    | 21 x 1,0                                       | 12.6                         | 201.6        | 297                  |
| 0166 023    | 24 x 1,0                                       | 14.2                         | 230.4        | 343                  |
| 0166 089    | 27 x 1,0                                       | 14.5                         | 259.2        | 376                  |
| 0166 039    | 30 x 1,0                                       | 15.0                         | 288.0        | 411                  |
| 0166 090    | 34 x 1,0                                       | 16.2                         | 326.4        | 478                  |
| 0166 091    | 37 x 1,0                                       | 16.2                         | 355.2        | 494                  |
| 0166 092    | 40 x 1,0                                       | 16.8                         | 384.0        | 534                  |
| 0166 093    | 44 x 1,0                                       | 18.4                         | 422.4        | 593                  |
| 0166 094    | 48 x 1,0                                       | 18.7                         | 460.8        | 637                  |
| 0166 095    | 50 x 1,0                                       | 19.2                         | 480.0        | 673                  |
| 0166 096    | 60 x 1,0                                       | 20.4                         | 576.0        | 783                  |
| 0166 021    | 2 x 1,5                                        | 5.9                          | 28.8         | 59                   |
| 0166 007    | 3 x 1,5                                        | 6.2                          | 43.2         | 72                   |
| 0166 008    | 4 x 1,5                                        | 6.8                          | 57.6         | 90                   |
| 0166 009    | 5 x 1,5                                        | 7.5                          | 72.0         | 111                  |
| 0166 097    | 6 x 1,5                                        | 8.1                          | 86.4         | 132                  |
| 0166 010    | 7 x 1,5                                        | 8.1                          | 100.8        | 140                  |
| 0166 098    | 8 x 1,5                                        | 8.8                          | 115.2        | 163                  |
| 0166 025    | 10 x 1,5                                       | 10.8                         | 144.0        | 210                  |
| 0166 099    | 12 x 1,5                                       | 11.2                         | 172.8        | 240                  |
| 0166 013    | 14 x 1,5                                       | 12.0                         | 201.6        | 279                  |
| 0166 100    | 16 x 1,5                                       | 12.6                         | 230.4        | 315                  |
| 0166 014    | 18 x 1,5                                       | 13.3                         | 259.2        | 353                  |
| 0166 101    | 19 x 1,5                                       | 13.3                         | 273.6        | 362                  |
| 0166 102    | 21 x 1,5                                       | 14.2                         | 302.4        | 407                  |
| 0166 103    | 24 x 1,5                                       | 15.8                         | 345.6        | 462                  |
| 0166 104    | 27 x 1,5                                       | 16.1                         | 388.8        | 508                  |
| 0166 040    | 30 x 1,5                                       | 16.7                         | 432.0        | 557                  |
| 0166 105    | 34 x 1,5                                       | 18.1                         | 489.6        | 646                  |
| 0166 106    | 37 x 1,5                                       | 18.1                         | 532.8        | 672                  |
| 0166 107    | 40 x 1,5                                       | 19.0                         | 576.0        | 735                  |
| 0166 108    | 48 x 1,5                                       | 20.9                         | 691.2        | 867                  |
| 0166 109    | 50 x 1,5                                       | 21.5                         | 720.0        | 915                  |
| 0166 110    | 60 x 1,5                                       | 23.0                         | 864.0        | 1079                 |
| 0166 022    | 2 x 2,5                                        | 6.7                          | 48.0         | 82                   |
| 0166 030    | 3 x 2,5                                        | 7.1                          | 72.0         | 104                  |
| 0166 016    | 4 x 2,5                                        | 7.8                          | 96.0         | 130                  |
| 0166 111    | 5 x 2,5                                        | 8.6                          | 120.0        | 162                  |
| 0166 112    | 6 x 2,5                                        | 9.8                          | 144.0        | 202                  |
| 0166 113    | 7 x 2,5                                        | 9.8                          | 168.0        | 216                  |
| 0166 114    | 8 x 2,5                                        | 10.7                         | 192.0        | 251                  |
| 0166 115    | 10 x 2,5                                       | 12.7                         | 240.0        | 313                  |
| 0166 017    | 12 x 2,5                                       | 13.2                         | 288.0        | 361                  |
| 0166 018    | 14 x 2,5                                       | 13.9                         | 336.0        | 412                  |
| 0166 116    | 16 x 2,5                                       | 14.8                         | 384.0        | 474                  |

| Product No. | Number of conductors x conductor cross-section | Cable outer diameter (appr.) | Copper index | Cable weight (appr.) |
|-------------|------------------------------------------------|------------------------------|--------------|----------------------|
|             | mm <sup>2</sup>                                | mm                           | kg/km        | kg/km                |
| 0166 117    | 18 x 2,5                                       | 15.7                         | 432.0        | 532                  |
| 0166 118    | 19 x 2,5                                       | 15.7                         | 456.0        | 546                  |
| 0166 119    | 21 x 2,5                                       | 16.5                         | 504.0        | 605                  |
| 0166 120    | 25 x 2,5                                       | 19.0                         | 600.0        | 739                  |
| 0166 121    | 27 x 2,5                                       | 19.0                         | 648.0        | 766                  |
| 0166 122    | 30 x 2,5                                       | 19.7                         | 720.0        | 841                  |
| 0166 123    | 34 x 2,5                                       | 21.3                         | 816.0        | 976                  |
| 0166 124    | 37 x 2,5                                       | 21.3                         | 888.0        | 1018                 |
| 0166 125    | 40 x 2,5                                       | 22.1                         | 960.0        | 1102                 |
| 0166 126    | 44 x 2,5                                       | 24.2                         | 1056.0       | 1218                 |
| 0166 127    | 50 x 2,5                                       | 25.3                         | 1200.0       | 1386                 |
| 0166 128    | 60 x 2,5                                       | 26.9                         | 1440.0       | 1625                 |
| 0166 129    | 2 x 4,0                                        | 8.1                          | 76.8         | 123                  |
| 0166 130    | 3 x 4,0                                        | 8.6                          | 115.2        | 157                  |
| 0166 131    | 4 x 4,0                                        | 9.9                          | 153.6        | 205                  |
| 0166 132    | 5 x 4,0                                        | 10.9                         | 192.0        | 255                  |
| 0166 133    | 7 x 4,0                                        | 12.1                         | 268.8        | 333                  |
| 0166 134    | 3 x 6,0                                        | 10.4                         | 172.8        | 235                  |
| 0166 135    | 4 x 6,0                                        | 11.5                         | 230.4        | 296                  |
| 0166 136    | 5 x 6,0                                        | 12.8                         | 288.0        | 374                  |
| 0166 137    | 7 x 6,0                                        | 14.3                         | 403.2        | 491                  |
| 0166 138    | 3 x 10,0                                       | 13.2                         | 288.0        | 396                  |
| 0166 139    | 4 x 10,0                                       | 14.8                         | 384.0        | 507                  |
| 0166 140    | 5 x 10,0                                       | 16.3                         | 480.0        | 632                  |
| 0166 141    | 7 x 10,0                                       | 17.9                         | 672.0        | 824                  |
| 0166 142    | 3 x 16,0                                       | 15.8                         | 460.8        | 603                  |
| 0166 143    | 4 x 16,0                                       | 17.4                         | 614.4        | 763                  |
| 0166 144    | 5 x 16,0                                       | 19.4                         | 768.0        | 961                  |
| 0166 145    | 7 x 16,0                                       | 21.3                         | 1075.2       | 1260                 |
| 0166 146    | 3 x 25,0                                       | 18.5                         | 720.0        | 872                  |
| 0166 147    | 4 x 25,0                                       | 20.5                         | 960.0        | 1110                 |
| 0166 148    | 5 x 25,0                                       | 22.8                         | 1200.0       | 1396                 |
| 0166 149    | 3 x 35,0                                       | 21.8                         | 1008.0       | 1213                 |
| 0166 150    | 4 x 35,0                                       | 24.4                         | 1344.0       | 1557                 |
| 0166 151    | 5 x 35,0                                       | 27.0                         | 1680.0       | 1950                 |
| 0166 152    | 3 x 50,0                                       | 27.4                         | 1440.0       | 1806                 |
| 0166 153    | 4 x 50,0                                       | 30.4                         | 1920.0       | 2296                 |
| 0166 154    | 5 x 50,0                                       | 33.9                         | 2400.0       | 2896                 |

Other cross-sections and conductor counts available on request.

**TECHNOKABEL S.A. reserves the right to change specifications without prior notice.**