

Sensor leads for signal transmission systems and Motor connection cables

Product Description

Allows much faster moving operations which increases the economic efficiency of machines; Multi-Standard= less part varieties= cost savings



Application range

- Connecting cable between servo controller and encoder / resolver
- Connecting cable between servo controller and motor
- Assembling- & pick-and-place machines
- Especially in wet areas of machine tools and transfer lines subject to average mechanical stress
- Assembly lines, production lines, in all kinds of machines

Benefits

- Allows much faster moving operations which increases the economic efficiency of machines
- Multi-Standard= less part varieties= cost savings

Design

- Extra fine strands of plain copper wires
- Core insulation: Polypropylene (PP)
- tinned copper braid
- Polyurethane sheath (PUR)
- Signal cables: green (RAL 6018)
- Servo motor cables: orange (RAL 2003)

Approvals (Norm references)

- For travel distances up to 100 m (horizontal)
- Usage in Power Chains: Please comply with the assembly guidelines Appendix T3
- USA: Acc. NFPA79 Ed 08 in industrial machinery as part of a listed assembly only.



- Conform to DESINA®

Product features

- Designed for up to 10 million bendings in the power chain
- Torsion-resistant up to $\pm 30^\circ/\text{mtr}$
- Abrasion- & cut resistant, halogen free, oil resistant
- Flame retardant acc. IEC 60332-1-2 & CSA FT1

Cross-References

Accessories

SILVYN® CHAIN Cable protection and guiding systems

Technical Data

Approvals

Power cable: VDE registered UL AWM Style 21223

CSA AWM I/II A/B 1000V 80° FT 1

Sensor leads: UL/CSA AWM Style 20236

Conductor stranding

Extra fine wire according to VDE 0295 Class 6 /

IEC 60228 Class 6

Minimum bending radius

Power cables: Static: $4 \times D$ Dynamic: $1.5 \text{ mm}^2 - 16$

mm^2 : $7,5 \times D$ $25 \text{ mm}^2 - 50 \text{ mm}^2$: $10 \times D$

Signalleitungen: Static: $4 \times D$ Dynamic: $8 \times D$

Rated voltage

Signal cables: 30 V AC/DC

Power cables: Cores: 600 /1000 V (IEC) 1000 V (UL/CSA)

Control cores: 24 V AC/DC (IEC) 1000 V (UL/CSA)

Test voltage

Cores: 4000 V eff.

Control cores/signal cores: 500 V rms

Range of temperature

Flexing: -30°C up to $+80^\circ\text{C}$

Fixed installation: -50°C up to $+80^\circ\text{C}$

Article List

Part number	Number of cores and mm^2 per conductor	Reference part. No.	Outer diameter in mm	Copper index kg/km	Weight kg/km
Feedback / signal cables					
00277101	8 x 2 x 0,18	6FX8008-1BD11	7.8	54.0	85
00277111	4 x 2 x 0,34 + 4 x 0,5	6FX8008-1BD21	8.9	77.0	120



00277121	3 x (2 x 0,14) + 2 x (0,5)	6FX8008-1BD31	8.9	69.0	113
00277131	3 x (2 x 0,14) + 4 x 0,14 + 2 x 0,5	6FX8008-1BD41	8.8	66.0	101
00277141	3 x (2 x 0,14) + 4 x 0,14 + 2 x 0,5 + 4 x 0,22	6FX8008-1BD51	9.4	86.0	139
00277151	4 x 2 x 0,18	6FX8008-1BD61	6.4	34.25	53
00277161	2 x 2 x 0,18	6FX8008-1BD71	5.0	23.1	36
00277171	12 x 0,22	6FX8008-1BD81	6.9	48.0	76
00277992	2 x 2 x 0,15 + 1 x 2 x 0,38	6FX8008-2DC00	7.2	39.0	67
Motor cables					
0027784	4 G1,5	6FX8008-1BB11-Plus	9.1	90.0	150
0027785	4 G2,5	6FX8008-1BB21-Plus	10.6	132.0	220
0027786	4 G4	6FX8008-1BB31-Plus	11.9	204.0	300
0027787	4 G6	6FX8008-1BB41-Plus	14.5	315.0	450
0027788	4 G10	6FX8008-1BB51-Plus	17.5	488.0	660
0027789	4 G16	6FX8008-1BB61-Plus	21.6	769.0	1010
Servo cables					
0027790	4 G 1,5 + (2 x 1,5)	6FX8008-1BA11-Plus	11.6	146.0	230
0027791	4 G 2,5 + (2 x 1,5)	6FX8008-1BA21-Plus	13.4	187.0	300
0027792	4 G 4 + (2 x 1,5)	6FX8008-1BA31-Plus	14.8	258.0	380
0027793	4 G 6 + (2 x 1,5)	6FX8008-1BA41-Plus	16.8	365.0	530
0027794	4 G 10 + (2 x 1,5)	6FX8008-1BA51-Plus	19.4	560.0	765
0027795	4 G 16 + (2 x 1,5)	6FX8008-1BA61-Plus	23.1	816.0	1090
0027796	4 G 25 + (2 x 1,5)	6FX8008-1BA25-Plus	26.6	1166.0	1530
0027797	4 G 35 + (2 x 1,5)	6FX8008-1BA35-Plus	30.9	1554.0	2040
0027798	4 G 50 + (2 x 1,5)	6FX8008-1BA50-Plus	34.0	2188.0	2760

Footnote:

All product related values as shown are nominal values unless specified differently. Further values, e.g. tolerances we submit on request - if available and released for publication.

Copper price basis: EUR 150 / 100 kg; For utilization and definition of 'Metal price basis' and 'Metal index' see Appendix T17

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: Coil ≤ 30 kg and ≤ 250 m, otherwise drum

Please specify the desired packaging size (e.g. 1 x 500 m drum or 5 x 100 m coils)

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FD-cables for powerchain use (continuous flexing) should only be handled on drums prior to installation.

Part number refers to genuine LAPP part

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