

Power chain applications • Harsh conditions, certified



ÖLFLEX® CHAIN 90 CP

Highly flexible, screened single core power cable with abrasion and oil resistant PUR sheath - certified for North America



Info

- Extended Line Performance - Long travel lengths or high acceleration
- Allrounder for indoor and outdoor use
- Improved characteristics in the event of a fire

Benefits

- Allows much faster speed and accelerations which increases the economic efficiency of the machines
- Increased durability under harsh conditions thanks to robust PUR outer sheath
- Resistant to contact with many mineral oil-based lubricants, diluted acids, aqueous alkaline solutions and other chemical media
- Wide temperature range for applications in harsh climatic environments
- Longer cable installation lengths thanks to low mutual capacitance cable design
- Copper screening complies with EMC requirements and protects against electromagnetic interference

Application range

- In power chains or moving machine parts
- For internal wiring of electric and electronic equipment in switch cabinets
- Specially designed for power circuits of servomotors driven by frequency converters
- This cable can substitute screened multi-core motor cables where space requirements or minimum bending radii cause problems
- Test systems in the automotive industry, vehicles and stationary fuel cell systems
- For indoor and outdoor use

Product features

- Flammability:
 - Halogen-free acc. to VDE 0472-815
 - Flame retardant acc. to IEC 60332-1-2 or UL/cUL VW-1, FT1
 - No flame propagation acc. to IEC 60332-3-24 Cat. C or /-25 Cat. D
- Good weather, UV and oil resistance
- Flexible at low temperatures
- Low-capacitance design
- EMC-compliant

Norm references / Approvals

- USA: UL AWM Style 11624, VW-1
- Canada: cUL AWM I/II A, FT1
- UL File No. E63634
- For use in power chains: Please comply with assembly guideline Appendix T3

Product Make-up

- Extra-fine wire strand made of bare copper wires (class 6)
- Core insulation: TPE compound
- Non-woven wrapping
- Tinned-copper braiding
- PUR outer sheath, black (similar RAL 9005)

Technical data

- Classification ETIM 5/6**
 ETIM 5.0/6.0 Class-ID: EC000057
 ETIM 5.0/6.0 Class-Description: Low voltage power cable
- Core identification code**
 Black, other colours are available upon request
- Conductor stranding**
 Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6
- Minimum bending radius**
 Flexing: up from 7.5 x outer diameter
 Fixed installation: 3 x outer diameter
- Nominal voltage**
 IEC: U_n/U 600/1000 V
 UL & CSA: 1000 V
- Bending cycles & operation parameters**
 See Selection Table A2-1 in the appendix of our online catalogue
- Test voltage**
 4000 V
- Temperature range**
 Flexing: -35°C to +80°C
 Fixed installation: -50°C to +80°C

Article number	Conductor cross-section (mm ²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
ÖLFLEX® CHAIN 90 CP				
1026547	1.5	7	23.8	60
1026548	2.5	7.6	41	90
1026549	4	7.9	58.8	100
1026550	6	8.4	81.3	120
1026551	10	9.8	123	180
1026553	16	11.3	187.7	240
1026555	25	13	280.6	340
1026557	35	14.2	398.9	480

Article number	Conductor cross-section (mm ²)	Outer diameter [mm]	Copper index (kg/km)	Weight (kg/km)
1026559	50	16.8	551.7	610
1026561	70	19.1	773.2	880
1026563	95	21.6	1036.6	1160
1026565	120	23.6	1277.7	1380
1026567	150	25.9	1618	1670
1026569	185	28.5	1957.3	1980
1026571	240	33.4	2511.7	2600
1026573	300	35.3	3117	3210

Unless specified otherwise, the shown product values are nominal values at room temperature. 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-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).

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

Accessories

- SKINTOP® BRUSH ADD-ON refer to page 700
- SKINTOP® MS-HF-M BRUSH refer to page 708
- SKINTOP® MS-M BRUSH refer to page 702
- SILVYN® CHAIN cable protection and guiding systems