

ÖLFLEX® 590 P/590 CP

Heavy Duty, LSLH, Indoor/Outdoor Flexible Cable with PUR Jacket; Unshielded & Shielded



ÖLFLEX® 590 P is a color-coded, flexible power and control cable with a rugged, highly abrasion-resistant yellow polyurethane jacket. It is UV-resistant and performs very well in cold-temperature indoor and outdoor applications. ÖLFLEX® 590 CP is the shielded version, with an overall foil tape, drain wire, and tinned copper braid for EMI and RFI protection.

Unshielded Construction

Conductors: Finely stranded tinned copper

Insulation: TPE

Jacket: Polyurethane; yellow

Shielded Construction

Conductors: Finely stranded tinned copper

Insulation: TPE

Shielding: Overall foil tape with drain wire; tinned copper braid (85% coverage)

Jacket: Polyurethane; yellow

Recommended Applications

Portable hand tools; utility & forestry trucks & equipment; cold temperature applications; areas where the cable can be cut or damaged by sharp objects

Approvals



Application Advantage

- Rugged PUR jacket resists cuts, nicks & abrasions
- TPE insulation for superior cold-temperature flexibility
- Safety colored yellow jacket
- Good for damp environments
- UL & CSA AWM approval

| Cable Attributes | | page 640 | |
|------------------|-------|----------|-------|
| OIL | OR-05 | FLAME | FR-02 |
| MOTION | FL-01 | MECH. | MP-06 |

| Complete the Installation | |
|---------------------------|----------|
| SKINTOP® Strain Relief | page 488 |
| EPIC® Connectors | page 280 |

Technical Data

Minimum Bend Radius:
 - for installation: 5 x cable diameter
 - shielded: 8 x cable diameter

Temperature Range:
 - for flexible use: -50°C to +80°C

Nominal Voltage: 600V

Test Voltage: 2000V

Conductor Stranding: Class 5 fine wire*
 * 18 AWG meets only the Class 5 cross section and DC resistance

Color Code: Color-coded per Chart 1, page 672 (#4 conductor is green/yellow)

Approvals:
 UL: AWM 20234
 Attributes: Oil Res I/II
 Sunlight Resistant
 NFPA 79
 Canada: CSA AWM I/II A/B FT 1
 Additional: CE & RoHS

If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question. For current information go to our website.

ÖLFLEX® 590 P

| Part Number | Number of Conductors (incl. ground) | Nominal Outer Diameter (in) (mm) | | Copper Weight (lbs/mft) | Approx. Weight (lbs/mft) | SKINTOP® Non-Metallic PG Thread | Part Number | Number of Conductors (incl. ground) | Nominal Outer Diameter (in) (mm) | | Copper Weight (lbs/mft) | Approx. Weight (lbs/mft) | SKINTOP® Non-Metallic PG Thread |
|--------------------------|-------------------------------------|----------------------------------|------|-------------------------|--------------------------|---------------------------------|--------------------------|-------------------------------------|----------------------------------|------|-------------------------|--------------------------|---------------------------------|
| 18 AWG (1.00 mm²) | | | | | | | 14 AWG (2.50 mm²) | | | | | | |
| 501802* | 2 | 0.293 | 7.4 | 13 | 44 | S2111 | 501403 | 3 | 0.360 | 9.1 | 43 | 82 | S2111 |
| 501803 | 3 | 0.308 | 7.8 | 19 | 51 | S2111 | 501404 | 4 | 0.389 | 9.9 | 57 | 101 | S2113 |
| 501804 | 4 | 0.332 | 8.4 | 25 | 64 | S2111 | 501405 | 5 | 0.422 | 10.7 | 72 | 123 | S2113 |
| 501805 | 5 | 0.357 | 9.1 | 31 | 77 | S2111 | 12 AWG (4 mm²) | | | | | | |
| 501807 | 7 | 0.390 | 9.9 | 44 | 95 | S2113 | 501203 | 3 | 0.399 | 10.1 | 72 | 117 | S2113 |
| 16 AWG (1.50 mm²) | | | | | | | 10 AWG (6 mm²) | | | | | | |
| 501602* | 2 | 0.315 | 8.0 | 18 | 51 | S2111 | 501204 | 4 | 0.447 | 11.4 | 96 | 145 | S2113 |
| 501603 | 3 | 0.331 | 8.4 | 26 | 64 | S2111 | 501003 | 3 | 0.485 | 12.3 | 105 | 161 | S2116 |
| 501604 | 4 | 0.357 | 9.1 | 39 | 77 | S2111 | 501004 | 4 | 0.532 | 13.5 | 139 | 205 | S2121 |
| 501605 | 5 | 0.387 | 9.8 | 44 | 90 | S2113 | | | | | | | |
| 501607 | 7 | 0.418 | 10.6 | 62 | 115 | S2113 | | | | | | | |

* 2c cable does not include ground

ÖLFLEX® 590 CP

| Part Number | Number of Conductors (incl. ground) | Nominal Outer Diameter (in) (mm) | | Copper Weight (lbs/mft) | Approx. Weight (lbs/mft) | SKINTOP® MS-SC PG Thread | Part Number | Number of Conductors (incl. ground) | Nominal Outer Diameter (in) (mm) | | Copper Weight (lbs/mft) | Approx. Weight (lbs/mft) | SKINTOP® MS-SC PG Thread |
|--------------------------|-------------------------------------|----------------------------------|------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|----------------------------------|------|-------------------------|--------------------------|--------------------------|
| 18 AWG (1.00 mm²) | | | | | | | 14 AWG (2.50 mm²) | | | | | | |
| 501803CP | 3 | 0.330 | 8.4 | 34 | 73 | 53112220 | 501403CP | 3 | 0.391 | 9.9 | 71 | 108 | 53112230 |
| 501804CP | 4 | 0.354 | 9.0 | 41 | 84 | 53112220 | 501404CP | 4 | 0.420 | 10.7 | 88 | 130 | 53112230 |
| 501805CP | 5 | 0.379 | 9.6 | 50 | 99 | 53112230 | 501405CP | 5 | 0.458 | 11.6 | 103 | 161 | 53112240 |
| 16 AWG (1.50 mm²) | | | | | | | 12 AWG (4 mm²) | | | | | | |
| 501602CP* | 2 | 0.346 | 8.8 | 37 | 73 | 53112220 | 501203CP | 3 | 0.442 | 11.2 | 109 | 156 | 53112240 |
| 501603CP | 3 | 0.362 | 9.2 | 46 | 86 | 53112220 | 501204CP | 4 | 0.479 | 12.2 | 136 | 190 | 53112240 |
| 501604CP | 4 | 0.388 | 9.9 | 56 | 99 | 53112230 | 501205CP | 5 | 0.518 | 13.2 | 160 | 231 | 53112240 |
| 501605CP | 5 | 0.418 | 10.6 | 67 | 117 | 53112230 | 10 AWG (6 mm²) | | | | | | |
| | | | | | | | 501003CP | 3 | 0.521 | 13.2 | 147 | 216 | 53112240 |
| | | | | | | | 501004CP | 4 | 0.564 | 14.3 | 184 | 262 | 53112250 |
| | | | | | | | 501005CP | 5 | 0.635 | 16.1 | 222 | 315 | 53112250 |

* 2c cable does not include ground

Recommended SKINTOP® assumes minimal OD variance. Additional configurations are available; please see our SKINTOP® section. If not otherwise specified, all values relating to the product are nominal values. For current information go to our website.