

## ÖLFLEX® CHAIN 90 P

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

ÖLFLEX® CHAIN 90 P - Oil resistant power cable for harsh conditions in power chains with UL/cUL AWM certification.

### Info

Extended Line Performance - Long travel lengths or high acceleration

Allrounder for indoor and outdoor use

Improved characteristics in the event of a fire



Suitable for outdoor use



Flame-retardant



Halogen-free



Cold-resistant



Mechanical resistance



Oil-resistant



Power chain



UV-resistant

### Benefits

Last Update (25.04.2024)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02\_03.16

## ÖLFLEX® CHAIN 90 P

Allows much faster speed and accelerations which increases the economic efficiency of the machines  
Multi-standard certification reduces part varieties and saves costs  
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

### 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 multi-core power 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  
Abrasion and notch-resistant  
Flexible at low temperatures  
Low-capacitance design

### Norm references / Approvals

DNV GL approved  
UL File No. E63634  
USA: UL AWM Style 11624, VW-1  
Canada: cUL AWM I/II A, FT1  
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  
PUR outer sheath, black (similar RAL 9005)

### Technical Data

|                           |  |
|---------------------------|--|
| Classification ETIM 5:    | ETIM 5.0 Class-ID: EC000057<br>ETIM 5.0 Class-Description: Low voltage power cable |
| Classification ETIM 6:    | ETIM 6.0 Class-ID: EC000057<br>ETIM 6.0 Class-Description: Low voltage power cable |
| Core identification code: | Black or green-yellow, other colours available on request                          |
| Conductor stranding:      | Extra-fine wire according to VDE 0295, class 6/IEC 60228 class 6                   |
| Torsion movement in WTG:  | TW-0 & TW-2, refer to Appendix T0  |
| Minimum bending radius:   | Flexing: up from 7.5 x outer diameter<br>Fixed installation: 3 x outer diameter    |

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## ÖLFLEX® CHAIN 90 P

|  |  |
|--|--|
| Nominal voltage:                       | IEC: U <sub>0</sub> /U 600/1000 V<br>UL & CSA: 1000 V            |
| Test voltage:                          | 4000 V   |
| Temperature range:                     | Flexing: -35°C to +80°C<br>Fixed installation: -50°C to +80°C    |
| Bending cycles & operation parameters: | See Selection Table A2-1 in the appendix of our online catalogue |

### Note

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](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).

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

Prices are net prices without VAT and surcharges. Sale to business customers only.

# ÖLFLEX® CHAIN 90 P

| Article number     | Conductor cross-section (mm²) | Outer diameter [mm] | Core colour  | Copper index (kg/km) | Weight (kg/km) |
|--------------------|-------------------------------|---------------------|--------------|----------------------|----------------|
| ÖLFLEX® CHAIN 90 P |                               |                     |              |                      |                |
| 1026513            | 1.5                           | 6.3                 | green-yellow | 14.4                 | 48             |
| 1026514            | 1.5                           | 6.3                 | black        | 14.4                 | 48             |
| 1026515            | 2.5                           | 6.9                 | green-yellow | 24                   | 63             |
| 1026516            | 2.5                           | 6.9                 | black        | 24                   | 63             |
| 1026517            | 4                             | 7.2                 | green-yellow | 38.4                 | 77             |
| 1026518            | 4                             | 7.2                 | black        | 38.4                 | 77             |
| 1026519            | 6                             | 7.7                 | green-yellow | 57.6                 | 95             |
| 1026520            | 6                             | 7.7                 | black        | 57.6                 | 95             |
| 1026521            | 10                            | 9.1                 | green-yellow | 96                   | 145            |
| 1026522            | 10                            | 9.1                 | black        | 96                   | 145            |
| 1026523            | 16                            | 10.6                | green-yellow | 153.6                | 205            |
| 1026524            | 16                            | 10.6                | black        | 153.6                | 205            |
| 1026525            | 25                            | 12.3                | green-yellow | 240                  | 290            |
| 1026526            | 25                            | 12.3                | black        | 240                  | 290            |
| 1026527            | 35                            | 13.3                | green-yellow | 336                  | 413            |
| 1026528            | 35                            | 13.3                | black        | 336                  | 413            |
| 1026529            | 50                            | 15.9                | green-yellow | 480                  | 535            |
| 1026530            | 50                            | 15.9                | black        | 480                  | 535            |
| 1026531            | 70                            | 18                  | green-yellow | 672                  | 776            |
| 1026532            | 70                            | 18                  | black        | 672                  | 776            |
| 1026533            | 95                            | 19.9                | green-yellow | 912                  | 998            |
| 1026534            | 95                            | 19.9                | black        | 912                  | 998            |
| 1026535            | 120                           | 22.5                | green-yellow | 1152                 | 1249           |
| 1026536            | 120                           | 22.5                | black        | 1152                 | 1249           |
| 1026537            | 150                           | 24.6                | green-yellow | 1440                 | 1486           |
| 1026538            | 150                           | 24.6                | black        | 1440                 | 1486           |
| 1026539            | 185                           | 27.2                | green-yellow | 1776                 | 1788           |
| 1026540            | 185                           | 27.2                | black        | 1776                 | 1788           |
| 1026541            | 240                           | 32.1                | green-yellow | 2304                 | 2381           |
| 1026542            | 240                           | 32.1                | black        | 2304                 | 2381           |
| 1026543            | 300                           | 34                  | green-yellow | 2880                 | 2964           |
| 1026544            | 300                           | 34                  | black        | 2880                 | 2964           |