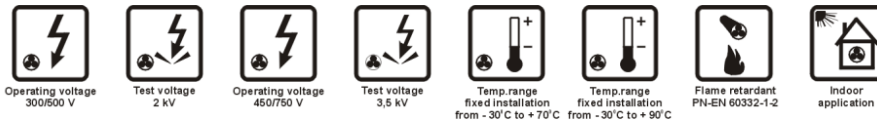


**LY 500 V; LY 750 V**  
**LYc 500 V; LYc 750 V**

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## POWER SINGLE WIRES



## APPLICATIONS

**LY** and **LYc** are power flexible single wires intended for interconnection in electrical equipment. Wires can be applied in control cabinets, electronic equipment and others. They are also used in lighting devices and systems.

## CONSTRUCTION

- multiwire conductors, stranded of bare annealed copper wires (tin-plated on request), meeting requirements of class 2 per PN-EN 60228,
- PVC insulation - **LY** wires,
- heat resistant PVC insulation (PVC 90°C) - **LYc** wires,
- identification colour code in accordance with PN-87/E-90050.

## AVAILABLE UPON REQUEST

**LYc 105°C** - wires with heat resistant PVC insulation up to 105°C.

**LY-LSF** - wires with special LSF PVC insulation. LSF PVC is self-extinguishing and flame retardant with low emission of toxic and corrosive fumes.

**H05V-R** and **H07V-R** - wires made of according to PN-EN-50525-2-31 standard.

# LY 500 V; LY 750 V LYc 500 V; LYc 750 V

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## CHARACTERISTICS

|                                                                                                                         |                 |                |                |                |                 |                  |                  |                  |
|-------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|----------------|----------------|-----------------|------------------|------------------|------------------|
| Conductor cross-section                                                                                                 | mm <sup>2</sup> | <b>0.50</b>    | <b>0.75</b>    | <b>1.0</b>     | <b>1.5</b>      | <b>2.5</b>       | <b>4.0</b>       | <b>6.0</b>       |
| DC conductor resistance at 20°C, maximum                                                                                | Ω/km            | 36.0           | 24.5           | 18.1           | 12.1            | 7.41             | 4.61             | 3.08             |
| Insulation resistance for PVC at 70°C and for heat resistant PVC at 95°C, minimum<br>LY 500, LYc 500<br>LY 750, LYc 750 | MΩ·km           | 0.013<br>0.016 | 0.011<br>0.014 | 0.010<br>0.012 | 0.0091<br>0.011 | 0.0074<br>0.0093 | 0.0069<br>0.0084 | 0.0059<br>0.0072 |
| Conductor cross-section                                                                                                 | mm <sup>2</sup> | <b>10</b>      | <b>16</b>      | <b>25</b>      | <b>35</b>       | <b>50</b>        | <b>70</b>        |                  |
| DC conductor resistance at 20°C, maximum                                                                                | Ω/km            | 1.83           | 1.15           | 0.727          | 0.524           | 0.387            | 0.268            |                  |
| Insulation resistance for PVC at 70°C and for heat resistant PVC at 95°C, minimum<br>LY 750, LYc 750                    | MΩ·km           | 0.0068         | 0.0056         | 0.0053         | 0.0046          | 0.0042           | 0.0042           |                  |

### Operating voltage U<sub>0</sub>/U

wires 500 V 300/500 V  
wires 750 V 450/750 V

### Voltage test

wires 500 V 2000 V rms  
wires 750 V 3500 V rms

### Operating temperature range

LY from - 30 to + 70°C  
LYc from - 30 to + 90°C

### Minimum bending radius

up to 8 mm  
from 8 to 12 mm  
from 12 mm

4 x wire diameter  
5 x wire diameter  
6 x wire diameter

### Wire combustibility

flame retardant

### Combustibility tests

PN-EN 60332-1-2, IEC 60332-1-2

### Reference standards

PN-87/E-90050, PN-87/E-90054

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

| Product No. | Conductor cross-section | Wire outer diameter (appr.) | Copper index | Wire weight (appr.) |
|-------------|-------------------------|-----------------------------|--------------|---------------------|
|             | mm <sup>2</sup>         | mm                          | kg/km        | kg/km               |
| LY 500 V    |                         |                             |              |                     |
| 0863 005    | 0,50                    | 2.1                         | 4.9          | 8.5                 |
| 0863 006    | 0,75                    | 2.3                         | 7.2          | 11.5                |
| 0863 003    | 1,00                    | 2.5                         | 9.6          | 15.0                |
| 0863 004    | 1,50                    | 2.8                         | 14.4         | 20.2                |
| 0863 007    | 2,50                    | 3.2                         | 24.0         | 30.8                |
| LY 750 V    |                         |                             |              |                     |
| 0729 014    | 0,50                    | 2.5                         | 4.8          | 10.6                |
| 0729 015    | 0,75                    | 2.7                         | 7.2          | 13.7                |
| 0729 026    | 1,00                    | 2.9                         | 9.6          | 17.4                |
| 0729 016    | 1,50                    | 3.2                         | 14.4         | 22.8                |
| 0729 017    | 2,50                    | 3.7                         | 24.0         | 33.8                |
| 0729 018    | 4,00                    | 4.4                         | 38.4         | 52.3                |
| 0729 019    | 6,00                    | 5.0                         | 57.6         | 74.9                |
| 0729 020    | 10,0                    | 6.3                         | 96.0         | 117.0               |
| 0729 021    | 16,0                    | 7.3                         | 153.6        | 176.0               |
| 0729 022    | 25,0                    | 9.0                         | 240.0        | 270.0               |
| 0729 023    | 35,0                    | 10.2                        | 336.0        | 365.0               |
| 0729 024    | 50,0                    | 12.1                        | 480.0        | 495.0               |
| 0729 025    | 70,0                    | 13.6                        | 672.0        | 680.0               |

| Product No. | Conductor cross-section | Wire outer diameter (appr.) | Copper index | Wire weight (appr.) |
|-------------|-------------------------|-----------------------------|--------------|---------------------|
|             | mm <sup>2</sup>         | mm                          | kg/km        | kg/km               |
| LYc 500 V   |                         |                             |              |                     |
| 0863 008    | 0,50                    | 2.1                         | 4.9          | 8.5                 |
| 0863 002    | 0,75                    | 2.3                         | 7.2          | 11.5                |
| 0863 001    | 1,00                    | 2.5                         | 9.6          | 15.0                |
| 0863 009    | 1,50                    | 2.8                         | 14.4         | 20.2                |
| 0863 010    | 2,50                    | 3.2                         | 24.0         | 30.8                |
| LYc 750 V   |                         |                             |              |                     |
| 0729 003    | 0,50                    | 2.5                         | 4.8          | 10.6                |
| 0729 002    | 0,75                    | 2.7                         | 7.2          | 13.7                |
| 0729 001    | 1,00                    | 2.9                         | 9.6          | 17.4                |
| 0729 004    | 1,50                    | 3.2                         | 14.4         | 22.8                |
| 0729 005    | 2,50                    | 3.7                         | 24.0         | 33.8                |
| 0729 006    | 4,00                    | 4.4                         | 38.4         | 52.3                |
| 0729 007    | 6,00                    | 5.0                         | 57.6         | 74.9                |
| 0729 008    | 10,0                    | 6.3                         | 96.0         | 117.0               |
| 0729 009    | 16,0                    | 7.3                         | 153.6        | 176.0               |
| 0729 010    | 25,0                    | 9.0                         | 240.0        | 270.0               |
| 0729 011    | 35,0                    | 10.2                        | 336.0        | 365.0               |
| 0729 012    | 50,0                    | 12.1                        | 480.0        | 495.0               |
| 0729 013    | 70,0                    | 13.6                        | 672.0        | 680.0               |

Other conductor cross-sections available on request.

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