



## SERVO cables in acc. to LENZE® Standard

### Motor and resolver/encoder cables



**Info**

- Servo drives
- EMC-compliant

#### Benefits

- Motor cables with low-capacitance
- Multi-standard = fewer part varieties = cost savings

#### Application range

- Connecting cable between servo controller and encoder/resolver
- Connecting cable between servo controller and motor
- Plant engineering
- Particularly in wet areas of machine tools and transfer lines
- Assembly lines, production lines, in all kinds of machines

#### Norm references / Approvals

- Resolver and encoder cable: UL AWM Style 2464 for fixed installation versions, Style 21165 for highly flexible applications.
- Motor cable: UL AWM Style 2570 for fixed installation version; Style 20940 for high flexibility use.
- Designed for power chain use: for travel distances up to 100 m (horizontal)
- For use in power chains: Please comply with the assembly guidelines listed in Appendix T3
- UL File Nr. E63634

#### Product make-up

- Design according to LENZE® standard:
- Designs for fixed installation: PVC outer sheath, flame-retardant in accordance with IEC 332.1, UL/CSA-approved PP core insulation.
- Designs for highly flexible use: oil-resistant PUR sheath in accordance with VDE472-803 Part B, flame-retardant in accordance with IEC 60332.1-2, TPE core insulation.
- Refer to data sheet (available upon request) for more details
- Signal cables: green (RAL 6018)
- Servo cable: orange (RAL 2003)

#### Technical data



##### Core identification code

- Encoder cables
- 7072508 (fixed installation) bk/ye+bk/gn+bk/rd+bk/bl + bk/wt
  - 7072517 (flexible installation) gn/ye+bl/rd+gy/pk+bk/vi + bn/wt
- Resolver cables:
- 7072507 (fixed installation) black/yellow + black/green + black/red + black/white
  - 7072516 (flexible application) green/yellow + blue/red + grey/pink + brown/white



##### Minimum bending radius

- Flexible use: 10 x outer diameter  
Fixed installation: 7.5 x cable diameter



##### Nominal voltage

- Resolver and encoder cable: 30 V (VDE), 300 V (UL/CSA)  
Motor cable:  
- Power cores: 0.6/1000 V (VDE), 600 V (UL/CSA).



##### Test voltage

- Resolver and encoder cable: 1.5 kV  
Motor cable:  
- Power cores: 4 kV  
- Control cores: 2 kV



##### Temperature range

- Flexing: -5°C to +70°C  
Fixed installation: -40°C to +80°C

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>Motor cables for fixed installation</b>				
7072500	4 G 1,0 + (2 x 0,5)	10.0	81.0	128
7072501	4 G 1,5 + (2 x 0,5)	11.2	106.0	173
7072502	4 G 2,5 + (2 x 0,5)	12.3	153.0	244
<b>Resolver/encoder cable, screened</b>				
7072507	3 x (2 x 0,14) + 1 x (2 x 0,5)	9.3	43.0	91
7072508	4 x (2 x 0,14) + 1 x (2 x 1,0)	11.0	65.0	136
<b>Motor cables for power chain application</b>				
7072509	4 G 1,0 + (2 x 0,5)	10.0	81.0	151

Article number	Number of cores and mm <sup>2</sup> per conductor	Outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
7072510	4 G 1,5 + (2 x 0,5)	11.5	106.0	192
7072511	4 G 2,5 + (2 x 0,5)	13.2	153.0	271
7072512	4 G 4 + (2 x 1,0)	14.6	235.0	373
7072513	4 G 6 + (2 x 1,0)	16.8	316.0	477
7072514	4 G 10 + (2 x 1,0)	20.1	513.0	710
7072515	4 G 16 + (2 x 1,0)	23.8	710.0	1015
<b>Resolver &amp; encoder cable for power chain applications</b>				
7072516	3 x (2 x 0,14) + 1 x (2 x 0,5)	10.0	44.0	107
7072517	4 x (2 x 0,14) + 1 x (2 x 1,0)	11.5	65.0	145

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

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Cables for power chain use should only be handled on drums prior to installation.

Article numbers refer to genuine Lapp products.

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- Circular connectors refer to page 608
- SKINTOP® EMC/Earthing refer to page 674