Motor and resolver/encoder cables
Allows much faster speed and accelerations which increases the economic efficiency of the machines
Multi-standard approval reduces part varieties and saves costs



Halogen-free

Mechanical resistance

Oil-resistant

Power chain

Interference signals

UV-resistant

Info

Extended Line for heavy duty in power chain applications
EMC-compliant

Application range

Connecting cable between servo controller and encoder/resolver
Connecting cable between servo controller and motor
For use in assembling & pick-and-place machinery
Particularly in wet areas of machine tools and transfer lines
Assembly lines, production lines, in all kinds of machines

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Product Make-up

Extra-fine strand made of copper wires:
> Signal cables: tinned
> Power cables: bare
Core insulation: polypropylene (PP)
Tinned-copper braiding
PUR outer sheath
Signal cables: green (RAL 6018)
Servo cable: orange (RAL 2003)

Norm references / Approvals

Power cable:
VDE-registered
UL AWM Style 21223
CSA AWM I/II, A/B 1000 V 80° FT 1
Sensor leads: UL/CSA AWM Style 20236
For horizontal travel distances up to 100m
For use in power chains: Please comply with the assembly guidelines listed in Appendix T3
UL File No. E63634

Product features

Abrasion and cut-resistant, halogen-free, oil-resistant
Flame-retardant according to IEC 60332-1-2 & CSA FT1
Designed for 5 up to 10 million bending/unbending cycles in the power chain

Remark

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.Copper price basis: EUR 150/100 kg. 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-standardlengthsPackaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drumPlease specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).Siemens part designations (6FX5002/5008, 6FX7002/7008, 6FX8002/8008) are registered trademarks of Siemens AG, and are listed for comparison purposes onlyCables 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.

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Technical Data

Conductor stranding:	Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6
Minimum bending radius:	Power cable: Fixed: 4 x D Dynamic: 1.5 mm² - 16 mm²: 7.5 x D 25 mm² - 50 mm²: 10 x D Signal cable: Fixed: 4 x D Dynamic: 8 x D
Nominal voltage:	Signal cables: 30 V AC/DC Power cable: - Power cores: 600/1000 V (IEC) 1000 V (UL/CSA) - Control cores: 24 V AC/DC (IEC) 1000 V (UL/CSA)
Test voltage:	Power cable: 4 KV Signal cables: 500 V
Temperature range:	Flexing: -20°C to +60°C Fixed installation: -50°C to +80°C

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Part number	Number of cores and mm² per conductor	Reference article no.	Outer diameter (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 0,38 + 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

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