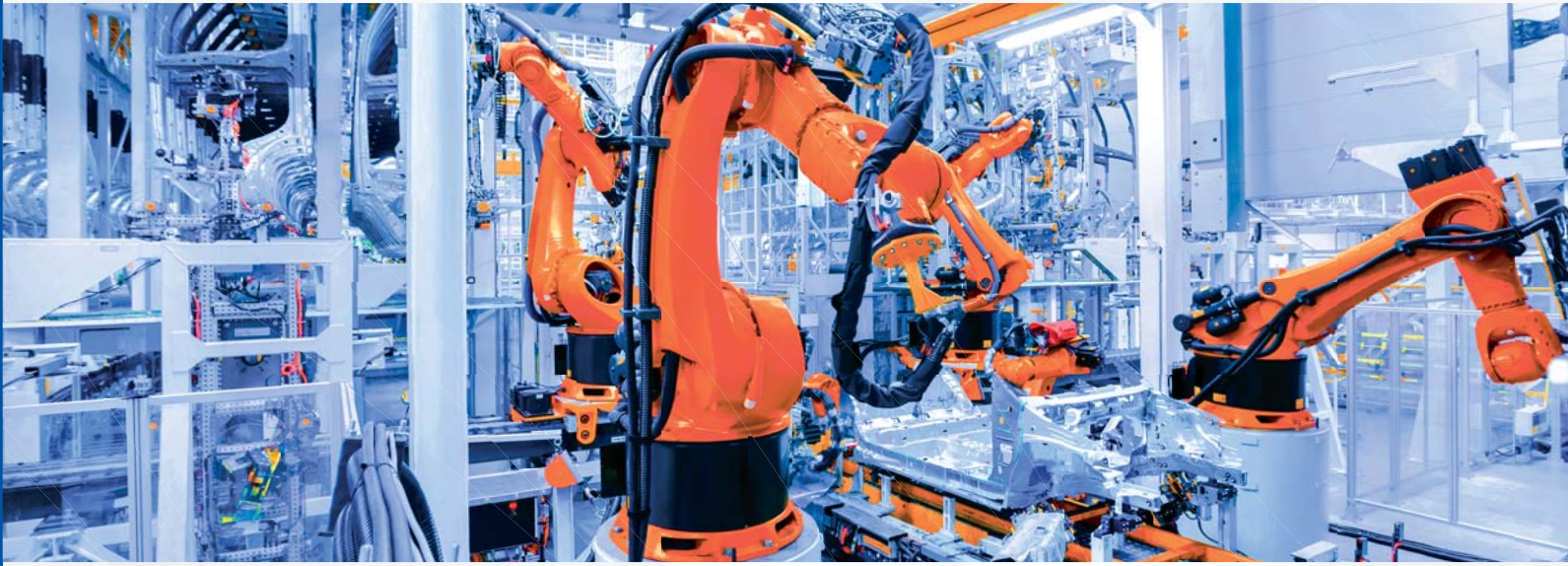


represented by:

Engineered Components Group 828-683-0176 sales@engineered-components.com www.engineered-components.com



Automation & Material Handling Cables AMERICAN CATALOG



ELETTROTEK KABEL

“We started out in Italy. After just a few years we opened subsidiaries in Europe. Then around the world. Now, with the acquisition of important manufacturing companies we have broadened our business and strategic vision even more.

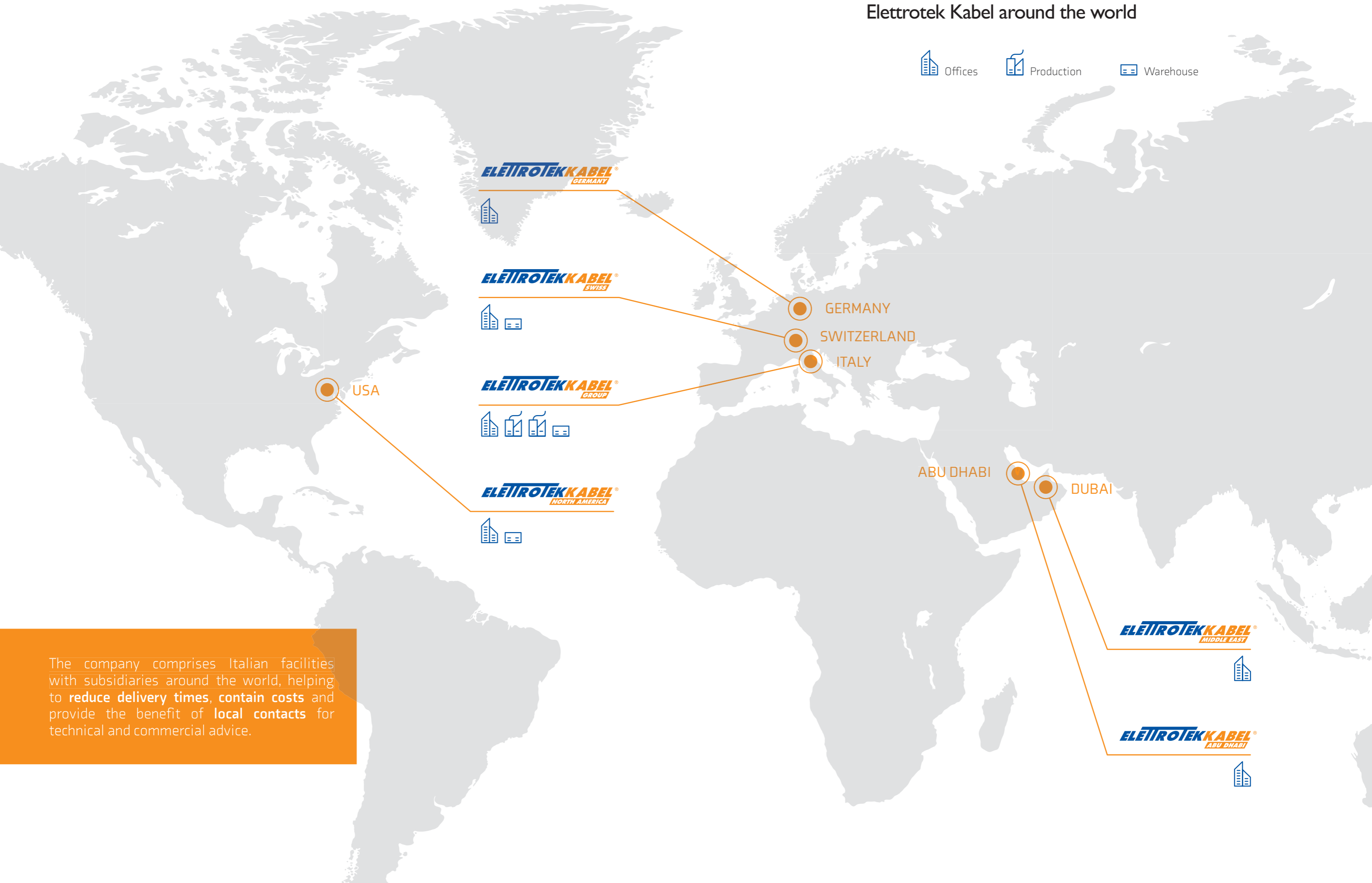
We’ve faced many challenges along the way, always tackling them with real passion.

But right from the start we have taken only one direction: the path of quality. Quality in terms of technology, products, services and customer relations.

That’s the essence of Elettrotek Kabel. And our products represent the best of us.”

Elettrotek Kabel around the world

 Offices  Production  Warehouse



ELETTROTEK KABEL
GERMANY

ELETTROTEK KABEL
SWISS

ELETTROTEK KABEL
GROUP

ELETTROTEK KABEL
NORTH AMERICA

ABU DHABI

DUBAI

ELETTROTEK KABEL
MIDDLE EAST

ELETTROTEK KABEL
ABU DHABI

The company comprises Italian facilities with subsidiaries around the world, helping to **reduce delivery times**, **contain costs** and provide the benefit of **local contacts** for technical and commercial advice.



*Technological innovation, and much more besides.
From the very start, Elettrotek Kabel has targeted growth.*

GROUP CERTIFICATIONS



ISO 9001:2015

QUALITY
MANAGEMENT



OHSAS 18001:2017

OCCUPATIONAL
HEALTH & SAFETY

CERTIFICATIONS FOR SHIPBOARD CABLES



DNV·GL - Det Norske Veritas
Germanischer Lloyd

CLASSIFICATION
SOCIETY- NO



ABS
American Bureau of Shipping

CLASSIFICATION
SOCIETY- USA



LR
Lloyd's Register

CLASSIFICATION
SOCIETY- UK



RINA / RINAMIL
Italian Military Register

CLASSIFICATION
SOCIETY- IT



BV
Bureau Veritas

CLASSIFICATION
SOCIETY- FR



RS - Russian Maritime
Register of Shipping

CLASSIFICATION
SOCIETY- RU

PRODUCT CERTIFICATIONS



CPR - Construction
Products Regulation

CONSTRUCTION
PRODUCTS TRADE



UL - Underwriters Laboratories Inc.

MANUFACTURING STANDARDS
FOR ELECTRICAL CABLES - USA



CSA - Canadian Standards Association

ELECTRICAL CABLE
MANUFACTURING
STANDARDS - CA



EAC - EurAsian Conformity

QUALITY, HEALTH &
SAFETY CONTROL - EAEU

| | |
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| GAALFLEX® TRAY1002..... | 12/13 |
| GAALFLEX® TRAY1002 CYLEAN..... | 14/15 |
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| | |
|-------------------------------------|-------|
| BASKET SPREADER 740 (YSLTÖE) | 95/96 |
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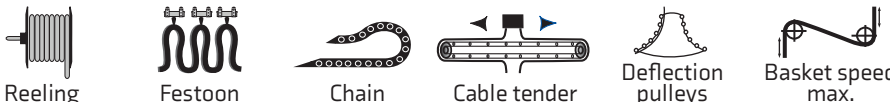
Technical data:

| | |
|-------|--------|
| | 99/136 |
|-------|--------|






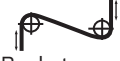
| ELETTROTEKKABEL types | Main application | Secondary application | Reeling speed max. | Festoon speed max. | Chain speed max. | Basket speed max. |
|--|---|---|--------------------|--------------------|--|-------------------|
| GAALFLEX® CHAIN TD 87 |  |  | | | 180 m/min | |
| GAALFLEX® CHAIN T 87 |  |  | | | 180 m/min | |
| GAALFLEX® CHAIN TD 87 C |  |  | | | 180 m/min | |
| GAALFLEX® CHAIN T 87 C |  |  | | | 180 m/min | |
| GAALFLEX® CHAIN TD 87 C TP |  |  | | | 180 m/min | |
| FLEXIDRUM® T 100-101 (UL) |  |  | | 240 m/min | 250 m/min | |
| FLEXIDRUM® T 100-101 C (UL) |  |  | | 240 m/min | 250 m/min | |
| GAALTHERM® 180 UL |  |  | | | | |
| GAALTHERM® 180 C UL |  |  | | | | |
| FLEXIDRUM® T 210 FLEXIDRUM® TD 210 |  |  | | 240 m/min | 250 m/min | |
| FLEXIDRUM® T 210 C FLEXIDRUM® TD 210 C |  |  | | 240 m/min | 250 m/min | |
| FLEXIDRUM® TD 210 C TP |  |  | | 240 m/min | 250 m/min | |
| SPECIAL GAALFLEX® SERVO T 830 - T 830 C |  | | | | Unsupported: 8 m/sec Gliding: 4 m/sec | |
| GAALFLEX® SERVO T 839 C |  |  | | | 250 m/min | |
| FLEXIDRUM® T 310 |  |  | | | 250 m/min | |
| GAALFLEX® SERVO T 833 C |  |  | | | 250 m/min | |
| GAALFLEX® SERVO T 834 C |  |  | | | 300 m/min | |
| GAALFLEX® SERVO T 844 C |  |  | | | 300 m/min | |
| SPECIAL PROFIBUS 634 UL |  |  | | 240 m/min | 250 m/min | |
| PROFIBUS 637 | | | | | | |
| CAN-BUS 627 UL | | | | | | |
| S CAN-BUS 628 UL |  |  | | 240 m/min | 250 m/min | |
| ASI CABLES | | | | | | |
| DEVICENET TM 650 DEVICENET TM 651 | | | | | | |
| DEVICENET TM 656 DEVICENET TM 657 | | | | | | |
| DEVICENET TM 658 DEVICENET TM 659 | | | | | | |

| ELETTROTEKKABEL types | Main application | Secondary application | Reeling speed max. | Festoon speed max. | Chain speed max. | Basket speed max. |
|--|---|---|--------------------|--------------------|------------------|-------------------|
| PROFINET 654 PROFINET 655 UL | | | | | | |
| PROFINET 662 PROFINET 663 PROFINET 663 PLTC | | | | | | |
| PROFINET 678 SPECIAL PROFINET 678 UL | | | | | | |
| SPECIAL PROFINET 681 SPECIAL PROFINET 682 |  |  | | 240 m/min | 250 m/min | |
| SPECIAL PROFINET 678 UL S_ FTP CAT. 6A | | | | | | |
| FLEXIDRUM® R 503 |  |  | 180 m/min | 240 m/min | | |
| FLEXIDRUM® FIBER 770 |  |  | 120 m/min | 240 m/min | 240 m/min | |
| FLEXFESTOON® NE-FLAT (NGFLGÖU) UL |  | | | 180 m/min | | |
| FLEXFESTOON® NE-FLAT M(STD)HÖU-J/O UL |  | | | 180 m/min | | |
| FLEXIFESTOON® PV FLAT UL |  | | | 120 m/min | | |
| FLEXIFESTOON® PV FLAT UL CY |  | | | | | |
| LIFT-1S UL CENTRAL PENDANT | | | | | | |
| LIFT-1S UL | | | | | | |
| LIFT-2S UL | | | | | | |
| PENDANT ROUND LIFT 733 UL | | | | | | |
| BASKET SPREADER 740 (YSLTÖE) |  | | | | | 160 m/min |
| BASKET SPREADER 750 (3YSLTÖE) |  | | | | | 160 m/min |

(Values are valid only after check and confirmation of the application by Elettrotek Kabel Group Technical dept.)

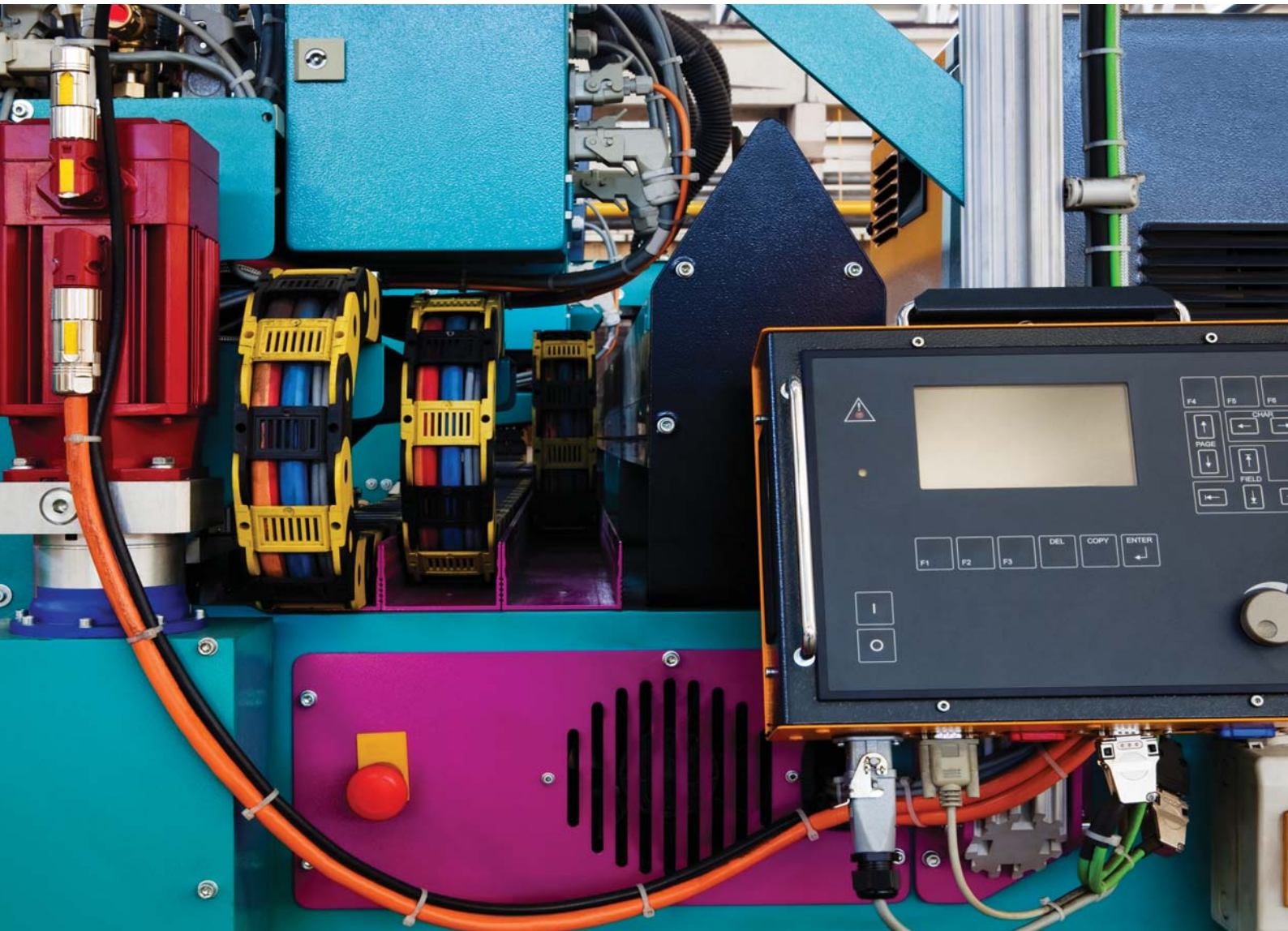
| ELETTROTEKKABEL types |  | | | | | | |
|--|--|---------|---------|---------|--------------|--------------------|-------------------|
| | Fixed | Reeling | Festoon | Chain | Cable tender | Deflection pulleys | Basket speed max. |
| GAALFLEX® CHAIN TD 87 | 5 x D | | | 7,5 x D | | | |
| GAALFLEX® CHAIN T 87 | 4 x D | | | 7,5 x D | | | |
| GAALFLEX® CHAIN TD 87 C | 5 x D | | | 7,5 x D | | | |
| GAALFLEX® CHAIN T 87 C | 5 x D | | | 7,5 x D | | | |
| GAALFLEX® CHAIN TD 87 C TP | 5 x D | | | 7,5 x D | | | |
| FLEXIDRUM® T 100-101 (UL) | 3 x D | | 7,5 x D | 7,5 x D | | | |
| FLEXIDRUM® T 100-101 C (UL) | 4 x D | | 7,5 x D | 7,5 x D | | | |
| GAALTHERM® 180 UL | 5 x D | | 10 x D | 15 x D | | | |
| GAALTHERM® 180 C UL | 5 x D | | 10 x D | 15 x D | | | |
| FLEXIDRUM® T 210 FLEXIDRUM® TD 210 | 3 x D | | 5 x D | 5 x D | | | |
| FLEXIDRUM® T 210 C FLEXIDRUM® TD 210 C | 4 x D | | 7,5 x D | 7,5 x D | | | |
| FLEXIDRUM® TD 210 C TP | 5 x D | | 7,5 x D | 7,5 x D | | | |
| SPECIAL GAALFLEX® SERVO T 830 - T 830 C | 4 x D | | | 7,5 x D | | | |
| GAALFLEX® SERVO T 839 C | 5 x D | | 10 x D | 12 x D | | | |
| FLEXIDRUM® T 310 | 4 x D | | 6 x D | 10 x D | | | |
| GAALFLEX® SERVO T 833 C | 5 x D | | 10 x D | 12 x D | | | |
| GAALFLEX® SERVO T 834 C | 5 x D | | 7 x D | 7 x D | | | |
| GAALFLEX® SERVO T 844 C | 5 x D | | 7 x D | 7 x D | | | |
| SPECIAL PROFIBUS 634 UL | 10 x D | | 15 x D | 15 x D | | | |
| PROFIBUS 637 | 12 x D | | | | | | |
| CAN-BUS 627 UL | 7,5 x D | | | | | | |
| S CAN-BUS 628 UL | 7,5 x D | | | | | | |
| ASI CABLES | | | | | | | |
| * DEVICENET TM 650 DEVICENET TM 651 | | | | | | | |
| * DEVICENET TM 656 DEVICENET TM 657 | | | | | | | |
| * DEVICENET TM 658 DEVICENET TM 659 | | | | | | | |

* Consult technical specification

| ELETTROTEKKABEL types | Fixed | Reeling  | Festoon  | Chain  | Cable tender  | Deflection pulleys  | Basket speed max.  |
|--|-----------------|---|---|--|--|--|---|
| * PROFINET 654 PROFINET 655 UL | | | | | | | |
| * PROFINET 662 PROFINET 663 PROFINET 663 PLTC | | | | | | | |
| * PROFINET 678 SPECIAL PROFINET 678 UL | | | | | | | |
| * SPECIAL PROFINET 681 SPECIAL PROFINET 682 | | | | | | | |
| * SPECIAL PROFINET 678 UL S_ftp CAT. 6A | | | | | | | |
| FLEXIDRUM® R 503 | 5 x D | 7,5 x D | 7,5 x D | 7,5 x D | | | |
| FLEXIDRUM® FIBER 770 | 100 mm | 125 mm | 125 mm | 125 mm | 200 mm | 200 mm | 500 mm |
| FLEXFESTOON® NE-FLAT (NGFLGÖU) UL | 3 x D* 4 x D | 5 x D | 4 x D* 5 x D | 4 x D* 5 x D | 7,5 x D | 7,5 x D | |
| FLEXFESTOON® NE-FLAT M(STD)HÖU-J/O UL | 3 x D* 4 x D | 5 x D | 4 x D* 5 x D | 4 x D* 5 x D | 7,5 x D | 7,5 x D | |
| FLEXIFESTOON® PV FLAT UL | | | 5 x D | | | | |
| FLEXIFESTOON® PV FLAT UL CY | | | 5 x D | | | | |
| LIFT-1S UL CENTRAL PENDANT | | | | | | | |
| LIFT-1S UL | 10 x D | | | | | | |
| LIFT-2S UL | 10 x D | | | | | | |
| PENDANT ROUND LIFT 733 UL | 10 x D | | | | | | |
| BASKET SPREADER 740 (YSLTÖE) | | | | | | | 15 x D |
| BASKET SPREADER 750 (3YSLTÖE) | | | | | | | 15 x D |

(Values are valid only after check and confirmation of the application by Elettrotek Kabel Group Technical dept.)

* Consult technical specification



GAALFLEX® CONTROL 600

PVC control cable, UL1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL.5, ACC.TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAALTHERM® 521 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| OUTER SHEATH: | GREY (RAL 7001) GAALTHERM® 521 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0472 PART 804 TEST METHOD B
IEC 60332-1-2,
IEC 60332-3/24,
UL VW-1



OIL RESISTANCE:
ACC. TO DIN EN 50290-2-22 RESP. VDE 0819-102, TM54

Technical data:

| | |
|---|---|
| NOMINAL VOLTAGE: | UL/CSA 1000 V |
| TEST VOLTAGE: | 3 kV ACC.TO DIN VDE 0281 PART 2 + HD 21.2 |
| TEMPERATURE RANGE | UL/CSA |
| FIXED LAYING: | -40°C UP TO +105°C |
| FLEXIBLE APPLICATION: (not-continuously movement) | -5°C UP TO +105°C |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 4 x D |
| FLEXIBLE INSTALLATION: (not-continuously movement) | 15 x D |

Features:

- SMALL BENDING RADIUS
- SUITABLE IN DRY, DAMP AND WET ENVIRONMENTS
- ON REQUEST BLACK
- NOMINAL VOLTAGE FOR IEC: 450/750 V
- UL RECOGNIZED AWM STYLE 21179 105°C 1000 V, CSA AWM I/II A/B OR STYLE 2587 90°C 600 V IDENTIFIED WITH "0" ON THE 5th NUMBER OF THE PART. NO, AND "F" ON THE 6th NUMBER OF THE PART. NO
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 31151H51020A20 | 2 x 0,5 | 5,8 | 9,6 | 46,5 | 20 |
| 31151H50031A20 | 3 g 0,5 | 6,2 | 14,4 | 55,5 | 20 |
| 31151H50041A20 | 4 g 0,5 | 6,9 | 19,2 | 69,7 | 20 |
| 31151H50051A20 | 5 g 0,5 | 7,5 | 24 | 83,3 | 20 |
| 31151H50061A20 | 6 G0,5 | 8,4 | 28,8 | 103,6 | 20 |
| 31151H50071A20 | 7 g 0,5 | 8,4 | 33,6 | 107 | 20 |
| 31151H50081A20 | 8 g 0,5 | 9,9 | 38,4 | 142,8 | 20 |
| 31151H50091A20 | 9 g 0,5 | 10,4 | 43,2 | 158,2 | 20 |
| 31151H50101A20 | 10 g 0,5 | 10,6 | 48 | 166,5 | 20 |
| 31151H50121A20 | 12 g 0,5 | 10,9 | 57,6 | 181 | 20 |
| 31151H50141A20 | 14 g 0,5 | 11,6 | 67,2 | 206,3 | 20 |
| 31151H50161A20 | 16 g 0,5 | 12,2 | 76,8 | 230 | 20 |
| 31151H50181A20 | 18 g 0,5 | 13,2 | 86,4 | 266,8 | 20 |
| 31151H50191A20 | 19 g 0,5 | 13,2 | 91,2 | 270,2 | 20 |
| 31151H50211A20 | 21G 0,5 | 14,5 | 100,8 | 319,4 | 20 |
| 31151H50251A20 | 25 g 0,5 | 15,2 | 120 | 357,6 | 20 |
| 31151H50271A20 | 27 g 0,5 | - | 129,6 | 401,4 | 20 |
| 31151H50301A20 | 30 g 0,5 | 16,5 | 144 | 423,2 | 20 |
| 31151H50321A20 | 32 g 0,5 | 17,1 | 153,6 | 453,8 | 20 |
| 31151H50341A20 | 34 g 0,5 | 18 | 163,2 | 497,8 | 20 |
| 31151H50351A20 | 35 g 0,5 | 18 | 168 | 501,3 | 20 |
| 31151H50371A20 | 37 g 0,5 | 18 | 177,6 | 508,1 | 20 |
| 31151H50401A20 | 40 g 0,5 | 19,2 | 192 | 570,9 | 20 |
| 31151H50411A20 | 41 g 0,5 | 19,5 | 196,8 | 588 | 20 |
| 31151H50421A20 | 42 g 0,5 | 19,5 | 201,6 | 591,4 | 20 |
| 31151H50501A20 | 50 g 0,5 | 21,5 | 240 | 715,4 | 20 |
| 31151H50561A20 | 56 g 0,5 | 21,5 | 268,8 | 735,9 | 20 |
| 31151H50611A20 | 61 g 0,5 | 21,5 | 292,8 | 753 | 20 |
| 31151H51020A19 | 2 x 0,75 | 6,2 | 14,4 | 55,5 | 19 |
| 31151H50031A19 | 3 g 0,75 | 6,6 | 21,6 | 66,7 | 19 |

GAALFLEX® CONTROL 600

PVC control cable, UL1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 31151H50041A19 | 4 g 0,75 | 7,4 | 28,8 | 85 | 19 |
| 31151H50051A19 | 5 g 0,75 | 8,3 | 36 | 106,8 | 19 |
| 31151H50061A19 | 6 g 0,75 | 9 | 43,2 | 126,2 | 19 |
| 31151H50071A19 | 7 g 0,75 | 9 | 50,4 | 131,3 | 19 |
| 31151H50081A19 | 8 g 0,75 | 10,6 | 57,6 | 173,4 | 19 |
| 31151H50091A19 | 9 g 0,75 | 11,4 | 64,8 | 199,2 | 19 |
| 31151H50101A19 | 10 g 0,75 | 11,6 | 72 | 209,8 | 19 |
| 31151H50121A19 | 12 g 0,75 | 11,9 | 86,4 | 228,3 | 19 |
| 31151H50141A19 | 14 g 0,75 | 12,7 | 100,8 | 261,8 | 19 |
| 31151H50151A19 | 15 g 0,75 | 13,1 | 108 | 279,1 | 19 |
| 31151H50161A19 | 16 g 0,75 | 13,3 | 115,2 | 290,4 | 19 |
| 31151H50181A19 | 18 g 0,75 | 14,3 | 129,6 | 333,2 | 19 |
| 31151H50191A19 | 19 g 0,75 | 14,3 | 136,8 | 338,3 | 19 |
| 31151H50211A19 | 21 g 0,75 | 15,8 | 151,2 | 401,7 | 19 |
| 31151H50241A19 | 24 g 0,75 | 16,5 | 172,8 | 443,7 | 19 |
| 31151H50251A19 | 25 g 0,75 | 16,6 | 180 | 452,8 | 19 |
| 31151H50261A19 | 26 g 0,75 | 17,2 | 187,2 | 481,8 | 19 |
| 31151H50271A19 | 27 g 0,75 | 17,7 | 194,4 | 507,5 | 19 |
| 31151H50301A19 | 30 g 0,75 | 18 | 216 | 535,5 | 19 |
| 31151H50321A19 | 32 g 0,75 | 18,6 | 230,4 | 571,6 | 19 |
| 31151H50341A19 | 34 g 0,75 | 19,6 | 244,8 | 626,8 | 19 |
| 31151H50361A19 | 36 x 0,75 | 19,6 | 259,2 | 637,1 | 19 |
| 31151H50371A19 | 37 x 0,75 | 19,6 | 266,4 | 642,2 | 19 |
| 31151H50421A19 | 42 x 0,75 | 21,4 | 302,4 | 754,8 | 19 |
| 31151H50451A19 | 45 x 0,75 | 22,8 | 324 | 843,1 | 19 |
| 31151H50501A19 | 50 x 0,75 | 23,3 | 360 | 895,9 | 19 |
| 31151H50611A19 | 61 g 0,75 | 23,3 | 439,2 | 952,3 | 19 |
| 31151H51020A18 | 2 x 1 | 6,5 | 19,2 | 63,4 | 18 |
| 31151H50031A18 | 3 g 1 | 7,1 | 28,8 | 79,9 | 18 |
| 31151H50041A18 | 4 g 1 | 7,7 | 38,4 | 97,2 | 18 |
| 31151H50051A18 | 5 g 1 | 8,7 | 48 | 123,3 | 18 |
| 31151H50061A18 | 6 g 1 | 9,4 | 57,6 | 145,1 | 18 |
| 31151H50071A18 | 7 g 1 | 9,4 | 67,2 | 151,9 | 18 |
| 31151H50081A18 | 8 g 1 | 11,4 | 76,8 | 207,8 | 18 |
| 31151H50091A18 | 9 g 1 | 11,9 | 86,4 | 228,3 | 18 |
| 31151H50101A18 | 10 g 1 | 12,2 | 96 | 243,7 | 18 |
| 31151H50121A18 | 12 g 1 | 12,8 | 115,2 | 275 | 18 |
| 31151H50141A18 | 14 G1 | 13,4 | 134,4 | 307,2 | 18 |
| 31151H50161A18 | 16 g 1 | 14,2 | 153,6 | 346,9 | 18 |
| 31151H50181A18 | 18 g 1 | 15,1 | 172,8 | 391,7 | 18 |
| 31151H50191A18 | 19 g 1 | 15,1 | 182,4 | 398,5 | 18 |
| 31151H50201A18 | 20 g 1 | 16,1 | 192 | 442,1 | 18 |
| 31151H50211A18 | 21 g 1 | 16,7 | 201,6 | 472,1 | 18 |
| 31151H50241A18 | 24 g 1 | 17,6 | 230,4 | 529 | 18 |
| 31151H50251A18 | 25 g 1 | 17,6 | 240 | 535,8 | 18 |
| 31151H50261A18 | 26 g 1 | 18,1 | 249,6 | 563,7 | 18 |
| 31151H50271A18 | 27 g 1 | 18,8 | 259,2 | 600,9 | 18 |
| 31151H50301A18 | 30 g 1 | 19,2 | 288 | 639,4 | 18 |
| 31151H50321A18 | 32 g 1 | 19,6 | 307,2 | 671,3 | 18 |
| 31151H50341A18 | 34 g 1 | 20,9 | 326,4 | 747 | 18 |
| 31151H50361A18 | 36 g 1 | 20,9 | 345,6 | 760,7 | 18 |
| 31151H50371A18 | 37 g 1 | 20,9 | 355,2 | 767,5 | 18 |
| 31151H50411A18 | 41 g 1 | 22,8 | 393,6 | 892,7 | 18 |
| 31151H50421A18 | 42 g 1 | 22,8 | 403,2 | 899,5 | 18 |
| 31151H50501A18 | 50 g 1 | 24,8 | 480 | 1066,3 | 18 |
| 31151H50561A18 | 56 g 1 | 24,8 | 537,6 | 1107,4 | 18 |
| 31151H50611A18 | 61 g 1 | 24,8 | 585,6 | 1141,6 | 18 |
| 31151H51020A16 | 2 x 1,5 | 7,3 | 28,8 | 83,7 | 16 |
| 31151H50031A16 | 3 g 1,5 | 7,7 | 43,2 | 101,2 | 16 |
| 31151H50041A16 | 4 g 1,5 | 8,6 | 57,6 | 128,9 | 16 |
| 31151H50051A16 | 5 g 1,5 | 9,5 | 72 | 158,6 | 16 |
| 31151H50061A16 | 6 g 1,5 | 10,5 | 86,4 | 192,6 | 16 |
| 31151H50071A16 | 7 g 1,5 | 10,5 | 100,8 | 203,1 | 16 |
| 31151H50081A16 | 8 g 1,5 | 12,4 | 115,2 | 264,8 | 16 |
| 31151H50091A16 | 9 G1,5 | 13,3 | 129,6 | 302,5 | 16 |
| 31151H50101A16 | 10 g 1,5 | 13,5 | 144 | 319,2 | 16 |
| 31151H50111A16 | 11 g 1,5 | 13,6 | 158,4 | 332,9 | 16 |
| 31151H50121A16 | 12 g 1,5 | 14,2 | 172,8 | 363 | 16 |

GAALFLEX® CONTROL 600

PVC control cable, UL1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 31151H50141A16 | 14 g 1,5 | 14,8 | 201,6 | 404,4 | 16 |
| 31151H50161A16 | 16 g 1,5 | 15,8 | 230,4 | 461,4 | 16 |
| 31151H50181A16 | 18 g 1,5 | 16,7 | 259,2 | 516,8 | 16 |
| 31151H50191A16 | 19 g 1,5 | 16,7 | 273,6 | 527,2 | 16 |
| 31151H50201A16 | 20 g 1,5 | 17,9 | 288 | 586,6 | 16 |
| 31151H50211A16 | 21 g 1,5 | 18,7 | 302,4 | 631,5 | 16 |
| 31151H50241A16 | 24 g 1,5 | 19,5 | 345,6 | 698,9 | 16 |
| 31151H50251A16 | 25 g 1,5 | 19,6 | 360 | 714 | 16 |
| 31151H50261A16 | 26 g 1,5 | 20,3 | 374,4 | 757,3 | 16 |
| 31151H50271A16 | 27 g 1,5 | 20,8 | 388,8 | 792 | 16 |
| 31151H50301A16 | 30 g 1,5 | 21,4 | 432 | 853,2 | 16 |
| 31151H50321A16 | 32 g 1,5 | 21,9 | 460,8 | 899,6 | 16 |
| 31151H50341A16 | 34 g 1,5 | 23,3 | 489,6 | 995 | 16 |
| 31151H50371A16 | 37 g 1,5 | 23,3 | 532,8 | 1026,4 | 16 |
| 31151H50411A16 | 41 g 1,5 | 25,2 | 590,4 | 1176,8 | 16 |
| 31151H50421A16 | 42 g 1,5 | 25,2 | 604,8 | 1187,3 | 16 |
| 31151H50501A16 | 50 g 1,5 | 27,6 | 720 | 1420,2 | 16 |
| 31151H50561A16 | 56 g 1,5 | 27,6 | 806,4 | 1483 | 16 |
| 31151H50611A16 | 61 g 1,5 | 27,6 | 878,4 | 1535,3 | 16 |
| 31151H51020A14 | 2 x 2,5 | 8,5 | 48 | 120,1 | 14 |
| 31151H50031A14 | 3 g 2,5 | 9 | 72 | 147,8 | 14 |
| 31151H50041A14 | 4 g 2,5 | 10 | 96 | 187,7 | 14 |
| 31151H50051A14 | 5 g 2,5 | 11,2 | 120 | 235,2 | 14 |
| 31151H50071A14 | 7 g 2,5 | 12,2 | 168 | 297,7 | 14 |
| 31151H50081A14 | 8 g 2,5 | 14,6 | 192 | 390,9 | 14 |
| 31151H50091A14 | 9 g 2,5 | 15,6 | 216 | 444 | 14 |
| 31151H50101A14 | 10 g 2,5 | 15,9 | 240 | 472,6 | 14 |
| 31151H50121A14 | 12 g 2,5 | 16,4 | 288 | 526,6 | 14 |
| 31151H50141A14 | 14 g 2,5 | 17,4 | 336 | 601,4 | 14 |
| 31151H50161A14 | 16 g 2,5 | 18,5 | 384 | 682,8 | 14 |
| 31151H50181A14 | 18 g 2,5 | 19,6 | 432 | 767,2 | 14 |
| 31151H50241A14 | 24 g 2,5 | 23 | 576 | 1042,7 | 14 |
| 31151H50251A14 | 25 g 2,5 | 23 | 600 | 1060,1 | 14 |
| 31151H50341A14 | 34 g 2,5 | 27,4 | 816 | 1478,7 | 14 |
| 31151H51020A12 | 2 x 4 | 9,9 | 76,8 | 171,2 | 12 |
| 31151H50031A12 | 3 g 4 | 10,6 | 115,2 | 216 | 12 |
| 31151H50041A12 | 4 g 4 | 11,8 | 153,6 | 275,5 | 12 |
| 31151H50051A12 | 5 g 4 | 13,1 | 192 | 341,5 | 12 |
| 31151H50071A12 | 7 g 4 | 14,5 | 268,8 | 442,8 | 12 |
| 31151H50111A12 | 11 g 4 | 18,9 | 422,4 | 727,4 | 12 |
| 31151H50121A12 | 12 g 4 | 19,4 | 460,8 | 777,8 | 12 |
| 31151H51020A10 | 2 x 6 | 11,2 | 115,2 | 231,4 | 10 |
| 31151H50031A10 | 3 g 6 | 11,9 | 172,8 | 292,2 | 10 |
| 31151H50041A10 | 4 g 6 | 13,3 | 230,4 | 375,6 | 10 |
| 31151H50051A10 | 5 g 6 | 14,8 | 288 | 467,1 | 10 |
| 31151H50071A10 | 7 g 6 | 16,4 | 403,2 | 609,5 | 10 |
| 31151H51020A08 | 2 x 10 | 14,2 | 192 | 376,5 | 8 |
| 31151H50031A08 | 3 g 10 | 15,1 | 288 | 477,2 | 8 |
| 31151H50041A08 | 4 g 10 | 16,7 | 384 | 606,6 | 8 |
| 31151H50051A08 | 5 g 10 | 18,9 | 480 | 768,4 | 8 |
| 31151H50071A08 | 7 g 10 | 20,8 | 672 | 996,3 | 8 |
| 31151H50031A06 | 3 g 16 | 19,5 | 460,8 | 783,5 | 6 |
| 31151H50041A06 | 4 g 16 | 21,8 | 614,4 | 1007,3 | 6 |
| 31151H50051A06 | 5 g 16 | 24,5 | 768 | 1266,5 | 6 |
| 31151H50071A06 | 7 g 16 | 27,2 | 1075,2 | 1654,7 | 6 |
| 31151H50041A04 | 4 g 25 | 26 | 960 | 1493,8 | 4 |
| 31151H50051A04 | 5 g 25 | 29,1 | 1200 | 1869,4 | 4 |
| 31151H50071A04 | 7 g 25 | 32,2 | 1680 | 2442,1 | 4 |
| 31151H50041A02 | 4 g 35 | 29,2 | 1344 | 1977,8 | 2 |
| 31151H50051A02 | 5 g 35 | 32,7 | 1680 | 2476,4 | 2 |
| 31151H50041A01 | 3 g 50 | 32,1 | 1440 | 2255,6 | 1 |
| 31151H50051A01 | 4 g 50 | 35,9 | 1920 | 2907,2 | 1 |
| 31151H50041A2C | 4 g 70 | 41,5 | 2688 | 3971,1 | 2/0 |
| 31151H50041A3C | 4 g 95 | 45 | 3648 | 5078,9 | 3/0 |
| 31151H50041A4C | 4 g 120 | 47,6 | 4608 | 5975,1 | 4/0 |
| 31151H50041A5C | 4 g 150 | 54 | 5760 | 7584,5 | 250 |
| 31151H50041A7C | 4 g 185 | 58,3 | 7104 | 9065,9 | 350 |

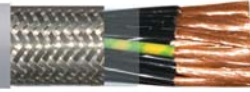
Other dimension and colours available on request.

GAALFLEX® CONTROL 600 CY Lean

PVC control cable with overall copper screen, UL 1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600 CY Lean



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL.5, ACC.TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAALTHERM® 521 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING | PETP FOIL |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | GREY (RAL 7001), GAALTHERM® 521 |

Technical data:

| | |
|---|--|
| NOMINAL VOLTAGE: | UL/CSA 1000 V |
| TEST VOLTAGE: | 3 kV ACC.TO DIN VDE 0281 PART 2 + HD 21.2 |
| TEMPERATURE RANGE | UL/CSA |
| FIXED LAYING: | -40°C UP TO +105°C |
| FLEXIBLE APPLICATION: (not-continuously movement) | -5°C UP TO +105°C |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 6 x D |
| FLEXIBLE INSTALLATION: (not-continuously movement) | 20 x D |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2,
UL VW-1, CSA FTI FT2



OIL RESISTANCE:
ACC. TO DIN EN 50290-2-22 RESP. VDE 0819-102, TM54

Features:

- HIGH MECHANICAL LOADING CAPACITY
- SUITABLE IN DRY, DAMP AND WET ENVIRONEMENTS
- NOMINAL VOLTAGE FOR IEC: 450/750 V
- UL RECOGNIZED AWM STYLE 21179 105°C 1000 V, CSA AWM I/II A/B OR STYLE 2587 90°C 600 V IDENTIFIED WITH "0" ON THE 5th NUMBER OF THE PART. NO. AND "F" ON THE 6th NUMBER OF THE PART. NO
- ROHS AND CE APPROVAL



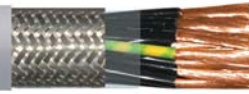
| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 31191H51020A20 | 2 x 0,5 | 6,4 | 28,7 | 59,3 | 20 |
| 31191H50031A20 | 3 g 0,5 | 7 | 33,7 | 71 | 20 |
| 31191H50041A20 | 4 g 0,5 | 7,5 | 43,8 | 89,3 | 20 |
| 31191H50051A20 | 5 g 0,5 | 8,3 | 48,7 | 105 | 20 |
| 31191H50061A20 | 6 G0,5 | 9 | 58,4 | 124,5 | 20 |
| 31191H50071A20 | 7 g 0,5 | 9 | 63,2 | 127,9 | 20 |
| 31191H50081A20 | 8 g 0,5 | 10,5 | 72,9 | 165,9 | 20 |
| 31191H50091A20 | 9 g 0,5 | 11,2 | 82,7 | 193,4 | 20 |
| 31191H50101A20 | 10 g 0,5 | 11,4 | 87,4 | 183,6 | 20 |
| 31191H50121A20 | 12 g 0,5 | 11,7 | 97 | 203 | 20 |
| 31191H50141A20 | 14 g 0,5 | 12,2 | 106,7 | 224,8 | 20 |
| 31191H50161A20 | 16 g 0,5 | 13 | 121,3 | 258,4 | 20 |
| 31191H50181A20 | 18 g 0,5 | 14,2 | 147,7 | 307,1 | 20 |
| 31191H50191A20 | 19 g 0,5 | 14,2 | 152,5 | 310,6 | 20 |
| 31191H50211A20 | 21G 0,5 | 15,3 | 171,1 | 356 | 20 |
| 31191H50251A20 | 25 g 0,5 | 16,2 | 199 | 399,5 | 20 |
| 31191H50271A20 | 27 g 0,5 | 17,2 | 208,5 | 430,9 | 20 |
| 31191H50301A20 | 30 g 0,5 | 17,5 | 222,9 | 460,6 | 20 |
| 31191H50321A20 | 32 g 0,5 | 17,9 | 241,5 | 491,6 | 20 |
| 31191H50341A20 | 34 g 0,5 | 19 | 250,8 | 527,5 | 20 |
| 31191H50351A20 | 35 g 0,5 | 19 | 255,6 | 536,4 | 20 |
| 31191H50371A20 | 37 g 0,5 | 19 | 265,2 | 548,7 | 20 |
| 31191H50401A20 | 40 g 0,5 | 20,2 | 288,6 | 613,3 | 20 |
| 31191H50411A20 | 41 g 0,5 | 20,5 | 293,4 | 628,3 | 20 |
| 31191H50421A20 | 42 g 0,5 | 20,5 | 298,2 | 637,2 | 20 |
| 31191H50501A20 | 50 g 0,5 | 22,3 | 345,4 | 725,5 | 20 |
| 31191H50561A20 | 56 g 0,5 | 22,3 | 374,2 | 780,5 | 20 |
| 31191H50611A20 | 61 g 0,5 | 22,3 | 398,2 | 822,1 | 20 |

GAALFLEX® CONTROL 600 CY Lean

PVC control cable with overall copper screen, UL 1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600 CY Lean



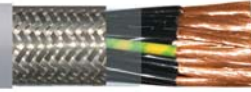
| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 31191H51020A19 | 2 x 0,75 | 7 | 33,7 | 70,1 | 19 |
| 31191H50031A19 | 3 g 0,75 | 7,4 | 46,2 | 85,8 | 19 |
| 31191H50041A19 | 4 g 0,75 | 8 | 53,6 | 103,4 | 19 |
| 31191H50051A19 | 5 g 0,75 | 8,9 | 65,6 | 126,8 | 19 |
| 31191H50061A19 | 6 g 0,75 | 9,8 | 72,9 | 149,6 | 19 |
| 31191H50071A19 | 7 g 0,75 | 9,8 | 80,1 | 154,7 | 19 |
| 31191H50081A19 | 8 g 0,75 | 11,4 | 97 | 204,1 | 19 |
| 31191H50091A19 | 9 g 0,75 | 12 | 104,2 | 226,8 | 19 |
| 31191H50101A19 | 10 g 0,75 | 12,2 | 111,5 | 216,2 | 19 |
| 31191H50121A19 | 12 g 0,75 | 12,7 | 130,9 | 251,6 | 19 |
| 31191H50141A19 | 14 g 0,75 | 13,3 | 145,3 | 279,6 | 19 |
| 31191H50151A19 | 15 g 0,75 | 14,1 | 169,4 | 318,5 | 19 |
| 31191H50161A19 | 16 g 0,75 | 14,3 | 176,7 | 332,3 | 19 |
| 31191H50181A19 | 18 g 0,75 | 15,1 | 199,7 | 372 | 19 |
| 31191H50191A19 | 19 g 0,75 | 15,1 | 206,9 | 377,2 | 19 |
| 31191H50211A19 | 21 g 0,75 | 16,6 | 230 | 439,6 | 19 |
| 31191H50241A19 | 24 g 0,75 | 17,5 | 251,7 | 473 | 19 |
| 31191H50251A19 | 25 g 0,75 | 17,6 | 259,1 | 485,8 | 19 |
| 31191H50261A19 | 26 g 0,75 | 18 | 274,9 | 508,3 | 19 |
| 31191H50271A19 | 27 g 0,75 | 18,7 | 282,3 | 532,7 | 19 |
| 31191H50301A19 | 30 g 0,75 | 19 | 303,6 | 570,8 | 19 |
| 31191H50321A19 | 32 g 0,75 | 19,4 | 318,2 | 599,8 | 19 |
| 31191H50341A19 | 34 g 0,75 | 20,6 | 341,3 | 652 | 19 |
| 31191H50361A19 | 36 x 0,75 | 20,6 | 355,7 | 675,2 | 19 |
| 31191H50371A19 | 37 x 0,75 | 20,6 | 362,9 | 680,4 | 19 |
| 31191H50421A19 | 42 x 0,75 | 22,2 | 407,6 | 787,8 | 19 |
| 31191H50451A19 | 45 x 0,75 | 23,6 | 438,1 | 834 | 19 |
| 31191H50501A19 | 50 x 0,75 | 24,3 | 474,1 | 909,4 | 19 |
| 31191H50561A19 | 61 g 0,75 | 24,3 | 553,3 | 1036,3 | 19 |
| 31191H51020A18 | 2 x 1 | 7,3 | 38,7 | 77 | 18 |
| 31191H50031A18 | 3 g 1 | 7,7 | 53,6 | 94,9 | 18 |
| 31191H50041A18 | 4 g 1 | 8,5 | 63,2 | 119,4 | 18 |
| 31191H50051A18 | 5 g 1 | 9,3 | 77,6 | 141,9 | 18 |
| 31191H50061A18 | 6 g 1 | 10,2 | 92,1 | 172,6 | 18 |
| 31191H50071A18 | 7 g 1 | 10,2 | 101,7 | 179,4 | 18 |
| 31191H50081A18 | 8 g 1 | 12 | 116,2 | 230,4 | 18 |
| 31191H50091A18 | 9 g 1 | 12,7 | 130,9 | 266,4 | 18 |
| 31191H50101A18 | 10 g 1 | 13 | 140,5 | 255,9 | 18 |
| 31191H50121A18 | 12 g 1 | 13,4 | 159,6 | 286,7 | 18 |
| 31191H50141A18 | 14 G1 | 14,4 | 195,9 | 343,6 | 18 |
| 31191H50161A18 | 16 g 1 | 15 | 223,9 | 386,4 | 18 |
| 31191H50181A18 | 18 g 1 | 16,1 | 243,1 | 432,4 | 18 |
| 31191H50191A18 | 19 g 1 | 16,1 | 252,7 | 439,2 | 18 |
| 31191H50201A18 | 20 g 1 | 17,1 | 270,9 | 488,6 | 18 |
| 31191H50211A18 | 21 g 1 | 17,7 | 280,5 | 510,4 | 18 |
| 31191H50241A18 | 24 g 1 | 18,6 | 318 | 558,3 | 18 |
| 31191H50251A18 | 25 g 1 | 18,6 | 327,6 | 572,5 | 18 |
| 31191H50261A18 | 26 g 1 | 19,1 | 337,4 | 590,9 | 18 |
| 31191H50271A18 | 27 g 1 | 19,6 | 355,6 | 617,2 | 18 |
| 31191H50301A18 | 30 g 1 | 20,2 | 384,6 | 673,9 | 18 |
| 31191H50321A18 | 32 g 1 | 20,6 | 403,7 | 708 | 18 |
| 31191H50341A18 | 34 g 1 | 21,9 | 431,6 | 767,9 | 18 |
| 31191H50361A18 | 36 g 1 | 21,9 | 450,8 | 796,3 | 18 |
| 31191H50371A18 | 37 g 1 | 21,9 | 460,4 | 803,1 | 18 |
| 31191H50411A18 | 41 g 1 | 23,6 | 507,7 | 914 | 18 |
| 31191H50421A18 | 42 g 1 | 23,6 | 517,3 | 928,2 | 18 |
| 31191H50501A18 | 50 g 1 | 25,8 | 602,8 | 1071 | 18 |
| 31191H50561A18 | 56 g 1 | 25,8 | 660,4 | 1158,7 | 18 |
| 31191H50611A18 | 61 g 1 | 25,8 | 708,4 | 1226,1 | 18 |
| 31191H51020A16 | 2 x 1,5 | 7,7 | 51,8 | 97,2 | 16 |
| 31191H50031A16 | 3 g 1,5 | 8,1 | 71,1 | 121 | 16 |
| 31191H50041A16 | 4 g 1,5 | 8,8 | 90,1 | 151,4 | 16 |
| 31191H50051A16 | 5 g 1,5 | 9,9 | 104,5 | 183,9 | 16 |
| 31191H50061A16 | 6 g 1,5 | 10,7 | 123,6 | 218,9 | 16 |
| 31191H50071A16 | 7 g 1,5 | 10,7 | 138 | 229,1 | 16 |
| 31191H50081A16 | 8 g 1,5 | 12,8 | 161,7 | 299,7 | 16 |
| 31191H50091A16 | 9 g 1,5 | 13,5 | 176,1 | 342,6 | 16 |

GAALFLEX® CONTROL 600 CY Lean

PVC control cable with overall copper screen, UL 1000 V



ELETTROTEK KABEL® GAALFLEX® CONTROL 600 CY Lean



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 31191H50101A16 | 10 g 1,5 | 14,5 | 205,3 | 341,1 | 16 |
| 31191H50101A16 | 11 g 1,5 | 14,6 | 228,7 | 378,8 | 16 |
| 31191H50121A16 | 12 g 1,5 | 15 | 243,1 | 391,9 | 16 |
| 31191H50141A16 | 14 g 1,5 | 15,8 | 271,9 | 444,4 | 16 |
| 31191H50161A16 | 16 g 1,5 | 16,6 | 309,2 | 500,3 | 16 |
| 31191H50181A16 | 18 g 1,5 | 17,7 | 338,1 | 559,3 | 16 |
| 31191H50191A16 | 19 g 1,5 | 17,7 | 352,5 | 569,8 | 16 |
| 31191H50201A16 | 20 g 1,5 | 18,9 | 375,6 | 631,1 | 16 |
| 31191H50211A16 | 21 g 1,5 | 19,5 | 398,8 | 667,3 | 16 |
| 31191H50241A16 | 24 g 1,5 | 20,5 | 442,2 | 721,9 | 16 |
| 31191H50251A16 | 25 g 1,5 | 20,6 | 456,5 | 742,3 | 16 |
| 31191H50261A16 | 26 g 1,5 | 21,1 | 470,8 | 766,1 | 16 |
| 31191H50271A16 | 27 g 1,5 | 21,8 | 494 | 808,5 | 16 |
| 31191H50301A16 | 30 g 1,5 | 22,2 | 537,2 | 872,7 | 16 |
| 31191H50321A16 | 32 g 1,5 | 22,9 | 566,1 | 930,4 | 16 |
| 31191H50341A16 | 34 g 1,5 | 24,3 | 603,7 | 1005,5 | 16 |
| 31191H50371A16 | 37 g 1,5 | 24,3 | 646,9 | 1055,4 | 16 |
| 31191H50411A16 | 41 g 1,5 | 26,2 | 713,3 | 1198,1 | 16 |
| 31191H50421A16 | 42 g 1,5 | 26,2 | 727,7 | 1217,8 | 16 |
| 31191H50501A16 | 50 g 1,5 | 28,6 | 860,2 | 1413,7 | 16 |
| 31191H50561A16 | 56 g 1,5 | 28,6 | 946,6 | 1534,9 | 16 |
| 31191H50611A16 | 61 g 1,5 | 28,6 | 1018,6 | 1628,9 | 16 |
| 31191H51020A14 | 2 x 2,5 | 9,1 | 77,5 | 131,4 | 14 |
| 31191H50031A14 | 3 g 2,5 | 9,8 | 101,7 | 164,2 | 14 |
| 31191H50041A14 | 4 g 2,5 | 10,6 | 130,4 | 209,1 | 14 |
| 31191H50051A14 | 5 g 2,5 | 11,8 | 159,5 | 255,4 | 14 |
| 31191H50071A14 | 7 g 2,5 | 13 | 212,5 | 326,1 | 14 |
| 31191H50081A14 | 8 g 2,5 | 15,6 | 262,1 | 439,5 | 14 |
| 31191H50091A14 | 9 g 2,5 | 16,4 | 295,2 | 498,6 | 14 |
| 31191H50101A14 | 10 g 2,5 | 16,7 | 319,2 | 484,8 | 14 |
| 31191H50121A14 | 12 g 2,5 | 17,4 | 366,9 | 556,8 | 14 |
| 31191H50141A14 | 14 g 2,5 | 18,2 | 423,9 | 633,9 | 14 |
| 31191H50161A14 | 16 G2,5 | 19,3 | 471,6 | 714,4 | 14 |
| 31191H50181A14 | 18 g 2,5 | 20,6 | 528,5 | 808,3 | 14 |
| 31191H50241A14 | 24 g 2,5 | 23,8 | 690,1 | 1039,9 | 14 |
| 31191H50251A14 | 25 g 2,5 | 23,8 | 714,1 | 1070,2 | 14 |
| 31191H50341A14 | 34 g 2,5 | 28,2 | 956,6 | 1455,6 | 14 |
| 31191H51020A12 | 2 x 4 | 10,5 | 111,3 | 181 | 12 |
| 31191H50031A12 | 3 g 4 | 11,4 | 154,6 | 233,7 | 12 |
| 31191H50041A12 | 4 g 4 | 12,4 | 198,1 | 299,1 | 12 |
| 31191H50051A12 | 5 g 4 | 14,1 | 253,4 | 381,9 | 12 |
| 31191H50071A12 | 7 g 4 | 15,3 | 339,1 | 481,4 | 12 |
| 31191H50111A12 | 11 g 4 | 19,9 | 519 | 771,3 | 12 |
| 31191H50121A12 | 12 g 4 | 20,4 | 557,3 | 803,3 | 12 |
| 31191H51020A10 | 2 x 6 | 11,8 | 154,7 | 237,4 | 10 |
| 31191H50031A10 | 3 g 6 | 12,7 | 217,3 | 309,1 | 10 |
| 31191H50041A10 | 4 g 6 | 14,3 | 291,9 | 416,5 | 10 |
| 31191H50051A10 | 5 g 6 | 15,8 | 358,3 | 507,3 | 10 |
| 31191H50071A10 | 7 g 6 | 17,4 | 482,1 | 652,8 | 10 |
| 31191H50031A08 | 3 G10 | 16,1 | 358,3 | 496,9 | 8 |
| 31191H50041A08 | 4 g 10 | 17,7 | 462,9 | 649,8 | 8 |
| 31191H50051A08 | 5 g 10 | 19,9 | 576,6 | 809,3 | 8 |
| 31191H50071A08 | 7 g 10 | 21,8 | 777,2 | 1040,9 | 8 |
| 31191H50031A06 | 3 g 16 | 20,5 | 557,4 | 789 | 6 |
| 31191H50041A06 | 4 g 16 | 22,8 | 719,8 | 1045,3 | 6 |
| 31191H50051A06 | 5 g 16 | 25,3 | 890,8 | 1277,7 | 6 |
| 31191H50071A06 | 7 g 16 | 28 | 1215,6 | 1669,4 | 6 |
| 31191H50041A04 | 4 g 25 | 26,8 | 1091,7 | 1509,9 | 4 |
| 31191H50051A04 | 5 g 25 | 30,1 | 1348,9 | 1872,1 | 4 |
| 31191H50041A02 | 4 g 35 | 30,2 | 1493,3 | 1995,3 | 2 |
| 31191H50051A02 | 5 g 35 | 33,9 | 1885,5 | 2491,2 | 2 |
| 31191H50041A01 | 4 g 50 | 36,9 | 2153,2 | 2915,6 | 1 |
| 31191H50041A2C | 4 g 70 | 42,5 | 2948,3 | 3903,4 | 2/0 |
| 31191H50041A3C | 4 g 95 | 46 | 3935,6 | 4931,9 | 3/0 |
| 31191H50041A4C | 4 g 120 | 48,6 | 4923,1 | 5868,3 | 4/0 |
| 31191H50041A5C | 4 g 150 | 55 | 6116 | 7375,8 | 250 MCM |
| 31191H50041A7C | 4 g 185 | 59,3 | 7501,4 | 8785,6 | 350 MCM |

Other dimension and colours available on request.

GAALFLEX® TRAY 1002

Special PVC oil resistant, flexible tray cable, Machine-Tool cable,
acc. to UL 1277 (TC-ER) DIR BUR OIL RES I 600 V 90°C Dry / 75°C Wet FT4
or UL 1277 FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C Dry and UL 2277 WTTC 1000 V 90°C Dry or UL 1063 MTW "FLEXING"
or AWM 21179 c(UL) CONTROL CABLE C1C/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1



ELETTROTEK KABEL® GAALFLEX® TRAY 1002, (UL) TC-ER DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4
or FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C DRY or MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE
C1C/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295 AND UL STANDARD 83 FROM 18 TO 16 AWG: CORES TYPE TFF FROM 14 AWG AND OVER: CORES TYPE THHW |
| INSULATION: | GAALTHERM® 522 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PVC OIL RESISTANT COMPOUND ACC. TO UL 1277 AND UL 1063 |

Resistance:



FIRE PERFORMANCE ACC. TO:
(UL) FT4/IEEE, UL 1685



OIL RESISTANCE ACC. TO:
TO UL OIL RES I



UV RESISTANT / SUNLIGHT RESISTANT:
ACC. TO EN 50396 AND HD 605 A1, UL 1581

Technical data:

| | |
|-------------------------------|--|
| NOMINAL VOLTAGE: | UL-TC/MTW 600 V |
| NOMINAL VOLTAGE: | IEC / UL-AWM 1000 V |
| TEST VOLTAGE: | 4 kV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | -40°C UP TO +90°C (UL-AWM UP TO +105°C) |
| FLEXIBLE APPLICATION: | -5°C UP TO +90°C (UL-AWM UP TO +105°C) |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 4 x D |
| FLEXIBLE INSTALLATION: | 13 x D |

Features:

UL AWM STYLE 10012/21179 90°C 600 OR 1000 V
C(UL) CONTROL CABLE C1C/TC PVC FT4,
CSA AWM I/II A/B 90°C 1000 V FT1

ACC. TO UL 1063 UL(MTW) "FLEXING" AND UL 1277 (TC-ER)
DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4

ACC. TO UL 2277: FLEXIBLE MOTOR SUPPLY LEAD CABLE
AND WIND TURBINE TRAY CABLE (WTTC) 1000 V 90°C DRY

ACC. TO NFPA 79 2007 AND NEC 336.10(7)
CLASS 1 DIV. 2 ART 336, 392, 501

DIRECT BURIAL ACC. TO UL 1277 PART. 5.2.
(WET LOCATION INSULATIONS)
AND 18.1 - 18.6 (CRUSHING TEST)

OUTDOOR USE

EXPOSED RUNS

CABLE FOR TRAY USE

OIL RESISTANCE

WATER RESISTANCE

ROHS AND CE APPROVAL



GAALFLEX® TRAY 1002

Special PVC oil resistant, flexible tray cable, Machine-Tool cable,
acc. to UL 1277 (TC-ER) DIR BUR OIL RES I 600 V 90°C Dry / 75°C Wet FT4
or UL 1277 FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C Dry and UL 2277 WTTC 1000 V 90°C Dry or UL 1063 MTW "FLEXING"
or AWM 21179 c(UL) CONTROL CABLE CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1



ELETTROTEK KABEL® GAALFLEX® TRAY 1002, (UL) TC-ER DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4
or FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C DRY or MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE
CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 32230H71020A20 | 2 x 0,5 | 7,3 | 9,6 | 69 | 20 |
| 32230H71020A18 | 2 x 1 | 8 | 19,2 | 90 | 18 |
| 32230H70031A18 | 3 g 1 | 8,4 | 28,8 | 105 | 18 |
| 32230H70041A18 | 4 g 1 | 9,2 | 38,4 | 125 | 18 |
| 32230H70051A18 | 5 g 1 | 10 | 48 | 150 | 18 |
| 32230H70071A18 | 7 g 1 | 10,9 | 67,2 | 185 | 18 |
| 32230H70081A18 | 8 g 1 | 12,8 | 76,8 | 245 | 18 |
| 32230H70101A18 | 10 g 1 | 14,2 | 96 | 305 | 18 |
| 32230H70121A18 | 12 g 1 | 14,7 | 115,2 | 335 | 18 |
| 32230H70181A18 | 18 g 1 | 17,1 | 172,8 | 470 | 18 |
| 32230H70251A18 | 25 g 1 | 19,5 | 240 | 620 | 18 |
| 32230H71020A16 | 2 x 1,5 | 8,7 | 28,8 | 110 | 16 |
| 32230H70031A16 | 3 g 1,5 | 9,2 | 43,2 | 130 | 16 |
| 32230H70041A16 | 4 g 1,5 | 10 | 57,6 | 150 | 16 |
| 32230H70051A16 | 5 g 1,5 | 10,9 | 72 | 190 | 16 |
| 32230H70071A16 | 7 g 1,5 | 11,9 | 100,8 | 240 | 16 |
| 32230H70081A16 | 8 g 1,5 | 14,6 | 115,2 | 335 | 16 |
| 32230H70121A16 | 12 g 1,5 | 16,1 | 172,8 | 430 | 16 |
| 32230H70181A16 | 18 g 1,5 | 18,8 | 259,2 | 600 | 16 |
| 32230H70251A16 | 25 g 1,5 | 22,7 | 360 | 860 | 16 |
| 32230H70651A16 | 65 g 1,5 | 33,9 | 936 | 2016 | 16 |
| 32230H71020A14 | 2 x 2,5 | 9,5 | 48 | 150 | 14 |
| 32230H70031A14 | 3 g 2,5 | 10 | 72 | 170 | 14 |
| 32230H70041A14 | 4 g 2,5 | 10,9 | 96 | 210 | 14 |
| 32230H70051A14 | 5 g 2,5 | 12 | 120 | 255 | 14 |
| 32230H70071A14 | 7 g 2,5 | 13,1 | 168 | 325 | 14 |
| 32230H70081A14 | 8 g 2,5 | 16,1 | 192 | 440 | 14 |
| 32230H70121A14 | 12 g 2,5 | 17,8 | 288 | 580 | 14 |
| 32230H70181A14 | 18 g 2,5 | 20,9 | 432 | 820 | 14 |
| 32230H70251A14 | 25 g 2,5 | 24,9 | 600 | 1167 | 14 |
| 32230H70031A12 | 3 g 4 | 11,4 | 115,2 | 235 | 12 |
| 32230H70041A12 | 4 g 4 | 12,5 | 153,6 | 295 | 12 |
| 32230H70051A12 | 5 g 4 | 14,5 | 192 | 385 | 12 |
| 32230H70071A12 | 7 g 4 | 15,8 | 268,8 | 485 | 12 |
| 32230H70031A10 | 3 G6 | 12,6 | 172,8 | 310 | 10 |
| 32230H70041A10 | 4 g 6 | 14,6 | 230,4 | 415 | 10 |
| 32230H70051A10 | 5 g 6 | 16 | 288 | 510 | 10 |
| 32230H70031A08 | 3 g 10 | 17,1 | 288 | 550 | 8 |
| 32230H70041A08 | 4 g 10 | 18,7 | 384 | 685 | 8 |
| 32230H70051A08 | 5 g 10 | 20,7 | 480 | 850 | 8 |
| 32230H70031A06 | 3 g 16 | 20,8 | 460,8 | 840 | 6 |
| 32230H70041A06 | 4 g 16 | 23,9 | 614,4 | 1115 | 6 |
| 32230H70051A06 | 5 g 16 | 26,4 | 768 | 1375 | 6 |
| 32230H70031A04 | 3 g 25 | 24,9 | 720 | 1254 | 4 |
| 32230H70041A04 | 4 g 25 | 27,4 | 960 | 1580 | 4 |
| 32230H70051A04 | 5 g 25 | 30,3 | 1200 | 1953 | 4 |
| 32230H70041A02 | 4 g 35 | 30,1 | 1344 | 2050 | 2 |
| 32230H70051A02 | 5 g 35 | 34,5 | 1680 | 2365 | 2 |
| 32230H70031A01 | 3 g 50 | 33,1 | 1440 | 2315 | 1 |
| 32230H70041A01 | 4 g 50 | 36,8 | 1920 | 2980 | 1 |
| 32230H70041A2C | 4 g 70 | 41,8 | 2688 | 3975 | 2/0 |
| 32230H70041A3C | 4 g 95 | 46,8 | 3648 | 5200 | 3/0 |
| 32230H70041A4C | 4 g 120 | 49,4 | 4608 | 6330 | 4/0 |
| 32230H70041A5C | 4 g 150 | 55 | 5760 | 7660 | 250 MCM |
| 32230H70041AAC | 4 g 240 | 67,6 | 9216 | 11650 | 500 MCM |

Other dimension and colours available on request.

GAALFLEX® TRAY1002 CY Lean

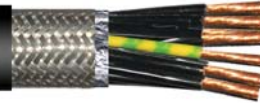
Special PVC oil resistant, flexible tray cable, Machine-Tool cable, with overall copper screen,
acc. to UL 1277 (TC-ER) DIR BUR OIL RES I 600 V 90°C Dry / 75°C Wet FT4

or UL 1277 FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C Dry and UL 2277 WTTC 1000 V 90°C Dry

or UL 1063 MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FTI



ELETTROTEK KABEL® GAALFLEX® TRAY 1002 CY Lean, (UL) TC-ER DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4
or FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C DRY or MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE
CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FTI



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295 AND UL STANDARD 83 FROM 18 TO 16 AWG: CORES TYPE TFF FROM 14 AWG AND OVER: CORES TYPE THHW |
| INSULATION: | GAALTHERM® 522 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| SCREEN: | ALUMINIUM TAPE AND TINNED COPPER BRAID |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PVC OIL RESISTANT COMPOUND ACC. TO UL 1277 AND UL 1063 |

Resistance:



FIRE PERFORMANCE ACC. TO:
(UL) FT4/IEEE, UL 1685



OIL RESISTANCE ACC. TO:
TO UL OIL RES I




UV RESISTANT / SUNLIGHT RESISTANT ACC. TO:
EN 50396 AND HD 605 A1, UL 1581

Technical data:

| | |
|-------------------------------|--|
| NOMINAL VOLTAGE: | UL-TC/MTW 600 V |
| NOMINAL VOLTAGE: | IEC / UL-AWM 1000 V |
| TEST VOLTAGE: | 4 kV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | -40°C UP TO +90°C (UL-AWM UP TO +105°C) |
| FLEXIBLE APPLICATION: | -5°C UP TO +90°C (UL-AWM UP TO +105°C) |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 6 x D |
| FLEXIBLE INSTALLATION: | 20 x D |

Features:

-  AWM STYLE 10012/21179 90°C 600 OR 1000 V
C(UL) CONTROL CABLE CIC/TC PVC FT4,
CSA AWM I/II A/B 90°C 1000 V FTI
- ACC. TO UL 1063 UL(MTW) "FLEXING" AND UL 1277 (TC-ER)
DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4
- ACC. TO UL 2277: FLEXIBLE MOTOR SUPPLY LEAD CABLE
AND WIND TURBINE TRAY CABLE (WTTC) 1000 V 90°C DRY
- ACC. TO NFPA 79 2007 AND NEC 336.10(7)
CLASS 1 DIV. 2 ART 336, 392, 501
- DIRECT BURIAL ACC. TO UL 1277 PART. 5.2.
(WET LOCATION INSULATIONS)
AND 18.1 - 18.6 (CRUSHING TEST)
- OUTDOOR USE
- EXPOSED RUNS
- CABLE FOR TRAY USE
- OIL RESISTANCE
- WATER RESISTANCE
- ROHS AND CE APPROVAL

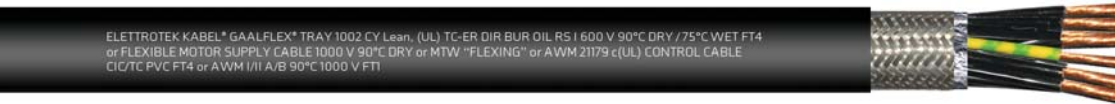


GAALFLEX® TRAY1002 CY Lean

Special PVC oil resistant, flexible tray cable, Machine-Tool cable, with overall copper screen,
acc. to UL 1277 (TC-ER) DIR BUR OIL RES I 600 V 90°C Dry / 75°C Wet FT4

or UL 1277 FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C Dry and UL 2277 WTTC 1000 V 90°C Dry

or UL 1063 MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1



ELETTROTEK KABEL® GAALFLEX® TRAY 1002 CY Lean, (UL) TC-ER DIR BUR OIL RES I 600 V 90°C DRY / 75°C WET FT4
or FLEXIBLE MOTOR SUPPLY CABLE 1000 V 90°C DRY or MTW "FLEXING" or AWM 21179 c(UL) CONTROL CABLE
CIC/TC PVC FT4 or AWM I/II A/B 90°C 1000 V FT1

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 32240H71020A18 | 2 x 1 | 8,5 | 44,0 | 100 | 18 |
| 32240H70031A18 | 3 g 1 | 8,9 | 58,4 | 122 | 18 |
| 32240H70041A18 | 4 g 1 | 9,7 | 67,9 | 145 | 18 |
| 32240H70051A18 | 5 g 1 | 10,5 | 82,6 | 175 | 18 |
| 32240H70071A18 | 7 g 1 | 11,4 | 106,7 | 212 | 18 |
| 32240H70121A18 | 12 g 1 | 15,5 | 185,2 | 350 | 18 |
| 32240H70181A18 | 18 g 1 | 17,9 | 260,5 | 485 | 18 |
| 32240H70251A18 | 25 g 1 | 20,3 | 336,3 | 610 | 18 |
| 32240H71020A16 | 2 x 1,5 | 9,2 | 58,4 | 125 | 16 |
| 32240H70031A16 | 3 g 1,5 | 9,7 | 72,7 | 145 | 16 |
| 32240H70041A16 | 4 g 1,5 | 10,5 | 92,2 | 185 | 16 |
| 32240H70051A16 | 5 g 1,5 | 11,4 | 111,5 | 220 | 16 |
| 32240H70071A16 | 7 g 1,5 | 12,4 | 145,3 | 270 | 16 |
| 32240H70121A16 | 12 g 1,5 | 16,9 | 251,8 | 450 | 16 |
| 32240H70181A16 | 18 g 1,5 | 19,6 | 355,6 | 630 | 16 |
| 32240H70191A16 | 19 g 1,5 | 19,6 | 370 | 636 | 16 |
| 32240H70251A16 | 25 g 1,5 | 23,4 | 474,0 | 770 | 16 |
| 32240H71020A14 | 2 x 2,5 | 10,0 | 82,5 | 158 | 14 |
| 32240H70031A14 | 3 g 2,5 | 10,5 | 106,6 | 190 | 14 |
| 32240H70041A14 | 4 g 2,5 | 11,4 | 135,6 | 240 | 14 |
| 32240H70051A14 | 5 g 2,5 | 12,5 | 164,4 | 290 | 14 |
| 32240H70071A14 | 7 g 2,5 | 14,6 | 229,6 | 390 | 14 |
| 32240H70121A14 | 12 g 2,5 | 18,5 | 375,9 | 610 | 14 |
| 32240H70181A14 | 18 g 2,5 | 22,6 | 537,5 | 850 | 14 |
| 32240H70031A12 | 3 g 4 | 11,9 | 154,6 | 260 | 12 |
| 32240H70041A12 | 4 g 4 | 13,0 | 198,1 | 335 | 12 |
| 32240H70051A12 | 5 g 4 | 15,2 | 262,1 | 435 | 12 |
| 32240H70071A12 | 7 g 4 | 16,5 | 348,0 | 550 | 12 |
| 32240H70031A10 | 3 G 6 | 13,9 | 217,2 | 355 | 10 |
| 32240H70041A10 | 4 g 6 | 15,3 | 300,7 | 480 | 10 |
| 32240H70051A10 | 5 g 6 | 16,7 | 367,0 | 570 | 10 |
| 32240H70041A08 | 4 g 10 | 19,4 | 480,8 | 770 | 8 |
| 32240H70051A08 | 5 g 10 | 22,4 | 585,4 | 960 | 8 |
| 32240H70041A06 | 4 g 16 | 24,6 | 737,3 | 1210 | 6 |
| 32240H70051A06 | 5 g 16 | 27,1 | 899,7 | 1450 | 6 |
| 32240H70041A04 | 4 g 25 | 28,1 | 1100,6 | 1700 | 4 |
| 32240H70041A02 | 4 g 35 | 31,0 | 1502,0 | 2210 | 2 |
| 32240H70041A01 | 4 g 50 | 37,7 | 2166,7 | 3210 | 1 |
| 32240H70041A2C | 4 g 70 | 44,2 | 2976,1 | 4400 | 2/0 |
| 32240H70041A3C | 4 g 95 | 47,7 | 3963,5 | 5570 | 3/0 |
| 32240H70041A4C | 4 g 120 | 50,3 | 4937,2 | 6660 | 4/0 |
| 32240H70041A5C | 4 g 150 | 55,9 | 6130,5 | 8260 | 250 MCM |

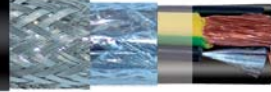
Other dimension and colours available on request.

GAALFLEX® TRAY VFD 1405 600 V

Inverter, connection to frequency converters, UV Resistant,
UL 2277 WTTC 1000 V, UL 1277 TC-ER 600 V 90°C Dry or 90°C Wet



ELETTROTEK KABEL® GAALFLEX® TRAY VFD 1405 600 V
UL 2277 WTTC or Flexible Motor Supply
UL 1277 TC-ER (Oil-resistant according to UL OIL RES I and Water-resistant, UL 90°C Dry or 90°C Wet)



Construction:

| | |
|---------------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 5, ACC. TO IEC 60228, DIN VDE 0295 AND UL STANDARD 83 |
| INSULATION: | FROM 18 AWG UP TO 16 AWG: GAALTHERM® 520 FROM 14 AWG AND OVER: GAALTHERM® 591 |
| CORES COLOR: | 3x..+3g..: 3 BLACK CONDUCTORS NUMBERED + 3 GREEN-YELLOW CONDUCTORS DIVIDED IN 3 INERTSTICES 3x..+1g../ 4g..+(2x..) OR 4g..+(2x..+2x.): BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 + GREEN/YELLOW |
| STRANDING: | 3x..+1g..: CORES TWISTED TOGETHER + FILLERS 3x..+3g..: PHASE UNITS LAID UP WITH EARTH-CONDUCTORS IN INTERSTICES 4g..+(2x..) or 4g..+(2x..+2x.): CONTROL CORES TWISTED IN PAIR(S) AND SCREENED, SUPPLY CORES AND CONTROL SCREENED PAIR(S) TWISTED TOGETHER |
| INDIVIDUAL SCREEN: | 4g..+(2x..) or 4g..+(2x..+2x.): ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID 85% COVERAGE +/- 5% |
| OVERALL SCREEN: | ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID 85% COVERAGE +/- 5% |
| OUTER SHEATH: | BLACK (SIMILAR RAL 9005), GAALTHERM® 520 |

Technical data:

| | |
|-------------------------------|---|
| NOMINAL VOLTAGE: | UL 1277 TC-ER 600 V UL 2277 WTTC 1000 V IEC: U ₀ /U 600/1000 V |
| TEMPERATURE RANGE: | UL: UP TO 90°C |
| FIXED LAYING: | -40 °C UP TO +105 °C |
| FLEXIBLE INSTALLATION: | -5 °C UP TO +105 °C |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 6 x D |
| FLEXIBLE APPLICATION: | 20 x D |

Resistance:



FLAME RETARDANT AND SELF-EXTINGUISHING ACC.TO:
UL FT4/IEEE 1202
UL 1685



UV RESISTANT / SUNLIGHT RESISTANT ACC. TO:
EN 50396 AND HD 605 A1, UL 1581

Features:

- UV RESISTANT
- OUTDOOR USE
- INSTALLATION IN HAZARDOUS AREAS
- ACC. TO UL 2277 WTTC OR FLEXIBLE MOTOR SUPPLY
- ACC. TO UL 1277 (OIL-RESISTANT ACCORDING TO UL OIL RES I AND WATER-RESISTANT, UL 90°C DRY OR 90°C WET)
- UL ONLY FOR TC-ER USE
- ON REQUEST C(UL) TYPE C1C FT4
- ON REQUEST DIRECT BURIAL
- ACC. TO NFPA 79 2007 AND NEC 336.10(7) CLASS 1, DIV. 2 ART. 336, 392, 501
- ROHS AND CE APPROVAL



UL Standards:

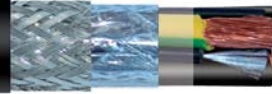
- UL 1277
- UL 2277

GAALFLEX® TRAY VFD 1405 600 V

Inverter, connection to frequency converters, UV Resistant,
UL 2277 WTTTC 1000 V, UL 1277 TC-ER 600 V 90°C Dry or 90°C Wet



ELETTROTEK KABEL® GAALFLEX® TRAY VFD 1405 600 V
UL 2277 WTTTC or Flexible Motor Supply
UL 1277 TC-ER (Oil-resistant according to UL OIL RES I and Water-resistant, UL 90°C Dry or 90°C Wet)



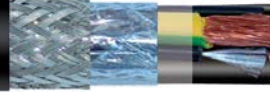
| Part no. | No. of cores x cross section n x AWG/MCM | Outer Ø inches/mm ±10% | Copper weight Lbs/Mft - kg/km | Cable weight approx. Lbs/Mft - kg/km |
|----------------|--|------------------------------|-------------------------------------|--|
| 33290F70041A14 | 4 g 14 | 0,456 - 11,4 | 91,4 - 136 | 150,5 - 224 |
| 33290F70041A12 | 4 g 12 | 0,52 - 13 | 136,4 - 203 | 209,7 - 312 |
| 33290F70041A10 | 4 g 10 | 0,612 - 15,3 | 202,3 - 301 | 301,1 - 448 |
| 33290F70041A08 | 4 g 8 | 0,776 - 19,4 | 323,2 - 481 | 479,8 - 714 |
| 33290F70041A06 | 4 g 6 | 0,912 - 22,8 | 489,2 - 728 | 702,2 - 1045 |
| 33290F70041A04 | 4 g 4 | 1,052 - 26,3 | 733,8 - 1092 | 1004 - 1494 |
| 33290F70041A02 | 4 g 2 | 1,168 - 29,2 | 1009,3 - 1502 | 1323,9 - 1970 |
| 33290F70041A01 | 4 g 1 | 1,384 - 34,6 | 1446,8 - 2153 | 1872,9 - 2787 |
| 33290F70041A2C | 4 g 2/0 | 1,584 - 39,6 | 1990,5 - 2962 | 2526,7 - 3760 |
| 33290F70041A3C | 4 g 3/0 | 1,784 - 44,6 | 2651 - 3945 | 3332,4 - 4959 |
| 33290F70041A4C | 4 g 4/0 | 1,936 - 48,4 | 3317,7 - 4937 | 4085,1 - 6079 |
| 33290F70041A5C | 4 g 250 | 2,088 - 52,2 | 4110,6 - 6117 | 4961,4 - 7383 |
| 33290F70041A7C | 4 g 350 | 2,26 - 56,5 | 5041,3 - 7502 | 5999 - 8927 |
| 33290F70037A10 | 3 x 10 + 3 g 18 | 0,608 - 15,2 | 179,4 - 267 | 252 - 375 |
| 33290F70037A08 | 3 x 8 + 3 g 16 | 0,724 - 18,1 | 277,5 - 413 | 378,3 - 563 |
| 33290F70037A06 | 3 x 6 + 3 g 14 | 0,804 - 20,1 | 428,7 - 638 | 552,4 - 822 |
| 33290F70037A04 | 3 x 4 + 3 g 12 | 0,976 - 24,4 | 643,8 - 958 | 824,5 - 1227 |
| 33290F70037A02 | 3 x 2 + 3 g 10 | 1,08 - 27 | 887,7 - 1321 | 1077,9 - 1604 |
| 33290F70037A01 | 3 x 1 + 3 g 8 | 1,28 - 32 | 1308,4 - 1947 | 1560,4 - 2322 |
| 33290F70037A2C | 3 x 2/0 + 3 g 8 | 1,46 - 36,5 | 1714,3 - 2551 | 1992,5 - 2965 |
| 33290F70037A3C | 3 x 3/0 + 3 g 6 | 1,592 - 39,8 | 2332,5 - 3471 | 2598 - 3866 |
| 33290F70037A4C | 3 x 4/0 + 3 g 6 | 1,788 - 44,7 | 2835,2 - 4219 | 3198,7 - 4760 |
| 33290F70037A5C | 3 x 250 + 3 g 4 | 1,928 - 48,2 | 3608,6 - 5370 | 3972,9 - 5912 |
| 33290F70037A7C | 3 x 350 + 3 g 2 | 2,084 - 52,1 | 4497,7 - 6693 | 4831,7 - 7190 |
| 33290F70037AAC | 3 x 500 + 3 g 6 | 2,365 - 60,1 | / - / | 6392 - 9511 |

GAALFLEX® TRAYVFD 1405 600 V

Inverter, connection to frequency converters, UV Resistant,
UL 2277 WTTTC 1000 V, UL 1277 TC-ER 600 V 90°C Dry or 90°C Wet



ELETTROTEK KABEL® GAALFLEX® TRAY VFD 1405 600 V
UL 2277 WTTTC or Flexible Motor Supply
UL 1277 TC-ER (Oil-resistant according to UL OIL RES I and Water-resistant, UL 90°C Dry or 90°C Wet)



| Part no. | No. of cores x cross section n x AWG/MCM | Outer Ø inches/mm ±10% | Copper weight Lbs/Mft - kg/km | Cable weight approx. Lbs/Mft - kg/km |
|----------------|--|------------------------------|-------------------------------------|--|
| 33290F7004BA14 | 4 g 14 + (2 x 18)C | 0,608 - 15,2 | 135,7 - 202 | 229,2 - 341 |
| 33290F7004BA12 | 4 g 12 + (2 x 18)C | 0,66 - 16,5 | 179,4 - 267 | 284,2 - 423 |
| 33291F7004BA14 | 4 g 14 + (2 x 16)C | 0,63 - 15,7 | 149,9 - 223 | 246 - 366 |
| 33291F7004BA12 | 4 g 12 + (2 x 16)C | 0,68 - 17 | 193,5 - 288 | 302,4 - 450 |
| 33291F7004BA10 | 4 g 10 + (2 x 16)C | 0,72 - 18 | 245,3 - 365 | 359,6 - 535 |
| 33291F7004BA08 | 4 g 8 + (2 x 16)C | 0,912 - 22,8 | 366,9 - 546 | 567,9 - 845 |
| 33291F7004BA06 | 4 g 6 + (2 x 16)C | 1 - 25 | 528,9 - 787 | 747,9 - 1113 |
| 33292F7004BA14 | 4 g 14 + (2 x 14)C | 0,638 - 16,2 | 162,6 - 242 | 256,7 - 382 |
| 33292F7004BA12 | 4 g 12 + (2 x 14)C | 0,697 - 17,7 | 207 - 308 | 309,8 - 461 |
| 33292F7004BA10 | 4 g 10 + (2 x 14)C | 0,744 - 18,9 | 264,1 - 393 | 323,9 - 482 |
| 33292F7004BA08 | 4 g 8 + (2 x 14)C | 0,913 - 23,2 | 384,4 - 572 | 514,8 - 766 |
| 33292F7004BA06 | 4 g 6 + (2 x 14)C | 1,012 - 25,7 | 545 - 811 | 708,3 - 1054 |
| 33292F7004BA04 | 4 g 4 + (2 x 14)C | 1,138 - 28,9 | 788,9 - 1174 | 992,5 - 1477 |
| 33292F7004BA02 | 4 g 2 + (2 x 14)C | 1,268 - 32,2 | 1058,4 - 1575 | 1297 - 1930 |
| 33292F7004BA01 | 4 g 1 + (2 x 14)C | 1,504 - 38,2 | 1493,9 - 2223 | 1842,6 - 2742 |
| 33292F7004BA2C | 4 g 2/0 + (2 x 14)C | 1,72 - 43,7 | 2036,8 - 3031 | 2483 - 3695 |
| 33290F7004B900 | 4 g 14 + (2 x 18)C + (2 x 18)C | 0,692 - 17,3 | 173,4 - 258 | 287,6 - 428 |
| 33290F7004B901 | 4 g 12 + (2 x 18)C + (2 x 18)C | 0,74 - 18,5 | 216,4 - 322 | 346,1 - 515 |
| 33290F7004B902 | 4 g 12 + (2 x 18)C + (2 x 16)C | 0,76 - 19 | 224,4 - 334 | 358,2 - 533 |
| 33290F7004B903 | 4 g 10 + (2 x 18)C + (2 x 16)C | 0,8 - 20 | 283,6 - 422 | 424,7 - 632 |
| 33290F7004B904 | 4 g 8 + (2 x 18)C + (2 x 16)C | 0,98 - 24,4 | 401,2 - 597 | 633 - 942 |
| 33290F7004B905 | 4 g 6 + (2 x 16)C + (2 x 16)C | 1,08 - 27 | 571,9 - 851 | 826,6 - 1230 |
| 33290F7004B906 | 4 g 12 + (2 x 14)C + (2 x 14)C | 0,78 - 19,8 | 266,1 - 396 | 396,5 - 590 |
| 33290F7004B907 | 4 g 10 + (2 x 14)C + (2 x 14)C | 0,87 - 22,1 | 317,9 - 473 | 494,6 - 736 |
| 33290F7004B908 | 4 g 8 + (2 x 14)C + (2 x 14)C | 1,004 - 25,5 | 435,5 - 648 | 665,3 - 990 |
| 33290F7004B909 | 4 g 6 + (2 x 14)C + (2 x 14)C | 1,138 - 28,9 | 608,8 - 906 | 905,2 - 1347 |
| 33290F7004B910 | 4 g 4 + (2 x 14)C + (2 x 14)C | 1,268 - 32,2 | 883,7 - 1315 | 1210,9 - 1802 |
| 33290F7004B911 | 4 g 2 + (2 x 14)C + (2 x 14)C | 1,362 - 34,6 | 1141,7 - 1699 | 1485,8 - 2211 |

Other dimension and colours available on request.

GAALFLEX® TRAY 603

Special PVC oil resistant, continuously flexible tray cable, Machine-Tool cable, acc. to UL 1277 (TC-ER) and UL 1063 (MTW), 600 V



ELETTROTEK KABEL® GAALFLEX® TRAY 603

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 AND UL STANDARD 83 FROM 18 TO 16 AWG: CORES TYPE TFF FROM 14 AWG AND OVER: CORES TYPE THHW |
| INSULATION: | SPECIAL PVC TYPE QMTT2 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7001), SPECIAL PVC OIL RESISTANT COMPOUND ACC. TO UL 1277 AND UL 1063 |

Resistance:



FIRE PERFORMANCE ACC. TO:
(UL FT4/IEEE, UL 1685)



OIL RESISTANCE ACC. TO:
TO UL OIL RES I

Technical data:

| | |
|-----------------------------|--------------------|
| NOMINAL VOLTAGE: | 600 V |
| TEST VOLTAGE: | 4 KV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | - 40°C UP TO +90°C |
| FLEXIBLE APPLICATION: | - 5°C UP TO +90°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 4 X D |
| FLEXIBLE INSTALLATION: | 7,5 X D |

Features:

AWM STYLE 10012/2587 90°C 600 V, CSA AWM I/II A/B

ACC. TO UL 1063 UL(MTW) AND UL 1277 (TC-ER)
OIL RESISTANT ACC. TO UL OIL RES I,
WATER RESISTANCE AND UL WET APPROVAL 75°C

ACC. TO UL 2277: FLEXIBLE MOTOR SUPPLY LEAD CABLE AND WIND TURBINE TRAY CABLE

ACC. TO NFPA 79 2007 AND NEC 336.10(7)
CLASS 1 DIV. 2 ART 336, 392, 501

EXPOSED RUNS

CABLE FOR TRAY USE

OIL RESISTANCE

WATER RESISTANCE

UP TO 8 MILION BENDING/UNBENDING CYCLES

UP TO 12 MT TRAVEL DISTANCE

ROHS AND CE APPROVAL



GAALFLEX® TRAY 603

Special PVC oil resistant, continuously flexible tray cable, Machine-Tool cable, acc. to UL 1277 (TC-ER) and UL 1063 (MTW), 600 V



ELETTROTEK KABEL® GAALFLEX® TRAY 603



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 32250F51020A18 | 2 x 1 | 8,1 | 19,2 | 95 | 18 |
| 32250F50031A18 | 3 g 1 | 8,8 | 28,8 | 115 | 18 |
| 32250F50041A18 | 4 g 1 | 9,5 | 38,4 | 135 | 18 |
| 32250F50051A18 | 5 g 1 | 10,4 | 48 | 165 | 18 |
| 32250F50071A18 | 7 g 1 | 12,2 | 67,2 | 225 | 18 |
| 32250F50081A18 | 8 g 1 | 13,1 | 76,8 | 260 | 18 |
| 32250F50121A18 | 12 g 1 | 15,2 | 115,2 | 360 | 18 |
| 32250F50181A18 | 18 g 1 | 17,7 | 172,8 | 495 | 18 |
| 32250F50251A18 | 25 g 1 | 20,9 | 240 | 700 | 18 |
| 32250F51020A16 | 2 x 1,5 | 8,7 | 28,8 | 110 | 16 |
| 32250F50031A16 | 3 g 1,5 | 9,5 | 43,2 | 140 | 16 |
| 32250F50041A16 | 4 g 1,5 | 10,2 | 57,6 | 165 | 16 |
| 32250F50051A16 | 5 g 1,5 | 11,2 | 72 | 200 | 16 |
| 32250F50071A16 | 7 g 1,5 | 13,2 | 100,8 | 280 | 16 |
| 32250F50081A16 | 8 g 1,5 | 14,9 | 115,2 | 350 | 16 |
| 32250F50121A16 | 12 g 1,5 | 16,5 | 172,8 | 450 | 16 |
| 32250F50181A16 | 18 g 1,5 | 19,3 | 259,2 | 630 | 16 |
| 32250F50251A16 | 25 g 1,5 | 23,9 | 360 | 940 | 16 |
| 32250F51020A14 | 2 x 2,5 | 9,5 | 48 | 145 | 14 |
| 32250F50031A14 | 3 g 2,5 | 10,4 | 72 | 180 | 14 |
| 32250F50041A14 | 4 g 2,5 | 11,2 | 96 | 220 | 14 |
| 32250F50051A14 | 5 g 2,5 | 12,3 | 120 | 270 | 14 |
| 32250F50071A14 | 7 g 2,5 | 15,3 | 168 | 405 | 14 |
| 32250F50081A14 | 8 g 2,5 | 16,4 | 192 | 460 | 14 |
| 32250F50121A14 | 12 g 2,5 | 18,2 | 288 | 605 | 14 |
| 32250F50031A12 | 3 g 4 | 11,8 | 115,2 | 250 | 12 |
| 32250F50041A12 | 4 g 4 | 12,8 | 153,6 | 305 | 12 |
| 32250F50051A12 | 5 g 4 | 14,8 | 192 | 400 | 12 |
| 32250F50071A12 | 7 g 4 | 17,9 | 268,8 | 575 | 12 |
| 32250F50031A10 | 3 g 6 | 14 | 172,8 | 360 | 10 |
| 32250F50041A10 | 4 g 6 | 15,1 | 230,4 | 440 | 10 |
| 32250F50051A10 | 5 g 6 | 16,6 | 288 | 540 | 10 |
| 32250F50041A08 | 4 g 10 | 19,4 | 384 | 730 | 8 |
| 32250F50051A08 | 5 g 10 | 22,6 | 480 | 955 | 8 |
| 32250F50041A06 | 4 g 16 | 25 | 614,4 | 1190 | 6 |
| 32250F50051A06 | 5 g 16 | 27,7 | 768 | 1470 | 6 |
| 32250F50041A04 | 4 g 25 | 27,9 | 960 | 1620 | 4 |
| 32250F50041A02 | 4 g 35 | 32,4 | 1344 | 2230 | 2 |

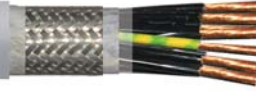
Other dimension and colours available on request.

GAALFLEX® TRAY603 CYLean

Special PVC oil resistant, continuously flexible tray cable, Machine-Tool cable, with overall copper screen, acc. to UL 1277 (TC-ER) and UL 1063 (MTW), 600 V



ELETTROTEK KABEL® GAALFLEX® TRAY 603 CY LEAN



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 AND UL STANDARD 83 FROM 18 TO 16 AWG: CORES TYPE TFF FROM 14 AWG AND OVER: CORES TYPE THHW |
| INSULATION: | SPECIAL PVC TYPE QMTT2 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON WOVEN TAPE |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL7001), SPECIAL PVC OIL RESISTANT COMPOUND ACC. TO UL1277 AND UL1063 |

Resistance:



FIRE PERFORMANCE ACC. TO:
(UL) FT4/IEEE, UL1685



OIL RESISTANCE ACC. TO:
TO UL OIL RES I

Technical data:

| | |
|-----------------------------|--------------------|
| NOMINAL VOLTAGE: | 600 V |
| TEST VOLTAGE: | 4 KV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | - 40°C UP TO +90°C |
| FLEXIBLE APPLICATION: | - 5°C UP TO +90°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 4 X D |
| FLEXIBLE INSTALLATION: | 7,5 X D |

Features:

- AWM STYLE 10012/2587 90°C 600 V, CSA AWM I/II A/B
- ACC. TO UL1063 UL(MTW) AND UL1277 (TC-ER)
OIL RESISTANT ACC. TO UL OIL RES I,
WATER RESISTANCE AND UL WET APPROVAL 75°C
- ACC. TO UL 2277: FLEXIBLE MOTOR SUPPLY LEAD CABLE
AND WIND TURBINE TRAY CABLE
- ACC. TO NFPA 79 2007 AND NEC 336.10(7)
CLASS 1 DIV. 2 ART 336, 392, 501
- EXPOSED RUNS
- CABLE FOR TRAY USE
- OIL RESISTANCE
- WATER RESISTANCE
- UP TO 8 MILION BENDING/UNBENDING CYCLES
- UP TO 12 MT TRAVEL DISTANCE
- ROHS AND CE APPROVAL



GAALFLEX® TRAY603 CYLean

Special PVC oil resistant, continuously flexible tray cable, Machine-Tool cable, with overall copper screen, acc. to UL 1277 (TC-ER) and UL 1063 (MTW), 600 V



ELETTROTEK KABEL® GAALFLEX® TRAY 603 CY LEAN

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 32260F51020A18 | 2 x 1 | 8,7 | 47,6 | 105 | 18 |
| 32260F50031A18 | 3 g 1 | 9,4 | 57,1 | 125 | 18 |
| 32260F50041A18 | 4 g 1 | 10,1 | 72,3 | 150 | 18 |
| 32260F50051A18 | 5 g 1 | 11 | 87,4 | 180 | 18 |
| 32260F50071A18 | 7 g 1 | 12,8 | 112,4 | 235 | 18 |
| 32260F50081A18 | 8 g 1 | 13,9 | 146,9 | 280 | 18 |
| 32260F50121A18 | 12 g 1 | 16 | 195,8 | 385 | 18 |
| 32260F50181A18 | 18 g 1 | 18,5 | 263,5 | 515 | 18 |
| 32260F50251A18 | 25 g 1 | 21,7 | 350,8 | 680 | 18 |
| 32260F51020A16 | 2 x 1,5 | 9,3 | 56,9 | 120 | 16 |
| 32260F50031A16 | 3 g 1,5 | 10,1 | 77,1 | 150 | 16 |
| 32260F50041A16 | 4 g 1,5 | 10,8 | 97,1 | 185 | 16 |
| 32260F50051A16 | 5 g 1,5 | 11,8 | 117,2 | 215 | 16 |
| 32260F50071A16 | 7 g 1,5 | 14 | 171,1 | 305 | 16 |
| 32260F50081A16 | 8 g 1,5 | 15,7 | 195,6 | 370 | 16 |
| 32260F50121A16 | 12 g 1,5 | 17,3 | 263,6 | 470 | 16 |
| 32260F50181A16 | 18 g 1,5 | 20,1 | 359,7 | 640 | 16 |
| 32260F50251A16 | 25 g 1,5 | 24,7 | 490,8 | 910 | 16 |
| 32260F51020A14 | 2 x 2,5 | 10,1 | 81,9 | 150 | 14 |
| 32260F50031A14 | 3 g 2,5 | 11 | 111,4 | 190 | 14 |
| 32260F50041A14 | 4 g 2,5 | 11,8 | 141,2 | 240 | 14 |
| 32260F50051A14 | 5 g 2,5 | 12,9 | 165,4 | 275 | 14 |
| 32260F50071A14 | 7 g 2,5 | 16,1 | 248,2 | 425 | 14 |
| 32260F50081A14 | 8 g 2,5 | 17,2 | 282,6 | 450 | 14 |
| 32260F50121A14 | 12 g 2,5 | 19 | 388,8 | 615 | 14 |
| 32260F50031A12 | 3 g 4 | 12,4 | 160,6 | 255 | 12 |
| 32260F50041A12 | 4 g 4 | 13,6 | 224,2 | 340 | 12 |
| 32260F50051A12 | 5 g 4 | 15,6 | 262,2 | 420 | 12 |
| 32260F50031A10 | 3 g 6 | 14,8 | 243,4 | 375 | 10 |
| 32260F50041A10 | 4 g 6 | 15,9 | 310,7 | 475 | 10 |
| 32260F50051A10 | 5 g 6 | 17,4 | 378,4 | 560 | 10 |
| 32260F50041A08 | 4 g 10 | 20,2 | 484,7 | 740 | 8 |
| 32260F50051A08 | 5 g 10 | 23,4 | 600,6 | 945 | 8 |
| 32260F50041A06 | 4 g 16 | 25,8 | 744,9 | 1170 | 6 |
| 32260F50051A06 | 5 g 16 | 28,5 | 918,6 | 1405 | 6 |
| 32260F50041A04 | 4 g 25 | 28,7 | 1111 | 1585 | 4 |
| 32260F50041A02 | 4 g 35 | 33,4 | 1563,8 | 2170 | 2 |

Other dimension and colours available on request.



GAALFLEX® CHAIN TD 87

Continuously flexible PVC data cable with colored cores, DIN VDE max. 350 V (UL) 300 V



ELETTROTEK KABEL® GAALFLEX® CHAIN TD 87



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC TYPE TI2, ACC. TO DIN VDE 0281 PART 1 + HD 21.1 |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7032), PVC TYPE TM2, ACC. TO DIN VDE 0281 PART 1 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Technical data:

| | |
|--------------------------------------|--|
| NOMINAL VOLTAGE: | DIN VDE: MAX. 350 V UL: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -30°C UP TO +80°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -5°C UP TO +80°C |
| RADIATION RESISTANCE: | 8 x 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

Features:

- AWM STYLE 2464 80°C 300 V
- GOOD FLEXIBILITY
- SMALL OUTER DIAMETER
- SMALL BENDING RADIUS
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 36080C64020A26 | 2 x 0,14 | 4,1 | 2,7 | 20 | 26 |
| 36080C64030A26 | 3 x 0,14 | 4,3 | 4 | 25 | 26 |
| 36080C64040A26 | 4 x 0,14 | 4,7 | 5,4 | 30 | 26 |
| 36080C64050A26 | 5 x 0,14 | 5,1 | 6,7 | 35 | 26 |
| 36080C64070A26 | 7 x 0,14 | 5,9 | 9,4 | 45 | 26 |
| 36080C64100A26 | 10 x 0,14 | 6,9 | 13,4 | 55 | 26 |
| 36080C64140A26 | 14 x 0,14 | 7,4 | 18,8 | 70 | 26 |
| 36080C64180A26 | 18 x 0,14 | 8,4 | 24,2 | 90 | 26 |
| 36080C64250A26 | 25 x 0,14 | 10,4 | 33,6 | 120 | 26 |
| 36080C64020A24 | 2 x 0,25 | 4,4 | 4,8 | 25 | 24 |
| 36080C64030A24 | 3 x 0,25 | 4,5 | 7,2 | 30 | 24 |
| 36080C64040A24 | 4 x 0,25 | 5 | 9,6 | 35 | 24 |
| 36080C64050A24 | 5 x 0,25 | 5,5 | 12 | 45 | 24 |
| 36080C64070A24 | 7 x 0,25 | 6,5 | 16,8 | 55 | 24 |
| 36080C64100A24 | 10 x 0,25 | 7,5 | 24 | 70 | 26 |
| 36080C64140A24 | 14 x 0,25 | 8,3 | 33,6 | 95 | 24 |
| 36080C64180A24 | 18 x 0,25 | 9,2 | 43,2 | 120 | 24 |
| 36080C64250A24 | 25 x 0,25 | 11,2 | 60 | 160 | 24 |
| 36080C64020A22 | 2 x 0,34 | 4,6 | 6,5 | 35 | 22 |
| 36080C64030A22 | 3 x 0,34 | 4,9 | 9,8 | 35 | 22 |
| 36080C64040A22 | 4 x 0,34 | 5,3 | 13,1 | 40 | 22 |
| 36080C64050A22 | 5 x 0,34 | 5,7 | 16,3 | 50 | 22 |
| 36080C64070A22 | 7 x 0,34 | 6,8 | 22,8 | 65 | 22 |
| 36080C64100A22 | 10 x 0,34 | 8,1 | 32,6 | 85 | 26 |
| 36080C64140A22 | 14 x 0,34 | 8,7 | 45,7 | 110 | 22 |
| 36080C64180A22 | 18 x 0,34 | 9,8 | 58,8 | 140 | 22 |
| 36080C64250A22 | 25 x 0,34 | 12 | 81,6 | 190 | 22 |

Other dimension and colours available on request.

GAALFLEX® CHAIN T 87

Continuously flexible PVC control cable, DIN VDE 300/500 V UL/CSA 600 V



ELETTROTEK KABEL® GAALFLEX® CHAIN T 87



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7000 OR 7001), PVC COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
IEC 60332-3-24
UL VW-1, CSA FT1



OIL RESISTANCE ACC. TO:
DIN EN 50290-2-22 TM 54



UV RESISTANT / SUNLIGHT RESISTANT ACC. TO:
ISO 4892-3

Technical data:

| | |
|---|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 300/500 V UL: 600 V |
| TEST VOLTAGE: | 3 kV ACC. TO DIN VDE 0281 PART 2 + HD 21.2 |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -40°C UP TO +80°C UP TO +90°C |
| FLEXIBLE INSTALLATION: | 0°C UP TO +80°C UP TO +90°C |
| RADIATION RESISTANCE: | 8 × 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| FIXED LAYING:: | 4 x D |
| FLEXIBLE INSTALLATION | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | |
| UNSUPPORTED: | 3 m/sec |
| GLIDING: | 2 m/sec |
| MAX ACCELERATION (MAIN APPLICATION): | 20 m/sec ² |
| BENDING CYCLES (MAIN APPLICATION): | UP TO 4,5 MILION |
| TRAVEL DISTANCES (MAIN APPLICATION): | UP TO 9 mt |
| MAX. TORSION (MAIN APPLICATION): | UP TO 90°, FOR 1 mt. LENGHT |

Features:

- AWM STYLE 2587 90°C 600V
CSA AWM I/II A/B 90°C 600V FT1 CE
- GOOD FLEXIBILITY
- SMALL OUTER DIAMETER
- SMALL BENDING RADIUS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



GAALFLEX® CHAIN T 87

Continuously flexible PVC control cable, DIN VDE 300/500 V UL/CSA 600 V



ELETTROTEKKABEL® GAALFLEX® CHAIN T 87



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36090F41020A20 | 2 x 0,5 | 5,1 | 9,6 | 35 | 20 |
| 36090F40031A20 | 3 g 0,5 | 5,6 | 14,4 | 45 | 20 |
| 36090F40041A20 | 4 g 0,5 | 6,0 | 19,2 | 50 | 20 |
| 36090F40051A20 | 5 g 0,5 | 6,5 | 24 | 60 | 20 |
| 36090F40071A20 | 7 g 0,5 | 7,7 | 33,6 | 85 | 20 |
| 36090F40081A20 | 8 g 0,5 | 7,8 | 38,4 | 100 | 20 |
| 36090F40121A20 | 12 g 0,5 | 9,3 | 57,6 | 130 | 20 |
| 36090F40181A20 | 18 g 0,5 | 11,2 | 86,4 | 195 | 20 |
| 36090F40251A20 | 25 g 0,5 | 13,4 | 20 | 265 | 20 |
| 36090F40341A20 | 34 g 0,5 | 15,0 | 163,2 | 340 | 20 |
| 36090F40501A20 | 50 g 0,5 | 17,4 | 240 | 475 | 20 |
| 36090F40611A20 | 61 g 0,5 | 19,2 | 292,8 | 595 | 20 |
| 36090F41020A19 | 2 x 0,75 | 5,6 | 14,4 | 40 | 19 |
| 36090F40031A19 | 3 g 0,75 | 6,1 | 21,6 | 55 | 19 |
| 36090F40041A19 | 4 g 0,75 | 6,6 | 28,8 | 65 | 19 |
| 36090F40051A19 | 5 g 0,75 | 7,2 | 36 | 80 | 19 |
| 36090F40071A19 | 7 g 0,75 | 8,7 | 50,4 | 115 | 19 |
| 36090F40121A19 | 12 g 0,75 | 10,5 | 86,4 | 175 | 19 |
| 36090F40181A19 | 18 g 0,75 | 12,7 | 129,6 | 260 | 19 |
| 36090F40251A19 | 25 g 0,75 | 15,1 | 180 | 355 | 19 |
| 36090F40341A19 | 34 g 0,75 | 16,4 | 244,8 | 475 | 19 |
| 36090F40501A19 | 50 g 0,75 | 19,2 | 360 | 680 | 19 |
| 36090F40611A19 | 61 g 0,75 | 21,3 | 439,2 | 835 | 19 |
| 36090F41020A18 | 2 x 1 | 5,8 | 19,2 | 50 | 18 |
| 36090F40031A18 | 3 g 1 | 6,4 | 28,8 | 60 | 18 |
| 36090F40041A18 | 4 g 1 | 6,8 | 38,4 | 75 | 18 |
| 36090F40051A18 | 5 g 1 | 7,5 | 48 | 90 | 18 |
| 36090F40071A18 | 7 g 1 | 9,1 | 67,2 | 130 | 18 |
| 36090F40121A18 | 12 g 1 | 11,2 | 115,2 | 210 | 18 |
| 36090F40181A18 | 18 g 1 | 13,2 | 172,8 | 305 | 18 |
| 36090F40251A18 | 25 g 1 | 16 | 240 | 425 | 18 |
| 36090F40341A18 | 34 g 1 | 17,1 | 326,4 | 570 | 18 |
| 36090F40501A18 | 50 g 1 | 20,5 | 480 | 830 | 18 |
| 36090F40611A18 | 61 g 1 | 22,3 | 585,6 | 1000 | 18 |
| 36090F41020A16 | 2 x 1,5 | 6,4 | 28,8 | 60 | 16 |
| 36090F40031A16 | 3 g 1,5 | 7 | 43,2 | 80 | 16 |
| 36090F40041A16 | 4 g 1,5 | 7,6 | 57,6 | 100 | 16 |
| 36090F40051A16 | 5 g 1,5 | 8,5 | 72 | 130 | 16 |
| 36090F40071A16 | 7 g 1,5 | 10,3 | 100,8 | 180 | 16 |
| 36090F40121A16 | 12 g 1,5 | 12,6 | 172,8 | 285 | 16 |
| 36090F40181A16 | 18 g 1,5 | 14,9 | 259,2 | 415 | 16 |
| 36090F40251A16 | 25 g 1,5 | 18 | 360 | 580 | 16 |
| 36090F40341A16 | 34 g 1,5 | 19,1 | 489,6 | 780 | 16 |
| 36090F40501A16 | 50 g 1,5 | 22,8 | 720 | 1120 | 16 |
| 36090F40611A16 | 61 g 1,5 | 25 | 878,4 | 1365 | 16 |
| 36090F41020A14 | 2 x 2,5 | 7,4 | 48 | 100 | 14 |
| 36090F40031A14 | 3 g 2,5 | 8,6 | 72 | 125 | 14 |
| 36090F40041A14 | 4 g 2,5 | 9,3 | 96 | 150 | 14 |
| 36090F40051A14 | 5 g 2,5 | 10,4 | 120 | 200 | 14 |
| 36090F40071A14 | 7 g 2,5 | 12,7 | 168 | 285 | 14 |
| 36090F40121A14 | 12 g 2,5 | 15,6 | 288 | 450 | 14 |
| 36090F40181A14 | 18 g 2,5 | 18,8 | 432 | 650 | 14 |
| 36090F40251A14 | 25 g 2,5 | 22,8 | 600 | 880 | 14 |
| 36090F40031A12 | 3 g 4 | 10,2 | 115,2 | 185 | 12 |
| 36090F40041A12 | 4 g 4 | 11,2 | 153,6 | 240 | 12 |
| 36090F40051A12 | 5 g 4 | 12,6 | 192 | 300 | 12 |
| 36090F40071A12 | 7 g 4 | 15,1 | 268,8 | 445 | 12 |
| 36090F40031A10 | 3 g 6 | 12,5 | 172,8 | 275 | 10 |
| 36090F40041A10 | 4 g 6 | 13,5 | 230,4 | 350 | 10 |
| 36090F40051A10 | 5 g 6 | 15,4 | 288 | 445 | 10 |
| 36090F40071A10 | 7 g 6 | 17,7 | 403,2 | 640 | 10 |

GAALFLEX® CHAIN T 87

Continuously flexible PVC control cable, DIN VDE 300/500 V UL/CSA 600 V



ELETTROTEK KABEL® GAALFLEX® CHAIN T 87



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36090F40031A08 | 3 g 10 | 14,6 | 288 | 455 | 8 |
| 36090F40041A08 | 4 g 10 | 17,6 | 384 | 584 | 8 |
| 36090F40051A08 | 5 g 10 | 19,8 | 480 | 739 | 6 |
| 36090F40031A06 | 3 g 16 | 17,7 | 460,8 | 680 | 6 |
| 36090F40041A06 | 4 g 16 | 20,7 | 614,4 | 870 | 6 |
| 36090F40051A06 | 5 g 16 | 23,3 | 768 | 1100 | 6 |
| 36090F40041A04 | 4 g 25 | 23,6 | 960 | 1300 | 4 |
| 36090F40051A04 | 5 g 25 | 26,4 | 1200 | 1650 | 4 |
| 36090F40041A02 | 4 g 35 | 27 | 1344 | 1800 | 2 |
| 36090F40051A02 | 5 g 35 | 29,9 | 1680 | 2200 | 2 |
| 36090F40041A01 | 4 g 50 | 31,5 | 1920 | 2500 | 1 |

Other dimension and colours available on request.

GAALFLEX® CHAIN TD 87 C

Continuously flexible PVC data cable with colored cores and overall copper screen,
DIN VDE max. 350 V (UL) 300 V



ELETTROTEK KABEL® GAALFLEX® CHAIN TD 87 C



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC TYPE TI2, ACC. TO DIN VDE 0281 PART 1 + HD 21.1 |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREY (RAL 7032), PVC TYPE TM2, ACC. TO TO DIN VDE 0281 PART 1 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Technical data:

| | |
|--------------------------------------|--|
| NOMINAL VOLTAGE: | DIN VDE: MAX. 350 V UL: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 CORE/SCREEN 1,2 kV |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -30°C UP TO +80°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -5°C UP TO +80°C |
| RADIATION RESISTANCE: | 8 x 10 ⁷ Cj/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

Features:

- AWM STYLE 2464 80°C 300 V
- VERY GOOD FLEXIBILITY
- SMALL OUTER DIAMETER
- SMALL BENDING RADIUS
- GOOD EMC CHARACTERISTICS
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36100C64020A26 | 2 x 0,14 | 4,8 | 13,8 | 30 | 26 |
| 36100C64030A26 | 3 x 0,14 | 5 | 15,7 | 35 | 26 |
| 36100C64040A26 | 4 x 0,14 | 5,5 | 19,4 | 40 | 26 |
| 36100C64050A26 | 5 x 0,14 | 5,8 | 22,6 | 45 | 26 |
| 36100C64070A26 | 7 x 0,14 | 6,7 | 26,1 | 60 | 26 |
| 36100C64100A26 | 10 x 0,14 | 7,7 | 45,7 | 70 | 26 |
| 36100C64140A26 | 14 x 0,14 | 8,8 | 56,4 | 90 | 26 |
| 36100C64180A26 | 18 x 0,14 | 9,5 | 64,7 | 110 | 26 |
| 36100C64250A26 | 25 x 0,14 | 11,3 | 84,4 | 150 | 26 |
| 36100C64020A24 | 2 x 0,25 | 5,2 | 18 | 35 | 24 |
| 36100C64030A24 | 3 x 0,25 | 5,5 | 20,7 | 40 | 24 |
| 36100C64040A24 | 4 x 0,25 | 5,8 | 25,5 | 45 | 24 |
| 36100C64050A24 | 5 x 0,25 | 6,5 | 28,3 | 55 | 24 |
| 36100C64070A24 | 7 x 0,25 | 7,3 | 46,3 | 65 | 24 |
| 36100C64100A24 | 10 x 0,25 | 8,8 | 61,7 | 95 | 24 |
| 36100C64140A24 | 14 x 0,25 | 9,5 | 72,1 | 115 | 24 |
| 36100C64180A24 | 18 x 0,25 | 10,4 | 93,2 | 140 | 24 |
| 36100C64250A24 | 25 x 0,25 | 12,8 | 115,8 | 205 | 24 |
| 36100C64020A22 | 2 x 0,34 | 5,4 | 19,9 | 35 | 22 |
| 36100C64030A22 | 3 x 0,34 | 5,7 | 25,4 | 40 | 22 |
| 36100C64040A22 | 4 x 0,34 | 6 | 29,1 | 50 | 22 |
| 36100C64050A22 | 5 x 0,34 | 6,6 | 44,5 | 60 | 22 |
| 36100C64070A22 | 7 x 0,34 | 7,6 | 54,9 | 75 | 22 |
| 36100C64100A22 | 10 x 0,34 | 9 | 70,9 | 105 | 22 |
| 36100C64140A22 | 14 x 0,34 | 9,9 | 86,8 | 130 | 22 |
| 36100C64180A22 | 18 x 0,34 | 11 | 109,4 | 170 | 22 |
| 36100C64250A22 | 25 x 0,34 | 13,3 | 139,1 | 230 | 22 |

Other dimension and colours available on request.

GAALFLEX® CHAIN T 87 C

Continuously flexible PVC control cable with overall copper screen, DIN VDE 300/500 V UL/CSA 600 V



ELETTROTEK KABEL® GAALFLEX® CHAIN T 87 C



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| INNER SHEATH: | PVC COMPOUND |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREY (RAL 7000 OR 7001), PVC COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1 FT2



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 300/500 V UL: 600 V |
| TEST VOLTAGE: | 3 kV ACC. TO DIN VDE 0281 PART 2 + HD 21.2 |
| TEMPERATURE RANGE | DIN VDE: -30°C UP TO +80°C UL/CSA: UP TO +90°C |
| FIXED LAYING: | |
| FLEXIBLE INSTALLATION: | -5°C UP TO +80°C |
| RADIATION RESISTANCE: | 8 x 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

Features:

- UL** AWM STYLE 2587 90°C 600V
CSA AWM I/II A/B 90°C 600V FT1 FT2 CE
- VERY GOOD FLEXIBILITY
- SMALL OUTER DIAMETER
- SMALL BENDING RADIUS
- GOOD EMC CHARACTERISTICS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL

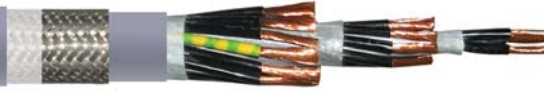


GAALFLEX® CHAIN T 87 C

Continuously flexible PVC control cable with overall copper screen, DIN VDE 300/500 V UL/CSA 600 V



ELETTROTEK KABEL® GAALFLEX® CHAIN T 87 C



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36110F41020A20 | 2 x 0,5 | 7,6 | 42,5 | 80 | 20 |
| 36110F40031A20 | 3 g 0,5 | 8,1 | 48,3 | 95 | 20 |
| 36110F40041A20 | 4 g 0,5 | 8,6 | 56 | 105 | 20 |
| 36110F40051A20 | 5 g 0,5 | 9 | 64,6 | 125 | 20 |
| 36110F40071A20 | 7 g 0,5 | 10,4 | 78,7 | 165 | 20 |
| 36110F40121A20 | 12 g 0,5 | 12,6 | 119 | 245 | 20 |
| 36110F40181A20 | 18 g 0,5 | 14,5 | 172,4 | 340 | 20 |
| 36110F40251A20 | 25 g 0,5 | 17 | 234,2 | 445 | 20 |
| 36110F41020A19 | 2 x 0,75 | 8,1 | 51,7 | 90 | 19 |
| 36110F40031A19 | 3 g 0,75 | 9 | 59,2 | 105 | 19 |
| 36110F40041A19 | 4 g 0,75 | 9 | 67,5 | 125 | 19 |
| 36110F40051A19 | 5 g 0,75 | 9,8 | 77 | 145 | 19 |
| 36110F40071A19 | 7 g 0,75 | 11,2 | 101,2 | 190 | 19 |
| 36110F40121A19 | 12 g 0,75 | 13,6 | 146,3 | 280 | 19 |
| 36110F40181A19 | 18 g 0,75 | 15,6 | 227,3 | 390 | 19 |
| 36110F40251A19 | 25 g 0,75 | 18,7 | 292 | 525 | 19 |
| 36110F41020A18 | 2 x 1 | 8,5 | 56,7 | 100 | 18 |
| 36110F40031A18 | 3 g 1 | 8,8 | 66,6 | 115 | 18 |
| 36110F40041A18 | 4 g 1 | 9,3 | 77,3 | 135 | 18 |
| 36110F40051A18 | 5 g 1 | 10,1 | 89,5 | 160 | 18 |
| 36110F40071A18 | 7 g 1 | 11,7 | 122 | 220 | 18 |
| 36110F40121A18 | 12 g 1 | 14,1 | 200,9 | 335 | 18 |
| 36110F40181A18 | 18 g 1 | 16,4 | 271,2 | 460 | 18 |
| 36110F40251A18 | 25 g 1 | 19,4 | 368,2 | 610 | 18 |
| 36110F41020A16 | 2 x 1,5 | 9 | 67 | 120 | 16 |
| 36110F40031A16 | 3 g 1,5 | 9,5 | 83 | 140 | 16 |
| 36110F40041A16 | 4 g 1,5 | 10,5 | 102,5 | 165 | 16 |
| 36110F40051A16 | 5 g 1,5 | 11,1 | 123,7 | 215 | 16 |
| 36110F40071A16 | 7 g 1,5 | 13,1 | 160,4 | 290 | 16 |
| 36110F40121A16 | 12 g 1,5 | 15,6 | 270,5 | 425 | 16 |
| 36110F40181A16 | 18 g 1,5 | 18,2 | 370,3 | 590 | 16 |
| 36110F40251A16 | 25 g 1,5 | 21,7 | 498,6 | 795 | 16 |
| 36110F41020A14 | 2 x 2,5 | 11,1 | 98,7 | 185 | 14 |
| 36110F40031A14 | 3 g 2,5 | 11,6 | 127 | 225 | 14 |
| 36110F40041A14 | 4 g 2,5 | 12,7 | 156,3 | 270 | 14 |
| 36110F40051A14 | 5 g 2,5 | 14,1 | 205,5 | 345 | 14 |
| 36110F40071A14 | 7 g 2,5 | 15,5 | 270,2 | 440 | 14 |
| 36110F40121A14 | 12 g 2,5 | 19,8 | 419,4 | 655 | 14 |
| 36110F40181A14 | 18 g 2,5 | 22,6 | 573,9 | 915 | 14 |
| 36110F40251A14 | 25 g 2,5 | 27,1 | 783,5 | 1215 | 14 |
| 36110F40031A12 | 3 g 4 | 13,3 | 183,2 | 310 | 12 |
| 36110F40041A12 | 4 g 4 | 14,2 | 239,3 | 380 | 12 |
| 36110F40051A12 | 5 g 4 | 15,5 | 296,6 | 460 | 12 |
| 36110F40031A10 | 3 g 6 | 15,8 | 243,7 | 440 | 10 |
| 36110F40041A10 | 4 g 6 | 16,8 | 340,2 | 520 | 10 |
| 36110F40051A10 | 5 g 6 | 18,5 | 418,1 | 625 | 10 |
| 36110F40041A08 | 4 g 10 | 20,4 | 524,1 | 800 | 8 |
| 36110F40051A08 | 5 g 10 | 22,6 | 652,6 | 965 | 8 |
| 36110F40041A06 | 4 g 16 | 24 | 781,5 | 1100 | 6 |
| 36110F40051A06 | 5 g 16 | 26,3 | 954,2 | 1345 | 6 |
| 36110F40041A04 | 4 g 25 | 28,3 | 1158,2 | 1680 | 4 |
| 36110F40051A04 | 5 g 25 | 31,4 | 1429,7 | 1985 | 4 |
| 36110F40041A02 | 4 g 35 | 31,8 | 1575,3 | 2115 | 2 |
| 36110F40041A01 | 4 g 50 | 38 | 2181,8 | 3015 | 1 |

Other dimension and colours available on request.

GAALFLEX® CHAIN TD 87 C TP

Continuously flexible paired PVC data cable with colored cores and overall copper screen
DIN VDE max. 350 V (UL) 300 V



ELETTROTEK KABEL® GAALFLEX® CHAIN TD 87 C TP



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC TYPE TI2, ACC. TO DIN VDE 0281 PART 1 + HD 21.1 |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7032), PVC TYPE TM2, ACC. TO TO DIN VDE 0281 PART 1 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Technical data:

| | |
|--------------------------------------|--|
| NOMINAL VOLTAGE: | DIN VDE: MAX. 350 V UL: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 CORE/SCREEN 1,2 kV |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -30°C UP TO +80°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -5°C UP TO +80°C |
| RADIATION RESISTANCE: | 8 × 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 × D |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

Features:

- AWM AWM STYLE 2464 80°C 300V
- GOOD FLEXIBILITY
- SMALL OUTER DIAMETER
- SMALL BENDING RADIUS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



GAALFLEX® CHAIN TD 87 C TP

Continuously flexible paired PVC data cable with colored cores and overall copper screen
DIN VDE max. 350 V (UL) 300 V



ELETTROTEK KABEL® GAALFLEX® CHAIN TD 87 C TP



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36120C64022A26 | 2 x 2 x 0,14 | 5,8 | 19,4 | 40 | 26 |
| 36120C64032A26 | 3 x 2 x 0,14 | 6,5 | 33 | 55 | 26 |
| 36120C64042A26 | 4 x 2 x 0,14 | 7,5 | 43,1 | 70 | 26 |
| 36120C64052A26 | 5 x 2 x 0,14 | 8 | 46,3 | 80 | 26 |
| 36120C64072A26 | 7 x 2 x 0,14 | 8,7 | 54 | 100 | 26 |
| 36120C64102A26 | 10 x 2 x 0,14 | 10,2 | 70,7 | 120 | 26 |
| 36120C64142A26 | 14 x 2 x 0,14 | 11,8 | 87,3 | 155 | 26 |
| 36120C64182A26 | 18 x 2 x 0,14 | 12,6 | 107 | 195 | 26 |
| 36120C64252A26 | 25 x 2 x 0,14 | 14,5 | 128,6 | 235 | 26 |
| 36120C64022A24 | 2 x 2 x 0,25 | 6,7 | 34,4 | 55 | 24 |
| 36120C64032A24 | 3 x 2 x 0,25 | 7,3 | 42,2 | 65 | 24 |
| 36120C64042A24 | 4 x 2 x 0,25 | 8,1 | 52,1 | 80 | 24 |
| 36120C64052A24 | 5 x 2 x 0,25 | 8,8 | 59,4 | 95 | 24 |
| 36120C64072A24 | 7 x 2 x 0,25 | 9,4 | 69,9 | 125 | 24 |
| 36120C64102A24 | 10 x 2 x 0,25 | 11 | 96,2 | 150 | 24 |
| 36120C64142A24 | 14 x 2 x 0,25 | 12,8 | 126,1 | 200 | 24 |
| 36120C64182A24 | 18 x 2 x 0,25 | 13,8 | 147 | 245 | 24 |
| 36120C64252A24 | 25 x 2 x 0,25 | 15,9 | 211,2 | 325 | 24 |
| 36120C64022A22 | 2 x 2 x 0,34 | 6,8 | 38,4 | 60 | 22 |
| 36120C64032A22 | 3 x 2 x 0,34 | 7,4 | 47,9 | 75 | 22 |
| 36120C64042A22 | 4 x 2 x 0,34 | 8,5 | 61 | 90 | 22 |
| 36120C64052A22 | 5 x 2 x 0,34 | 9,2 | 68,6 | 110 | 22 |
| 36120C64072A22 | 7 x 2 x 0,34 | 9,9 | 89,4 | 150 | 22 |
| 36120C64102A22 | 10 x 2 x 0,34 | 11,6 | 114,6 | 170 | 22 |
| 36120C64142A22 | 14 x 2 x 0,34 | 13,6 | 151,4 | 225 | 22 |
| 36120C64182A22 | 18 x 2 x 0,34 | 14,8 | 205,9 | 305 | 22 |
| 36120C64252A22 | 25 x 2 x 0,34 | 16,8 | 273,7 | 390 | 22 |
| 36120C64022A20 | 2 x 2 x 0,50 | 7,4 | 47,5 | 75 | 20 |
| 36120C64032A20 | 3 x 2 x 0,50 | 8,2 | 61,7 | 90 | 20 |
| 36120C64042A20 | 4 x 2 x 0,50 | 9,3 | 74,5 | 110 | 20 |
| 36120C64052A20 | 5 x 2 x 0,50 | 10,2 | 92,1 | 135 | 20 |
| 36120C64072A20 | 7 x 2 x 0,50 | 11 | 115,6 | 185 | 20 |
| 36120C64102A20 | 10 x 2 x 0,50 | 12,8 | 154,9 | 220 | 20 |
| 36120C64142A20 | 14 x 2 x 0,50 | 15,3 | 223,8 | 310 | 20 |
| 36120C64182A20 | 18 x 2 x 0,50 | 16,5 | 265,4 | 380 | 20 |
| 36120C64252A20 | 25 x 2 x 0,50 | 18,7 | 355,9 | 495 | 20 |
| 36120C64022A19 | 2 x 2 x 0,75 | 8,3 | 61,9 | 95 | 19 |
| 36120C64032A19 | 3 x 2 x 0,75 | 9,2 | 79,2 | 115 | 19 |
| 36120C64042A19 | 4 x 2 x 0,75 | 10,6 | 105,3 | 150 | 19 |
| 36120C64052A19 | 5 x 2 x 0,75 | 11,5 | 121,3 | 180 | 19 |
| 36120C64072A19 | 7 x 2 x 0,75 | 12,5 | 159,2 | 245 | 19 |
| 36120C64102A19 | 10 x 2 x 0,75 | 14,8 | 232,4 | 315 | 19 |
| 36120C64142A19 | 14 x 2 x 0,75 | 17,4 | 313,8 | 425 | 19 |
| 36120C64182A19 | 18 x 2 x 0,75 | 18,8 | 375,4 | 525 | 19 |
| 36120C64252A19 | 25 x 2 x 0,75 | 22 | 484,6 | 695 | 19 |

Other dimension and colours available on request.

FLEXIDRUM® T 100 UL

Continuously flexible single conductor, 0,6/1 kV, UL/CSA 1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 100 UL
AWM style 10553 or 10848 AWM I/II A/B 80°C 1000V FT1



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, UL 758 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PUR COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL 1581 VW-1, CSA FT-1



OIL RESISTANCE ACC. TO:
TMPU ACC. TO DIN VDE 0473 PART 811-2-1,
EN 60811-2-1,
IEC 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | | |
|--------------------------------------|----------------------------|----------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV | |
| UL/CSA: | 1000 V | |
| TEST VOLTAGE: | 4 kV EN 50289-1-3 | |
| TEMPERATURE RANGE | DIN VDE: | UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C | UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg | |
| MIN. BENDING RADIUS | | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D | |
| MAX PULLING FORCE: | | |
| STATIC: | 50 N/mm ² | |
| DINAMIC: | 20 N/mm ² | |
| MAX SPEED (MAIN APPLICATION): | 250 m/min | |

Features:

- HIGHLY FLEXIBLE SINGLE CONDUCTOR FOR USE IN CABLE TRACKS
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- HIGH ABRASION RESISTANCE
- UV RESISTANT
- AWM STYLE 10553 AWM I/II A/B 80°C 1000V FT1 OR AWM STYLE 10848 AWM I/II A/B 80°C 1000V FT1
- TEST VOLTAGE ACC. TO EN 50289-1-3
- CONDUCTOR RESISTANCE AT 20°C ACC. TO EN 50289-1-2
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------|---------------------|----------------------------|-------------|
| 04030H7L010A16 | 1 x 1,5 | 5,6 | 14,4 | 45 | 16 |
| 04030H7L010A14 | 1 x 2,5 | 6,5 | 24 | 63 | 14 |
| 04030H7L010A12 | 1 x 4 | 7,3 | 38,4 | 85 | 12 |
| 04030H7L010A10 | 1 x 6 | 8 | 57,6 | 114 | 10 |
| 04030H7L010A08 | 1 x 10 | 9,8 | 96 | 173 | 8 |
| 04030H7L010A06 | 1 x 16 | 10,8 | 153,6 | 245 | 6 |
| 04030H7L010A04 | 1 x 25 | 12,7 | 240 | 353 | 4 |
| 04030H7L010A02 | 1 x 35 | 14 | 336 | 459 | 2 |
| 04030H7L010A01 | 1 x 50 | 16,1 | 480 | 638 | 1 |
| 04030H7L010A2C | 1 x 70 | 18,1 | 672 | 854 | 2/0 |
| 04030H7L010A3C | 1 x 95 | 21 | 912 | 1140 | 3/0 |
| 04030H7L010A4C | 1 x 120 | 22,8 | 1152 | 1394 | 4/0 |
| 04030H7L010A5C | 1 x 150 | 24,6 | 1440 | 1716 | 250 MCM |
| 04030H7L010A7C | 1 x 185 | 26,7 | 1776 | 2077 | 350 MCM |
| 04030H7L010A9C | 1 x 240 | 31,5 | 2304 | 2750 | 450 MCM |
| 04030H7L010ACC | 1 x 300 | 34,3 | 2880 | 3389 | 600 MCM |

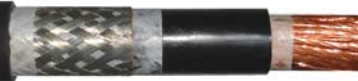
Other dimension and colours available on request.

FLEXIDRUM® T 100 C UL

Continuously flexible single conductor with overall copper screen, 0,6/1 kV, UL/CSA 1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 100 C UL
AWM style 10553 or 10848 AWM I/II A/B 80°C 1000V FT1



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, UL 758 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK |
| SCREEN: | TINNED COPPER BRAID ACC. TO UL1569 |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PUR COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:

DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL 1581 VW-1, CSA FT-1



OIL RESISTANCE ACC. TO:

TMPU ACC. TO DIN VDE 0473 PART 811-2-1,
EN 60811-2-1,
IEC 60811-2-1



HALOGEN FREE ACC. TO:

DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | | |
|--------------------------------------|--|----------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV | |
| UL/CSA: | 1000 V | |
| TEST VOLTAGE: | 4 kV EN 50289-1-3 | |
| TEMPERATURE RANGE | DIN VDE: | UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C | UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg | |
| MIN. BENDING RADIUS | | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D (OTHER MIN. BENDING RADIUS ON REQUEST) | |
| MAX PULLING FORCE: | | |
| STATIC: | 50 N/mm ² | |
| DINAMIC: | 20 N/mm ² | |
| MAX SPEED (MAIN APPLICATION): | 250 m/min | |

Features:

- HIGHLY FLEXIBLE SINGLE CONDUCTOR FOR USE IN CABLE TRACKS
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- HIGH ABRASION RESISTANCE
- UV RESISTANT
- AWM STYLE 10553 AWM I/II A/B 80°C 1000V FT1 OR AWM STYLE 10848 AWM I/II A/B 80°C 1000V FT1
- TEST VOLTAGE ACC. TO EN 50289-1-3
- CONDUCTOR RESISTANCE AT 20°C ACC. TO EN 50289-1-2
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 04040H7L010A10 | 1 x 6 | 8,5 | 77 | 120 | 10 |
| 04040H7L010A08 | 1 x 10 | 10,5 | 127 | 170 | 8 |
| 04040H7L010A06 | 1 x 16 | 11,8 | 189 | 236 | 6 |
| 04040H7L010A04 | 1 x 25 | 13,5 | 285 | 341 | 4 |
| 04040H7L010A02 | 1 x 35 | 15 | 389 | 447 | 2 |
| 04040H7L010A01 | 1 x 50 | 17,5 | 544 | 613 | 1 |
| 04040H7L010A2C | 1 x 70 | 19,5 | 768 | 837 | 2/0 |
| 04040H7L010A3C | 1 x 95 | 23 | 1020 | 1096 | 3/0 |
| 04040H7L010A4C | 1 x 120 | 24,5 | 1265 | 1331 | 4/0 |
| 04040H7L010A5C | 1 x 150 | 27,5 | 1450 | 1578 | 250 MCM |
| 04040H7L010A7C | 1 x 185 | 30 | 2040 | 2166 | 350 MCM |
| 04040H7L010A9C | 1 x 240 | 32 | 2621 | 2791 | 450 MCM |
| 04040H7L010ACC | 1 x 300 | 33 | - | 3130 | 600 MCM |

Other dimension and colours available on request.

FLEXIDRUM® T 101 UL

Continuously flexible single conductor, 0,6/1 kV, UL/CSA 1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 101 UL
AWM style 10553 or 10848 AWM I/II A/B 80°C 1000V FTI



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | GREEN/YELLOW |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PUR COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:

DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL 1581 VW-1, CSA FT-1



OIL RESISTANCE ACC. TO:

TMPO ACC. TO DIN VDE 0473 PART 811-2-1,
EN 60811-2-1,
IEC 60811-2-1



HALOGEN FREE ACC. TO:

DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | | |
|--------------------------------------|----------------------------|----------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV | |
| UL/CSA: | 1000 V | |
| TEST VOLTAGE: | 4 kV EN 50289-1-3 | |
| TEMPERATURE RANGE | DIN VDE: | UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C | UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg | |
| MIN. BENDING RADIUS | | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D | |
| MAX PULLING FORCE: | | |
| STATIC: | 50 N/mm ² | |
| DINAMIC: | 20 N/mm ² | |
| MAX SPEED (MAIN APPLICATION): | 250 m/min | |

Features:

- HIGHLY FLEXIBLE SINGLE CONDUCTOR FOR USE IN CABLE TRACKS
- GOOD CHEMICAL RESISTANCE
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- HIGH ABRASION RESISTANCE
- UV RESISTANT
- AWM STYLE 10553 AWM I/II A/B 80°C 1000V FTI OR AWM STYLE 10848 AWM I/II A/B 80°C 1000V FTI
- TEST VOLTAGE ACC. TO EN 50289-1-3
- CONDUCTOR RESISTANCE AT 20°C ACC. TO EN 50289-1-2
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 04070H7P011A16 | 1 g 1,5 | 5,6 | 14,4 | 45 | 16 |
| 04070H7P011A14 | 1 g 2,5 | 6,5 | 24 | 63 | 14 |
| 04070H7P011A12 | 1 g 4 | 7,3 | 38,4 | 86 | 12 |
| 04070H7P011A10 | 1 g 6 | 8,0 | 57,6 | 114 | 10 |
| 04070H7P011A08 | 1 g 10 | 8,7 | 96 | 149 | 8 |
| 04070H7P011A06 | 1 g 16 | 10,3 | 153,6 | 210 | 6 |
| 04070H7P011A04 | 1 g 25 | 11,9 | 240 | 310 | 4 |
| 04070H7P011A02 | 1 g 35 | 13,7 | 336 | 420 | 2 |
| 04070H7P011A01 | 1 g 50 | 16,1 | 480 | 625 | 1 |
| 04070H7P011A2C | 1 g 70 | 18,1 | 672 | 854 | 2/0 |
| 04070H7P011A3C | 1 g 95 | 21 | 912 | 1140 | 3/0 |
| 04070H7P011A4C | 1 g 120 | 22,8 | 1152 | 1394 | 4/0 |
| 04070H7P011A5C | 1 g 150 | 24,6 | 1440 | 1716 | 250 MCM |
| 04070H7P011A7C | 1 g 185 | 26,7 | 1776 | 2077 | 350 MCM |
| 04070H7P011A9C | 1 g 240 | 31,5 | 2304 | 2750 | 450 MCM |
| 04070H7P011ACC | 1 g 300 | 34,3 | 2880 | 3389 | 600 MCM |

Other dimension and colours available on request.

FLEXIDRUM® T 101 C UL

Continuously flexible single conductor with overall copper screen, 0,6/1 kV, UL/CSA 1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 101 C UL
AWM style 10553 or 10848 AWM I/II A/B 80°C 1000V FT1



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | GREEN/YELLOW |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | BLACK (RAL 9005), SPECIAL PUR COMPOUND |

Technical data:

| | | |
|--------------------------------------|----------------------------|----------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV | |
| UL/CSA: | 1000 V | |
| TEST VOLTAGE: | 4 kV EN 50289-1-3 | |
| TEMPERATURE RANGE | DIN VDE: | UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C | UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg | |
| MIN. BENDING RADIUS | | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D | |
| MAX PULLING FORCE: | | |
| STATIC: | 50 N/mm ² | |
| DINAMIC: | 20 N/mm ² | |
| MAX SPEED (MAIN APPLICATION): | 250 m/min | |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL 1581 VW-1, CSA FT-1



OIL RESISTANCE ACC. TO:
TMPU ACC. TO DIN VDE 0473 PART 811-2-1,
EN 60811-2-1,
IEC 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Features:

- HIGHLY FLEXIBLE SINGLE CONDUCTOR FOR USE IN CABLE TRACKS
- GOOD CHEMICAL RESISTANCE
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- HIGH ABRASION RESISTANCE
- UV RESISTANT
- AWM STYLE 10553 AWM I/II A/B 80°C 1000V FT1 OR AWM STYLE 10848 AWM I/II A/B 80°C 1000V FT1
- TEST VOLTAGE ACC. TO EN 50289-1-3
- CONDUCTOR RESISTANCE AT 20°C ACC. TO EN 50289-1-2
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------|
| 04080H7P011A10 | 1 g 6 | 8,5 | 77 | 120 | 10 |
| 04080H7P011A08 | 1 g 10 | 10,5 | 127 | 170 | 8 |
| 04080H7P011A06 | 1 g 16 | 11,8 | 189 | 236 | 6 |
| 04080H7P011A04 | 1 g 25 | 13,5 | 285 | 341 | 4 |
| 04080H7P011A02 | 1 g 35 | 15 | 389 | 447 | 2 |
| 04080H7P011A01 | 1 g 50 | 17,5 | 544 | 613 | 1 |
| 04080H7P011A2C | 1 g 70 | 19,5 | 768 | 837 | 2/0 |
| 04080H7P011A3C | 1 g 95 | 23 | 1020 | 1096 | 3/0 |
| 04080H7P011A4C | 1 g 120 | 24,5 | 1265 | 1331 | 4/0 |
| 04080H7P011A5C | 1 g 150 | 27,5 | 1450 | 1578 | 250 MCM |
| 04080H7P011A7C | 1 g 185 | 30 | 2040 | 2166 | 350 MCM |
| 04080H7P011A9C | 1 g 240 | 32 | 2621 | 2791 | 450 MCM |
| 04080H7P011ACC | 1 g 300 | 33 | - | 3130 | 600 MCM |

Other dimension and colours available on request.

GAALTHERM® 180 UL

Continuously flexible high temperature control cable with numbered cores 0,6/1 kV, UL/CSA 1000 V



ELETTROTEKKABEL® GAALTHERM® 180 UL
UL style 4476 200°C 1000 V cUL AWM I/II A/B 180°C

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE TINNED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAALTHERM® 545 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7000), G AALTHERM® 540 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2

Technical data:

| | |
|----------------------------|----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV |
| UL/CSA: | 1000 V |
| TEST VOLTAGE: | 4 kV ACC. TO EN 50264 |
| TEMPERATURE RANGE | |
| FIXED LAYING: | -25°C UP TO +180°C |
| FLEXIBLE INSTALLATION: | -25°C UP TO +180°C |
| SHORT-TIME USE: | + 200°C |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 10 x D |

Features:

HIGH TEMPERATURE RESISTANCE
HIGH NOTCH RESISTANCE
VERY GOOD FLEXIBILITY
SUITABLE FOR USE ON FESTOONS AS LONG AS THERE IS NO FRICTION OR MECHANICAL STRESS ON THE OUTER SHEATH WITH A MAX. TENSILE LOAD OF 15 N/mm²
UL AWM STYLE 4476 200°C 1000 V
CUL AWM I/II A/B 180°C
FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 51080H40031A16 | 3 g 1,5 | 8 | 43,2 | 100 | 16 |
| 51080H40041A16 | 4 g 1,5 | 8,5 | 57,6 | 120 | 16 |
| 51080H40051A16 | 5 g 1,5 | 9,5 | 72 | 150 | 16 |
| 51080H40071A16 | 7 g 1,5 | 10,5 | 100,8 | 210 | 16 |
| 51080H40031A14 | 3 g 2,5 | 10 | 72 | 148 | 14 |
| 51080H40041A14 | 4 g 2,5 | 10,5 | 96 | 185 | 14 |
| 51080H40051A14 | 5 g 2,5 | 11,8 | 120 | 240 | 14 |
| 51080H40071A14 | 7 g 2,5 | 13,8 | 168 | 330 | 14 |
| 51080H40191A14 | 19 g 2,5 | 21,8 | 456 | 710 | 14 |
| 51080H40041A12 | 4 g 4 | 12,5 | 153,6 | 275 | 12 |
| 51080H40051A12 | 5 g 4 | 13,8 | 192 | 340 | 12 |
| 51080H40071A12 | 7 g 4 | 16,3 | 268,8 | 480 | 12 |
| 51080H40041A10 | 4 g 6 | 15 | 230,4 | 420 | 10 |
| 51080H40051A10 | 5 g 6 | 16,8 | 288 | 500 | 10 |
| 51080H40071A10 | 7 g 6 | 19,9 | 403,2 | 700 | 10 |
| 51080H40041A08 | 4 g 10 | 18 | 384 | 620 | 8 |
| 51080H40051A08 | 5 g 10 | 19,3 | 480 | 750 | 8 |
| 51080H40041A06 | 4 g 16 | 21 | 614,4 | 920 | 6 |
| 51080H40051A06 | 5 g 16 | 23,6 | 768 | 1150 | 6 |
| 51080H40041A04 | 4 g 25 | 24,5 | 960 | 1320 | 4 |
| 51080H40041A02 | 4 g 35 | 28,6 | 1344 | 1810 | 2 |

Other dimension and colours available on request.



GAALTHERM® 180 C UL

Continuously flexible high temperature control cable
with numbered cores, and overall copper screen, 0,6/1 kV UL/CSA 1000 V



ELETTROTEKKABEL® GAALTHERM® 180 C UL
UL style 4476 200°C 1000 V cUL AWM I/II A/B 180°C

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE TINNED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAALTHERM® 545 |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | GREY (RAL 7000), G AALTHERM® 540 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2

Technical data:

| | |
|----------------------------|----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV |
| UL/CSA: | 1000 V |
| TEST VOLTAGE: | 4 kV ACC. TO EN 50264 |
| TEMPERATURE RANGE | |
| FIXED LAYING: | -25°C UP TO +180°C |
| FLEXIBLE INSTALLATION: | -25°C UP TO +180°C |
| SHORT-TIME USE: | + 200°C |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 15 x D |

Features:

- HIGH TEMPERATURE RESISTANCE
- HIGH NOTCH RESISTANCE
- VERY GOOD FLEXIBILITY
- SUITABLE FOR USE ON FESTOONS AS LONG AS THERE IS NO FRICTION OR MECHANICAL STRESS ON THE OUTER SHEATH WITH A MAX. TENSILE LOAD OF 15 N/mm²
- UL AWM STYLE 4476 200°C 1000 V
CUL AWM I/II A/B 180°C
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 51090H4L010A12 | 1 x 4 | 7 | 54,6 | - | 12 |
| 51090H4L010A08 | 1 x 10 | 9 | 118,7 | - | 8 |
| 51090H4L010A3C | 1 x 95 | 22 | 456 | - | 3/0 |
| 51090H4L010A4C | 1 x 120 | 23,5 | 2289,3 | - | 4/0 |
| 51090H40031A16 | 3 g 1,5 | 8,5 | 63,8 | 115 | 16 |
| 51090H40041A16 | 4 g 1,5 | 9 | 80,4 | 140 | 16 |
| 51090H40051A16 | 5 g 1,5 | 10 | 98,3 | 170 | 16 |
| 51090H40071A16 | 7 g 1,5 | 11,5 | 147,6 | 250 | 16 |
| 51090H40031A14 | 3 g 2,5 | 10 | 98,5 | 170 | 14 |
| 51090H40041A14 | 4 g 2,5 | 11,3 | 142,1 | 230 | 14 |
| 51090H40051A14 | 5 g 2,5 | 12,4 | 171,9 | 270 | 14 |
| 51090H40071A14 | 7 g 2,5 | 14,4 | 229,2 | 370 | 14 |
| 51090H40041A12 | 4 g 4 | 13 | 206,4 | 310 | 12 |
| 51090H40051A12 | 5 g 4 | 14,3 | 253,2 | 390 | 12 |
| 51090H40071A12 | 7 g 4 | 17 | 368 | 550 | 12 |
| 51090H40041A10 | 4 g 6 | 15,5 | 297,9 | 460 | 10 |
| 51090H40051A10 | 5 g 6 | 17,5 | 388 | 570 | 10 |
| 51090H40071A10 | 7 g 6 | 20,5 | 519,5 | 790 | 10 |
| 51090H40041A08 | 4 g 10 | 18 | 485,6 | 690 | 8 |
| 51090H40051A08 | 5 g 10 | 20 | 594,9 | 830 | 8 |
| 51090H40041A06 | 4 g 16 | 21,8 | 747,7 | 1010 | 6 |
| 51090H40051A06 | 5 g 16 | 24,3 | 922,4 | 1260 | 6 |
| 51090H40041A04 | 4 g 25 | 25,5 | 1117,5 | 1450 | 4 |
| 51090H40041A02 | 4 g 35 | 29,4 | 1532,5 | 1950 | 2 |

Other dimension and colours available on request.

FLEXIDRUM® TD 210

High speed continuously flexible PUR halogen-free data cable with colored cores,
DIN VDE 300/500 UL/CSA 300 V



ELETTROTEK KABEL® FLEXIDRUM® TD 210



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS |
| WRAPPING: | NETTING TAPE OVER EACH LAYER AND OVERALL NON-WOVEN TAPE |
| OUTER SHEATH: | GREY (RAL7032), PUR TYPE TPU, ACC. TO DIN VDE 0282 PART 10 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1, (ACC. TO DIMENSION) FT2



OIL RESISTANCE:
VERY GOOD TPU ACC. TO DIN VDE 0282 PART 10
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 300/500 V UL/CSA: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/K g |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- FLEXIBLE AT LOW TEMPERATURES
- HIGH ABRASION RESISTANCE
- MAT SURFACE OUTER SHEATH
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- UL AWM STYLE 21198 80°C 300V
CSA AWM I/II A/B 80°C 300V FT1 FT2 CE
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 36350C64030A26 | 3 x 0,14 | 3,8 | 4 | 15 | 26 |
| 36350C64040A26 | 4 x 0,14 | 4 | 5,4 | 18 | 26 |
| 36350C64050A26 | 5 x 0,14 | 4,4 | 6,7 | 21 | 26 |
| 36350C64070A26 | 7 x 0,14 | 5 | 9,4 | 27 | 26 |
| 36350C64100A26 | 10 x 0,14 | 5,5 | 13,4 | 33 | 24 |
| 36350C64140A26 | 14 x 0,14 | 5,9 | 18,8 | 40 | 26 |
| 36350C64180A26 | 18 x 0,14 | 6,8 | 24,2 | 52 | 26 |
| 36350C64250A26 | 25 x 0,14 | 8 | 33,6 | 66 | 26 |
| 36350C64030A24 | 3 x 0,25 | 4,4 | 7,2 | 21 | 24 |
| 36350C64040A24 | 4 x 0,25 | 4,7 | 9,6 | 24 | 24 |
| 36350C64050A24 | 5 x 0,25 | 5 | 12 | 28 | 24 |
| 36350C64070A24 | 7 x 0,25 | 5,7 | 16,8 | 37 | 24 |
| 36350C64100A24 | 10 x 0,25 | 6 | 24 | 48 | 24 |
| 36350C64140A24 | 14 x 0,25 | 6,5 | 33,6 | 60 | 24 |
| 36350C64180A24 | 18 x 0,25 | 8 | 43,2 | 73 | 24 |
| 36350C64250A24 | 25 x 0,25 | 9,4 | 60 | 99 | 24 |
| 36350C64030A22 | 3 x 0,34 | 4,6 | 9,8 | 25 | 22 |
| 36350C64040A22 | 4 x 0,34 | 4,7 | 13 | 28 | 22 |
| 36350C64050A22 | 5 x 0,34 | 5,3 | 16,3 | 33 | 22 |
| 36350C64070A22 | 7 x 0,34 | 6,1 | 22,8 | 44 | 22 |
| 36350C64100A22 | 10 x 0,34 | 6,8 | 32,6 | 55 | 22 |
| 36350C64140A22 | 14 x 0,34 | 7,3 | 45,7 | 73 | 22 |
| 36350C64180A22 | 18 x 0,34 | 8,5 | 58,8 | 91 | 22 |
| 36350C64250A22 | 25 x 0,34 | 10,2 | 81,6 | 124 | 22 |

Other dimension and colours available on request.

FLEXIDRUM® T 210

High speed continuously flexible PUR halogen-free control cable,
DIN VDE 0,6/1 kV, UL/CSA 600/1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 210
UL Style 21223 80°C 600/1000V
CSA AWM I/II A/B 80°C 600V FT1 FT2 CE



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| OUTER SHEATH: | GREY (RAL 7000) , PUR COMPOUND ACC. TO UL1581 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1, FT2



OIL RESISTANCE:
VERY GOOD TMPU ACC. TO DIN VDE 0282 PART 10
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 0,6/1 kV UL/CSA: 600/1000 V |
| TEST VOLTAGE: | 3 kV ACC. TO DIN VDE 0281 PART 2 + HD 21.2 |
| TEMPERATURE RANGE | DIN VDE: -50°C UP TO +90°C UP TO +80°C UL/CSA: |
| FIXED LAYING: | |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- FLEXIBLE AT LOW TEMPERATURES
- HIGH ABRASION RESISTANCE
- MAT SURFACE OUTER SHEATH
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC

UL AWM STYLE 21223 80°C 600 1000 V
CSA AWM I/II A/B 80°C 600V FT1 FT2 CE

FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 04110G40031A20 | 3 g 0,5 | 5,6 | 14,4 | 38 | 20 |
| 04110G40041A20 | 4 g 0,5 | 6,2 | 19,2 | 45 | 20 |
| 04110G40051A20 | 5 g 0,5 | 6,7 | 24 | 55 | 20 |
| 04110G40071A20 | 7 g 0,5 | 7,6 | 33,6 | 72 | 20 |
| 04110G40121A20 | 12 g 0,5 | 8,9 | 57,6 | 105 | 20 |
| 04110G40181A20 | 18 g 0,5 | 10,5 | 86,4 | 155 | 20 |
| 04110G40251A20 | 25 g 0,5 | 12,2 | 120 | 210 | 20 |
| 04110G40341A20 | 34 g 0,5 | 13,7 | 163,2 | 260 | 20 |
| 04110G40501A20 | 50 g 0,5 | 16,3 | 240 | 390 | 20 |
| 04110G40611A20 | 61 g 0,5 | 18,2 | 292,6 | 450 | 20 |
| 04110G41020A19 | 2 x 0,75 | 5,8 | 14,6 | 41 | 19 |
| 04110G40031A19 | 3 g 0,75 | 6,5 | 21,6 | 55 | 19 |
| 04110G40041A19 | 4 g 0,75 | 6,6 | 28,8 | 60 | 19 |
| 04110G40051A19 | 5 g 0,75 | 7,2 | 36 | 75 | 19 |
| 04110G40071A19 | 7 g 0,75 | 8,6 | 50,4 | 100 | 19 |
| 04110G40121A19 | 12 g 0,75 | 10,3 | 86,4 | 150 | 19 |
| 04110G40181A19 | 18 g 0,75 | 11,8 | 129,6 | 220 | 19 |
| 04110G40251A19 | 25 g 0,75 | 14,2 | 180 | 290 | 19 |
| 04110G40341A19 | 34 g 0,75 | 15,8 | 244,8 | 380 | 19 |
| 04110G40501A19 | 50 g 0,75 | 18,7 | 360 | 540 | 19 |
| 04110G40611A19 | 61 g 0,75 | 20,8 | 439,2 | 650 | 19 |

FLEXIDRUM® T 210

High speed continuously flexible PUR halogen-free control cable,
DIN VDE 0,6/1 kV, UL/CSA 600/1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 210
UL Style 21223 80°C 600/1000V
CSA, AWM I/II A/B 80°C 600V FT1 FT2 CE



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 04110G41020A18 | 2 x 1 | 6,7 | 19,2 | 50 | 18 |
| 04110G40031A18 | 3 g 1 | 6,9 | 28,8 | 60 | 18 |
| 04110G40041A18 | 4 g 1 | 7,1 | 38,4 | 75 | 18 |
| 04110G40051A18 | 5 g 1 | 7,7 | 48 | 90 | 18 |
| 04110G40071A18 | 7 g 1 | 9 | 67,2 | 125 | 18 |
| 04110G40121A18 | 12 g 1 | 11 | 115,2 | 185 | 18 |
| 04110G40181A18 | 18 g 1 | 13 | 172,8 | 270 | 18 |
| 04110G40251A18 | 25 g 1 | 15,7 | 240 | 370 | 18 |
| 04110G40341A18 | 34 g 1 | 17,4 | 326,4 | 490 | 18 |
| 04110G40501A18 | 50 g 1 | 20,5 | 480 | 695 | 18 |
| 04110G40611A18 | 61 g 1 | 22,9 | 586,6 | 870 | 18 |
| 04110G41020A16 | 2 x 1,5 | 7,3 | 28,8 | 50 | 16 |
| 04110G40031A16 | 3 g 1,5 | 7,4 | 43,2 | 80 | 16 |
| 04110G40041A16 | 4 g 1,5 | 7,9 | 57,6 | 100 | 16 |
| 04110G40051A16 | 5 g 1,5 | 8,6 | 72 | 120 | 16 |
| 04110G40071A16 | 7 g 1,5 | 10,1 | 100,8 | 170 | 16 |
| 04110G40121A16 | 12 g 1,5 | 12,4 | 172,8 | 260 | 16 |
| 04110G40181A16 | 18 g 1,5 | 14,5 | 259,2 | 375 | 16 |
| 04110G40251A16 | 25 g 1,5 | 18 | 360 | 510 | 16 |
| 04110G40341A16 | 34 g 1,5 | 19,9 | 489,6 | 690 | 16 |
| 04110G40501A16 | 50 g 1,5 | 23,4 | 720 | 975 | 16 |
| 04110G40611A16 | 61 g 1,5 | 26 | 878,4 | 1200 | 16 |
| 04110G41020A14 | 2 x 2,5 | 8,3 | 48 | 78 | 14 |
| 04110G40031A14 | 3 g 2,5 | 8,8 | 72 | 125 | 14 |
| 04110G40041A14 | 4 g 2,5 | 10,2 | 96 | 160 | 14 |
| 04110G40051A14 | 5 g 2,5 | 11,1 | 120 | 190 | 14 |
| 04110G40071A14 | 7 g 2,5 | 13,2 | 168 | 270 | 14 |
| 04110G40121A14 | 12 g 2,5 | 15,8 | 288 | 420 | 14 |
| 04110G40181A14 | 18 g 2,5 | 18,6 | 432 | 620 | 14 |
| 04110G40251A14 | 25 g 2,5 | 22,8 | 600 | 830 | 14 |
| 04110G40031A12 | 3 g 4 | 10,5 | 115,2 | 180 | 12 |
| 04110G40041A12 | 4 g 4 | 11,4 | 153,6 | 230 | 12 |
| 04110G40051A12 | 5 g 4 | 12,5 | 192 | 290 | 12 |
| 04110G40031A10 | 3 g 6 | 12,4 | 172,8 | 260 | 10 |
| 04110G40041A10 | 4 g 6 | 13,8 | 230,4 | 330 | 10 |
| 04110G40051A10 | 5 g 6 | 15,1 | 288 | 420 | 10 |
| 04110G40031A08 | 3 g 10 | 15,6 | 288 | 430 | 8 |
| 04110G40041A08 | 4 g 10 | 17,3 | 384 | 360 | 8 |
| 04110G40051A08 | 5 g 10 | 19,3 | 480 | 520 | 8 |
| 04110G40031A06 | 3 g 16 | 18,2 | 460,8 | 620 | 6 |
| 04110G40041A06 | 4 g 16 | 20,2 | 614,4 | 800 | 6 |
| 04110G40051A06 | 5 g 16 | 22,4 | 768 | 1000 | 6 |
| 04110G40041A04 | 4 g 25 | 25,2 | 960 | 1200 | 4 |
| 04110G40051A04 | 5 g 25 | 25,7 | 1200 | 1500 | 4 |
| 04110G40041A02 | 4 g 35 | 26,8 | 1344 | 1620 | 2 |
| 04110G40051A02 | 5 g 35 | 28,7 | 1680 | 2030 | 2 |
| 04110G40051A01 | 4 g 50 | 34 | 1920 | 2280 | 1 |

Other dimension and colours available on request.

FLEXIDRUM® TD 210 C

High speed continuously flexible PUR halogen-free with colored cores and overall copper screen, DIN VDE 300/500 UL/CSA 300 V



ELETTROTEK KABEL® FLEXIDRUM® TD 210 C



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS |
| WRAPPING: | NETTING TAPE OVER EACH LAYER AND OVERALL NON-WOVEN TAPE |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREY (RAL 7032), PUR TYPE TMPU, ACC. TO DIN VDE 0282 PART 10 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1, (ACC. TO DIMENSION) FT2



OIL RESISTANCE:
VERY GOOD TMPU ACC. TO DIN VDE 0282 PART 10
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 300/500 V UL/CSA: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 CORE/SCREEN 1,2 kV |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/K g |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- FLEXIBLE AT LOW TEMPERATURES
- HIGH ABRASION RESISTANCE
- MAT SURFACE OUTER SHEATH
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- AWM STYLE 21198 80°C 300V
CSA AWM I/II A/B 80°C 300V FT1 FT2 CE



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36360C64030A26 | 3 x 0,14 | 3,8 | 13 | 22 | 26 |
| 36360C64040A26 | 4 x 0,14 | 4,1 | 16,2 | 27 | 26 |
| 36360C64050A26 | 5 x 0,14 | 4,3 | 17,7 | 32 | 26 |
| 36360C64070A26 | 7 x 0,14 | 4,9 | 22,7 | 45 | 26 |
| 36360C64100A26 | 10 x 0,14 | 5,6 | 41 | 50 | 24 |
| 36360C64140A26 | 14 x 0,14 | 6,3 | 45 | 58 | 26 |
| 36360C64180A26 | 18 x 0,14 | 6,7 | 53,2 | 82 | 26 |
| 36360C64250A26 | 25 x 0,14 | 7,8 | 71,2 | 105 | 26 |
| 36360C64030A24 | 3 x 0,25 | 4,8 | 18,1 | 28 | 24 |
| 36360C64040A24 | 4 x 0,25 | 5,1 | 20,7 | 33 | 24 |
| 36360C64050A24 | 5 x 0,25 | 5,5 | 25,1 | 43 | 24 |
| 36360C64070A24 | 7 x 0,25 | 6,2 | 32,5 | 55 | 24 |
| 36360C64100A24 | 10 x 0,25 | 6,8 | 52 | 65 | 24 |
| 36360C64140A24 | 14 x 0,25 | 7,5 | 62 | 75 | 24 |
| 36360C64180A24 | 18 x 0,25 | 8,5 | 75,6 | 108 | 24 |
| 36360C64250A24 | 25 x 0,25 | 10 | 100,8 | 135 | 24 |
| 36360C64030A22 | 3 x 0,34 | 5,1 | 20,4 | 35 | 22 |
| 36360C64040A22 | 4 x 0,34 | 4,5 | 26,2 | 44 | 22 |
| 36360C64050A22 | 5 x 0,34 | 5,8 | 29,7 | 54 | 22 |
| 36360C64070A22 | 7 x 0,34 | 6,6 | 53 | 65 | 22 |
| 36360C64100A22 | 10 x 0,34 | 7,2 | 65 | 85 | 22 |
| 36360C64140A22 | 14 x 0,34 | 8 | 75 | 100 | 22 |
| 36360C64180A22 | 18 x 0,34 | 9 | 96,6 | 128 | 22 |
| 36360C64250A22 | 25 x 0,34 | 10,8 | 131,5 | 170 | 22 |

Other dimension and colours available on request.

FLEXIDRUM® T 210 C

High speed continuously flexible PUR halogen-free control cable with overall copper screen, DIN VDE 0,6/1 kV, UL/CSA 600/1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 210 C
UL Style 21223 80°C 600/1000 V
CSA AWM I/II A/B 80°C 600V FT1 FT2 CE



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334, GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE OVER EACH LAYER |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GRAY (SIMILAR TO RAL 7000), PUR TYPE TMPU ACC. TO DIN VDE 0282 PART.10 + HD 22.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1, (ACC. TO DIMENSION) FT2



OIL RESISTANCE:
VERY GOOD TMPU ACC. TO DIN VDE 0282 PART 10
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1




HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1 (EQUIVALENT DIN VDE 0472 PART 815)

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 0,6/1 kV UL/CSA: 600/1000 V |
| TEST VOLTAGE: | 3 kV ACC. TO DIN VDE 0281 PART 2 + HD 21.2 CORE/SCREEN 2 kV |
| TEMPERATURE RANGE | DIN VDE: -50°C UP TO +90°C UL/CSA: UP TO +80°C |
| FIXED LAYING: | -50°C UP TO +90°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- FLEXIBLE AT LOW TEMPERATURES
- HIGH ABRASION RESISTANCE
- MAT SURFACE OUTER SHEATH
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- GOOD EMC RESISTANCE
-  AWM STYLE 21223 80°C 600 1000 V
CSA AWM I/II A/B 80°C 600V FT1 FT2 CE
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



FLEXIDRUM® T 210 C

High speed continuously flexible PUR halogen-free control cable with overall copper screen, DIN VDE 0,6/1 kV, UL/CSA 600/1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 210 C
UL Style 21223 80°C 600/1000 V
CSA AWM I/II A/B 80°C 600V FT1 FT2 CE



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 04120G41020A20 | 2 x 0,5 | 6,1 | 19 | 47 | 20 |
| 04120G40031A20 | 3 g 0,5 | 6,3 | 43,6 | 58 | 20 |
| 04120G40041A20 | 4 g 0,5 | 6,7 | 51,1 | 67 | 20 |
| 04120G40051A20 | 5 g 0,5 | 7,1 | 61,5 | 77 | 20 |
| 04120G40071A20 | 7 g 0,5 | 8,2 | 74,1 | 101 | 20 |
| 04120G40121A20 | 12 g 0,5 | 9,6 | 108,2 | 151 | 20 |
| 04120G40181A20 | 18 g 0,5 | 11,1 | 143 | 203 | 20 |
| 04120G40251A20 | 25 g 0,5 | 12,9 | 217 | 299 | 20 |
| 04120G40301A20 | 30 g 0,5 | 14,3 | 235 | 330 | 20 |
| 04120G40311A20 | 36 g 0,5 | 14,6 | 275,3 | 379 | 20 |
| 04120G41020A19 | 2 x 0,75 | 6,4 | 27,3 | 53 | 19 |
| 04120G40031A19 | 3 g 0,75 | 6,9 | 54,1 | 70 | 19 |
| 04120G40041A19 | 4 g 0,75 | 7,3 | 64 | 82 | 19 |
| 04120G40051A19 | 5 g 0,75 | 7,9 | 74,3 | 98 | 19 |
| 04120G40071A19 | 7 g 0,75 | 9,2 | 92,3 | 123 | 19 |
| 04120G40121A19 | 12 g 0,75 | 11 | 142,4 | 192 | 19 |
| 04120G40181A19 | 18 g 0,75 | 12,6 | 215,3 | 294 | 19 |
| 04120G40251A19 | 25 g 0,75 | 15,2 | 289,7 | 386 | 19 |
| 04120G40301A19 | 30 g 0,75 | 16,5 | 320 | 440 | 19 |
| 04120G40311A19 | 36 g 0,75 | 16,7 | 387,7 | 520 | 19 |
| 04120G40031A18 | 3 g 1 | 7,1 | 66,4 | 82 | 18 |
| 04120G40041A18 | 4 g 1 | 8,1 | 77,3 | 97 | 18 |
| 04120G40051A18 | 5 g 1 | 8,6 | 89 | 114 | 18 |
| 04120G40071A18 | 7 g 1 | 10 | 117,9 | 159 | 18 |
| 04120G40121A18 | 12 g 1 | 12 | 174,9 | 239 | 18 |
| 04120G40181A18 | 18 g 1 | 13,8 | 270,2 | 353 | 18 |
| 04120G40251A18 | 25 g 1 | 16,5 | 367,5 | 481 | 18 |
| 04120G40301A18 | 30 g 1 | 18 | 410 | 550 | 18 |
| 04120G40311A18 | 36 g 1 | 18,3 | 478,7 | 633 | 18 |
| 04120G41020A16 | 2 x 1,5 | 7,4 | 45 | 75 | 16 |
| 04120G40031A16 | 3 g 1,5 | 8,1 | 81,5 | 104 | 16 |
| 04120G40041A16 | 4 g 1,5 | 8,8 | 101,2 | 125 | 16 |
| 04120G40051A16 | 5 g 1,5 | 9,3 | 122,2 | 145 | 16 |
| 04120G40071A16 | 7 g 1,5 | 11,1 | 156,8 | 206 | 16 |
| 04120G40121A16 | 12 g 1,5 | 13,4 | 269,7 | 341 | 16 |
| 04120G40181A16 | 18 g 1,5 | 15,5 | 369,2 | 465 | 16 |
| 04120G40251A16 | 25 g 1,5 | 17,5 | 493,4 | 633 | 16 |
| 04120G40301A16 | 30 g 1,5 | 20,5 | 525 | 750 | 16 |
| 04120G40311A16 | 36 g 1,5 | 20,7 | 660,3 | 856 | 16 |
| 04120G41020A14 | 2 x 2,5 | 8,8 | 65,5 | 110 | 14 |
| 04120G40031A14 | 3 g 2,5 | 8,7 | 122,8 | 159 | 14 |
| 04120G40041A14 | 4 g 2,5 | 11 | 150,1 | 197 | 14 |
| 04120G40051A14 | 5 g 2,5 | 11,5 | 179,6 | 236 | 14 |
| 04120G40071A14 | 7 g 2,5 | 14 | 265,2 | 335 | 14 |
| 04120G40121A14 | 12 g 2,5 | 16,3 | 417,1 | 525 | 14 |
| 04120G40181A14 | 18 g 2,5 | 19,7 | 571,4 | 739 | 14 |
| 04120G40251A14 | 25 g 2,5 | 23,7 | 780,8 | 1004 | 14 |
| 04120G40031A12 | 3 g 4 | 11,2 | 172,9 | 224 | 12 |
| 04120G40041A12 | 4 g 4 | 12,1 | 216,5 | 287 | 12 |
| 04120G40051A12 | 5 g 4 | 13,2 | 289,2 | 357 | 12 |
| 04120G40031A10 | 3 g 6 | 13,1 | 258,8 | 334 | 10 |
| 04120G40041A10 | 4 g 6 | 14,7 | 328,3 | 414 | 10 |
| 04120G40051A10 | 5 g 6 | 16 | 398,4 | 485 | 10 |
| 04120G40031A08 | 3 g 10 | 16,5 | 392,9 | 502 | 8 |
| 04120G40041A08 | 4 g 10 | 18,3 | 507,4 | 624 | 8 |
| 04120G40051A08 | 5 g 10 | 20,5 | 615,5 | 731 | 8 |
| 04120G40031A06 | 3 g 16 | 19,1 | 598,4 | 724 | 6 |
| 04120G40041A06 | 4 g 16 | 21,1 | 758,2 | 915 | 6 |
| 04120G40051A06 | 5 g 16 | 23,3 | 947,1 | 1101 | 6 |
| 04120G40041A04 | 4 g 25 | 25,9 | 1148 | 1312 | 4 |
| 04120G40051A04 | 5 g 25 | 28,5 | 1400,1 | 1610 | 4 |
| 04120G40041A02 | 4 g 35 | 29,7 | 1546,4 | 1765 | 2 |
| 04120G40051A02 | 5 g 35 | 32,5 | 1915,1 | 2119 | 2 |

Other dimension and colours available on request.

FLEXIDRUM® TD 210 C TP

High speed continuously flexible PUR halogen-free, screened, twisted pairs data cable,
DIN VDE 300/500 UL/CSA 300 V



ELETTROTEK KABEL® FLEXIDRUM® TD 210 C TP



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED IN LAYERS |
| WRAPPING: | NETTING TAPE OVER EACH LAYER |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREY (RAL 7032), PUR TYPE TMPU, ACC. TO DIN VDE 0282 PART 10 + HD 21.1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL VW-1, CSA FT1, (ACC. TO DIMENSION) FT2



OIL RESISTANCE:
VERY GOOD TMPU ACC. TO DIN VDE 0282 PART 10
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1



HALOGEN FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | DIN VDE: U ₀ /U 300/500 V UL/CSA: 300 V |
| TEST VOLTAGE: | 1,5 kV ACC. TO DIN VDE 0472 PART 509 CORE/SCREEN 1,2 kV |
| TEMPERATURE RANGE | DIN VDE: UL/CSA: |
| FIXED LAYING: | -50°C UP TO +90°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ Cj/Kg |
| MIN. BENDING RADIUS | |
| CONTINUOUSLY FLEXIBLE: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- FLEXIBLE AT LOW TEMPERATURES
- HIGH ABRASION RESISTANCE
- MAT SURFACE OUTER SHEATH
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC
- GOOD EMC RESISTANCE

UL AWM STYLE 21198 80°C 300 V
CSA AWM I/II A/B 80°C 300V FT1 FT2 CE
OR:
UL US AWM STYLE 20233 80°C 300 V FT2 CE

FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



FLEXIDRUM® TD 210 C TP

High speed continuously flexible PUR halogen-free, screened, twisted pairs data cable,
DIN VDE 300/500 UL/CSA 300 V

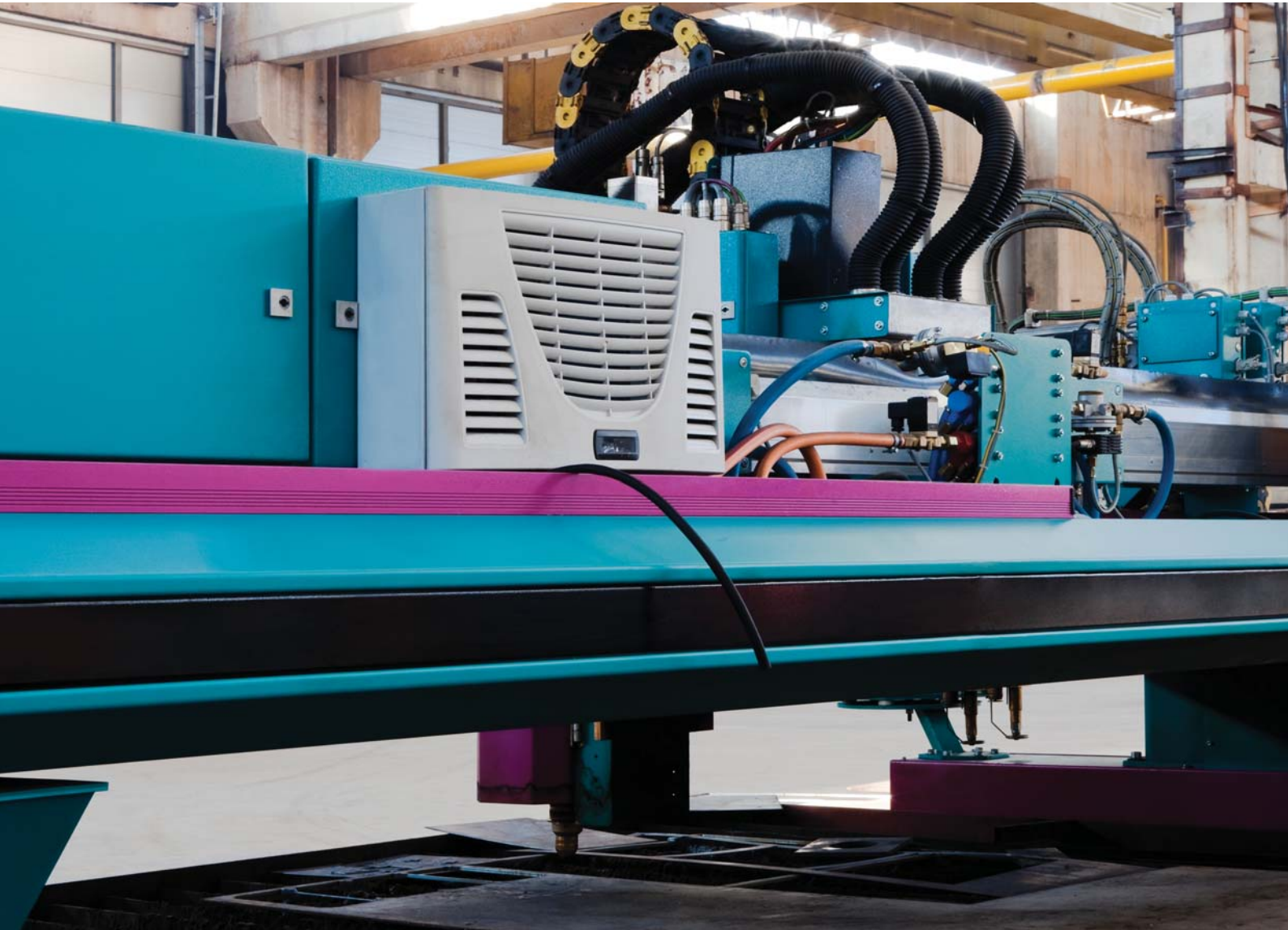


ELETTROTEK KABEL® FLEXIDRUM® TD 210 C TP



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 36370C64022A26 | 2 x 2 x 0,14 | 5,3 | 17,4 | 28 | 26 |
| 36370C64032A26 | 3 x 2 x 0,14 | 5,9 | 20,2 | 32 | 26 |
| 36370C64042A26 | 4 x 2 x 0,14 | 6,3 | 24,7 | 39 | 26 |
| 36370C64052A26 | 5 x 2 x 0,14 | 6,7 | 28,8 | 46 | 26 |
| 36370C64072A26 | 7 x 2 x 0,14 | 7,8 | 35,9 | 59 | 26 |
| 36370C64102A26 | 10 x 2 x 0,14 | 9 | 47,5 | 72 | 24 |
| 36370C64142A26 | 14 x 2 x 0,14 | 9,8 | 62,7 | 96 | 26 |
| 36370C64182A26 | 18 x 2 x 0,14 | 10,4 | 89,6 | 129 | 26 |
| 36370C64252A26 | 25 x 2 x 0,14 | 11,7 | 114,3 | 170 | 26 |
| 36370C64022A24 | 2 x 2 x 0,25 | 5,7 | 21,8 | 35 | 24 |
| 36370C64032A24 | 3 x 2 x 0,25 | 6,3 | 28,3 | 44 | 24 |
| 36370C64042A24 | 4 x 2 x 0,25 | 7 | 36,1 | 52 | 24 |
| 36370C64052A24 | 5 x 2 x 0,25 | 7,5 | 41,1 | 71 | 24 |
| 36370C64062A24 | 6 x 2 x 0,25 | 8,3 | 47,3 | 89 | 24 |
| 36370C64072A24 | 7 x 2 x 0,25 | 8,5 | 54,1 | 92 | 24 |
| 36370C64102A24 | 10 x 2 x 0,25 | 10 | 70,8 | 101 | 24 |
| 36370C64142A24 | 14 x 2 x 0,25 | 10,8 | 108,7 | 153 | 24 |
| 36370C64182A24 | 18 x 2 x 0,25 | 11,4 | 133,4 | 189 | 24 |
| 36370C64252A24 | 25 x 2 x 0,25 | 12,9 | 171,9 | 262 | 24 |
| 36370C64022A22 | 2 x 2 x 0,34 | 6,1 | 20,3 | 40 | 22 |
| 36370C64032A22 | 3 x 2 x 0,34 | 7 | 34,9 | 52 | 22 |
| 36370C64042A22 | 4 x 2 x 0,34 | 7,5 | 43,2 | 63 | 22 |
| 36370C64052A22 | 5 x 2 x 0,34 | 8,1 | 53,1 | 73 | 22 |
| 36370C64072A22 | 7 x 2 x 0,34 | 9,3 | 66,4 | 94 | 22 |
| 36370C64102A22 | 10 x 2 x 0,34 | 10,8 | 90,5 | 121 | 22 |
| 36370C64142A22 | 14 x 2 x 0,34 | 11,8 | 138,3 | 181 | 22 |
| 36370C64182A22 | 18 x 2 x 0,34 | 12,4 | 169,2 | 223 | 22 |
| 36370C64252A22 | 25 x 2 x 0,34 | 14,2 | 247,3 | 313 | 22 |
| 36370C64022A20 | 2 x 2 x 0,5 | 6,3 | 34,6 | 52 | 20 |
| 36370C64032A20 | 3 x 2 x 0,5 | 7,5 | 47,3 | 69 | 20 |
| 36370C64042A20 | 4 x 2 x 0,5 | 8,5 | 61,4 | 87 | 20 |
| 36370C64052A20 | 5 x 2 x 0,5 | 9,5 | 73,1 | 115 | 20 |
| 36370C64062A20 | 6 x 2 x 0,5 | 10,7 | 85,3 | 147 | 20 |
| 36370C64072A20 | 7 x 2 x 0,5 | 11 | 108,4 | 161 | 20 |
| 36370C64082A20 | 8 x 2 x 0,5 | 12 | 121,5 | 175 | 20 |
| 36370C64102A20 | 10 x 2 x 0,5 | 13 | 143,3 | 192 | 20 |
| 36370C64142A20 | 14 x 2 x 0,5 | 15 | 191,7 | 276 | 20 |
| 36370C64182A20 | 18 x 2 x 0,5 | 16,5 | 257,8 | 345 | 20 |
| 36370C64252A20 | 25 x 2 x 0,5 | 19,5 | 336,5 | 446 | 20 |
| 36370C64022A19 | 2 x 2 x 0,75 | 9 | 47,4 | 69 | 19 |
| 36370C64032A19 | 3 x 2 x 0,75 | 9,5 | 66,2 | 87 | 19 |
| 36370C64042A19 | 4 x 2 x 0,75 | 10,5 | 101 | 112 | 19 |
| 36370C64052A19 | 5 x 2 x 0,75 | 11,5 | 118,8 | 163 | 19 |
| 36370C64072A19 | 7 x 2 x 0,75 | 12,5 | 148 | 212 | 19 |
| 36370C64082A19 | 8 x 2 x 0,75 | 14 | 188 | 258 | 19 |
| 36370C64102A19 | 10 x 2 x 0,75 | 15,5 | 228 | 296 | 19 |
| 36370C64122A19 | 12 x 2 x 0,75 | 16 | 266 | 358 | 19 |
| 36370C64142A19 | 14 x 2 x 0,75 | 17,5 | 296,9 | 390 | 19 |
| 36370C64182A19 | 18 x 2 x 0,75 | 19,5 | 366,1 | 482 | 19 |
| 36370C64252A19 | 25 x 2 x 0,75 | 22,5 | 480,5 | 620 | 19 |
| 36370C64032A18 | 3 x 2 x 1 | 10 | 88 | 128 | 18 |
| 36370C64042A18 | 4 x 2 x 1 | 10,7 | 101,4 | 153 | 18 |
| 36370C64052A18 | 5 x 2 x 1 | 11,7 | 119,4 | 190 | 18 |
| 36370C64062A18 | 6 x 2 x 1 | 12,8 | 140 | 250 | 18 |
| 36370C64082A18 | 8 x 2 x 1 | 15,6 | 191 | 370 | 18 |
| 36370C64062A16 | 6 x 2 x 1,5 | 14,8 | 226 | 319 | 16 |

Other dimension and colours available on request.





SPECIAL GAALFLEX® SERVO T 830

PVC motor connection cable

SPECIAL GAALFLEX® SERVO T 830 C

PVC motor connection cable with overall copper screen

ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830

ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830 C



Construction:

| | |
|--|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6 ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL PP COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 +GREEN-YELLOW |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPE |
| SCREEN (SPECIAL T 830 C): | TINNED COPPER BRAID |
| WRAPPING (SPECIAL T 830 C): | NON-WOVEN TAPE |
| OUTER SHEATH: | ORANGE (RAL2003), SPECIAL PVC COMPOUND 90°C |

Technical data:

| | |
|---|--|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 KV UL/CSA: 1000 V |
| TEST VOLTAGE: | SUPPLY CORES:4 kV CORE SCREEN: 1,5 kV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | - 40°C UP TO + 80°C |
| FLEXIBLE INSTALLATION: | - 10°C UP TO + 80°C |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 4 x D |
| FLEXIBLE INSTALLATION: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | |
| UNSUPPORTED: | 8 m/sec |
| GLIDING: | 4 m/sec |
| MAX ACCELERATION (MAIN APPLICATION): | |
| | 30 m/sec ² |
| BENDING CYCLES (MAIN APPLICATION): | |
| | UP TO 6 MILION |
| TRAVEL DISTANCES (MAIN APPLICATION): | |
| | UP TO 10 mt |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0472 PART 804 TEST METHOD B,
IEC 60332-1, IEC 60332-3-24, CSA FT1



OIL RESISTANCE ACC. TO:
EN 50363-4-1

Features:

- UL AWM STYLE 2570 80°C 1000 V, CSA AWM I/II A/B
- SUITABLE FOR TRACK CABLES
- SPEED 8 M/SEC (UNSUPPORTED), 4 M/SEC (GLIDING), ACC. 30 M/SEC²
- LOW CAPACITANCE
- HIGH OIL RESISTANCE
- HIGH FLEXIBILITY
- DESINA® COLOURS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL





SPECIAL GAALFLEX® SERVO T 830

PVC motor connection cable

SPECIAL GAALFLEX® SERVO T 830 C

PVC motor connection cable with overall copper screen

ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830

ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830 C



DESINA® T 830

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 37010HG0041A19 | 4 g 0,75 | 6,9 | 28,8 | 76 | 19 |
| 37010HG0041A18 | 4 g 1 | 7,4 | 38,4 | 92 | 18 |
| 37010HG0041A16 | 4 g 1,5 | 8,1 | 57,6 | 120 | 16 |
| 37010HG0041A14 | 4 g 2,5 | 9,5 | 96 | 173 | 14 |
| 37010HG0041A12 | 4 g 4 | 11,2 | 153,6 | 255 | 12 |
| 37010HG0041A10 | 4 g 6 | 13,4 | 230,4 | 385 | 10 |
| 37010HG0041A08 | 4 g 10 | 16,3 | 384 | 595 | 8 |
| 37010HG0041A06 | 4 g 16 | 20,3 | 614,4 | 888 | 6 |
| 37010HG0041A04 | 4 g 25 | 24,2 | 960 | 1296 | 4 |

DESINA® T 830 C

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 37020HG0041A19 | 4 g 0,75 | 7,5 | 51,4 | 87 | 19 |
| 37020HG0041A18 | 4 g 1 | 8 | 66,7 | 105 | 18 |
| 37020HG0041A16 | 4 g 1,5 | 8,7 | 85,8 | 130 | 16 |
| 37020HG0041A14 | 4 g 2,5 | 10,1 | 130,2 | 183 | 14 |
| 37020HG0041A12 | 4 g 4 | 11,8 | 198,7 | 265 | 12 |
| 37020HG0041A10 | 4 g 6 | 14,4 | 300,6 | 397 | 10 |
| 37020HG0041A08 | 4 g 10 | 17,3 | 474,4 | 601 | 8 |
| 37020HG0041A06 | 4 g 16 | 21,3 | 724,9 | 913 | 6 |
| 37020HG0041A04 | 4 g 25 | 25 | 1090,8 | 1320 | 4 |
| 37020HG0041A02 | 4 g 35 | 30,2 | 1504,9 | 1863 | 2 |
| 37020HG0041A01 | 4 g 50 | 35,9 | 2155,8 | 2650 | 1 |
| 37020HG0041A2C | 4 g 70 | 42,3 | 2970,8 | 3637 | 2/0 |



SPECIAL GAALFLEX® SERVO T 830

PVC motor connection cable

SPECIAL GAALFLEX® SERVO T 830 C

PVC motor connection cable with overall copper screen

ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830



ELETTROTEK KABEL® SPECIAL GAALFLEX® SERVO T 830 C



DESINA® SPECIAL T 830 C + 1 SCREENED PAIR

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 37025HG004BA19 | 4 g 0,75 + (2 x 0,5)C | 10 | 89,6 | 124,2 | 19 |
| 37025HG004BA16 | 4 g 1,5 + (2 x 0,5)C | 11,1 | 124,3 | 166,7 | 16 |
| 37025HG004BA14 | 4 g 2,5 + (2 x 0,5)C | 11,3 | 162,6 | 207 | 14 |
| 37026HG004BA16 | 4 g 1,5 + (2 x 0,75)C | 12,2 | 137,1 | 179,8 | 16 |
| 37026HG004BA14 | 4 g 2,5 + (2 x 0,75)C | 12,4 | 175,4 | 220,3 | 14 |
| 37027HG004BA16 | 4 g 1,5 + (2 x 1)C | 11,7 | 143,8 | 218,8 | 16 |
| 37027HG004BA14 | 4 g 2,5 + (2 x 1)C | 12,7 | 187,8 | 271,4 | 14 |
| 37027HG004BA12 | 4 g 4 + (2 x 1)C | 14,2 | 265,1 | 357,7 | 12 |
| 37027HG004BA10 | 4 g 6 + (2 x 1)C | 15,9 | 352 | 466,3 | 10 |
| 37027HG004BA08 | 4 g 10 + (2 x 1)C | 18,6 | 525,3 | 637,3 | 8 |
| 37027HG004BA06 | 4 g 16 + (2 x 1)C | 22,2 | 775,9 | 936,4 | 6 |
| 37028HG004BA16 | 4 g 1,5 + (2 x 1,5)C | 12,1 | 156,5 | 233,9 | 16 |
| 37028HG004BA14 | 4 g 2,5 + (2 x 1,5)C | 13,1 | 200,6 | 286,7 | 14 |
| 37028HG004BA12 | 4 g 4 + (2 x 1,5)C | 14,6 | 287,3 | 381,3 | 12 |
| 37028HG004BA10 | 4 g 6 + (2 x 1,5)C | 16,3 | 374,3 | 490,2 | 10 |
| 37028HG004BA08 | 4 g 10 + (2 x 1,5)C | 18,9 | 537,9 | 686,4 | 8 |
| 37028HG004BA06 | 4 g 16 + (2 x 1,5)C | 22 | 788,4 | 979,7 | 6 |
| 37028HG004BA04 | 4 g 25 + (2 x 1,5)C | 26,2 | 1154,5 | 1399,1 | 4 |
| 37028HG004BA02 | 4 g 35 + (2 x 1,5)C | 30,6 | 1568,3 | 1914 | 2 |

DESINA® SPECIAL T 830 C + 2 SCREENED PAIRS

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 37025HG004B900 | 4 g 0,75 + (2 x 0,5)C + (2 x 0,5)C | 11,2 | 122,1 | 196,7 | 19 |
| 37025HG004B901 | 4 g 1 + (2 x 0,75)C + (2 x 0,75)C | 12,1 | 152,5 | 233,6 | 18 |
| 37025HG004B902 | 4 g 1,5 + (2 x 0,75)C + (2 x 0,75)C | 12,7 | 177,1 | 264,8 | 16 |
| 37025HG004B903 | 4 g 2,5 + (2 x 1)C + (2 x 1)C | 14,4 | 248,4 | 349,9 | 14 |
| 37025HG004B904 | 4 g 4 + (2 x 1)C + (2 x 1,5)C | 16,3 | 338,5 | 460,5 | 12 |
| 37025HG004B905 | 4 g 6 + (2 x 1)C + (2 x 1,5)C | 17,9 | 425,1 | 571,6 | 10 |
| 37025HG004B906 | 4 g 10 + (2 x 1)C + (2 x 1,5)C | 20,4 | 589,2 | 771,9 | 8 |
| 37025HG004B907 | 4 g 16 + (2 x 1,5)C + (2 x 1,5)C | 23,5 | 852,1 | 1082,5 | 6 |
| 37025HG004B908 | 4 g 25 + (2 x 1,5)C + (2 x 1,5)C | 27,2 | 1217,6 | 1501,1 | 4 |

Other dimension and colours available on request.

GAALFLEX® SERVO T 839 C

paired PUR transmission cable with coloured cores and overall copper screen



ELETTROTEK KABEL® GAALFLEX® SERVO T 839 C



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE TINNED COPPER ACC. TO DIN VDE 0812 |
| INSULATION: | SPECIAL POLYMER COMPOUND |
| COLOUR CORES: | DIN 47100 AS FAR APPLICABLE |
| SCREEN: | PAIRS SCREENED INDIVIDUALLY WITH TINNED COPPER BRAID |
| INNER SHEATH: | SPECIAL POLYMER COMPOUND |
| STRANDING: | CORES TWISTED TOGETHER IN PAIRS AND IN LAYERS |
| WRAPPING: | NON WOVEN TAPE OR PETP FOILL |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREEN (RAL 6018), PUR TYPE TMPU ACC. TO DIN VDE 0282 PART 10 + HD 22.1, OR GREEN (RAL 6018), PUR TYPE PU ACC. TO UL 758 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2
UL CSA FT-1, FT-2



OIL RESISTANCE:
VERY GOOD - PUR TMPU ACC. TO DIN VDE 0282 PART.10+ HD 22.10



HALOGEN FREE ACC. TO:
DIN VDE 0472 PART 815 + IEC

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | MAX. 30 V UL: 30 V |
| TEST VOLTAGE: | 750 V |
| TEMPERATURE RANGE | DIN VDE: UL: UP TO + 80°C |
| FIXED LAYING: | - 50°C UP TO + 80°C |
| FLEXIBLE INSTALLATION: | - 40°C UP TO + 80°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ Cj/kg |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 5 x D |
| FLEXIBLE INSTALLATION: | 10 x D |
| CONTINUOUSLY FLEXIBLE: | 12 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Features:

- ULAWM STYLE 20236 80°C 30 V
- GOOD EMC CHARACTERISTICS
- FLEXIBLE INSTALLATION
- OIL RESISTANT
- VERY GOOD WEATHER RESISTANCE
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC.
OR OIL-RATING 60°C ACC. TO UL 758
- LONG SERVICE LIFE
- ADHESION-FREE INSTALLATION
- HALOGEN-FREE
- LABS UNCRITICA
- MAT SURFACE OUTER SHEATH
- DESINA® COLOURS
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



GAALFLEX® SERVO T 839 C

paired PUR transmission cable with coloured cores and overall copper screen



ELETTROTEK KABEL® GAALFLEX® SERVO T 839 C



SHEATH MATERIAL PU ACC. TO UL 758

| Part no. | Color code | No. of cores x cross section n x mm ² | Outer Ø ca. mm ±10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--------------------------|--|---------------------------|------------------------|----------------------------------|--------------|
| 37140AE4029901 | SPECIAL COLORED | 2 x 2 x 0,15 + 2 x 0,38 | 6,9 | 28,1 | 52 | -/- |
| 37140AE4029902 | DIN 47100 | 4 x 0,18 | 4,9 | 18,9 | 28 | - |
| 37140AE4022903 | DIN 47100 | 4 x 2 x 0,18 | 6,3 | 30,8 | 47 | - |
| 37140AE4029904 | SPECIAL COLORED | 4 x 2 x 0,25 + 2 x 1 | 8 | 61 | 96 | 24/18 |
| 37140AE4029905 | SPECIAL COLORED | 4 x 2 x 0,14 + 4 x 0,5 | 8 | 49,7 | 74 | 26/20 |
| 37140AE4039906 | SPECIAL COLORED | 3 x (2 x 0,25)D2Y + 4 x 0,5 | 9,7 | 81,9 | 122 | 24/20 |
| 37140AE4029907 | SPECIAL COLORED | 3 x 2 x 0,25 + 2 x 0,5 | 6,7 | 41,7 | 66 | 24/20 |
| 37140AE4029908 | SPECIAL COLORED | 4 x (2 x 0,25)D + 2 x 0,5 | 8,2 | 60,7 | 91 | 24/20 |
| 37140AE4029909 | SPECIAL COLORED | 6 x 2 x 0,34 + 1 x (2 x 0,34)C + 2 x 1 | 9,4 | 107,8 | 134 | 22/22/18 |
| 37140CE4042A24 | DIN 47100 | 4 x 2 x 0,25 | 7,2 | 38,7 | 64 | 24 |
| 37140AE4042A24 | DIN 47100 | 4 x (2 x 0,25)CY | 9,1 | 80,3 | 120 | 24 |
| 37140AE4042A22 | DIN 47100 | 4 x (2 x 0,34)C | 9,8 | 92,3 | 138 | 22 |
| 37140AE4082A22 | DIN 47100 | 8 x (2 x 0,34)C | 16,2 | 188 | 282 | 22 |
| 37140AE4029913 | SPECIAL COLORED | 5 x (2 x 0,14)D + 2 x 0,5 | 8 | 49 | 73 | 26/20 |
| 37140AE4029914 | ACC. TO SIEMENS STANDARD | 3 x (2 x 0,14)D2Y + 4 x 0,14 + 4 x 0,22 + 2 x 0,5 | 9,5 | 80,4 | 130 | 26/26/-/20 |
| 37140AE4029915 | SPECIAL COLORED | 3 x (2 x 0,34)D12Y + 16 x 0,34 | 11,6 | 117,1 | 175 | 22/22 |
| 37140AE4029916 | DIN 47100 | 4 x (2 x 0,5)C | 9,9 | 123 | 184 | 20 |
| 37140AE4039917 | SPECIAL COLORED | 3 x (2 x 0,14)D2Y + 2 x 0,5 | 8,6 | 57,7 | 86 | 26/20 |
| 37140CE405B927 | DIN 47100 | 5X0,5+2X0,18 | 7,5 | 49 | 95 | 20/25 |

SHEATH MATERIAL TPU ACC. TO DIN VDE 0282

| Part no. | Color code | No. of cores x cross section n x mm ² | Outer Ø ca. mm ±10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--------------------------|--|---------------------------|------------------------|----------------------------------|--------------|
| 37140AE4039919 | SPECIAL COLORED | 3 x (2 x 0,14)D + 2 x (0,5)D | 9 | 71,4 | 96 | 26/20 |
| 37140AE4029920 | ACC. TO SIEMENS STANDARD | 3 x (2 x 0,14)D + 4 x 0,14 + 2 x 0,5 | 8,9 | 61 | 97 | 26/26/20 |
| 37140AE4029921 | SPECIAL COLORED | 3 x (2 x 0,14)D + 4 x 0,14 + 4 x 0,22 + 2 x 0,5 | 9,5 | 79 | 111 | 26/26/-/20 |
| 37140AE4049922 | SPECIAL COLORED | 4 x 2 x 0,38 + 4 x 0,5 | 8,9 | 76,3 | 106 | -/20 |
| 37140AE4082923 | DIN 47100 | 8 x 2 x 0,18 | 7,8 | 48 | 74 | - |
| 37140AE4029924 | DIN 47100 | 12 x 0,22 | 6,9 | 42,5 | 63 | - |
| 37140AE4029925 | ACC. TO SIEMENS STANDARD | 4 x (2 x 0,25)C12Y + (2 x 1)C12Y | 13,2 | - | - | 24/18 |
| 37140AE4029926 | SPECIAL COLORED | 3X(2X0,25)C+2X0,5 | 8,8 | - | - | 24/20 |
| 37140AE8039910 | US4 | 3 x (2 x 0,14)D2Y + 2 x 0,5 | 8,6 | 57,5 | 89 | 26/20 |

Other dimension and colours available on request.

FLEXIDRUM® T 310

TPE/PUR motor connection cable 0,6/1 kV, UL/CSA 1000 V



ELETTROTEK KABEL® FLEXIDRUM® T 310
UL Style 21223 80°C 1000 V
CSA AWM I/II A/B 80°C 1000 V FTI C



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6 ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW FROM 3 CORES |
| STRANDING: | IN LAYERS + FILLERS |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | ORANGE (RAL 2003), SPECIAL PUR COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2



OIL RESISTANCE:
VERY GOOD TMPU ACC. TO DIN VDE 0282 PART 10
+ HD 22.10, ACC. TO DIN VDE 0473 PART 811-2-1,
EN 60811-2-1
EC 60811-2-1



HALOGEN FREE ACC. TO:
ACC. TO DIN VDE 0482, PART 267
EN 50267-2-1 /
IEC 60754-1
(EQUIVALENT DIN VDE 0472 PART 815)

Technical data:

| | | |
|--------------------------------------|----------------------------|----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV | UL/CSA: 1000 V |
| TEST VOLTAGE: | 4 kV | |
| TEMPERATURE RANGE | DIN VDE | UL/CSA: UP TO +80°C |
| FIXED LAYING: | - 50°C UP TO + 90°C | |
| FLEXIBLE INSTALLATION: | - 40°C UP TO + 90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/KG | |
| MIN. BENDING RADIUS | | |
| FIXED LAYING: | 4 x D | |
| FLEXIBLE INSTALLATION: | 6 x D | |
| CONTINUOUSLY FLEXIBLE: | 10 x D | |
| MAX SPEED (MAIN APPLICATION): | 250 m/min | |

Features:

- AWM STYLE 21223 80°C 1000 V
CSA AWM I/II A/B 80°C 1000 V FTI CE
- VERY HIGH FLEXIBLE
- SUITABLE FOR CABLE TRACKS
- OIL RESISTANT
- VERY LONG SERVICE LIFE
- ADHESION-FREE INSTALLATION
- HALOGEN-FREE
- LABS UNCRITICAL
- FLEXIBLE AT LOW TEMPERATURES
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS,
HYDRAULIC LIQUIDS ETC.
- VERY GOOD WEATHER RESISTANT
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. (*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|----------------|
| 04150HG0041A16 | 4 g 1,5 | 7,7 | 57,6 | 100 | 16 |
| 04150HG0041A14 | 4 g 2,5 | 9,3 | 96 | 149 | 14 |
| 04150HG0041A12 | 4 g 4 | 10,8 | 153,6 | 230 | 12 |
| 04150HG0041A10 | 4 g 6 | 12,9 | 230,4 | 334 | 10 |
| 04150HG0041A08 | 4 g 10 | 15,5 | 384 | 520 | 8 |
| 04150HG0041A06 | 4 g 16 | 18,8 | 614,4 | 806 | 6 |
| 04150HG0041A04 | 4 g 25 | 23,7 | 960 | 1245 | 4 |
| 04150HG0041A02 | 4 g 35 | 26,6 | 1344 | 1688 | 2 |
| 04150HG0041A01 | 4 g 50 | 31,8 | 1920 | 2381 | 1 |

Other dimension and colours available on request.

GAALFLEX® SERVO T 834 C

TPE/PUR with overall copper screen, acc. to SIEMENS standard 6FX8008



ELETTROTEK KABEL® GAALFLEX® SERVO T 834 C



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6 ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | SPECIAL TPE COMPOUND |
| COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW FROM 3 CORES 0,34 mm ² : ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS + FILLERS |
| WRAPPING: | NON-WOVEN TAPE |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | ORANGE (RAL 2003), PUR COMPOUND, ACC. TO UL 758 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2
UL CSA FT-1, FT-2



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1,
IEC 60811-2-1



HALOGEN FREE ACC. TO:
IEC 60754-1
(EQUIVALENT DIN VDE 0472 PART 815)

Technical data:

| | | |
|--------------------------------------|------------------------------|----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 KV | UL/CSA: 1000 V |
| TEST VOLTAGE: | 4 kV x 5 MIN 4 kV x 1 MIN | |
| TEMPERATURE RANGE | DIN VDE | UL/CSA: UP TO +80°C |
| FIXED LAYING: | - 50°C UP TO + 90°C | |
| FLEXIBLE INSTALLATION: | - 40°C UP TO + 90°C | |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/kg | |
| MIN. BENDING RADIUS | | |
| FIXED LAYING: | 5 x D | |
| FLEXIBLE INSTALLATION: | 7 x D | |
| CONTINUOUSLY FLEXIBLE: | 7 x D | |
| MAX SPEED (MAIN APPLICATION): | 300 m/min | |

Features:

- UL AWM STYLE 21223 80°C, 1000V
- CSA AWM I/II A/B 80°C 1000 V FT1 FT2
- VERY HIGH FLEXIBILITY
- OIL RESISTANT
- VERY LONG SERVICE LIFE
- ADHESION-FREE INSTALLATION
- LABS UNCRITICAL
- FLEXIBLE AT LOW TEMPERATURE
- DESINA® COLOURS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



SIEMENS

| Part no. | acc.to SIEMENS Standard | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ±10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|-------------------------------|--|---------------------------|---------------------------|----------------------------------|---------------|
| 37080HG0041A16 | 6FX8008-1BB11 | 4 g 1,5 | 9,1 | 83,5 | 126 | 16 |
| 37080HG0041A14 | 6FX8008-1BB21 | 4 g 2,5 | 11 | 142,5 | 192 | 14 |
| 37080HG0041A12 | 6FX8008-1BB31 | 4 g 4 | 12,5 | 206,7 | 273 | 12 |
| 37080HG0041A10 | 6FX8008-1BB41 | 4 g 6 | 15,5 | 298,3 | 399 | 10 |
| 37080HG0041A08 | 6FX8008-1BB51 | 4 g 10 | 17,8 | 495,2 | 605 | 8 |
| 37080HG0041A06 | 6FX8008-1BB61 | 4 g 16 | 22,8 | 750 | 951 | 6 |
| 37080HG0041A04 | 6FX8008-1BB25 | 4 g 25 | 25,7 | 1120 | 1331 | 4 |
| 37080HG0041A02 | 6FX8008-1BB35 | 4 g 35 | 29,2 | 1534 | 1732 | 2 |
| 37080HG0041A01 | 6FX8008-1BB50 | 4 g 50 | 34,3 | 2144 | 2428 | 1 |
| 37080HG0041A2C | 6FX8008-1BB70 | 4 g 70 | 39,9 | 3029 | 3803 | 2/0 |

Other dimension and colours available on request.

GAALFLEX® SERVO T 844 C

paired TPE/PUR with overall copper screen acc.to SIEMENS standard 6FX8008



Construction:

| | |
|-----------------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 > 0,5 mm ² ACC. TO DIN VDE 0812 |
| INSULATION: | SPECIAL TPE COMPOUND |
| POWER COLOUR CORES: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 GREEN-YELLOW FROM 3 CORES 0,34 mm² : ACC. TO DIN 47100 |
| SIGNAL COLOUR CORES: | |
| PAIRS: | BLACK AND WHITE |
| MULTI PAIRS: | BLACK AND WHITE NUMERED |
| QUADS: | BLACK, WHITE, RED, YELLOW |
| STRANDING: | SUPPLY CORES AND CONTROL CORES TOGETHER IN LAYERS + FILLERS |
| SCREEN: | TINNED COPPER BRAID |
| WRAPPING: | PLASTIC TAPE |
| OUTER SHEATH: | ORANGE (RAL 2003), PUR COMPOUND, ACC. TO UL 758 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2
UL CSA FT-1, FT-2



OIL RESISTANCE:
VERY GOOD, ACC. TO INTERNAL STANDARD, IEC 60811-2-1



HALOGEN FREE ACC. TO:
IEC 60754-1
(EQUIVALENT DIN VDE 0472 PART 815)

Technical data:

| | |
|--------------------------------------|--|
| NOMINAL VOLTAGE: | DIN VDE: SUPPLY CORES U ₀ /U 0,6/1 KV UL/CSA: SUPPLY CORES 1000 V DIN VDE: CONTROL CORES 350 V UL/CSA: CONTROL CORES 300 V |
| TEST VOLTAGE: | SUPPLY CORES: 4 kV CORE SCREEN: 1,5 kV |
| TEMPERATURE RANGE | DIN VDE UL/CSA: UP TO +80°C |
| FIXED LAYING: | - 50°C UP TO + 90°C |
| FLEXIBLE INSTALLATION: | - 40°C UP TO + 90°C |
| RADIATION RESISTANCE: | 5 x 10 ⁷ CJ/kg |
| MIN. BENDING RADIUS | |
| FIXED LAYING: | 5 x D |
| FLEXIBLE INSTALLATION: | 7 x D |
| CONTINUOUSLY FLEXIBLE: | 7 x D |
| MAX SPEED (MAIN APPLICATION): | 300 m/min |

Features:

- UL AWM STYLE 21223 80°C, 1000V
CSA AWM I/II A/B 80°C 300 V FT1 FT2
- VERY GOOD EMC CHARACTERISTICS
- LONG LIFE SERVICE
- ADHESION-FREE INSTALLATION
- HIGH FLEXIBILITY
- GOOD AGAINST ACIDS, ALKALINES, SOLVENTS,
HYDRAULIC LIQUIDS ETC.
- VERY GOOD WEATHER RESISTANCE
- HALOGEN-FREE
- LABS UNCRITICAL
- FLEXIBLE AT LOW TEMPERATURES
- DESINA® COLOURS
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



GAALFLEX® SERVO T 844 C

paired TPE/PUR with overall copper screen acc.to SIEMENS standard 6FX8008



DESINA® INDRAMAT

| Part no. | acc. to INDRAMAT Standard | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.)* |
|----------------|---------------------------|--|---------------------|---------------------|----------------------------|-----------|
| 37100HG004B926 | - | 4 x 0,75+(2 x 0,5)STC | 8,7 | 75,2 | - | 19/20 |
| 37100HG004B909 | INK-0653 | 4 g 1 + 2 x (2 x 0,75)STC | 11,8 | 148 | 260 | 18/19 |
| 37100HG004B910 | INK-0650 | 4 g 1,5 + 2 x (2 x 0,75)STC | 12,5 | 170 | 300 | 16/19 |
| 37100HG004B911 | - | 4 g 2,5 + 2 x (2 x 0,75)STC | - | - | - | 14/19 |
| 37100HG004B912 | INK-0602 | 4 g 2,5 + 2 x (2 x 1)STC | 15 | 229 | 350 | 14/18 |
| 37100HG004B913 | - | 4 g 4 + 2 x (2 x 1)STC | 16,5 | 312 | 480 | 12/18 |
| 37100HG004B914 | INK-0603 | 4 g 4 + (2 x 1,5) STC + (2 x 1)STC | 16,3 | 318 | 500 | 12/18 |
| 37100HG004B915 | - | 4 g 4 + 2 x (2 x 1,5)STC | 17 | 324 | 505 | 12/16 |
| 37100HG004B916 | - | 4 g 6 + 2 x (2 x 1)STC | 18,5 | 437 | 615 | 10/18 |
| 37100HG004B917 | INK-0604 | 4 g 6 + (2 x 1,5)STC + (2 x 1)STC | 19 | 445 | 630 | 10/16/18 |
| 37100HG004B918 | - | 4 g 6 + 2 x (2 x 1,5)STC | 19,3 | 450 | 640 | 10/16 |
| 37100HG004B919 | - | 4 g 10 + 2 x (2 x 1)STC | 21,8 | 609 | 920 | 8/18 |
| 37100HG004B920 | INK-0605 | 4 g 10 + (2 x 1,5)STC + (2 x 1)STC | 22,7 | 610 | 930 | 8/16/18 |
| 37100HG004B921 | - | 4 x 10 + 2 x (2 x 1,5)STC | 22,7 | 625 | 940 | 8/16 |
| 37100HG004B922 | INK-0606 | 4 x 16 + 2 x (2 x 1,5)STC | 27,2 | 904 | 1240 | 6/16 |
| 37100HG004B923 | INK-0607 | 4 x 25 + 2 x (2 x 1,5)STC | 28,3 | 1323 | 1610 | 4/16 |
| 37100HG004B924 | INK-0667 | 4 x 35 + 2 x (2 x 1,5)STC | 32,8 | 1621 | 2220 | 2/16 |

DESINA® SIEMENS

| Part no. | acc. to SIEMENS Standard | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.)* |
|----------------|--------------------------|--|---------------------|---------------------|----------------------------|-----------|
| 37100HG004B900 | 6FX8008-1BA11 | 4 g 1,5 + (2 x 1,5)C | 12 | 153 | 230 | 16/16 |
| 37100HG004B901 | 6FX8008-1BA21 | 4 g 2,5 + (2 x 1,5)C | 13,5 | 193 | 285 | 14/16 |
| 37100HG004B902 | 6FX8008-1BA31 | 4 g 4 + (2 x 1,5)C | 15 | 260 | 370 | 12/16 |
| 37100HG004B903 | 6FX8008-1BA41 | 4 g 6 + (2 x 1,5)C | 17 | 355 | 480 | 10/16 |
| 37100HG004B904 | 6FX8008-1BA51 | 4 g 10 + (2 x 1,5)C | 19,5 | 525 | 680 | 8/16 |
| 37100HG004B905 | 6FX8008-1BA61 | 4 g 16 + (2 x 1,5)C | 22,5 | 800 | 1030 | 6/16 |
| 37100HG004B906 | 6FX8008-1BA25 | 4 g 25 + (2 x 1,5)C | 26 | 1180 | 1400 | 4/16 |
| 37100HG004B907 | 6FX8008-1BA35 | 4 g 35 + (2 x 1,5)C | 30 | 1585 | 1905 | 2/16 |
| 37100HG004B908 | 6FX8008-1BA50 | 4 x 50 + (2 x 1,5) C | 34 | 2173 | 2525 | 1/16 |

Other dimension and colours available on request.



PROFIBUS 637 UL approval



ELETTROTEK KABEL® PROFIBUS 637

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | SOLID (39141) OR STRANDED (39140) RED COPPER CONDUCTOR 7X0,25 mm -22/7 AWG |
| INSULATION: | SPECIAL PE COMPOUND ACC. TO DIN VDE 0819 PART 103 |
| COLOUR CORES: | RED, GREEN |
| STRANDING: | IN LAYERS |
| SCREEN: | ALUMINIUM TAPE AND TINNED COPPER BRAID |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), PVC OIL RESISTANT COMPOUND, ACC. TO DIN VDE 0281 PART 1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0281 PART 1
DIN VDE 0473 PART.811-2-1
DIN VDE 0207 PART. 5



UV RESISTANCE ACC. TO:
UL1581 §1200 STD.

Technical data:

| | |
|---|--|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| UL VOLTAGE: | (PROFIBUS 637): 300 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | (PROFIBUS 637): UL: UP TO +80°C |
| FIXED LAYING: | -30°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -5°C UP TO +80°C |
| MIN. BENDING RADIUS: | 12 x D |
| CHARACTERISTIC IMPEDANCE 3-20 MHz: | 150 Ω ± 10% |

Features:

UL STYLE: AWM STYLE 2571 80°C 300V

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39140CVB020A22 | 2 x 0,34 | 7,3 | 23,8 | 53 | 22 |
| 39141CVB020A22 | 2 x 0,34 | 7,3 | 23,8 | 53 | 22 |

Other dimension and colours available on request.

SPECIAL PROFIBUS 634 UL, UL approval, for cable tracks



ELETTROTEK KABEL® SPECIAL PROFIBUS 634 UL

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | 0,34 mm²: FLEXIBLE RED COPPER CONDUCTOR, 19X0,16 mm - 22/19 AWG ACC. TO DIN VDE 0812 0,75 mm²: FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 42X0,15 mm - AWG 19/42 |
| INSULATION: | 0,34 mm²: SPECIAL PE COMPOUND 0,75 mm²: SPECIAL PP COMPOUND |
| COLOUR CORES: | 0,34 mm²: RED, GREEN 0,75 mm²: BROWN, LIGHT BLUE AND GREEN-YELLOW |
| STRANDING: | 0,34 mm²: IN PAIR + PE FILLERS 0,75 mm²: IN LAYERS + FILLERS |
| SCREEN: | 0,34 mm²: ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID |
| WRAPPING: | 0,34 mm²: NON-WOVEN TAPE 0,75 mm²: NON-WOVEN TAPE |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), PUR COMPOUND |

Technical data:

| | |
|--------------------------------------|-------------------|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| VOLTAGE UL: | 300 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | -40°C UP TO +80°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 10 x D |
| FLEXIBLE INSTALLATION: | 15 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
UL 1581 1061,
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE ACC. TO:
IEC 60811-2-1
ICEA 5-82-552 AND ASTM OIL 1



HALOGEN-FREE ACC. TO:
IEC 60754-1
EN 50267-2-1



CORROSIVENESS OF CONFLAGRATION GASES ACC. TO:
IEC 60754-2 AND EN 50267-2-2 + VDE 0482 PART 267-2-2
NO DEVELOPMENT OF CORROSIVE CONFLAGRATION GASES



UV RESISTANCE ACC. TO:
UL1581 §1200 STD.

Features:

AWM STYLE 10493 - 20233 80°C 300 V

PROFIBUS DP TYPE A

FOR SPEED AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



Electrical and Transmission proprieties at 20°C PROFIBUS UL

Profinet bus

| | |
|---|-----------------|
| MAX. DC COND. RESISTANCE | 59,4 Ω x km |
| MAX. CAPACITANCE AT 800 Hz | 30 nF/km |
| IMPEDANCE AT 800 1-20 MHz | 150 Ω (± 10%) |
| MAX. ATTENUATION AT 9,6 KHz | 4,2 dB/km |
| MAX. ATTENUATION AT 38,4 KHz | 5,2 dB/km |
| MAX. ATTENUATION AT 4 MHz | 2,3 dB/km |
| MAX. ATTENUATION AT 16 MHz | 44,0 dB/km |
| DIELECTRIC STRENGTH (COND/COND/ SHIELD) | 1,5 kVAC/1 min. |
| MIN. INSULATION RESISTANCE | 5,0 Ω x km |
| TRANSFER IMPEDANCE AT 10 MHz | 20 MΩ/m |

Power conductors

| | |
|---------------------------------|------------------|
| MAX. DC COND. RESISTANCE | 26,0 Ω x km |
| DIELECTRIC STRENGTH (COND/COND) | 2,5 kVAC/10 min. |
| MIN. INSULATION RESISTANCE | 5,0 Ω x km |

SPECIAL PROFIBUS 634 UL, UL approval, for cable tracks



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39180CVB020M03 | 2 x 0,34 | 8 | 30,9 | 74 | 22 |
| 39180CV403BM07 | 2 x 0,34+3 x 0,75 | 10,4 | 45 | 90 | 22/19 |

Other dimension and colours available on request.



CAN-BUS 627

UL approval

ELETTROTEK KABEL® CAN-BUS 627 UL

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | STRANDED RED COPPER CONDUCTOR, 7 x 0,25 mm - 22/7 AWG |
| INSULATION: | SPECIAL PE COMPOUND, ACC. TO DIN VDE 0207 PART 2 |
| COLOUR CORES: | ACC. TO DIN 47100 |
| WRAPPING: | PETP FOIL |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), PVC OIL RESISTANT COMPOUND, ACC. TO DIN VDE 0281 PART 1 |

Technical data:

| | |
|----------------------------------|---------------------------|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| VOLTAGE: | UL: 300 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | UL: UP TO +80°C |
| FIXED LAYING: | -30°C UP TO +70°C |
| FLEXIBLE INSTALLATION: | -5°C UP TO +70°C |
| MIN. BENDING RADIUS: | 7,5 x D |
| CHARACTERISTIC IMPEDANCE: | 120 Ω (95 - 140 Ω) |
| RADIATION RESISTANCE: | 8 x 10 ⁶ CJ/KG |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE:
VERY GOOD ACC. TO DIN VDE 0207 PART 5

Features:

UL STYLE: AWM STYLE 2571 80°C 300V CE

ROHS AND CE APPROVAL

GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC.



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39050CV4020A24 | 2 x 0,25 | 6 | 19 | 44 | 24 |
| 39050CV4020A22 | 2 x 0,34 | 6,4 | 21,8 | 47 | 22 |
| 39050CV4020A20 | 2 x 0,5 | 7,6 | 28,4 | 63 | 20 |
| 39050CV4020A19 | 2 x 0,75 | 9,6 | 39,6 | 93 | 19 |
| 39050CV4022A24 | 2 x 2 x 0,25 | 7,1 | 27,4 | 57 | 24 |
| 39050CV4022A22 | 2 x 2 x 0,34 | 7,7 | 33,5 | 66 | 22 |
| 39050CV4022A20 | 2 x 2 x 0,5 | 9,5 | 44,3 | 98 | 20 |
| 39050CV4022A19 | 2 x 2 x 0,75 | 13,5 | 80,8 | 174 | 19 |

Other dimension and colours available on request.

S CAN-BUS 628

UL approval, halogen-free for cable tracks



ELETTROTEK KABEL® S CAN-BUS 628

Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR EXTRA FINE WIRES |
| INSULATION: | SPECIAL PE COMPOUND, ACC. TO DIN VDE 0207 PART 2 |
| COLOUR CORES: | ACC. TO DIN 47100 |
| STRANDING: | IN LAYERS |
| WRAPPING: | NON-WOVEN TAPEL |
| Inner sheath: | HALOGEN-FREE COMPOUND |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), PUR TYPE TMPU, ACC. TO DIN VDE 0281 PART 10, (ROUGH SURFACE) |

Technical data:

| | |
|--------------------------------------|---------------------------|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| VOLTAGE: | UL: 300 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | UL: UP TO +80°C |
| FIXED LAYING: | - 50°C UP TO + 70°C |
| FLEXIBLE INSTALLATION: | - 40°C UP TO + 70°C |
| MIN. BENDING RADIUS: | 7,5 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |
| CHARACTERISTIC IMPEDANCE: | 120 Ω (95 - 140 Ω) |
| RADIATION RESISTANCE: | 5 x 10 ⁶ CJ/KG |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



HALOGEN FREE ACC. TO:
DIN VDE 0472 PART 815+IEC 60754-1



CORROSIVENESS OF CONFLAGRATION GASES ACC. TO:
IEC 60754-2 AND EN 50267-2-2 + VDE 0482 PART 267-2-2



OIL RESISTANCE ACC. TO:
DIN VDE 0282 PART 10 + HD 22.10

Features:

AWM STYLE 20233 80°C 300 V

FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------|
| 39060CV4020A24 | 2 x 0,25 | 7,9 | 20,2 | 71 | 24 |
| 39060CV4020A22 | 2 x 0,34 | 8,3 | 22,9 | 77 | 22 |
| 39060CV4020A20 | 2 x 0,50 | 8,7 | 29,0 | 74 | 20 |
| 39060CV4022A24 | 2 x 2 x 0,25 | 9,1 | 27,9 | 90 | 24 |
| 39060CV4022A22 | 2 x 2 x 0,34 | 9,6 | 32,7 | 97 | 22 |
| 39060CV4022A20 | 2 x 2 x 0,5 | 10,6 | 44,9 | 94 | 20 |

Other dimension and colours available on request.

ASI CABLES

EPDM, PUR, TPE



ELETTROTEK KABEL* ASI CABLES

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE TINNED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | EPDM TYPE: RUBBER COMPOUND PUR TYPE: PUR TYPE PO (UL) TPE TYPE: TPE COMPOUND (UL) |
| COLOUR CORES: | ACC. TO DIN VDE 0293-308, HD 308 S2 |
| STRANDING: | IN LAYERS |
| OUTER SHEATH: | YELLOW (RAL 1021) OR BLACK (RAL 9005) EPDM TYPE: RUBBER TYPE EPDM PUR TYPE: PUR COMPOUND (UL) TPE TYPE: TPE COMPOUND (UL) |

Features:

AWM STYLE 20549, UL 758, UL 1581 FT2 CSA FT2 (PUR TYPES)
ROHS AND CE APPROVAL

AWM STYLE 21439, UL 758, UL 1581 FT2 CSA FT2 (TPE TYPES)
ROHS AND CE APPROVAL (TPE)



Technical data:

| | |
|-------------------------------|---|
| NOMINAL VOLTAGE: | YELLOW: 32 V BLACK: 48 V |
| TEST VOLTAGE: | 1 kV EPDM, PUR TYPES (UL) 1,5 kV TPE TYPE (UL) |
| TEMPERATURE RANGE | EPDM TYPE: -40°C UP TO +85°C PUR TYPE: -40°C UP TO +85°C (UL) TPE TYPE: -40°C UP TO +105°C (UL) |
| CONDUCTOR RESISTANCE: | 13,7 Ω/km MAX. |
| INSULATION RESISTANCE: | 1 GΩ/km MIN. |
| MIN. BENDING RADIUS: | EPDM AND PUR TYPES: 30 MM TPE TYPE: 24 MM |

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.)* |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 39420AYX020A16 | 2 x 1,5 | - | 31 | 70 | 16 |
| 39420A7X020A16 | 2 x 1,5 | - | 31 | 70 | 16 |
| 39421AYX020A16 | 2 x 1,5 | - | 31 | 64 | 16 |
| 39421A7X020A16 | 2 x 1,5 | - | 31 | 64 | 16 |
| 39422AYX020A16 | 2 x 1,5 | - | 31 | 70 | 16 |
| 39422A7X020A16 | 2 x 1,5 | - | 31 | 70 | 16 |

the 5th digit of part number refers to the different material.

0: EPDM
1: PUR
2: TPE

Other dimension and colours available on request.



DEVICENET™ 650 UL approval
DEVICENET™ 651 UL approval

ELETTROTEK KABEL® DEVICENET 650



Construction:

CONDUCTOR: FLEXIBLE TINNED COPPER CONDUCTOR
INSULATION: **1ST PAIR:** SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103
2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1
COLOUR CORES: **SUPPLY PAIR:** BLACK AND RED
DATA PAIR: WHITE AND LIGHT BLUE
STRANDING: CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
SCREEN: PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE TINNED COPPER DRAIN WIRE
WRAPPING: NON-WOVEN TAPE
SCREEN: **(DEVICENET 650):** TINNED COPPER BRAID
(DEVICENET 651): ALUMINIUM TAPE
OUTER SHEATH: VIOLET (RAL 4001 OR 4005), PVC TYPE TM1 ACC. TO DIN VDE 0281 PART 1

Technical data:

PEAK OPERATING VOLTAGE: MAX. 350 V
UL VOLTAGE: 30 V
TEST VOLTAGE: 1,5 kV
TEMPERATURE RANGE **DIN/VDE** **UL:**
FIXED LAYING: -30 UP TO +70°C UP TO +60 °C
FLEXIBLE INSTALLATION: -5 UP TO +70°C
MIN. BENDING RADIUS:
FIXED LAYING: 7,5 x D
FLEXIBLE INSTALLATION: 15 x D
CHARACTERISTIC IMPEDANCE AT 1 MHz: 120 Ω ± 10%

Features:

AWM STYLE 2560 60°C 30 V CE

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39350AVX02BA24 | 2 x 0,24 + 2 x 0,38 | 6,5 | 41,2 | 74 | 24/22 |
| 39350AVX02BA18 | 2 x 0,96 + 2 x 1,53 | 11,5 | 98,7 | 166 | 18/16 |
| 39360AVX02BA24 | 2 x 0,24 + 2 x 0,38 | 6,5 | 16,4 | 57 | 24/22 |
| 39360AVX02BA18 | 2 x 0,96 + 2 x 1,53 | 11,5 | 58,4 | 116 | 18/16 |

Other dimension and colours available on request.

DEVICENET™ 656 halogen-free UL approval
DEVICENET™ 657 halogen-free



ELETTROTEK KABEL® DEVICENET 656



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE TINNED COPPER CONDUCTOR |
| INSULATION: | 1ST PAIR: SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103 2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1 |
| COLOUR CORES: | SUPPLY PAIR: BLACK AND RED DATA PAIR: WHITE AND LIGHT BLUE |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER |
| SCREEN: | PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE TINNED COPPER DRAIN WIRE |
| WRAPPING: | NON-WOVEN TAPE |
| SCREEN: | (DEVICENET 657): TINNED COPPER BRAID (DEVICENET 656): ALUMINIUM TAPE |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), HALOGEN FREE COMPOUND |

Technical data:

| | |
|---|---|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| UL VOLTAGE: | (DEVICENET 656): 300 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | (DEVICENET 656) UL: UP TO + 75°C |
| FIXED LAYING: | - 40 UP TO +70°C |
| FLEXIBLE INSTALLATION: | - 30 UP TO +70°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 7,5 x D |
| FLEXIBLE INSTALLATION: | 15 x D |
| CHARACTERISTIC IMPEDANCE AT 1 MHz: | 120 Ω ± 10% |

Features:

AWM STYLE 21080 75°C 300 V **(DEVICENET 656)**

ACC. TO DIN VDE 0472 PART 815+IEC60754-1

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|----------------------------|---------------------------|----------------------------------|--------------|
| 39370CVX02BA24 | 2 x 0,24 + 2 x 0,38 | 6,5 | 16,4 | 56 | 24/22 |
| 39370CVX02BA18 | 2 x 0,96 + 2 x 1,53 | 11,5 | 58,4 | 120 | 18/16 |
| 39380CVX02BA24 | 2 x 0,24 + 2 x 0,38 | 6,5 | 41,2 | 74 | 24/22 |
| 39380CVX02BA18 | 2 x 0,96 + 2 x 1,53 | 11,5 | 98,7 | 183 | 18/16 |

Other dimension and colours available on request.



DEVICENET™ 658 UL approval

DEVICENET™ 659 UL approval

ELETTROTEK KABEL® DEVICENET 658



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE TINNED COPPER CONDUCTOR |
| INSULATION: | 1ST PAIR: SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103 2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1 |
| COLOUR CORES: | SUPPLY PAIR: BLACK AND RED DATA PAIR: WHITE AND LIGHT BLUE |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER |
| SCREEN: | PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE + TINNED COPPER DRAIN WIRE |
| WRAPPING: | NON-WOVEN TAPE (OPTIONAL) |
| SCREEN: | (DEVICENET 658): TINNED COPPER BRAID (DEVICENET 659): ALUMINIUM TAPE |
| OUTER SHEATH: | VIOLET (RAL 4001 OR 4005), PUR TYPE TMPU, ACC. TO DIN VDE 0281 PART. 10 |

Technical data:

| | |
|---|-------------------------|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| UL VOLTAGE: | 30 V |
| TEST VOLTAGE: | 1,5 kV |
| TEMPERATURE RANGE | UL: UP TO + 60°C |
| FIXED LAYING: | -30 UP TO +70°C |
| FLEXIBLE INSTALLATION: | -5 UP TO +70°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 7,5 x D |
| FLEXIBLE INSTALLATION: | 15 x D |
| CHARACTERISTIC IMPEDANCE AT 1 MHz: | 120 Ω ± 10% |

Features:

AWM STYLE 20417 60°C 30V

POSSIBLE VERSION WITH AWM STYLE 21576 80°C 1000V IDENTIFIED WITH "H" ON THE 6TH NUMBER OF THE PART. N

ROHS AND CE APPROVAL



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------|---------------------|----------------------------|------------|
| 39390CVX02BA22 | 2 x 0,24 + 2 x 0,38 | 6,5 | 41,2 | 74 | 24/22 |
| 39390CVX02BA16 | 2 x 0,96 + 2 x 1,53 | 11,5 | 98,7 | 166 | 18/16 |
| 39400CVX02BA22 | 2 x 0,24 + 2 x 0,38 | 6,5 | 16,4 | 57 | 24/22 |
| 39400CVX02BA16 | 2 x 0,96 + 2 x 1,53 | 11,5 | 58,4 | 115 | 18/16 |

Other dimension and colours available on request.



PROFINET 654 fixed installation, type A
PROFINET 655 fixed installation, type A, UL approval

ELETTROTEK KABEL® PROFIBUS 654



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | SOLID BARE COPPER CONDUCTOR |
| INSULATION: | PE COMPOUND |
| COLOUR CORES: | BLUE, YELLOW, WHITE, ORANGE |
| STRANDING: | |
| - PROFINET 654: | IN LAYERS |
| - PROFINET 655: | IN LAYERS + CENTRAL FILLER |
| WRAPPING: | PET FOIL |
| SCREEN: | |
| - PROFINET 654: | TINNED COPPER BRAID |
| - PROFINET 655: | ALUMINIUM TAPE + PET FOIL AND TINNED COPPER BRAID |
| OUTER SHEATH: | GREEN (SIMILAR RAL 6018) PVC COMPOUND |

Resistance:



FLAME RETARDANT ACC. TO (PROFINET 655):
UL 1581 & 1060 (FT1)
UL 1061
IEC 60332-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART.811-2-1 IEC 60811-2-1



OZONE RESISTANCE ACC. TO (PROFINET 655):
EN 50396

Technical data:

| | | |
|---|---|---------------------|
| PEAK OPERATING VOLTAGE: | MAX. 350 V | |
| UL VOLTAGE: | 300 V (PROFINET 655) | |
| TEST VOLTAGE: | | |
| - PROFINET 654: | CORE/CORE 1,5 kV CORE/SCREEN 1,2 kV | |
| - PROFINET 655: | 2 kV | |
| TEMPERATURE RANGE | PROFINET 654 | PROFINET 655 |
| FIXED LAYING: | -30 UP TO +70°C | -30°C UP TO +80°C |
| FLEXIBLE APPLICATION: | -5 UP TO +70°C | / |
| MIN. BENDING RADIUS: | | |
| - PROFINET 654: | 5 x D | |
| - PROFINET 655: | 8 x D | |
| CHARACTERISTIC IMPEDANCE: | 100Ω ± 5Ω, ACC. TO EN 50288-2-2 (CAT 5E ACC. TO EN 50173-1) | |
| OHMIC RESISTANCE AT 20°C MAX.Ω/km: | | |
| - PROFINET 654: | 58 ACC. TO VDE 0812 | |
| - PROFINET 655: | 56,4 | |

Features:

- AWM STYLE 10578-2571 80°C 300V (PROFINET 655)
- ACC. TO STANDARD IEC 61156-5 AND EN 50228-2-1 (PROFINET 655)
- ROHS AND CE APPROVAL





PROFINET 654 fixed installation, type A
PROFINET 655 fixed installation, type A, UL approval

ELETTROTEK KABEL® PROFIBUS 654



PROFINET 655 UL

| FREQUENCY (MHZ) | ATTENUATION (DB/100 M) | | NEXT (DB) | | ACR-F (DB/100 M) | | ACR (DB/100 M) | | RETURN LOSS (DB/100 M) | |
|--------------------|---------------------------|---------|--------------|---------|---------------------|------|-------------------|---------|---------------------------|---------|
| | MAX. - STD | TYPICAL | MIN. - STD | TYPICAL | MIN. | MIN. | MIN - STD | TYPICAL | MIN. STD | TYPICAL |
| 1 | 2,1 | 1,6 | 65,3 | 80 | 64 | 81 | 63,2 | 78,4 | - | 29 |
| 4 | 4 | 3,2 | 56,3 | 73 | 52 | 72 | 52,3 | 69,8 | 23 | 30 |
| 10 | 6,3 | 5,1 | 50,3 | 65 | 44 | 63 | 44 | 59,9 | 25 | 31 |
| 16 | 8 | 6,5 | 47,2 | 63 | 39,9 | 57 | 39,2 | 56,5 | 25 | 31 |
| 20 | 9 | 7,4 | 45,8 | 60 | 38 | 54 | 36,8 | 52,6 | 25 | 31 |
| 31,25 | 11,4 | 9,5 | 42,9 | 56 | 34,1 | 48 | 31,5 | 46,5 | 23,6 | 27 |
| 62,5 | 16,5 | 14,3 | 38,4 | 51 | 28,1 | 39 | 21,9 | 36,7 | 21,5 | 26 |
| 100 | 21,3 | 22 | 35,3 | 48 | 24 | 32 | 14 | 29 | 20,1 | 25 |

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39210CEX022M03 | 2 x 2 x 0,34 | 5,3 | 28 | 43 | 22 |
| 39220CEX022A22 | 2 x 2 x 0,34 | 5,9 | 30,4 | 51 | 22 |

Other dimension and colours available on request.






PROFINET 662 flexible application, type B
PROFINET 663 flexible application, type B, UL approval,
PROFINET 663 PLTC flexible application, type B, UL & PLTC approval



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | PROFINET 662): FLEXIBLE TINNED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812 (PROFINET 663): FLEXIBLE RED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812 (PROFINET 663 PLTC): FLEXIBLE TINNED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812 |
| INSULATION: | PE TYPE L/MD ACC. TO DIN VDE 0819 PART 103 |
| COLOUR CORES: | BLUE, YELLOW, WHITE, ORANGE |
| STRANDING: | (PROFINET 662 AND 663 PLTC): CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER (PROFINET 663): IN LAYERS (STAR-QUAD CONSTRUCTION) |
| WRAPPING: | PETP FOIL |
| INNER SHEATH | PVC COMPOUND |
| SCREEN: | ALUMINIUM TAPE AND TINNED COPPER BRAID |
| OUTER SHEATH: | GREEN (SIMILAR RAL 6018), PVC COMPOUND |

Resistance:

| | |
|--|--|
| | SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO: (PROFINET 662) IEC 60332-1-2 EN 60332-1-2 (PROFINET 663) EC 60332-1-2 EN 60332-1-2, UL 1581 SECTION 1061 CSA FT1 (PROFINET 663 PLTC) IEC 60332-3A, UL 1685 CSA FT4 |
|  | |
| | OIL RESISTANCE ACC. TO: (PROFINET 662 AND 663 PLTC) DIN VDE 0473 PART.811-2-1 IEC 60811-2-1 (PROFINET 663) DIN VDE 0473 PART.811-2-1 IEC 60811-2-1 AND ICEA S-82-552, |
|  | |
|  | UV RESISTANCE ACC. TO (PROFINET 663, PROFINET 663 PLTC): UL1581 §1200 STD. |

Technical data:

| | | | |
|---|---|------------------------|-----------------------------|
| NOMINAL VOLTAGE: | (PROFINET 662 AND 663): 300 V (PROFINET 663 PLTC): 600 V | | |
| TEST VOLTAGE: | (PROFINET 662 AND 663): 1,5 KV (PROFINET 663 PLTC): 2 KV | | |
| TEMPERATURE RANGE | (PROFINET 662): | (PROFINET 663): | (PROFINET 663 PLTC): |
| | UL: UP TO +80°C | UL: UP TO +80°C | UL: UP TO +80°C |
| FIXED LAYING: | -30 UP TO +70°C | -30 UP TO +80°C | -40 UP TO +80°C |
| FLEXIBLE INSTALLATION: | -5 UP TO +70°C | -5 UP TO +80°C | -5 UP TO +80°C |
| MIN. BENDING RADIUS: | (PROFINET 662): | (PROFINET 663): | (PROFINET 663 PLTC): |
| FIXED LAYING: | 5 x D | 5 x D | 5 x D |
| FLEXIBLE INSTALLATION: | 10 x D | 10 x D | 10 x D |
| CHARACTERISTIC IMPEDANCE: | 100Ω ± 5Ω, ACC. TO EN 50288-2-2 CAT 5E ACC. TO EN 50173-1) | | |
| OHMIC RESISTANCE AT 20°C MAX.Ω/km: | 58, ACC. TO VDE 0812 | | |

Features:

-  AWM STYLE 10578-2571 80°C 300V **(PROFINET 663)**
-  AWM STYLE 21694 80°C 600V **(PROFINET 663 PLTC)**
- ROHS AND CE APPROVAL





PROFINET 662 flexible application, type B

PROFINET 663 flexible application, type B, UL approval,

PROFINET 663 PLTC flexible application, type B, UL & PLTC approval

ELETTROTEK KABEL® PROFINET 663



PROFINET 663

ELETTROTEK KABEL® PROFINET 663 PLTC



PROFINET 663 PLTC

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39230CEX022M03 | 2 x 2 x 0,34 | 6,6 | 36,2 | 67 | 22 |
| 39240CEX022A22 | 2 x 2 x 0,34 | 6,6 | 36,2 | 70 | 22 |

Other dimension and colours available on request.

PROFINET 678 fixed installation, type A
SPECIAL PROFINET 678 UL flexible application, type B, UL approval



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | (PROFINET 678): SOLID TINNED COPPER CONDUCTOR (PROFINET 678 UL): STRANDED TINNED COPPER CONDUCTOR, 7X0,16 mm - 26/7 AWG |
| INSULATION: | PE COMPOUND |
| COLOUR CORES: | WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER |
| WRAPPING: | ALUMINIUM TAPE (PROFINET 678) |
| WRAPPING: | PETP FOIL (PROFINET 678 UL): |
| SCREEN: | TINNED COPPER BRAID (PROFINET 678) |
| SCREEN: | ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID (PROFINET 678 UL) |
| OUTER SHEATH: | GREEN (SIMILAR RAL 6018), PVC COMPOUND |

Technical data:

| | |
|--|---|
| PEAK OPERATING VOLTAGE: | MAX. 350 V (PROFINET 678) |
| NOMINAL VOLTAGE: | 125 V (PROFINET 678 UL) |
| TEST VOLTAGE: | (PROFINET 678) CORE/CORE 1,5 kV CORE/SCREEN 1,2 kV |
| TEST VOLTAGE: | (PROFINET 678 UL) CORE/CORE 700 V x 1 min CORE/SCREEN 700 V x 1 min |
| TEMPERATURE RANGE | (PROFINET 678): |
| FIXED LAYING: | -30 UP TO+70°C |
| FLEXIBLE INSTALLATION: | -5 UP TO+70°C |
| TEMPERATURE RANGE | (PROFINET 678 UL): |
| FIXED LAYING: | -30 UP TO+80°C |
| FLEXIBLE APPLICATION: | -5 UP TO+50°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 5 x D |
| SPORADIC MOVEMENT: | 10 x D (PROFINET 678 UL) |
| OHMIC RESISTANCE AT 20°C MAX. Ω/km: | MAX. 150, ACC. TO VDE 0812 (PROFINET 678) |
| MAX. DC CONDUCTOR RESISTANCE: | 140 Ω/km (PROFINET 678 UL) |
| CAPACITANCE AT 800 Hz: | 48 pF/m (PROFINET 678 UL) |
| MAX. CAPACITANCE UNBALANCE: | 1600 pF/km (PROFINET 678 UL) |
| PROPAGATION VELOCITY AT 100 MHz: | APPROX. 75% (PROFINET 678 UL) |
| CHARACTERISTIC IMPEDANCE: | (PROFINET 678) 100Ω (± 10%) ACC. TO EN 50288-2-2, CAT 5E ACC. TO EN 50173-1 |
| CHARACTERISTIC IMPEDANCE: | (PROFINET 678 UL) 100Ω (± 15%), CAT 5E |
| MIN. INSULATION RESISTANCE: | 5 GΩ x km (PROFINET 678 UL) |
| TRANSFER IMPEDANCE: | 10 MΩ/m AT 1 MHz, 4 MΩ/m AT 10 MHz 4 MΩ/m AT 30 MHz, 2 MΩ/m AT 100 MHz (PROFINET 678 UL) |
| STANDARD REFERENCE: | IEC 61156-3, EN 50288-1, EN 50288-2-2 ISO IEC 11801 |

Resistance:



FLAME RETARDANT ACC. TO:
UL 1581 1061, CSA FT1, IEC 60332-1
STANDARD REQUIREMENTS **(PROFINET 678 UL)**



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART. 811-2-1 IEC 60811-2-1
(PROFINET 678)
EN 50363-4-1, IEC 60811-2-1, DIN VDE 0472-803
UL 13 (60°C), ACC. TO ICEA S-82-552 AND NEMA WC55
(PROFINET 678 UL)



SUNLIGHT RESISTANT ACC. TO:
UL 1581 1200 STANDARD REQUIREMENT
(PROFINET 678 UL)

Features:

(UL) AWM STYLE 1598 - 2571 30 V 80°C **(PROFINET 678 UL)**

ROHS AND CE APPROVAL



PROFINET 678 fixed installation, type A
SPECIAL PROFINET 678 UL flexible application, type B, UL approval



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL



| FREQUENCY (MHZ) | ATTENUATION (DB/100 M) | | NEXT (DB) | | PS NEXT (DB) | | PS EL-FEXT (DB/100M) | | PS ACR (DB/100 M) | | RETURN LOSS (DB) | |
|-----------------|------------------------|---------|------------|---------|--------------|------|----------------------|---------|-------------------|---------|------------------|---------|
| | MAX. - STD | TYPICAL | MIN. - STD | TYPICAL | MIN. | MIN. | MIN - STD | TYPICAL | MIN. | TYPICAL | MIN. STD | TYPICAL |
| 1 | 3,2 | 2,5 | 65,3 | 71 | 62,3 | 69 | 60,8 | 69 | 62,1 | 68,5 | - | 29 |
| 4 | 6 | 5,2 | 56,3 | 63 | 53,3 | 61 | 48,8 | 57 | 50,3 | 57,8 | 24,1 | 32 |
| 10 | 9,5 | 8,4 | 50,3 | 58 | 47,3 | 56 | 40,8 | 51 | 40,8 | 49,6 | 25 | 32 |
| 16 | 12,1 | 11 | 47,2 | 56 | 44,2 | 54 | 36,7 | 47 | 35,1 | 45 | 25 | 32 |
| 20 | 13,6 | 12,5 | 45,8 | 54 | 42,8 | 52 | 34,8 | 45 | 32,2 | 41,5 | 25 | 32 |
| 31,25 | 17,1 | 16 | 42,9 | 50 | 39,9 | 48 | 30,9 | 42 | 25,8 | 34 | 23,6 | 30 |
| 62,5 | 24,8 | 23,6 | 38,4 | 45 | 35,4 | 43 | 24,9 | 36 | 13,6 | 21,4 | 21,5 | 28 |
| 100 | 32 | 29,9 | 35,3 | 43 | 32,3 | 41 | 20,8 | 32 | 3,3 | 13,1 | 20,1 | 26 |
| 155,52 | | 37,4 | | 40 | | 38 | - | 26 | - | 2,6 | - | 24 |
| 200 | | 42,8 | | 37 | | 35 | - | 22 | - | - | - | 23 |

PROFINET 678 UL

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------|---------------------|----------------------------|------------|
| 39290CEX042M01 | 4 x 2 x 0,14 | 6,2 | 33 | 49 | 26 |
| 39300BEX042A26 | 4 x 2 x 0,14 | 6,2 | 33 | 54 | 26 |

Other dimension and colours available on request.

SPECIAL PROFINET 681 continuously flexible, type C
SPECIAL PROFINET 682 continuously flexible, type C, UL approval









ELETTROTEK KABEL® SPECIAL PROFINET 681



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | (PROFINET 681): FLEXIBLE TINNED COPPER CONDUCTORS EXTRA FINE WIRES (PROFINET 682): FLEXIBLE RED COPPER CONDUCTORS EXTRA FINE WIRES |
| INSULATION: | HALOGEN FREE COMPOUND |
| COLOUR CORES: | WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN |
| STRANDING: | CORES TWISTED IN PAIRS |
| WRAPPING: | NON-WOVEN TAPE |
| SCREEN: | ALUMINIUM TAPE AND TINNED COPPER BRAID |
| WRAPPING: | NON-WOVEN TAPE |
| OUTER SHEATH: | GREEN (SIMILAR RAL 6018) PUR COMPOUND |

Resistance:

| | |
|---|---|
|  | SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO: IEC 60332-1 (SPECIAL PROFINET 682) |
|  | HALOGEN-FREE ACC. TO: DIN VDE 0472, PART 815, EN 50267-2-2, IEC 60754-1 (SPECIAL PROFINET 681 & 682) |
|  | CORROSIVENESS OF CONFLAGRATION GASES ACC. TO: EN 50267-2-2, IEC 60754-2 (SPECIAL PROFINET 682) |
|  | OIL RESISTANCE ACC. TO: DIN VDE 0282 PART 10 + HD 22.10 (SPECIAL PROFINET 681) IEC 60811-2-1, ICEA S-82-552 AND ASTM-OIL 1 (SPECIAL PROFINET 682) |
|  | UV RESISTANT / SUNLIGHT RESISTANT ACC. TO: UL1581§1200 (SPECIAL PROFINET 682) |
|  | MUD RESISTANCE ACC. TO: NEK 606 (SPECIAL PROFINET 682) |

Technical data:

| | |
|--|--|
| PEAK OPERATING VOLTAGE: | MAX. 350 V |
| TEST VOLTAGE: | CORE/CORE 1,5 KV CORE/SCREEN 1,2 KV |
| TEMPERATURE RANGE | |
| FIXED LAYING: | - 40 UP TO +90°C |
| FLEXIBLE APPLICATION: | - 30 UP TO +70°C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 5 x D |
| FLEXIBLE INSTALLATION: | 10 x D |
| CONTINUOUSLY FLEXIBLE: | 12 x D |
| MAX SPEED (MAIN APPLICATION): | 250 m/min |
| CHARACTERISTIC IMPEDANCE: | 100Ω ± 5Ω, ACC. TO EN 50288-2-2 (CAT 5E ACC. TO EN 50173-1) |

Features:

 AWM 10493-20233 300V/80°C CE
(SPECIAL PROFINET 682)

ACC. TO STANDARDS:
EN 50288-1,
EN 50288-2-2,
EN 50173,
IEC 61156-3,
ISO/IEC 11801
(SPECIAL PROFINET 682)

FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE

ROHS AND CE APPROVAL



SPECIAL PROFINET 681 continuously flexible, type C
SPECIAL PROFINET 682 continuously flexible, type C, UL approval



ELETTROTEK KABEL® SPECIAL PROFINET 681



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca. mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no. *) |
|----------------|--|----------------------------|---------------------------|----------------------------------|---------------|
| 39320CEX042M01 | 4 x 2 x 0,14 | 7,2 | 35,5 | 58 | 26 |
| 39330CEX022A22 | 2 x 2 x 0,34 | 6,8 | 25 | - | 22 |
| 39330CEX042A26 | 4 x 2 x 0,14 | 7,3 | 35,5 | 60 | 26 |

Other dimension and colours available on request.

SPECIAL PROFINET 678 UL

S/FTP CAT. 6A



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL S/FTP Cat. 6A



Construction:

| | |
|---------------------------|---|
| CONDUCTOR: | STRANDED BARE COPPER CONDUCTOR |
| INSULATION: | PO COMPOUND |
| COLOUR CORES: | WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN |
| STRANDING: | CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER |
| INDIVIDUAL SCREEN: | ALUMINIUM/POLYESTER TAPE |
| OVERALL SCREEN: | TINNED COPPER BRAID (COVERAGE 85%) |
| OUTER SHEATH: | GREEN (SIMILAR RAL 6018), PVC COMPOUND |

Resistance:



FLAME RETARDANT ACC. TO:

CEI 20-35
EN 50265
IEC 60332-1
UL VW-1
CSA FT1



HYDROCARBONS AND OIL RESISTANCE ACC. TO:

UL 1581
DIN VDE 0472 PART 803
HD 22.10

Technical data:

| | |
|---|---|
| OPERATING VOLTAGE: | MAX. 125 V |
| TEST VOLTAGE: | |
| - DIRECT CURRENT | 1000 V X 1 min |
| - ALTERNATE CURRENT | 700 V x 1 min |
| TEMPERATURE RANGE | -20°C UP TO +80°C |
| MIN. BENDING RADIUS: | |
| - FIXED LAYING: | 5 x D |
| MAX. CONDUCTOR RESISTANCE AT 20°C: | MAX. 69,5 Ω/km |
| CAPACITANCE AT 800 TO 1000 Hz: | 43 pF/m |
| PROPAGATION VELOCITY: | APPROX. 78% |
| CHARACTERISTIC IMPEDANCE: | 100 ± 10 Ω |
| MIN. INSULATION RESISTANCE: | MIN. 5 GΩ x km |
| TRANSFER IMPEDANCE: | 10 MΩ/m AT 1 MHz, 10 MΩ/m AT 10 MHz 15 MΩ/m AT 30 MHz |

Features:

cURus AWM STYLE 2919 80°C 30 V

ROHS AND CE APPROVAL



SPECIAL PROFINET 678 UL

S/FTP CAT. 6A



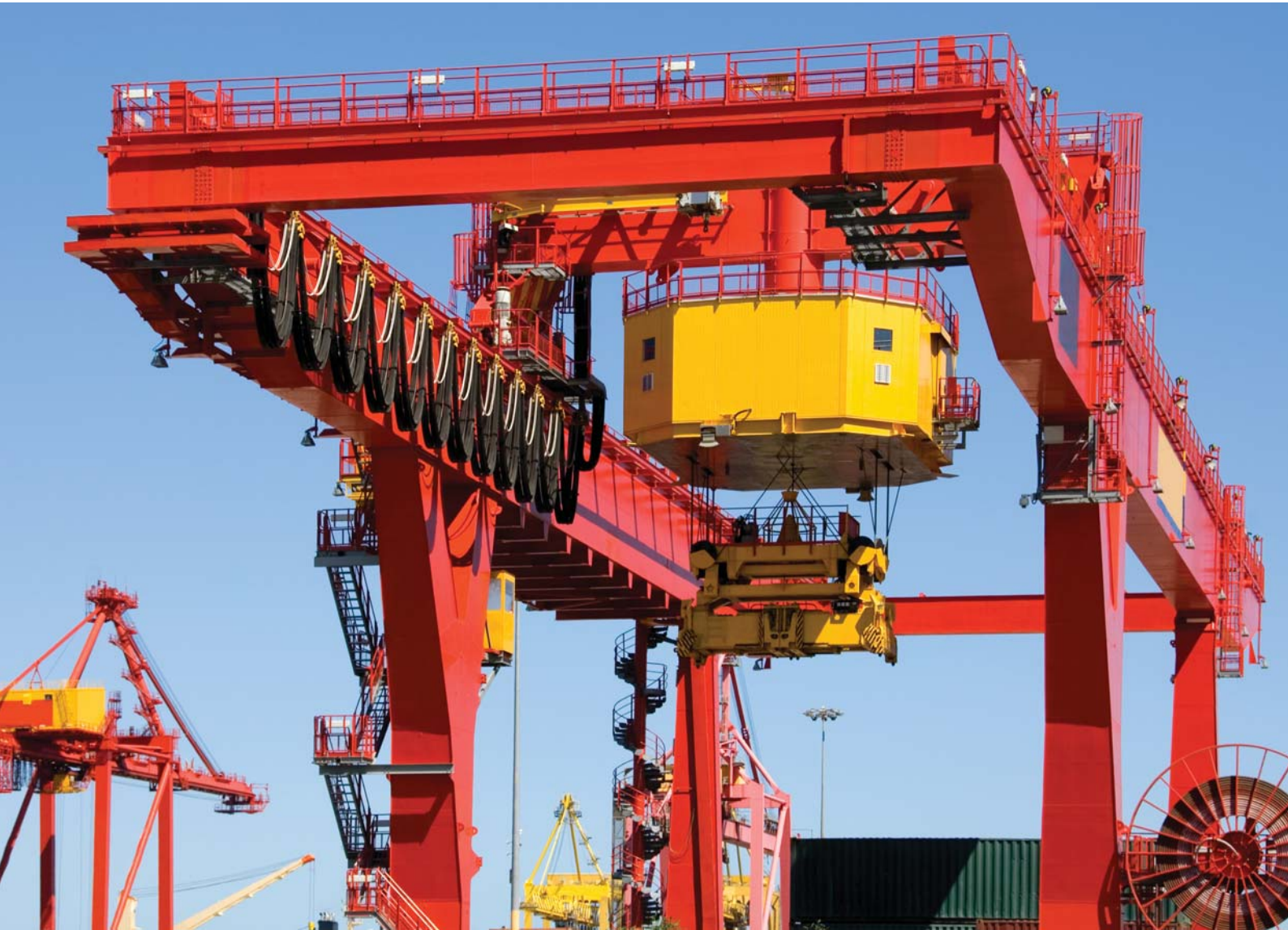
ELETTROTEK KABEL® SPECIAL PROFINET 678 UL S/FTP Cat. 6A



| FREQUENCY (MHZ) | ATTENUATION (DB/100 M) | | NEXT (DB) | | PS NEXT (DB) | | EL-FEXT (DB/100M) | | PS EL-FEXT (DB/100M) | | RETURN LOSS (DB) | |
|--------------------|---------------------------|---------|--------------|---------|-----------------|---------|----------------------|---------|-------------------------|---------|------------------|---------|
| | REQUIRED | TYPICAL | REQUIRED | TYPICAL | REQUIRED | TYPICAL | REQUIRED | TYPICAL | REQUIRED | TYPICAL | REQUIRED | TYPICAL |
| 1 | 2,9 | 2,2 | 80 | 100 | 77 | 95 | 80 | 96 | 77 | 98 | - | - |
| 4 | 5,5 | 3,8 | 80 | 100 | 77 | 95 | 80 | 93 | 77 | 90 | 23,1 | 35 |
| 10 | 8,5 | 5,9 | 80 | 95 | 77 | 90 | 74 | 90 | 71 | 98 | 25 | 38 |
| 16 | 10,8 | 7,4 | 80 | 90 | 77 | 86 | 69,9 | 100 | 66,9 | 105 | 25 | 32 |
| 20 | 12,1 | 8,4 | 80 | 90 | 77 | 80 | 68 | 100 | 65 | 90 | 25 | 32 |
| 31,25 | 15,2 | 10,5 | 80 | 90 | 77 | 80 | 64,1 | 100 | 61,1 | 90 | 23,6 | 31 |
| 62,5 | 21,7 | 15,3 | 75,1 | 85 | 72,5 | 80 | 58,1 | 100 | 55,1 | 90 | 21,5 | 27 |
| 100 | 27,8 | 18,1 | 72,4 | 82 | 69,4 | 75 | 54 | 100 | 51 | 90 | 20,1 | 34 |
| 155,52 | 35 | 23,2 | 69,6 | 80 | 66,6 | 70 | 50,2 | 100 | 47,2 | 90 | 18,8 | 28 |
| 200 | 40,1 | 26,6 | 67,9 | 77 | 64,9 | 68 | 48 | 100 | 45 | 90 | 17,3 | 25 |
| 300 | 50 | 33,3 | 65,3 | 71 | 62,3 | 66 | 44,5 | 100 | 41,5 | 90 | 17,3 | 23 |
| 600 | 73,3 | 50,1 | 60,8 | 67 | 57,8 | 62 | 38,4 | 100 | 35,4 | 90 | 17,3 | 21 |

| Part no. | No. of cores x cross section n x AWG | Outer-Ø ca. mm ± 10% | Cable weight approx. kg/km |
|----------------|--|----------------------------|----------------------------------|
| 39620AEX042A23 | 4 x 2 x AWG23 | 8,6 | 91 |

Other dimension and colours available on request.



FLEXIDRUM® R 503



ELETTROTEK KABEL® FLEXIDRUM® R 503
cRUUS AWM style 10492/21223 80° 600, 1000 V
AWM II A/B 80°C 1000 V FTI



Construction:

| | |
|---------------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAAL THERM® 585 |
| CORES COLOR: | CONSTRUCTION IN LAYER/S (EG 4g, 12g, 30g): BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 + GREEN-YELLOW CONSTRUCTION 3+3 (EG 3 x 25+3 g 4): 3 BLACK CONDUCTORS NUMBERED + 3 GREEN-YELLOW CONDUCTORS DIVIDED IN 3 INETSTICES CONSTRUCTION IN PAIRS (EG 6 x (2 x 1)C): BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 |
| CENTRAL UNIT: | CORE ELEMENT (IF NECESSARY) |
| STRANDING: | CONSTRUCTION IN LAYER/S (EG 4g, 12g, 30g): IN LAYERS WIH SPECIALYARNS BETWEEN CORES + PLASTIC TAPE BETWEEN LAYERS CONSTRUCTION 3+3 (EG 3 x 25+3 g 4): PHASE UNITS LAID UP WITH EARTH-CONDUCTORS IN INTERSTICES, WITH SPECIAL YARNS BETWEEN PHASES + FILLERS (IF NECESSARY) CONSTRUCTION IN PAIRS (EG 6 x (2 x 1)C): CORES TWISTED IN PAIRS + PLASTIC FOIL / TINNED COPPER BRAID / PLASTIC FOIL / GAAL THERM® 585 SHEATH, PAIRS IN LAYERS AROUND CENTRAL UNIT + FILLER (IF NECESSARY) |
| WRAPPING: | NON-WOVEN TAPE OR PLASTIC TAPE |
| INNER SHEATH: | PUR COMPOUND |
| SUPPORTING SCREEN: | ANTI-TWISTING PROTECTION OF TEXTILE BRAID |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), PUR COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL-VW-1, CSA FT-1



HALOGEN-FREE ACC. TO:
DIN VDE 0482 PART 267,
EN 50267-2-1,
IEC 60754-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Features:

- UV RESISTANCE: VERY GOOD
- CHEMICAL RSISTANCE: GOOD
- SMALL OUTER DIAMETER
- REDUCED CABLE WEIGHT
- HIGH WINDING AND UNWINDING STRENGTH
- cRUUS AWM STYLE 10492/21223 80°C 600, 1000 V
AWM II A/B 80°C 1000 V FTI
- OR
- cRUUS AWM STYLE 21897 80°C
AWM II A/B 80°C, 0,6/1 KV, FTI
- FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



Applications:

FLEXIDRUM® R 503 IS USED ON HEAVY APPLIANCES LIKE MOTOR CABLE REEL HOISTS, TRANSPORT SYSTEMS, MOVABLE MOTORS AND FARM VEHICLES WITH HIGH MECHANICAL STRESS

Technical data:

| | |
|---|----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 KV |
| NOMINAL VOLTAGE UL: | 1000 V |
| TEST VOLTAGE: | 4 KV |
| TEMPERATURE RANGE DIN VDE: | |
| FIXED LAYING: | -50°C UP TO +90°C |
| FLEXIBLE INSTALLATION: | -40°C UP TO +90°C |
| TEMPERATURE RANGE UL: | |
| FIXED LAYING: | UP TO +80°C |
| FLEXIBLE INSTALLATION: | UP TO +80°C |
| MAX. TEMPERATURE ON CONDUCTOR: | + 90°C |
| MAX. TEMPERATURE IN SHORT CIRCUIT: | + 250 °C |
| MIN. BENDING RADIUS: | |
| FIXED LAYING: | 5 x D |
| FLEXIBLE LAYING: | 7,5 x D |
| TENSILE STRENGHT: | |
| STATIC | 50 N/mm ² |
| DYNAMIC: | 20 N/mm ² |
| MAX. TORSION: | ± 25°/1mt. |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

FLEXIDRUM® R 503



ELETTROTEK KABEL® FLEXIDRUM® R 503
cULus AWM style 10492/21223 80° 600, 1000 V
AWM II A/B 80°C 1000 V FTI



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | Tensile strenght N | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------------------|--------------|
| 01120G70041A16 | 4 g 1,5 | 9,4 | 57,6 | 135 | 2000 | 16 |
| 01120G70051A16 | 5 g 1,5 | 10,1 | 72 | 160 | 2000 | 16 |
| 01120G70071A16 | 7 g 1,5 | 11,1 | 101 | 210 | 2500 | 16 |
| 01120G70121A16 | 12 g 1,5 | 13,6 | 172,8 | 310 | 3000 | 16 |
| 01120G70181A16 | 18 g 1,5 | 15,7 | 259,2 | 420 | 3500 | 16 |
| 01120G70241A16 | 24 g 1,5 | 18,8 | 345 | 560 | 4000 | 16 |
| 01120G70361A16 | 36 g 1,5 | 25,4 | 518,4 | 992 | - | 16 |
| 01120G70041A14 | 4 g 2,5 | 11 | 96 | 195 | 2500 | 14 |
| 01120G70051A14 | 5 g 2,5 | 12 | 120 | 235 | 2500 | 14 |
| 01120G70071A14 | 7 g 2,5 | 13,8 | 168 | 305 | 3000 | 14 |
| 01120G70121A14 | 12 g 2,5 | 17 | 288 | 460 | 3500 | 14 |
| 01120G70181A14 | 18 g 2,5 | 20 | 432 | 695 | 4000 | 14 |
| 01120G70241A14 | 24 g 2,5 | 23,2 | 576 | 925 | 4500 | 14 |
| 01120G70301A14 | 30 g 2,5 | 23,7 | 720 | 1250 | 5000 | 14 |
| 01120G70361A14 | 36 g 2,5 | 27,8 | 864 | 1410 | 5700 | 14 |
| 01120G70041A12 | 4 g 4 | 12,5 | 153,6 | 275 | 2500 | 12 |
| 01120G70041A10 | 4 g 6 | 14,9 | 230,4 | 390 | 3000 | 10 |
| 01120G70041A08 | 4 g 10 | 18 | 384 | 570 | 4000 | 8 |
| 01120G70041A06 | 4 g 16 | 21,5 | 614,4 | 915 | 4500 | 6 |
| 01120G70041A04 | 4 g 25 | 25,5 | 960 | 1360 | 5500 | 4 |
| 01120G70041A02 | 4 g 35 | 29,2 | 1344 | 1865 | 7000 | 2 |
| 01120G70041A01 | 4 g 50 | 34,5 | 1920 | 2650 | 9000 | 1 |
| 01120G70051A12 | 5 g 4 | 14,3 | 192 | 365 | - | 12 |
| 01120G70051A08 | 5 g 10 | 19,6 | 480 | 730 | 4000 | 8 |
| 01120G70051A06 | 5 g 16 | 23,6 | 768 | 1110 | 5500 | 6 |
| 01120G70051A04 | 5 g 25 | 28,3 | 1200 | 1685 | 6000 | 4 |
| 01120G70081A12 | 8 g 4 | 18,4 | 307,2 | - | - | 4 |
| 01120G70121A12 | 12 g 4 | 19,5 | 367,2 | 630 | - | 4 |
| 01120G70201A12 | 20 g 4 | 24,8 | 768 | - | - | 4 |
| 01120G70241A12 | 24 g 4 | 27,8 | 921,6 | 1442,5 | - | 4 |
| 01120G70301A12 | 30 g 4 | 31,2 | 1152 | 1840 | - | 4 |
| 01120G70037A04 | 3 x 25+3 g 6 | 23,2 | 892,9 | 1105 | 5000 | 4 |
| 01120G70037A02 | 3 x 35+3 g 6 | 26,5 | 1180 | 1525 | 6000 | 2 |
| 01120G70037A01 | 3 x 50+3 g 10 | 31 | 1728 | 2155 | 7000 | 1 |
| 01120G70037A2C | 3 x 70+3 g 16 | 36,4 | 2477 | 3100 | 8000 | 2/0 |
| 01121G70062A18 | 6 x (2 x 1)C | 20,1 | 204 | 455 | 2500 | 18 |
| 01120G70031900 | 30 g 2,5+(4 x 1,5)C | 28,4 | 799 | 1395 | 10000 | 14 |
| 01120G72049904 | 4 g 70+12 g 62,5/125 | 39,6 | 2688 | 3612 | - | 2/0 |

Other dimensions and colors available on request.

FLEXIDRUM® FIBER 770

ELETTROTEK KABEL® FLEXIDRUM® FIBER 770



Construction:

| | |
|---------------------------|---|
| OPTICAL FIBERS: | CORE Ø: 50 µm, 62,5 µm, 9 µm CLADDING: 125 µm COATING: 250 µm STANDARD TYPE: 62,5/125 (OTHERS ON REQUEST) |
| TUBES: | THERMOPLASTIC COMPOUND |
| CENTRAL UNIT: | HIGH-TECHYARNS |
| STRANDING: | FIBER-OPTICS AROUND CENTRAL UNIT 6-12-18 FIBER-OPTICS LAYING IN 6 TUBES (1,2 OR 3 FIBERS PER TUBE) |
| SUPPORTING SCREEN: | ANTI-TWISTING PROTECTION OF SYNTHETIC YARNS |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), RUBBER PCP TYPE 5GM2 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Technical data:

| | |
|--------------------------------------|-------------------|
| TEMPERATURE RANGE: | |
| FIXED LAYING: | -40°C UP TO +80°C |
| FLEXIBLE INSTALLATION: | -30°C UP TO +60°C |
| MIN. BENDING RADIUS: | 15 x D |
| MAX TORSION: | ± 120°/M |
| TENSILE STRENGTH: | 1200 N |
| MAX TRANSVERSE PRESSURE: | 300 N/cm |
| MAX SPEED (MAIN APPLICATION): | 240 m/min |

Features:

- UV RESISTANT
- OIL AND CHEMICAL RESISTANCE
- FOR SPEED AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS APPROVAL



| Part no. | No. of fibers | No. of fibers x tube | Outer-Ø ca. mm ± 10% | Cable weight approx. kg/km | Tensile strength N |
|----------------|----------------------|----------------------|----------------------|----------------------------|--------------------|
| 0109007F061F62 | 6 g 62,5/125 MICRON | 1 | 14 | 230 | 1200 |
| 0109007F061F52 | 6 g 50/125 MICRON | 1 | 14 | 230 | 1200 |
| 0109007F06AF09 | 6 e 9/125 MICRON | 1 | 14 | 230 | 1200 |
| 0109007F121F62 | 12 g 62,5/125 MICRON | 2 | 14 | 230 | 1200 |
| 0109007F121F52 | 12 g 50/125 MICRON | 2 | 14 | 230 | 1200 |
| 0109007F12AF09 | 12 e 9/125 MICRON | 2 | 14 | 230 | 1200 |
| 0109007F181F62 | 18 g 62,5/125 MICRON | 3 | 14 | 230 | 1200 |
| 0109007F181F52 | 18 g 50/125 MICRON | 3 | 14 | 230 | 1200 |
| 0109007F18AF09 | 18 e 9/125 MICRON | 3 | 14 | 230 | 1200 |

Other dimensions and colors available on request.



FLEXIFESTOON® NE-FLAT (NGFLGÖU) UL



Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 (FROM 1 UP TO 25 mm²) FLEXIBLE RED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295 (FROM 35 mm²) |
| INSULATION: | EPR TYPE 3GI3 ACC. TO DIN VDE 0207 |
| CORES COLOR: | ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334; GREEN-YELLOW EARTH-WIRE FROM 3 CORES |
| STRANDING: | CORES LAYING PARALLEL |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), RUBBER PCP TYPE 5GM3, YELLOW (SIMILAR TO RAL 1021) ON REQUEST |

Technical data:

| | |
|--------------------------------------|--|
| NOMINAL VOLTAGE: | U ₀ /U 300/500 V (UL 600 V) |
| TEST VOLTAGE: | 3 kV |
| TEMPERATURE RANGE: | |
| FIXED LAYING: | -50°C UP TO +80°C |
| FLEXIBLE APPLICATION: | -35°C UP TO +80°C |
| MAX. TEMP ON CONDUCTOR: | |
| IN SERVICE: | UP TO +90°C |
| IN SHORT CIRCUIT: | UP TO +250°C |
| MIN. BENDING RADIUS: | ACC. TO DIN VDE 0298 PART 3 |
| TENSILE STRENGTH: | 15 N/mm ² |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 404, PART.10

Features:

- ACC. TO DIN VDE 0250-809
- UV, OZONE, AND CHEMICAL RESISTANT
- INDOOR/OUTDOOR USE
- EXTREMELY SMALL BENDING RADIUS
- MINIMUM WASTE OF SPACE
- HIGH FLEXIBILITY
- COLD RESISTANT
- APPROVAL AVAILABLE
- GOST-R/EAC APPROVAL
- FOR SPEEDS AND MINIMUM BENDING RADIUS SEE PAGES FROM 1 TO 4 OF CATALOGUE
- ROHS AND CE APPROVAL



FLEXIFESTOON® NE-FLAT (NGFLGÖU) UL



ELETTROTEK KABEL® FLEXIFESTOON® NE-FLAT (NGFLGÖU) UL

ELETTROTEK KABEL® FLEXIFESTOON® NE-FLAT (NGFLGÖU) UL

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 03030F72031A16 | 3 g 1,5 | 6 x 12,1 | 43,2 | 140 | 16 |
| 03030F72041A16 | 4 g 1,5 | 6 x 15,4 | 58 | 180 | 16 |
| 03030F72051A16 | 5 g 1,5 | 5,8 x 19,3 | 72 | 220 | 16 |
| 03030F70071A16 | 7 g 1,5 | 5,8 x 25,9 | 101 | 290 | 16 |
| 03030F70081A16 | 8 g 1,5 | 5,8 x 28,4 | 115 | 320 | 16 |
| 03030F70101A16 | 10 g 1,5 | 6,5 x 36,3 | 144 | 450 | 16 |
| 03030F70121A16 | 12 g 1,5 | 6,5 x 42,8 | 173 | 540 | 16 |
| 03030F70241A16 | 24 g 1,5 | 11,9 x 52,1 | 345,6 | 1050 | 16 |
| 03030F70421A16 | 42 g 1,5 | 15,6 x 71,3 | 604,8 | 1930 | 16 |
| 03030F72041A14 | 4 g 2,5 | 7,1 x 19 | 96 | 270 | 14 |
| 03030F72051A14 | 5 g 2,5 | 7 x 23,8 | 120 | 330 | 14 |
| 03030F70071A14 | 7 g 2,5 | 7,1 x 31,9 | 168 | 450 | 14 |
| 03030F70081A14 | 8 g 2,5 | 7,1 x 35 | 192 | 500 | 14 |
| 03030F70101A14 | 10 g 2,5 | 7,7 x 44,2 | 240 | 670 | 14 |
| 03030F70121A14 | 12 g 2,5 | 7,7 x 52,1 | 288 | 790 | 14 |
| 03030F70241A14 | 24 g 2,5 | 15,2 x 66,7 | 576 | 1700 | 14 |
| 03030F72041A12 | 4 g 4 | 8,7 x 23 | 154 | 400 | 12 |
| 03030F72051A12 | 5 g 4 | 8,8 x 30,1 | 192 | 520 | 12 |
| 03030F70071A12 | 7 g 4 | 8,7 x 39,7 | 269 | 700 | 12 |
| 03030F70081A12 | 8 g 4 | 8,5 x 42,3 | 307,2 | 757 | 12 |
| 03030F70121A12 | 12 g 4 | 8,4 x 61,9 | 460,8 | 1131 | 12 |
| 03030F72041A10 | 4 g 6 | 9,3 x 26,2 | 230 | 510 | 10 |
| 03030F72051A10 | 5 g 6 | 9,4 x 33 | 288 | 650 | 10 |
| 03030F70071A10 | 7 g 6 | 9,3 x 44,1 | 403 | 880 | 10 |
| 03030F72041A08 | 4 g 10 | 10,8 x 31,4 | 384 | 760 | 8 |
| 03030F72051A08 | 5 g 10 | 10,9 x 40,4 | 480 | 970 | 8 |
| 03030F70071A08 | 7 g 10 | 10,9 x 54,5 | 672 | 1330 | 8 |
| 03030F72041A06 | 4 g 16 | 12,5 x 36,8 | 614 | 1070 | 6 |
| 03030F72051A06 | 5 g 16 | 12,5 x 46,4 | 768 | 1370 | 6 |
| 03030F70071A06 | 7 g 16 | 13 x 62,3 | 1075 | 2000 | 6 |
| 03030F72041A04 | 4 g 25 | 14 x 42,7 | 960 | 1510 | 4 |
| 03030F72051A04 | 5 g 25 | 13,2 x 60 | 1200 | 2210 | 4 |
| 03030F70071A04 | 7 g 25 | 15,2 x 74,3 | 1680 | 2830 | 4 |
| 03030F72041A02 | 4 g 35 | 15,8 x 48,5 | 1344 | 2050 | 2 |
| 03030F70071A02 | 7 g 35 | 16,9 x 85,4 | 2352 | 3830 | 2 |
| 03030F72041A01 | 4 g 50 | 18,5 x 57 | 1920 | 2840 | 1 |
| 03030F72041A2C | 4 g 70 | 20,8 x 64,2 | 2688 | 3830 | 2/0 |
| 03030F72041A3C | 4 g 95 | 23,6 x 73,6 | 3648 | 4940 | 3/0 |
| 03030F72041A4C | 4 g 120 | 25,7 x 81,2 | 4608 | 6230 | 4/0 |

Other dimensions and colors available on request.

FLEXIFESTOON® NE FLAT M(StD)HÖU-J/O UL

Screened rubber flat cables, UL approval



ELETTROTEK KABEL® FLEXIFESTOON® NE-FLAT M(StD)HÖU-J/O UL
UL style 4540 90°C 600 V FT-1 600 V

Construction:

| | |
|----------------------|--|
| COND CTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 (FROM 1 UP TO 25 mm²) FLEXIBLE RED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295 (FROM 35 mm²) |
| WRAPPING: | PETP TAPE |
| INSULATION: | RUBBER HEPR TYPE 3G13 ACC. TO DIN VDE 0207 |
| CORES COLOR: | ACC. TO DIN VDE 0293-308, HD 308 S2 FROM 6 CORES BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334; GREEN-YELLOW EARTH-WIRE FROM 3 CORES |
| STRANDING: | CORES LAYING PARALLEL PAIRS: CORES TWISTED IN PAIRS WITH SHORT LAY LENGTH WRAPPING WITH PETP FOIL, PAIRS LAYING PARALLEL |
| SCREEN: | TINNED COPPER WIRES + ALUMINIUM TAPE/PETP FOIL |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), RUBBER PCP TYPE 5GM3 |

Technical data:

| | |
|--------------------------------------|---|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 kV (UL 600 V) |
| TEST VOLTAGE: | 4 kV |
| TEMPERATURE RANGE: | |
| UL: | UP TO +90°C |
| FIXED LAYING: | -40°C UP TO +85°C |
| FLEXIBLE APPICATION: | -30°C UP TO +85°C |
| MAX. TEMP ON CONDUCTOR: | |
| IN SERVICE: | UP TO +90°C |
| IN SHORT CIRCUIT: | UP TO +250°C |
| MIN. BENDING RADIUS: | ACC. TO DIN VDE 0298 PART 3 |
| MAX SPEED (MAIN APPLICATION): | 180 m/min |
| RADIATION RESISTANCE: | UP TO 50X10 ⁶ CJ/Kg (UP TO 50 Mrad) |
| TENSILE STRENGTH: | |
| STATIC: | 15 N/mm ² |
| DYNAMIC: | 30 N/mm ² |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART 811-2-1
IEC EN 60811-2-1

Features:

UV, OZONE, AND CHEMICAL RESISTANT
EXTREMELY SMALL BENDING RADIUS
MINIMUM WASTE OF SPACE
HIGH FLEXIBILITY
COLD RESISTANT
ACC. TO DIN VDE 0250 PART 809 TABLE 2
ULLISTED APPROVAL AVAILABLE ON REQUEST
AWM STYLE 4540 90°C 600 V FT-1 600 V
FOR SPEEDS AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE
ROHS AND CE APPROVAL

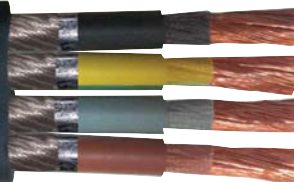


FLEXIFESTOON® NE FLAT M(StD)HÖU-J/O UL

Screened rubber flat cables, UL approval



ELETTROTEK KABEL® FLEXIFESTOON® NE-FLAT M(StD)HÖU-J/O UL
UL style 4540 90°C 600 V FT-1 600 V



| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 03190F72041A16 | 4 g 1,5 | 20,8 x 7,5 | 99 | 291 | 16 |
| 03190F72051A16 | 5 g 1,5 | 24,8 x 7,5 | 124 | 350 | 16 |
| 03190F70081A16 | 8 g 1,5 | 38,1 x 7,5 | 228 | 537 | 16 |
| 03190F71080A16 | 8 x 1,5 | 38,1 x 7,5 | 228 | 537 | 16 |
| 03190F70121A16 | 12 g 1,5 | 55,3 x 7,5 | 343 | 795 | 16 |
| 03190F71120A16 | 12 x 1,5 | 55,3 x 7,5 | 343 | 795 | 16 |
| 03190F72041A14 | 4 g 2,5 | 23,4 x 8,2 | 163 | 418 | 14 |
| 03190F70061A14 | 6 g 2,5 | 32,5 x 8,2 | 245 | 535 | 14 |
| 03190F70121A16 | 12 g 2,5 | 63 x 8,2 | 493 | 1004 | 14 |
| 03190F72041A12 | 4 g 4 | 26,8 x 9 | 241 | 440 | 12 |
| 03190F72041A10 | 4 g 6 | 29,7 x 9,7 | 353 | 603 | 10 |
| 03190F72041A08 | 4 g 10 | 35,9 x 11,7 | 497 | 955 | 8 |
| 03190F72041A06 | 4 g 16 | 39,9 x 13,1 | 805 | 1254 | 6 |
| 03190F72041A04 | 4 g 25 | 45,5 x 14,2 | 1200 | 1694 | 4 |
| 03190F72041A02 | 4 g 35 | 53,1 x 16,4 | 1657 | 2282 | 2 |
| 03190F72041A01 | 4 g 50 | 63,2 x 19,2 | 2261 | 3130 | 1 |
| 03190F72041A2C | 4 g 70 | 75 x 22,9 | 3259 | 4680 | 2/0 |
| 03190F72041A3C | 4 g 95 | 79,1 x 24 | 4311 | 5605 | 3/0 |
| 03190F70042A18 | 4 x (2 x 1)STD | 32 x 11,7 | 156 | 525 | 18 |
| 03190F70072A18 | 7 x (2 x 1)STD | 57,5 x 11,7 | 205 | 909 | 18 |
| 03190F70122A18 | 12 x (2 x 1)STD | 68,3 x 15,4 | 460 | 1500 | 18 |
| 03190F70122A18 | 4 x (4 g 1,5)STD | 40,6 x 11,5 | 440 | 900 | 16 |

Other dimensions and colors available on request.

FLEXIFESTOON® PV-FLAT UL



ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT UL
UL Festoon and AWM 105°C 600 V, CSA Festoon 105°C 600 V

ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT UL
UL Festoon and AWM 105°C 600 V, CSA Festoon 105°C 600 V

Construction:

| | |
|----------------------|--|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CLASS M FROM 16 AWG UP TO 14 AWG FLEXIBLE RED COPPER CONDUCTOR CLASS K FROM 12 AWG AND LARGER |
| INSULATION: | SPECIAL PVC COMPOUND 105°C |
| CORES COLOR: | ACC. TO ICEA METHOD 1-E2 (K-2)* *5 CONDUCTORS: 1 GREEN, 2 WHITE, 3 BLACK, 4 RED AND BLUE |
| STRANDING: | CORES LAYING PARALLEL |
| OUTER SHEATH: | YELLOW (SIMILAR TO RAL 1021), SPECIAL PVC COMPOUND 105°C BLACK (SIMILAR TO RAL 9005), ON REQUEST |

Technical data:

| | |
|--------------------------------------|----------------------|
| NOMINAL VOLTAGE: | 600 V |
| MAX. OPERATING VOLTAGE: | 2000 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | -40°C UP TO +105°C |
| MAX. TEMP ON CONDUCTOR: | |
| IN SERVICE: | UP TO +90°C (105°C) |
| IN SHORT CIRCUIT: | UP TO +150°C |
| MIN. BENDING RADIUS: | 5 x D |
| TENSILE STRENGTH: | |
| STATIC: | 15 N/mm ² |
| DYNAMIC: | 30 N/mm ² |
| MAX SPEED (MAIN APPLICATION): | 120 m/min |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
UL VW-1, CSA FT1

Features:

- OIL RESISTANT OUTER SHEATH
- UV RESISTANT
- COLD RESISTANT
- INDOOR/OUTDOOR USE
- HIGH FLEXIBILITY
- MINIMUM WASTE OF SPACE
- ACC. TO NEC APPROVAL
- UL FESTOON AND AWM 105°C 600 V
- CSA FESTOON 105°C 600 V

FLEXIFESTOON® PV-FLAT UL



ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT UL
UL Festoon and AWM 105°C 600 V, CSA Festoon 105°C 600 V

ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT UL
UL Festoon and AWM 105°C 600 V, CSA Festoon 105°C 600 V

| Part no. | No. of cores x cross section n x AWG | Outer Ø inches/mm ±10% | Copper weight Lbs/Mft - kg/km | Cable weight approx. Lbs/Mft - kg/km |
|----------------|--|------------------------------|-------------------------------------|--|
| 03220FYU040A16 | 4 x 16 | 0,6 x 0,2 - 15,2 x 5,1 | 33,8 - 50,3 | 87,4 - 130 |
| 03220FYU080A16 | 8 x 16 | 1,12 x 0,2 - 28,5 x 5,1 | 67,6 - 100,6 | 174,7 - 260 |
| 03220FYU120A16 | 12 x 16 | 1,68 x 0,2 - 41 x 5,1 | 101,4 - 150,9 | 268,8 - 400 |
| 03220FYU040A14 | 4 x 14 | 0,69 x 0,24 - 17,5 x 6,2 | 53,7 - 79,9 | 141,1 - 210 |
| 03220FYU080A14 | 8 x 14 | 1,34 x 0,24 - 34 x 6,2 | 107,3 - 159,7 | 255,4 - 380 |
| 03220FYU120A14 | 12 x 14 | 1,97 x 0,24 - 50 x 6,2 | 161,3 - 240 | 362,9 - 540 |
| 03220FYU040A12 | 4 x 12 | 0,71 x 0,24 - 18,1 x 6 | 85,4 - 127,1 | 168 - 250 |
| 03220FYU050A12 | 5 x 12 | 0,85 x 0,22 - 21,5 x 5,6 | 106,8 - 158,9 | 201,6 - 300 |
| 03220FYU080A12 | 8 x 12 | 1,34 x 0,24 - 34 x 6 | 170,8 - 254,2 | 315,8 - 470 |
| 03220FYU040A10 | 4 x 10 | 0,89 x 0,27 - 22,5 x 6,9 | 135,7 - 202 | 255,4 - 380 |
| 03220FYU050A10 | 5 x 10 | 1,08 x 0,27 - 27,5 x 6,9 | 169,7 - 252,5 | 302,4 - 450 |
| 03220FYU040A08 | 4 x 8 | 1,2 x 0,37 - 30,5 x 9,4 | 215,2 - 320,2 | 403,2 - 600 |
| 03220FYU040A06 | 4 x 6 | 1,45 x 0,43 - 36,8 x 10,9 | 343 - 510,7 | 618,2 - 920 |
| 03220FYU050A06 | 5 x 6 | 1,81 x 0,43 - 46 x 10,9 | 429 - 638,4 | 780 - 1160,7 |
| 03220FYU040A04 | 4 x 4 | 1,68 x 0,49 - 42,6 x 12,5 | 547,1 - 814,1 | 873,6 - 1300 |
| 03220FYU040A02 | 4 x 2 | 1,97 x 0,57 - 50 x 14,5 | 867 - 1290,2 | 1276,8 - 1900 |
| 03220FYU040A1C | 4 x 1/0 | 2,6 x 0,75 - 66 x 19,1 | 1378 - 2050,6 | 2221 - 3305 |
| 03220FYU040A2C | 4 x 2/0 | 2,72 x 0,79 - 69 x 20 | 1739,1 - 2588,2 | 2587,2 - 3850 |

Other dimensions and colors available on request.

FLEXIFESTOON® PV-FLAT CYUL



ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT CY UL
UL Festoon, VW1, 105°C 600 V, CSA Festoon, FT1, 105°C 600 V

ELETTROTEK KABEL® FLEXIFESTOON® PV-FLAT CY UL
UL Festoon, VW1, 105°C 600 V, CSA Festoon, FT1, 105°C 600 V

Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR |
| INSULATION: | SPECIAL PVC COMPOUND 105°C |
| CORES COLOR: | ACC. TO ICEA METHOD 1-E2 (K-2) |
| WRAPPING: | CLEAR MYLAR TAPE |
| STRANDING: | CORES LAYING PARALLEL + NYLON RIPCORDS |
| SCREEN: | TINNED COPPER BRAID |
| OUTER SHEATH: | YELLOW (SIMILAR TO RAL 1021), SPECIAL PVC COMPOUND 105°C BLACK (SIMILAR TO RAL 9005), ON REQUEST |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
UL VW-1, CSA FT1

Technical data:

| | |
|--------------------------------|--------------------|
| NOMINAL VOLTAGE: | 600 V |
| MAX. OPERATING VOLTAGE: | 2000 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | |
| FIXED LAYING: | -40°C UP TO +105°C |
| FLEXIBLE APPLICATION: | -10°C UP TO +70°C |
| MIN. BENDING RADIUS: | 5 x D |

Features:

- UV RESISTANT
- COLD RESISTANT
- INDOOR/OUTDOOR USE
- HIGH FLEXIBILITY
- MINIMUM WASTE OF SPACE
- ACC. TO NEC APPROVAL
- UL FESTOON, VW-1, 105°C 600 V
- CSA FESTOON, FT1, 105°C 600 V



| Part no. | No. of cores x cross section n x AWG | Outer Ø inches/mm ±10% | Copper weight Lbs/Mft - kg/km | Cable weight approx. Lbs/Mft - kg/km |
|----------------|--|------------------------------|-------------------------------------|--|
| 03340FYU040A14 | 4 x 14 | 0,256 x 0,799 - 6,5 x 20,3 | / - / | / - / |
| 03340FYU120A16 | 12 x 16 | 0,270 x 2,1 - 6,86 x 53,34 | / - / | / - / |

Other dimensions and colors available on request.



LIFT-1S UL Central

UL Type ST00W Cable / CSA ST00W AWM / 600V 105°C / FT1



ELETTROTEK KABEL® LIFT-1S UL Central
UL Pendant 600V 90°C; UL
Type MTW; CSA AWM 600V 90°C

Construction:

| | |
|---------------------------------|---|
| CONDUCTOR: | EXTRA FINELY STRANDED RED COPPER, CLASS M |
| INSULATION: | PVC COMPOUND |
| CORES COLOR: | 1ST CORE: YELLOW 2ND CORE: BLUE 3DT CORE: BROWN 4TH CORE: RED 5TH CORE: ORANGE 6TH CORE: WHITE 7TH CORE: PURPLE |
| CENTRAL SUPPORTING UNIT: | CENTRAL GALVANIZED STEEL CORE A 1/16" (7X7) |
| STRANDING: | IN LAYERS AROUND CENTRAL SUPPORTING UNIT |
| OUTER SHEATH: | YELLOW (SIMILAR TO RAL 1021), PVC COMPOUND, OIL RESISTANT |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL TYPE MTW, VW-1,
CSA AWM, FT-1

Technical data:

| | |
|-----------------------------|-----------------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 600 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | |
| FIXED LAYING: | UP TO +105°C UL/CSA: +90°C |
| FLEXIBLE APPLICATION: | UP TO +105°C UL/CSA: +90°C |
| MIN. BENDING RADIUS: | 10 x D |

Features:

- UV, OZONE AND MOISTURE RESISTANCE
- LOW ABRASION
- HIGH NOTCH RESISTANT
- UL PENDANT 600 V 90°C**
- UL TYPE MTW**
- CSA AWM 600 V 90°C**

| Part no. | No. of cores x cross section n x AWG | Outer-Ø inches/mm ± 10% | Cable weight approx. Lbs/Mft-kg/km |
|----------------|--|-------------------------------|--|
| 03300FYK030A16 | 3 x 16 | 0,514 - 13,1 | 100 - 149 |
| 03300FYK050A16 | 5 x 16 | 0,554 - 14,1 | 173 - 257 |
| 03300FYK070A16 | 7 x 16 | 0,592 - 15 | 185 - 275 |

Other dimensions and colors available on request.

LIFT- 1S UL



ELETTROTEK KABEL® LIFT 1S UL
UL subject 2562 for pendant cable,
UL 105°C 600 V, CSA AWM I/II A/B 105°C 600 V

Construction:

| | |
|-------------------------|--|
| CONDUCTOR: | EXTRA FINELY STRANDED RED COPPER, CLASS M |
| INSULATION: | PVC COMPOUND 105°C ACC. TO UL 62, CSA C22.2 NO.210.2 |
| CORES COLOR: | ACC. TO ICEA METHOD 1-E1 (K-1) |
| STRANDING: | IN LAYER WITH FIBRILLATED POLYPROPYLENE FILLER |
| WRAPPING: | POLYESTER TAPE |
| SUPPORTING UNIT: | ONE GALVANIZED STEEL CORE + BLACK NYLON COVERING, LAYING PARALLEL WITH THE CABLE |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), PVC COMPOUND ACC. TO UL 62, CSA C22.2 NO.210.2 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL TYPE MTW, VW-1,
CSA AWM, FT-1

Technical data:

| | |
|-----------------------------|-------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 600 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | (UL) / C(UL) |
| FIXED LAYING: | -25°C UP TO +105°C |
| FLEXIBLE APPLICATION: | -25°C UP TO +105°C |
| MIN. BENDING RADIUS: | 10 x D |

Features:

- UV, OZONE AND MOISTURE RESISTANCE
- LOW ABRASION
- HIGH NOTCH RESISTANT
- UL SUBJECT 2562 FOR PENDANT CABLES**
- UL 105°C 600 V**
- CSA AWM I/II A/B 105°C 600 V**

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø inches/mm ± 10% | Cable weight approx. Lbs/Mft-kg/km | Tensile strength N | AWG no.*) |
|----------------|--|-------------------------------|--|--------------------------|--------------|
| 03170F7K041A16 | 4 g 1,5 | 0,675 x 0,445 - 17,1 x 11,3 | 134 - 199,4 | 1000 | 16 |
| 03170F7K061A16 | 6 g 1,5 | 0,75 x 0,52 - 19 x 13,2 | 171 - 254,4 | 1000 | 16 |
| 03170F7K081A16 | 8 g 1,5 | 0,845 x 0,615 - 21,5 x 15,6 | 213 - 317 | 1000 | 16 |

Other dimensions and colors available on request.

LIFT-2S UL



ELETTROTEK KABEL® LIFT-2S UL
UL subject 2562 for pendant cables,
UL 90°C 600 V, CSA AWM I/II A/B 90°C 600 V

Construction:

| | |
|-------------------------|--|
| CONDUCTOR: | EXTRA FINELY STRANDED RED COPPER, CLASS M |
| INSULATION: | PVC/NYLON SPECIAL COMPOUND |
| CORES COLOR: | ACC. TO ICEA METHOD 1-E2 (K-2) |
| CENTRAL UNIT: | PVC FILLER (IF NECESSARY) |
| STRANDING: | IN LAYERS |
| WRAPPING: | MYLAR TAPE |
| SUPPORTING UNIT: | TWO GALVANIZED STEEL CORE + BLACK NYLON COVERING, LAYING PARALLEL WITH THE CABLE |
| OUTER SHEATH: | YELLOW (SIMILAR TO RAL 1021), PVC COMPOUND |

Technical data:

| | |
|-----------------------------|-------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 600 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | (UL) / C(UL) |
| FIXED LAYING: | -25°C UP TO +90°C |
| FLEXIBLE APPLICATION: | -25°C UP TO +90°C |
| MIN. BENDING RADIUS: | 10 × D |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL TYPE MTW, VW-1,
CSA AWM, FT-1

Features:

- UV, OZONE AND MOISTURE RESISTANCE
- LOW ABRASION
- HIGH NOTCH RESISTANT
- UL SUBJECT 2562 FOR PENDANT CABLES**
- UL 90°C 600 V**
- CSA AWM I/II A/B 90°C 600 V**

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø inches/mm ± 10% | Cable weight approx. Lbs/Mft-kg/km | Tensile strength N | AWG no.*) |
|----------------|--|-------------------------------|--|--------------------------|--------------|
| 03180FYU081A16 | 8 g 1,5 | 0,895 x 0,490 - 22,7 x 12,4 | 219 - 325,9 | 1000 | 16 |
| 03180FYU121A16 | 12 g 1,5 | 0,972 x 0,546 - 24,7 x 13,9 | 263 - 391,4 | 1000 | 16 |
| 03180FYU161A16 | 16 g 1,5 | 1,030 x 0,624 - 26,2 x 15,8 | 318 - 473,2 | 1000 | 16 |
| 03180FYU241A16 | 24 g 1,5 | 1,195 x 0,760 - 30,3 x 19,3 | 430 - 640 | 1000 | 16 |

Other dimensions and colors available on request.

PENDANT ROUND LIFT 733 UL

pendant control cable up to 60 mt.



ELETTROTEK KABEL® PENDANT ROUND LIFT 733 UL
UL type MTW VW-1, UL 90°C 600 V,
CSA AWM I/II A/B 90°C 600 V FT1



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | EXTRA FINELY STRANDED RED COPPER, CLASS M |
| INSULATION: | PVC/NYLON SPECIAL COMPOUND |
| CORES COLOR: | ACC. TO ICEA METHOD 1-E2 (K-2) |
| CENTRAL UNIT: | PVC FILLER |
| STRANDING: | IN LAYERS |
| WRAPPING: | MYLAR TAPE |
| OUTER SHEATH: | YELLOW (SIMILAR TO RAL1021), PVC COMPOUND |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL TYPE MTW, VW-1,
CSA AWM, FT-1

Technical data:

| | |
|------------------------------|-------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 600 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | (UL) / C(UL) |
| FIXED LAYING: | -25°C UP TO +90°C |
| FLEXIBLE APPLICATION: | -25°C UP TO +90°C |
| MIN. BENDING RADIUS: | 10 x D |

Features:

UL 90°C 600 V
CSA AWM I/II A/B 90°C 600 V

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø inches/mm ± 10% | Cable weight approx. Lbs/Mft-kg/km | Max. Tensile strength N | AWG no.*) |
|----------------|--|-------------------------------|--|-------------------------------|--------------|
| 07050FYU081A16 | 8 g 1,5 | 0,479 - 12,2 | 158 - 235 | 1000 | 16 |
| 07050FYU121A16 | 12 g 1,5 | 0,566 - 14,4 | 217 - 323 | 1000 | 16 |
| 07050FYU161A16 | 16 g 1,5 | 0,605 - 15,4 | 255 - 380 | 1000 | 16 |
| 07050FYU241A16 | 24 g 1,5 | 0,755 - 19,2 | - | 1000 | 16 |
| 07050FYU301A16 | 30 g 1,5 | 0,803 - 20,4 | - | 1000 | 16 |
| 07050FYU361A16 | 36 g 1,5 | 0,905 - 23 | - | 1000 | 16 |

Other dimensions and colors available on request.



BASKET SPREADER 740 (YSLTOE)

Control cable hoisting cages in crane systems

ELETTROTEK KABEL® BASKET SPREADER 740 (YSLTOE)



Construction:

| | |
|----------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | PVC TYPEY12 |
| CORES COLOR: | BLACK CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 + GREEN/YELLOW |
| CENTRAL UNIT: | ARAMIDYARNS WITH LEAD |
| STRANDING: | CORES ARE TWISTED TO BUNDLE WITH CENTRAL LEAD CORE, BUNDLES TWISTED AROUND CENTRAL UNIT |
| WRAPPING: | NON-WOVEN TAPE, ON EACH BUNDLE AND OVERALL |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), PUR TYPE 11YM1 |

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
DIN VDE 0482 PART 265-2-1
EN 50265-2-1
IEC 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0282 PART.10
IEC EN 60811-2-1

Technical data:

| | |
|--|-----------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 300/500 V |
| MAX. OPERATING VOLTAGE IN A.C. SYSTEMS: | U ₀ /U 310/550 V |
| MAX. OPERATING VOLTAGE IN D.C. SYSTEMS: | U ₀ /U 410/825 V |
| TEST VOLTAGE: | 2 kV |
| TEMPERATURE RANGE: | |
| FIXED LAYING: | -20°C UP TO +60°C |
| FLEXIBLE APPLICATION: | -20°C UP TO +60°C |
| MAX. TEMP ON CONDUCTOR: | |
| IN SERVICE: | UP TO +70°C |
| IN SHORT CIRCUIT: | UP TO +150°C |
| MIN. BENDING RADIUS: | 15 x D |
| TENSILE STRENGTH: | UP TO 15 N/mm ² |
| MAX. TORSION: | ± 25°/1MT. |
| MAX SPEED (MAIN APPLICATION): | 160 m/min |

Features:

UV, OZONE, AND MOISTURE RESISTANCE
OUTDOOR/INDOOR USE
UP TO 50 MT. SUSPENSION LENGTH
HIGH BREAKING LOAD OF SUPPORTING UNIT
COLD VERSION ON REQUEST
POSSIBLE CONSTRUCTIONS: CONTROL CABLES WITH BUS OR FIBRE OPTICS ELEMENT
UL/CSA APPROVAL ON REQUEST
GOST-R APPROVAL ON REQUEST
FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE
CE APPROVAL

CE

BASKET SPREADER 740 (YSLTOE)

Control cable hoisting cages in crane systems

ELETTROTEK KABEL® BASKET SPREADER 740 (YSLTOE)



YSLTOE-J CONTROL CABLES

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 03150D70481M10 | 48 g 1 | 32 | 460,8 | 1900 | 18 |
| 03150D70121M25 | 12 g 2,5 | 22,9 | 288 | 834 | 14 |
| 03150D70241M25 | 24 g 2,5 | 30 | 576 | 1650 | 14 |
| 03150D70301M25 | 30 g 2,5 | 32,6 | 720 | 2050 | 14 |
| 03150D70361M25 | 36 g 2,5 | 36,2 | 864 | 2350 | 14 |
| 03150D70421M25 | 42 g 2,5 | 38,5 | 1008 | 3050 | 14 |
| 03150D70481M25 | 48 g 2,5 | 42,5 | 1152 | 3450 | 14 |
| 03150D70541M25 | 54 g 2,5 | 47 | 1296 | 3490 | 14 |
| 03150D70201M35 | 20 g 3,5 | 32,3 | 672 | 2000 | 12 |
| 03150D70241M35 | 24 g 3,5 | 32,5 | 806,4 | 2080 | 12 |
| 03150D70301M35 | 30 g 3,5 | 36,6 | 1008 | 2650 | 12 |
| 03150D70361M35 | 36 g 3,5 | 39,5 | 1209,6 | 3300 | 12 |
| 03150D70421M35 | 42 g 3,5 | 41,2 | 1411,2 | 3800 | 12 |
| 03150D70481M35 | 48 g 3,5 | 44,1 | 1612,8 | 4150 | 12 |
| 03150D70541M35 | 54 g 3,5 | 44,3 | 1814,4 | 4430 | 12 |

Other dimensions and colors available on request.

BASKET SPREADER 750 (3GSLTOE)

Control cable hoisting cages in crane systems

ELETTROTEK KABEL® BASKET SPREADER 750 (3GSLTOE)



Construction:

| | |
|---------------------------|---|
| CONDUCTOR: | FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC. TO IEC 60228, DIN VDE 0295 |
| INSULATION: | GAALTherm® 530 |
| CORES COLOR: | WHITE CORES WITH CONSECUTIVE NUMBERS ACC. TO EN 50334 + GREEN/YELLOW |
| INDIVIDUAL SCREEN: | TINNED COPPER BRAID (ONLY FOR CONTROL CABLES WITH BUS ELEMENT VERSION) |
| CENTRAL UNIT: | ARAMID YARNS WITH LEAD |
| STRANDING: | CORES ARE TWISTED TO BUNDLE WITH CENTRAL LEAD CORE, BUNDLES TWISTED AROUND CENTRAL UNIT |
| WRAPPING: | NON-WOVEN TAPE, ON EACH BUNDLE AND OVERALL |
| OUTER SHEATH: | BLACK (SIMILAR TO RAL 9005), PUR COMPOUND |

Technical data:

| | |
|--|------------------------------|
| NOMINAL VOLTAGE: | U ₀ /U 0,6/1 KV |
| MAX. OPERATING VOLTAGE IN A.C. SYSTEMS: | U ₀ /U 0,7/1,2 KV |
| MAX. OPERATING VOLTAGE IN D.C. SYSTEMS: | U ₀ /U 0,9/1,8 KV |
| TEST VOLTAGE: | 3,5 KV |
| TEMPERATURE RANGE: | |
| FIXED LAYING: | -50°C UP TO +80°C |
| FLEXIBLE APPLICATION: | -40°C UP TO +80°C |
| MAX. TEMP ON CONDUCTOR: | |
| IN SERVICE: | UP TO +90°C |
| IN SHORT CIRCUIT: | UP TO +250°C |
| MIN. BENDING RADIUS: | 5 X D |
| TENSILE STRENGTH: | UP TO 15 N/mm ² |
| MAX. TORSION: | ± 25°/1mt. |
| MAX SPEED (MAIN APPLICATION): | 160 m/min |

Resistance:



OIL RESISTANCE ACC. TO:
DIN VDE 0473-811-404 PART.10
DIN EN 60811-404

Features:

- UV, OZONE, AND MOISTURE RESISTANCE
- OUTDOOR/INDOOR USE
- UP TO 50 MT. SUSPENSION LENGTH
- HIGH BREAKING LOAD OF SUPPORTING UNIT
- COLD RESISTANT
- POSSIBLE CONSTRUCTIONS: CONTROL CABLES WITH BUS OR FIBRE OPTICS ELEMENT
- GOST-R APPROVAL ON REQUEST
- FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE
- CE APPROVAL

CE

BASKET SPREADER 750 (3GSLTOE)

Control cable hoisting cages in crane systems

ELETTROTEK KABEL® BASKET SPREADER 750 (3GSLTOE)



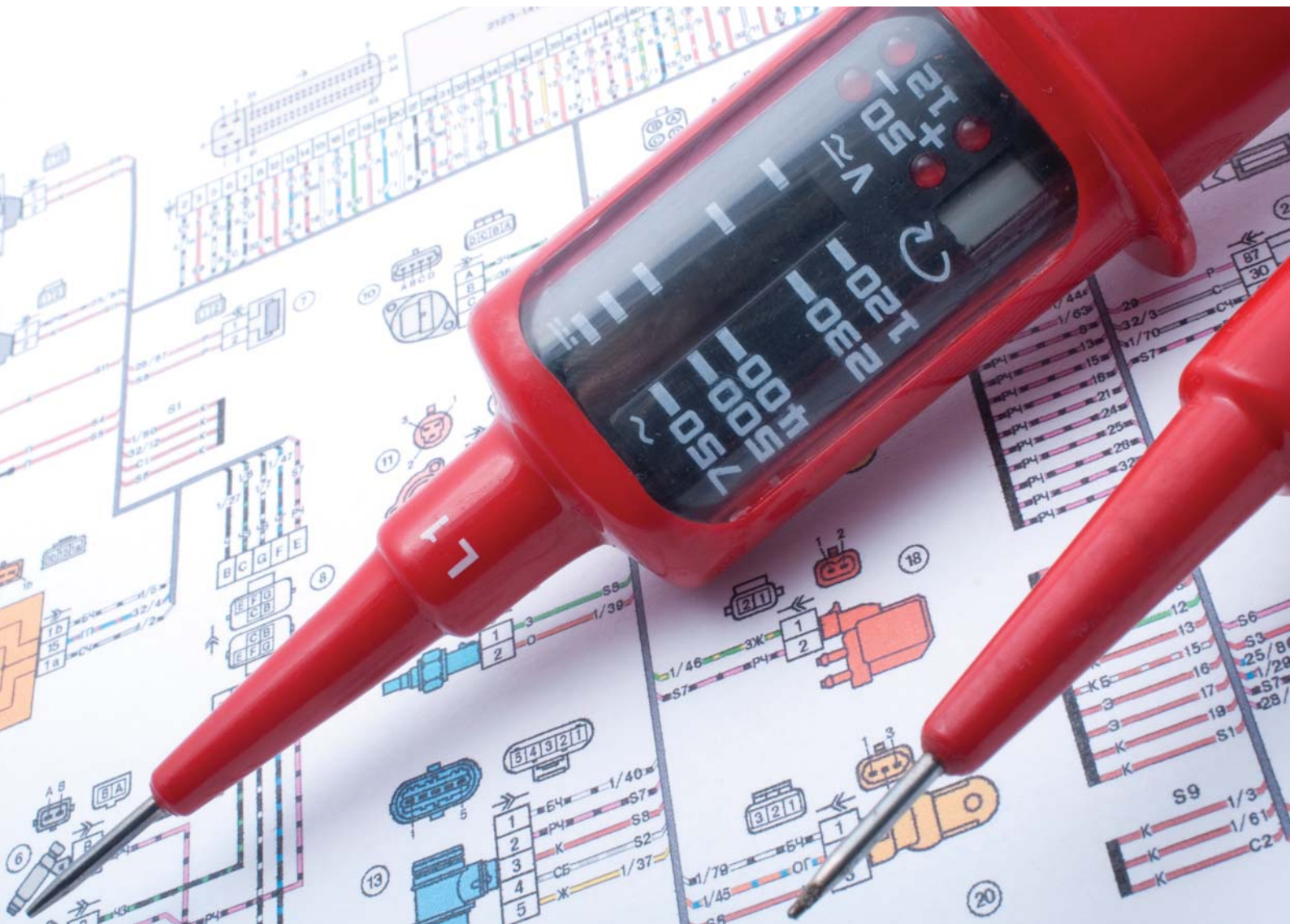
3GSLTOE-J CONTROL CABLES

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 03330G7A481M10 | 48 g 1 | 32,5 | 460,8 | 2350 | 18 |
| 03330G7A241M25 | 24 g 2,5 | 30,5 | 576 | 1750 | 14 |
| 03330G7A301M25 | 30 g 2,5 | 32,6 | 720 | 2250 | 14 |
| 03330G7A361M25 | 36 g 2,5 | 36,2 | 864 | 2800 | 14 |
| 03330G7A421M25 | 42 g 2,5 | 38,5 | 1008 | 3500 | 14 |
| 03330G7A481M25 | 48 g 2,5 | 42,5 | 1152 | 4050 | 14 |
| 03330G7A541M25 | 54 g 2,5 | 47 | 1296 | 3900 | 14 |
| 03330G7A201M35 | 20 g 3,5 | 32,5 | 672 | 2200 | 12 |
| 03330G7A241M35 | 24 g 3,5 | 33,5 | 806,4 | 2350 | 12 |
| 03330G7A301M35 | 30 g 3,5 | 36 | 1008 | 3000 | 12 |
| 03330G7A361M35 | 36 g 3,5 | 39,5 | 1209,6 | 3750 | 12 |
| 03330G7A421M35 | 42 g 3,5 | 44 | 1411,2 | 4500 | 12 |
| 03330G7A481M35 | 48 g 3,5 | 47 | 1612,8 | 4800 | 12 |
| 03330G7A541M35 | 54 g 3,5 | 47,5 | 1814,4 | 5100 | 12 |

3GSLTOE-J CONTROL CABLES WITH BUS ELEMENT

| Part no. | No. of cores x cross section n x mm ² | Outer-Ø ca.mm ± 10% | Copper weight kg/km | Cable weight approx. kg/km | AWG no.*) |
|----------------|--|---------------------------|---------------------------|----------------------------------|--------------|
| 03330G7A36BM25 | 36 g 2,5+2 x (2 x 1)C | 43 | - | 3830 | 14/18 |

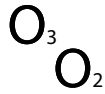
Other dimensions and colors available on request.



| | |
|--|---------|
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Fire performance
Fire resistant



Ozone-Oxygene resistance



mud resistant



Flame retardant and
self-extinguishing

F

flourine
resistance



microbe resistant



Halogen-free



weather/atmospheric
resistance



Railway
network stability



Smoke density/
low smoke emission



impact-crushing
resistance



Corrosiveness of
combustion gases



Mechanical resistance



Chem. resistance



water and cold
resistance



Abrasion
notch resistant



high temperature/
heat resistance



UV resistant/
Sunlight resistant



electro magnetic
resistance



Ozone resistance



ageing resistance



Oil resistance



water resistant

STRAND MAKE-UP ACCORDING TO DIN VDE 0295 and IEC 60228

| Cross section mm ² | Stranded wires | Multi-Stranded wires | Fine wires | Extra-fine wires |
|-------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| | Class 2 DIN VDE 0295 | | Class 5 DIN VDE 0295 | Class 6 DIN VDE 0295 |
| | 1 | 2 | 3 | 4 |
| | Number of single wires x wire Ø mm | Number of single wires x wire Ø mm | Number of single wires x wire Ø mm | Number of single wires x wire Ø mm |
| 0,05 | | | | |
| 0,08 | | | | |
| 0,09 | | | | |
| 0,14 | | | ± 18X0,1 | ±18X0,1 |
| 0,25 | | | ±14X0,15 | ±32X0,1 |
| 0,34 | | 7X0,25 | ±19X0,15 | ±42X0,1 |
| 0,38 | | 7X0,27 | ±12X0,2 | ±21X0,15 |
| 0,5 | 7X0,30 | 7X0,30 | ±16X0,2 | ±28X0,15 |
| 0,75 | 7X0,37 | 7X0,37 | ±24X0,2 | ±42X0,15 |
| 1,0 | 7X0,43 | 7X0,43 | ±32X0,2 | ±56X0,15 |
| 1,5 | 7X0,52 | 7X0,52 | ±30X0,25 | ±84X0,15 |
| 2,5 | 7X0,67 | 19X0,41 | ±50X0,25 | ±140X0,15 |
| 4 | 7X0,85 | 19X0,52 | ±56X0,3 | ±224X0,15 |
| 6 | 7X1,05 | 19X0,64 | ±84X0,3 | ±192X0,2 |
| 10 | 7X1,35 | 49X0,51 | ±80X0,4 | ±320X0,2 |
| 16 | 7X1,70 | 49X0,65 | ±128X0,4 | ±512X0,2 |
| 25 | 7X2,13 | 84X0,62 | ±200X0,4 | ±800X0,2 |
| 35 | 7X2,52 | 133X0,58 | ±280X0,4 | ±1120X0,2 |
| 50 | 19X1,83 | 133X0,69 | ±400X0,4 | ±705X0,3 |
| 70 | 19X2,17 | 189X0,69 | ±356X0,5 | ±990X0,3 |
| 95 | 19X2,52 | 259X0,69 | ±485X0,5 | ±1340X0,3 |
| 120 | 37X2,03 | 336X0,67 | ±614X0,5 | ±1690X0,3 |
| 150 | 37X2,27 | 392X0,69 | ±765X0,5 | ±2123X0,3 |
| 185 | 37X2,52 | 494X0,69 | ±944X0,5 | 1470X0,4 |
| 240 | 61X2,24 | 627X0,70 | ±1225X0,5 | ±1905X0,4 |
| 300 | 61X2,50 | 790X0,70 | ±1530X0,5 | ±2385X0,4 |
| 400 | 61X2,89 | | ±2035X0,5 | |
| 500 | 61X3,23 | | ±1768X0,6 | |
| 630 | 91X2,97 | | ±2228X0,6 | |

allowable maximal diameter of single wire

| nominal value mm | maximum value mm |
|------------------|------------------|
| 0,2 | 0,21 |
| 0,25 | 0,26 |
| 0,3 | 0,31 |
| 0,4 | 0,41 |
| 0,5 | 0,51 |
| 0,6 | 0,51 |

COPPER CONDUCTOR AND STRANDING COMPOSITION DATA

| Approx outer Ø | Pounds per 1000 ft. | Circular Mills | Size AWG/CM | CONCENTRIC STRAND | | | | | ROPE LAY Concentric Strand | | ROPE LAY Bunch Strand | | |
|----------------|---------------------|----------------|-------------|-------------------|---------|---------|---------|---------|----------------------------|---------|-----------------------|------------------------|--------|
| | | | | Class AA | Class A | Class B | Class C | Class D | Class G | Class H | Class K 30AWG (.010") | Class M 34AWG (.0063") | |
| .0050 | .0757 | 25.00 | 36 | | | | | | | | | | |
| .0056 | .0954 | 31.52 | 35 | | | | | | | | | | |
| .0063 | .1203 | 39.75 | 34 | | | | | | | | | | |
| .0071 | .1517 | 50.13 | 33 | | | | | | | | | | |
| .0080 | .1913 | 63.21 | 32 | | | | | | | | | | |
| .0089 | .2413 | 79.70 | 30 | | | | | | | | | | |
| .0100 | .3042 | 100.5 | 30 | | | | | | | | | | |
| .0113 | .3836 | 126.7 | 29 | | | | | | | | | | |
| .0126 | .4837 | 159.8 | 28 | | | | | | | | | | |
| .0142 | .6100 | 201.5 | 27 | | | | | | | | | | |
| .0159 | .7692 | 254.1 | 26 | | | | | | | | | | |
| .0179 | .9699 | 320.4 | 25 | | | | | | | | | | |
| .0201 | 1.223 | 404.0 | 24 | | | | | | | | | | |
| .0226 | 1.542 | 509.5 | 23 | | | | | | | | | | |
| .0254 | 1.945 | 642.4 | 22 | | | | | | | | | | |
| .0285 | 2.452 | 810.1 | 21 | | | | | | | | | | |
| .0363 | 3.154 | 1,020 | 20 | | | 7 | 19 | | | | | 10 | 26 |
| .0456 | 5.015 | 1,620 | 18 | | | 7 | 19 | | | | | 16 | 41 |
| .0576 | 7.974 | 2,580 | 16 | | | 7 | 19 | | | | | 26 | 65 |
| .0726 | 12.68 | 4,110 | 14 | | | 7 | 19 | 37 | 49 | | | 41 | 104 |
| .0915 | 20.16 | 6,530 | 12 | | | 7 | 19 | 37 | 49 | | | 65 | 186 |
| .1160 | 32.06 | 10,380 | 10 | | | 7 | 19 | 37 | 49 | | | 104 | 259 |
| .1600 | 40.42 | 13,090 | 9 | | | 7 | 19 | 37 | 49 | 133 | | | |
| .1460 | 51.0 | 16,510 | 8 | | | 7 | 19 | 37 | 49 | 133 | | 168 | 420 |
| .1840 | 80.9 | 26,240 | 6 | | | 7 | 19 | 37 | 49 | 133 | | 266 | 665 |
| .2320 | 129 | 41,740 | 4 | 3 | 7 | 7 | 19 | 37 | 49 | 133 | | 420 | 1064 |
| .2600 | 162 | 52,620 | 3 | 3 | 7 | 7 | 19 | 37 | 49 | 133 | | 532 | 1323 |
| .2990 | 205 | 66,630 | 2 | 3 | 7 | 7 | 19 | 37 | 49 | 133 | | 665 | 1666 |
| .3320 | 259 | 83,690 | 1 | 3 | 7 | 19 | 37 | 61 | 133 | 259 | | 836 | 2107 |
| .3730 | 326 | 105,600 | 1/0 | 7 | 7 | 19 | 37 | 61 | 133 | 259 | | 1064 | 2646 |
| .4190 | 411 | 133,100 | 2/0 | 7 | 7 | 19 | 37 | 61 | 133 | 259 | | 1323 | 3325 |
| .4700 | 518 | 167,800 | 3/0 | 7 | 7 | 19 | 37 | 61 | 133 | 259 | | 1666 | 4256 |
| .5280 | 653 | 211,600 | 4/0 | 7 | 7 | 19 | 37 | 61 | 133 | 259 | | 2107 | 5320 |
| .5750 | 772 | 250,000 | 250,000 | 12 | 19 | 37 | 61 | 91 | 259 | 427 | | 2499 | 6384 |
| .6300 | 925 | 300,000 | 300,000 | 12 | 19 | 37 | 61 | 91 | 259 | 427 | | 2989 | 7581 |
| .6810 | 1080 | 350,000 | 350,000 | 12 | 19 | 37 | 61 | 91 | 259 | 427 | | 3458 | 8806 |
| .7280 | 1236 | 400,000 | 400,000 | 19 | 19 | 37 | 61 | 91 | 259 | 427 | | 3990 | 10,101 |
| .8130 | 1542 | 500,000 | 500,000 | 19 | 37 | 37 | 61 | 91 | 259 | 427 | | 5054 | 12,691 |
| .8930 | 1850 | 600,000 | 600,000 | 37 | 37 | 61 | 91 | 127 | 427 | 703 | | 5985 | 14,945 |
| .9980 | 2316 | 750,000 | 750,000 | 37 | 61 | 61 | 91 | 127 | 427 | 703 | | 7581 | 18,788 |
| 1.152 | 3086 | 1,000,000 | 1,000,000 | 37 | 61 | 61 | 91 | 127 | 427 | 703 | | 10,101 | 25,193 |

DIMENSION AND WEIGHTS OF SOLID COPPER WIRE

| Size AWG | Approximate Diameter | Circular Mils | Square Inches | Approximate Lbs/Mft |
|----------|----------------------|---------------|---------------|---------------------|
| 34 | 0,00063 | 39,7 | 0,0000312 | 0,120 |
| 32 | 0.0080 | 64.0 | 0.0000503 | 0.194 |
| 30 | 0.0100 | 100 | 0.0000785 | 0.303 |
| 29 | 0.0113 | 128 | 0.000100 | 0.387 |
| 28 | 0.0126 | 159 | 0.000125 | 0.481 |
| 27 | 0.0142 | 202 | 0.000158 | 0.610 |
| 26 | 0.0159 | 253 | 0.000199 | 0.765 |
| 25 | 0.0179 | 320 | 0.000252 | 0.970 |
| 24 | 0.0201 | 404 | 0.000317 | 1.22 |
| 23 | 0.0226 | 511 | 0.000401 | 1.55 |
| 22 | 0.0253 | 640 | 0.000503 | 1.94 |
| 21 | 0.0285 | 812 | 0.000638 | 2.46 |
| 20 | 0.0320 | 1020 | 0.000804 | 3.10 |
| 18 | 0.0403 | 1620 | 0.00128 | 4.92 |
| 16 | 0.0508 | 2580 | 0.00203 | 7.81 |
| 14 | 0.0641 | 4110 | 0.00323 | 12.4 |
| 12 | 0.0808 | 6530 | 0.00513 | 19.8 |
| 10 | 0.1019 | 10,380 | 0.00815 | 31.43 |
| 9 | 0.1144 | 13,090 | 0.01028 | 39.62 |
| 8 | 0.1285 | 16,510 | 0.01297 | 49.98 |
| 7 | 0.1443 | 20,820 | 0.01635 | 63.03 |
| 6 | 0.1620 | 26,240 | 0.02061 | 79.44 |
| 5 | 0.1819 | 33,090 | 0.02599 | 100.2 |
| 4 | 0.2043 | 41,740 | 0.03278 | 130.3 |
| 3 | 0.2294 | 52,620 | 0.04133 | 159.3 |
| 2 | 0.2576 | 66,360 | 0.05212 | 200.9 |

STRANDING-CLASS CONSTRUCTION AND USES

Concentric-lay Conductors

| | |
|---------|--|
| Class B | Power cables |
| Class C | Power cables where more flexible stranding than Class B is desired |
| Class D | Power cables where extra flexible stranding is desired |

Rope-lay and Bunch-stranded Conductors

| | |
|---------|--|
| Class G | All cables for portable use |
| Class H | All cables where extreme flexibility is required, e.g. take-up reels |
| Class I | Apparatus cable and motor leads |
| Class K | Cords and cables 30 AWG copper wires - Stationary service |
| Class M | Cords and cables 34 AWG copper wires - Constant service |

Note: Class G and H shall have concentric-lay stranded members and Class I, K and M shall have bunched stranded members.

AMERICAN/EUROPEAN CONVERSION TABLE FROM AWG TO mm²

| AWG Number | Cross section mm ² (AMERICAN COMPARISON) | Cross section mm ² (EUROPEAN COMPARISON) | Ø mm | Conductor resistance Ω/km |
|------------|--|--|--------|---------------------------|
| 1000 MCM | 507 | 500 | 29,3 | 0,036 |
| 900 | 456 | - | 27,8 | 0,04 |
| 750 | 380 | 400 | 25,4 | 0,048 |
| 600 | 304 | 300 | 22,7 | 0,061 |
| 550 | 279 | - | 21,7 | 0,066 |
| 500 | 253 | 240 | 20,7 | 0,07 |
| 450 | 228 | - | 19,6 | 0,08 |
| 400 | 203 | - | 18,5 | 0,09 |
| 350 | 177 | 185 | 17,3 | 0,1 |
| 300 | 152 | 150 | 16 | 0,12 |
| 250 | 127 | - | 14,6 | 0,14 |
| 4/0 | 107,2 | 120 | 11,68 | 0,18 |
| 3/0 | 85 | 95 | 10,4 | 0,23 |
| 2/0 | 67,4 | 70 | 9,27 | 0,29 |
| 0 | 53,4 | - | 8,25 | 0,37 |
| 1 | 42,4 | 50 | 7,35 | 0,47 |
| 2 | 33,6 | 35 | 6,54 | 0,57 |
| 3 | 26,7 | - | 5,83 | 0,71 |
| 4 | 21,2 | 25 | 5,19 | 0,91 |
| 5 | 16,8 | - | 4,62 | 1,12 |
| 6 | 13,3 | 16 | 4,11 | 1,44 |
| 7 | 10,6 | - | 3,67 | 1,78 |
| 8 | 8,34 | 10 | 3,26 | 2,36 |
| 9 | 6,62 | - | 2,91 | 2,77 |
| 10 | 5,26 | 6 | 2,59 | 3,64 |
| 11 | 4,15 | - | 2,3 | 4,44 |
| 12 | 3,31 | 4 | 2,05 | 5,41 |
| 13 | 2,63 | - | 1,83 | 7,02 |
| 14 | 2,08 | 2,5 | 1,63 | 8,79 |
| 15 | 1,65 | - | 1,45 | 11,2 |
| 16 | 1,31 | 1,5 | 1,29 | 14,7 |
| 17 | 1,04 | - | 1,15 | 17,8 |
| 18 | 0,823 | 1 | 1,024 | 23 |
| 19 | 0,653 | 0,75 | 0,912 | 28,3 |
| 20 | 0,519 | 0,5 | 0,812 | 34,5 |
| 21 | 0,412 | 0,38 | 0,723 | 44 |
| 22 | 0,324 | 0,34 | 0,644 | 54,8 |
| 23 | 0,259 | - | 0,573 | 70,1 |
| 24 | 0,205 | 0,25 | 0,511 | 89,2 |
| 25 | 0,163 | - | 0,455 | 111 |
| 26 | 0,128 | 0,14 | 0,405 | 146 |
| 27 | 0,102 | - | 0,361 | 176 |
| 28 | 0,0804 | 0,08 | 0,321 | 232 |
| 29 | 0,0646 | - | 0,286 | 282 |
| 30 | 0,0503 | 0,05 | 0,255 | 350 |
| 31 | 0,04 | - | 0,227 | 446 |
| 32 | 0,032 | - | 0,202 | 578 |
| 33 | 0,0252 | - | 0,18 | 710 |
| 34 | 0,0200 | - | 0,16 | 899 |
| 35 | 0,0161 | - | 0,143 | 1125 |
| 36 | 0,0123 | - | 0,127 | 1426 |
| 37 | 0,01 | - | 0,113 | 1800 |
| 38 | 0,00795 | - | 0,101 | 2255 |
| 39 | 0,00632 | - | 0,0897 | 2860 |

4/0 is also known as 0000; 1 mil = inch = 0.0254 mm
 *Shown in MCM (circular mils) for bigger cross sections

1 CM = 1 Circ. mil = 0.0005067 mm²
 1 MCM = 1000 Circ. mils = 0.5067 mm²

1 CM = 1 Circ. mil = 0.0005067 mm²
 1 MCM = 1000 Circ. mils = 0.5067 mm²

ADDITIONAL CONVERSION TABLE

LENGHT

| From | to | Formula |
|-----------------|-----------------|--------------------------|
| INCH (IN) | MILLIMETER (MM) | $IN \times 25,4 = MM$ |
| MILLIMETER (MM) | INCH (IN) | $MM \times 0,03937 = IN$ |
| FOOT (FT) | METER (M) | $FT \times 0,3048 = M$ |
| METER (M) | FOOT (FT) | $MT \times 3,218 = FT$ |
| MILE (MI) | KILOMETER (KM) | $MI \times 1,609 = KM$ |
| KILOMETER (KM) | MILE (MI) | $KM \times 0,662 = MI$ |

WEIGHTS

| From | to | Formula |
|---------------|---------------|------------------------|
| POUND (LB) | KILOGRAM (KG) | $LB \times 2,205 = KG$ |
| KILOGRAM (KG) | POUND (LB) | $KG : 2,205 = LB$ |

TEMPERATURE

| From | to | Formula |
|----------------|----------------|--------------------------|
| FAHRENHEIT (F) | CELSIUS (C) | $(F-32) \times 0,56 = C$ |
| CELSIUS (C) | FAHRENHEIT (F) | $C \times 1,8 + 32 = F$ |

ELETTROTEK KABEL SINGLE WIRE COLOR IDENTIFICATION

| Core. no | Basic color | RAL |
|----------|------------------------------------|-----------|
| 01 | BLACK / NERO | 9005 |
| 02 | DARK BLUE / BLU SCURO (RAL 5010) | 5010 |
| 03 | BROWN / MARRONE | 8003 |
| 04 | GREY / GRIGIO | 7000 |
| 05 | YELLOW / GIALLO | 1021 |
| 06 | GREEN / VERDE | 6018 |
| 07 | VIOLET/ VIOLA | 4005 |
| 08 | WHITE / BIANCO | 9003 |
| 09 | ORANGE / ARANCIONE | 2003 |
| 10 | RED / ROSSO | 3000 |
| 11 | LIGHT BLUE / BLU CHIARO (RAL 5015) | 5015 |
| 12 | LIGHT BLUE / BLU CHIARO (RAL 5012) | 5012 |
| 13 | PINK / ROSA | 3015 |
| 14 | SKYBLUE/BLU SKY | 5024 |
| 15 | YELLOW-GREEN / GIALLO-VERDE | 1021/6018 |
| 16 | WHITE-DARK BLUE / BIANCO-BLU SCURO | 9003/5010 |
| 17 | DARK BLUE-WHITE / BLU-BIANCO | 5010/9003 |
| 18 | WHITE-GREY / BIANCO-GRIGIO | 9003/7000 |
| 19 | BLACK-GREEN / NERO-VERDE | 9005/6018 |
| 20 | BLACK-DARK BLUE / NERO-BLU SCURO | 9005/5010 |
| 21 | BLACK-WHITE / NERO-BIANCO | 9005/9003 |
| 22 | BLACK-VIOLET / NERO-VIOLA | 9005/4005 |
| 23 | BLACK-RED / NERO-ROSSO | 9005/3000 |
| 24 | WHITE-RED / BIANCO-ROSSO | 9003/3000 |
| 25 | WHITE-BROWN / BIANCO- MARRONE | 9003/8003 |
| 26 | DARK BLUE-RED / BLU SCURO-ROSSO | 5010/3000 |
| 27 | WHITE-VIOLET / BIANCO-VIOLA | 9003/4005 |
| 28 | WHITE-YELLOW / BIANCO-GIALLO | 9003/1021 |
| 29 | WHITE-GREEN / BIANCO-VERDE | 9003/6018 |
| 30 | WHITE-ORANGE / BIANCO-ARANCIONE | 9003/2003 |
| 31 | OFF WHITE GREY | 9002 |
| 32 | REDDISH BROWN | 3016 |
| 33 | BEIGE | 1001 |
| 34 | | |
| 35 | | |
| 36 | | |
| 37 | | |
| 38 | | |
| 39 | | |

HD 308 S2

| no. of cores | Cores with green-yellow insulated conductor (-J) | Cores without green-yellow insulated conductor (-0) |
|--------------|--|---|
| 2 | - | BLUE-BROWN |
| 3 | GREEN/YELLOW-BLUE-BROWN | BROWN-BLACK-GREY |
| 4 | GREEN/YELLOW-BROWN-BLACK-GREY | BLUE-BROWN-BLACK-GREY |
| 5 | GREEN/YELLOW-BLUE-BROWN-BLACK-GREY | BLUE-BROWN-BLACK-GREY-BLACK |
| 6 | GREEN-YELLOW/BLACK + WHITE PRINTED NUMBERS | BLACK + WHITE PRINTED NUMBERS |

Core identification with numbers acc. to EN 50334

Number Printing used as the marking inscription for identifying the number of cores of electrical cables. Other core colors are possible with the exception of green and yellow.

DIN 47100

| Number | Color | Number | Color |
|--------|----------------|--------|------------------------|
| 1 | WHITE | 32 | YELLOW - BLUE |
| 2 | BROWN | 33 | GREEN - RED |
| 3 | GREEN | 34 | YELLOW - RED |
| 4 | YELLOW | 35 | GREEN - BLACK |
| 5 | GREY | 36 | YELLOW - BLACK |
| 6 | PINK | 37 | GREY - BLUE |
| 7 | BLUE | 38 | PINK - BLUE |
| 8 | RED | 39 | GREY - RED |
| 9 | BLACK | 40 | PINK - RED |
| 10 | VIOLET | 41 | GREY - BLACK |
| 11 | GREY - PINK | 42 | PINK - BLACK |
| 12 | RED - BLUE | 43 | BLUE - BLACK |
| 13 | WHITE - GREEN | 44 | RED - BLACK |
| 14 | BROWN - GREEN | 45 | WHITE - BROWN - BLACK |
| 15 | WHITE - YELLOW | 46 | YELLOW - GREEN - BLACK |
| 16 | YELLOW - BROWN | 47 | GREY - PINK - BLACK |
| 17 | WHITE - GREY | 48 | RED - BLUE - BLACK |
| 18 | GREY - BROWN | 49 | WHITE - GREEN - BLACK |
| 19 | WHITE - PINK | 50 | BROWN - GREEN - BLACK |
| 20 | PINK - BROWN | 51 | WHITE - YELLOW - BLACK |
| 21 | WHITE - BLUE | 52 | YELLOW - BROWN - BLACK |
| 22 | BROWN - BLUE | 53 | WHITE - GREY - BLACK |
| 23 | WHITE - RED | 54 | GRAY - BROWN - BLACK |
| 24 | BROWN - RED | 55 | WHITE - PINK - BLACK |
| 25 | WHITE - BLACK | 56 | PINK - BROWN - BLACK |
| 26 | BROWN - BLACK | 57 | WHITE - BLUE - BLACK |
| 27 | GREY - GREEN | 58 | BROWN - BLUE - BLACK |
| 28 | YELLOW - GREY | 59 | WHITE - RED - BLACK |
| 29 | PINK - GREEN | 60 | BROWN - RED - BLACK |
| 30 | YELLOW - PINK | 61 | BLACK - WHITE |
| 31 | GREEN - BLUE | | |

COLOR CODE US 1

| Core. no | Basic color | 1 st ring | 2nd ring |
|----------|-------------|-----------|----------|
| 1 | BLACK | - | - |
| 2 | WHITE | - | - |
| 3 | RED | - | - |
| 4 | GREEN | - | - |
| 5 | BROWN | - | - |
| 6 | BLUE | - | - |
| 7 | ORANGE | - | - |
| 8 | YELLOW | - | - |
| 9 | VIOLET | - | - |
| 10 | GREY | - | - |
| 11 | PINK | - | - |
| 12 | BEIGE | - | - |

COLOR CODE US2

Comparable with IEEE 1580 table 22 and K1color code (for multi-conductor cables and per ICEA and NEC code)

| Core.no | Basic color | 1st stripe | 2nd stripe |
|---------|-------------|------------|------------|
| 1 | BLACK | - | - |
| 2 | WHITE | - | - |
| 3 | RED | - | - |
| 4 | GREEN | - | - |
| 5 | ORANGE | - | - |
| 6 | BLUE | - | - |
| 7 | WHITE | BLACK | - |
| 8 | RED | BLACK | - |
| 9 | GREEN | BLACK | - |
| 10 | ORANGE | BLACK | - |
| 11 | BLUE | BLACK | - |
| 12 | BLACK | WHITE | - |
| 13 | RED | WHITE | - |
| 14 | GREEN | WHITE | - |
| 15 | BLUE | WHITE | - |
| 16 | BLACK | RED | - |
| 17 | WHITE | RED | - |
| 18 | ORANGE | RED | - |
| 19 | BLUE | RED | - |
| 20 | RED | GREEN | - |
| 21 | ORANGE | GREEN | - |
| 22 | BLACK | WHITE | RED |
| 23 | WHITE | BLACK | RED |
| 24 | RED | BLACK | WHITE |
| 25 | GREEN | BLACK | WHITE |
| 26 | ORANGE | BLACK | WHITE |
| 27 | BLUE | BLACK | WHITE |
| 28 | BLACK | RED | GREEN |
| 29 | WHITE | RED | GREEN |
| 30 | RED | BLACK | GREEN |
| 31 | GREEN | BLACK | ORANGE |
| 32 | ORANGE | BLACK | GREEN |
| 33 | BLUE | WHITE | ORANGE |
| 34 | BLACK | WHITE | ORANGE |
| 35 | WHITE | RED | ORANGE |
| 36 | ORANGE | WHITE | BLUE |
| 37 | WHITE | RED | BLUE |
| 38 | BLACK | WHITE | GREEN |
| 39 | WHITE | BLACK | GREEN |
| 40 | RED | WHITE | GREEN |
| 41 | GREEN | WHITE | BLUE |
| 42 | ORANGE | RED | GREEN |

| Core.no | Basic color | 1 st stripe | 2nd stripe |
|---------|-------------|-------------|------------|
| 43 | BLUE | RED | GREEN |
| 44 | BLACK | WHITE | BLUE |
| 45 | WHITE | BLACK | BLUE |
| 46 | RED | WHITE | BLUE |
| 47 | GREEN | ORANGE | RED |
| 48 | ORANGE | RED | BLUE |
| 49 | BLUE | RED | ORANGE |
| 50 | BLACK | ORANGE | RED |
| 51 | WHITE | BLACK | ORANGE |
| 52 | RED | ORANGE | BLACK |
| 53 | GREEN | RED | BLUE |
| 54 | ORANGE | BLACK | BLUE |
| 55 | BLUE | BLACK | ORANGE |
| 56 | BLACK | ORANGE | GREEN |
| 57 | WHITE | ORANGE | GREEN |
| 58 | RED | ORANGE | GREEN |
| 59 | GREEN | BLACK | BLUE |
| 60 | ORANGE | GREEN | BLUE |
| 61 | BLUE | GREEN | ORANGE |
| 62 | BLACK | RED | BLUE |
| 63 | WHITE | ORANGE | BLUE |
| 64 | RED | BLACK | BLUE |
| 65 | GREEN | ORANGE | BLUE |
| 66 | ORANGE | WHITE | RED |
| 67 | BLUE | WHITE | RED |
| 68 | BLACK | GREEN | BLUE |
| 69 | WHITE | GREEN | BLUE |
| 70 | RED | GREEN | BLUE |
| 71 | GREEN | WHITE | RED |
| 72 | ORANGE | RED | BLACK |
| 73 | BLUE | RED | BLACK |
| 74 | BLACK | ORANGE | BLUE |
| 75 | RED | ORANGE | BLUE |
| 76 | GREEN | RED | BLACK |
| 77 | ORANGE | WHITE | GREEN |
| 78 | BLUE | WHITE | GREEN |
| 79 | RED | WHITE | ORANGE |
| 80 | GREEN | WHITE | ORANGE |
| 81 | BLUE | BLACK | GREEN |
| 82 | ORANGE | WHITE | - |
| 83 | GREEN | RED | - |
| 84 | BLACK | GREEN | - |
| 85 | WHITE | GREEN | - |
| 86 | BLUE | GREEN | - |
| 87 | BLACK | ORANGE | - |
| 88 | WHITE | ORANGE | - |
| 89 | RED | ORANGE | - |
| 90 | GREEN | ORANGE | - |
| 91 | BLUE | ORANGE | - |
| 92 | BLACK | BLUE | - |

COLOR CODE US 3

| Core. no | Basic color | Color combination |
|----------|------------------------|--------------------|
| 1 | BLACK | PAIRED WITH RED |
| 2 | BLACK | PAIRED WITH WHITE |
| 3 | BLACK | PAIRED WITH GREEN |
| 4 | BLACK | PAIRED WITH BLUE |
| 5 | BLACK | PAIRED WITH YELLOW |
| 6 | BLACK | PAIRED WITH BROWN |
| 7 | BLACK | PAIRED WITH ORANGE |
| 8 | RED | PAIRED WITH WHITE |
| 9 | RED | PAIRED WITH GREEN |
| 10 | RED | PAIRED WITH BLUE |
| 11 | RED | PAIRED WITH YELLOW |
| 12 | RED | PAIRED WITH BROWN |
| 13 | RED | PAIRED WITH ORANGE |
| 14 | GREEN | PAIRED WITH WHITE |
| 15 | GREEN | PAIRED WITH BLUE |
| 16 | GREEN | PAIRED WITH YELLOW |
| 17 | GREEN | PAIRED WITH BROWN |
| 18 | GREEN | PAIRED WITH ORANGE |
| 19 | WHITE | PAIRED WITH BLUE |
| 20 | WHITE | PAIRED WITH YELLOW |
| 21 | WHITE | PAIRED WITH BROWN |
| 22 | WHITE | PAIRED WITH ORANGE |
| 23 | BLUE | PAIRED WITH YELLOW |
| 24 | BLUE | PAIRED WITH BROWN |
| 25 | BLUE | PAIRED WITH ORANGE |
| 26 | BROWN | PAIRED WITH YELLOW |
| 27 | BROWN | PAIRED WITH ORANGE |
| 28 | ORANGE | PAIRED WITH YELLOW |
| 29 | VIOLET | PAIRED WITH ORANGE |
| 30 | VIOLET | PAIRED WITH RED |
| 31 | VIOLET | PAIRED WITH WHITE |
| 32 | VIOLET | PAIRED WITH GREEN |
| 33 | VIOLET | PAIRED WITH BLUE |
| 34 | VIOLET | PAIRED WITH YELLOW |
| 35 | VIOLET | PAIRED WITH BROWN |
| 36 | VIOLET | PAIRED WITH BLACK |
| 37 | GREY PAIRED WITH WHITE | |

K2 Color code (with printed numbers)

Chart 12: ICEA S-66-524 NEMA WC-7

| Core. no | Basic color | Stripe |
|----------|-------------|--------|
| 1 | BLACK | - |
| 2 | RED | - |
| 3 | BLUE | - |
| 4 | ORANGE | - |
| 5 | YELLOW | - |
| 6 | BROWN | - |
| 7 | RED | BLACK |
| 8 | BLUE | BLACK |
| 9 | ORANGE | BLACK |
| 10 | YELLOW | BLACK |
| 11 | BROWN | BLACK |
| 12 | BLACK | RED |
| 13 | BLUE | RED |
| 14 | ORANGE | RED |
| 15 | YELLOW | RED |
| 16 | BROWN | RED |
| 17 | BLACK | BLUE |
| 18 | RED | BLUE |
| 19 | ORANGE | BLUE |
| 20 | YELLOW | BLUE |
| 21 | BROWN | BLUE |
| 22 | BLACK | ORANGE |
| 23 | RED | ORANGE |
| 24 | BLUE | ORANGE |
| 25 | YELLOW | ORANGE |
| 26 | BROWN | ORANGE |
| 27 | BLACK | YELLOW |
| 28 | RED | YELLOW |
| 29 | BLUE | YELLOW |
| 30 | ORANGE | YELLOW |
| 31 | BROWN | YELLOW |
| 32 | BLACK | BROWN |
| 33 | RED | BROWN |
| 34 | BLUE | BROWN |
| 35 | ORANGE | BROWN |
| 36 | YELLOW | BROWN |

ICEA Table E2 (acc. to ICEA S-73-532)

| Core. no | Basic color | Tracer |
|----------|-------------|--------|
| 1 | BLACK | - |
| 2 | RED | - |
| 3 | BLUE | - |
| 4 | ORANGE | - |
| 5 | YELLOW | - |
| 6 | BROWN | - |
| 7 | RED | BLACK |
| 8 | BLUE | BLACK |
| 9 | ORANGE | BLACK |
| 10 | YELLOW | BLACK |
| 11 | BROWN | BLACK |
| 12 | BLACK | RED |
| 13 | BLUE | RED |
| 14 | ORANGE | RED |
| 15 | YELLOW | RED |
| 16 | BROWN | RED |
| 17 | BLACK | BLUE |
| 18 | RED | BLUE |
| 19 | ORANGE | BLUE |
| 20 | YELLOW | BLUE |
| 21 | BROWN | BLUE |
| 22 | BLACK | ORANGE |
| 23 | RED | ORANGE |
| 24 | BLUE | ORANGE |
| 25 | YELLOW | ORANGE |
| 26 | BROWN | ORANGE |
| 27 | BLACK | YELLOW |
| 28 | RED | YELLOW |
| 29 | BLUE | YELLOW |
| 30 | ORANGE | YELLOW |
| 31 | BROWN | YELLOW |
| 32 | BLACK | BROWN |
| 33 | RED | BROWN |
| 34 | BLUE | BROWN |
| 35 | ORANGE | BROWN |
| 36 | YELLOW | BROWN |

Pair cables are Black, Red and numbered. Triad cables are Black, Red, Blue and numbered. Colors repeat after 36 conductors. There are no Green or White conductors stripes.

Acc. to IEC 60364-5-52 table A.52-10 and B.52.14 (acc. to VDE 0298 T4 08/03)

Current carrying capacities listed in amperes and Correction factors for ambient air temperature other than 30°C

PVC insulation / Copper conductor 70°C

Conductor temperature +70°C, Ambient temperature: +30°C

Installation methods - table A.52-1

| Nominal cross sectional area of conductor mm ² | Multi core cables | | Single core cables | | |
|---|-------------------------|---------------------------------|------------------------------|------------|----------|
| | Three loaded conductors | Three loaded conductors trefoil | Three loaded conductors flat | | |
| | | | Touching | Spaced | |
| | | | | Horizontal | Vertical |
| | | | | | |
| 1,5 | 18,5 | - | - | - | - |
| 2,5 | 25 | - | - | - | - |
| 4 | 34 | - | - | - | - |
| 6 | 43 | - | - | - | - |
| 10 | 60 | - | - | - | - |
| 16 | 80 | - | - | - | - |
| 25 | 101 | 110 | 114 | 146 | 130 |
| 35 | 126 | 137 | 143 | 181 | 162 |
| 50 | 153 | 167 | 174 | 219 | 197 |
| 70 | 196 | 216 | 225 | 281 | 254 |
| 95 | 238 | 264 | 275 | 341 | 311 |
| 120 | 276 | 308 | 321 | 396 | 362 |
| 150 | 319 | 356 | 372 | 456 | 419 |
| 185 | 364 | 409 | 427 | 521 | 480 |
| 240 | 430 | 485 | 507 | 615 | 569 |
| 300 | 497 | 561 | 587 | 709 | 659 |
| 400 | - | 656 | 689 | 852 | 795 |
| 500 | - | 749 | 789 | 982 | 920 |
| 600 | - | 855 | 905 | 1138 | 1070 |

Correction factors - table B.52.14.

| AMBIENT TEMPERATURE °C | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 |
|-------------------------|------|------|------|------|----|------|------|------|------|------|------|----|----|----|----|----|----|----|
| INSULATION MATERIAL PVC | 1,22 | 1,17 | 1,12 | 1,06 | 1 | 0,94 | 0,87 | 0,79 | 0,71 | 0,61 | 0,50 | - | - | - | - | - | - | - |

NOTE:

Circular conductors are estimated for sizes up to and including 16 mm².

Values for larger sizes relate to shaped conductors and may safely be applied to circular conductor

Acc.to IEC 60364-5-52 table B.52-12 and B.52.14 (acc. to VDE 0298 T4 08/03)

Current carrying capacities listed in amperes and Correction factors for ambient air temperature other than 30°C

XLPE or HEPR insulation / Copper conductor
Conductor temperature +90°C, Ambient temperature: +30°C

Installation methods - table B.52-1

| Nominal cross sectional area of conductor mm ² | Multi core cables | | Single core cables | | |
|---|-------------------------|---------------------------------|------------------------------|------------|----------|
| | Three loaded conductors | Three loaded conductors trefoil | Three loaded conductors flat | | |
| | | | Touching | Spaced | |
| | | | | Horizontal | Vertical |
| | | | | | |
| 1,5 | 23 | - | - | - | - |
| 2,5 | 32 | - | - | - | - |
| 4 | 42 | - | - | - | - |
| 6 | 54 | - | - | - | - |
| 10 | 75 | - | - | - | - |
| 16 | 100 | - | - | - | - |
| 25 | 127 | 135 | 141 | 182 | 161 |
| 35 | 158 | 169 | 176 | 226 | 201 |
| 50 | 192 | 207 | 216 | 275 | 246 |
| 70 | 246 | 268 | 279 | 353 | 318 |
| 95 | 298 | 328 | 342 | 430 | 389 |
| 120 | 346 | 383 | 400 | 500 | 454 |
| 150 | 399 | 444 | 464 | 577 | 527 |
| 185 | 456 | 510 | 533 | 661 | 605 |
| 240 | 538 | 607 | 634 | 781 | 719 |
| 300 | 621 | 703 | 736 | 902 | 833 |
| 400 | - | 823 | 868 | 1085 | 1008 |
| 500 | - | 946 | 998 | 1253 | 1169 |
| 600 | - | 1088 | 1151 | 1454 | 1362 |

Correction factors - table B.52.14.

| Ambient temperature °C | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 | 95 |
|----------------------------------|------|------|------|------|----|------|------|------|------|------|------|------|------|------|------|----|----|----|
| Insulation material XLPE or HEPR | 1,15 | 1,12 | 1,08 | 1,04 | 1 | 0,96 | 0,91 | 0,87 | 0,82 | 0,76 | 0,71 | 0,65 | 0,58 | 0,50 | 0,41 | - | - | - |

NOTE:
Circular conductors are estimated for sizes up to and including 16 mm².
Values for larger sizes relate to shaped conductors and may safely be applied to circular conductor

PHASE SPLITTING

Single core cables laying in line

Cables laying in trefoil formation

Number 3 core units in the same layer

| | | | | | | | | |
|----|----|----|----|----|----|----|----|----|
| 2 | | 3 | | | 4 | | | |
| T | T | T | T | T | T | T | T | T |
| RS | SR | RS | SR | RS | RS | SR | RS | SR |

Cables laying in line: horizontally or vertically

Number 3 core units in the same layer(*)

| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 2 | | 4 | | | |
| RST | TSR | RST | TSR | RST | TSR |

(*) For cables installed in layers, the indicated arrangements are repeated for each layer

RESISTANCE AND REACTANCE

Cables insulated with thermoplastic compounds

Apparent resistance of flexible red copper conductor at 70°C and reactance at 50 Hz (for 0,6/1 Kv voltage rates)

Power cables

| Conductor cross-section (mm ²) | Resistance at 70 °C | | Reactance at 50 Hz | |
|---|-----------------------|-----------------------|--------------------------|-------------------------|
| | C.C. / DC (Ohm/km) | C.A. / AC (Ohm/km) | single cores (Ohm/km) | multi-cores (Ohm/km) |
| 1,5 | 15,9 | 15,9 | 0,147 | 0,106 |
| 2,5 | 9,55 | 9,55 | 0,186 | 0,098 |
| 4 | 5,92 | 5,92 | 0,129 | 0,097 |
| 6 | 3,95 | 3,95 | 0,121 | 0,092 |
| 10 | 2,29 | 2,29 | 0,111 | 0,086 |
| 16 | 1,45 | 1,45 | 0,103 | 0,081 |
| 25 | 0,93 | 0,93 | 0,097 | 0,080 |
| 35 | 0,66 | 0,66 | 0,093 | 0,077 |
| 50 | 0,46 | 0,46 | 0,090 | 0,076 |
| 70 | 0,33 | 0,33 | 0,086 | 0,074 |
| 95 | 0,25 | 0,25 | 0,085 | 0,074 |
| 120 | 0,193 | 0,194 | 0,081 | - |
| 150 | 0,154 | 0,156 | 0,081 | - |
| 185 | 0,127 | 0,129 | 0,081 | - |
| 240 | 0,096 | 0,099 | 0,080 | - |

Cables insulated with thermoplastic compounds

Control and signal cables

| number of conductors | conductor cross-section (mm ²) | resistance at 70 °C C.C./ DC (Ohm/km) | C.C./ DC (Ohm/km) | reactance at 50 Hz (Ohm/km) |
|----------------------|--|---|----------------------|--------------------------------|
| 5 | 1,5 | 15,9 | 15,9 | 0,106 |
| 7 | 1,5 | 15,9 | 15,9 | 0,106 |
| 7 | 2,5 | 9,55 | 9,55 | 0,098 |
| FROM 10 TO 19 | 1,5 | 16 | 16 | 0,106 |
| FROM 10 TO 19 | 2,5 | 9,65 | 9,65 | 0,098 |
| 24 | 1,5 | 16,1 | 16,1 | 0,106 |
| 24 | 2,5 | 9,7 | 9,7 | 0,098 |

Cables insulated with elastomeric compounds

Resistance at 70°C

| Conductor cross-section (mm ²) | Fexible red copper conductor | | Rigid red copper conductor | |
|---|------------------------------|----------------------|----------------------------|----------------------|
| | C.C./ DC (Ohm/km) | C.A./ AC (Ohm/km) | C.C./ DC (Ohm/km) | C.A./ AC (Ohm/km) |
| 1,5 | 16,95 | 16,95 | 15,4 | 15,4 |
| 2,5 | 10,17 | 10,17 | 9,45 | 9,45 |
| 4 | 6,31 | 6,31 | 5,88 | 5,88 |
| 6 | 4,20 | 4,20 | 3,93 | 3,93 |
| 10 | 2,43 | 2,43 | 2,33 | 2,33 |
| 16 | 1,54 | 1,54 | 1,47 | 1,47 |
| 25 | 0,99 | 0,99 | 0,93 | 0,93 |
| 35 | 0,71 | 0,71 | 0,67 | 0,67 |
| 50 | 0,49 | 0,50 | 0,49 | 0,49 |
| 70 | 0,34 | 0,35 | 0,34 | 0,34 |
| 95 | 0,26 | 0,27 | 0,25 | 0,25 |
| 120 | 0,20 | 0,21 | 0,20 | 0,20 |
| 150 | 0,16 | 0,17 | 0,16 | 0,16 |
| 185 | 0,13 | 0,14 | 0,13 | 0,13 |
| 240 | 0,102 | 0,104 | 0,96 | 0,99 |
| 300 | 0,081 | 0,085 | 0,076 | 0,080 |
| 400 | 0,062 | 0,065 | 0,060 | 0,064 |
| 500 | - | - | 0,047 | 0,052 |
| 630 | - | - | 0,037 | 0,043 |

Cables insulated with elastomeric compounds

Reactance at 50 Hz

| Conductor cross-section (mm ²) | Rigid red copper conductor | | Flexible red copper conductor | |
|---|----------------------------|-------------------------|-------------------------------|-------------------------|
| | Single core (Ohm/km) | Multi cores (Ohm/km) | Single core (Ohm/km) | Multi cores (Ohm/km) |
| 1,5 | 0,146 | 0,103 | 0,144 | 0,100 |
| 2,5 | 0,135 | 0,095 | 0,132 | 0,094 |
| 4 | 0,126 | 0,090 | 0,122 | 0,087 |
| 6 | 0,118 | 0,085 | 0,114 | 0,083 |
| 10 | 0,106 | 0,079 | 0,105 | 0,078 |
| 16 | 0,099 | 0,076 | 0,098 | 0,075 |
| 25 | 0,095 | 0,076 | 0,093 | 0,075 |
| 35 | 0,091 | 0,074 | 0,089 | 0,072 |
| 50 | 0,088 | 0,073 | 0,085 | 0,071 |
| 70 | 0,087 | 0,072 | 0,084 | 0,070 |
| 95 | 0,085 | 0,070 | 0,083 | 0,069 |
| 120 | 0,084 | 0,070 | 0,080 | 0,069 |
| 150 | 0,084 | 0,070 | 0,080 | 0,069 |
| 185 | 0,083 | 0,070 | 0,080 | 0,069 |
| 240 | 0,081 | 0,070 | 0,078 | 0,069 |
| 300 | 0,079 | 0,069 | 0,076 | 0,068 |
| 400 | 0,079 | 0,069 | 0,076 | 0,068 |
| 500 | 0,077 | - | 0,074 | - |
| 630 | 0,076 | - | 0,073 | - |

VOLTAGE DROP

For alternate currents, voltage drop is calculated (Volts) as follows:

$$\phi V = \frac{C_t \cdot I \cdot L}{1000}$$

Where:

C_t (V/A km) = $K \cdot (R \cdot \cos j + X \cdot \sin j)$

L (m) = length of line

I (A) = current

R (ohm/km) = conductor resistance at maximum operating temperature

X (ohm/km) = phase reactance

j = power factor

K = 2 for single-phase system

K = 1,73 for three-phase system

The formula is valid direct currents too

Voltage drop coefficients (Ct) in AC

Flexible PVC cables at 70°C

| Cross-section | single-phase system single core | | | | three-phase system single core | | | | single-phase system multi-core | | | | three-phase system multi-core | | | |
|---------------|---------------------------------|-----------|-----------|---------|--------------------------------|-----------|-----------|---------|--------------------------------|-----------|-----------|---------|-------------------------------|-----------|-----------|---------|
| | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 |
| 1,5 | 22,49 | 25,63 | 28,77 | 31,83 | 19,45 | 22,17 | 24,89 | 27,53 | 22,43 | 25,59 | 28,73 | 31,83 | 19,40 | 22,1 | 24,86 | 27,53 |
| 2,5 | 13,56 | 15,43 | 17,30 | 19,10 | 11,73 | 13,35 | 14,97 | 16,52 | 13,50 | 15,39 | 17,27 | 19,10 | 11,68 | 13,31 | 14,94 | 16,52 |
| 4 | 8,47 | 9,63 | 10,77 | 11,84 | 7,33 | 8,33 | 9,32 | 10,25 | 8,43 | 9,59 | 10,74 | 11,84 | 7,29 | 8,30 | 9,29 | 10,25 |
| 6 | 5,70 | 6,46 | 7,21 | 7,90 | 4,93 | 5,59 | 6,24 | 6,83 | 5,66 | 6,43 | 7,19 | 7,90 | 4,89 | 5,56 | 6,22 | 6,83 |
| 10 | 3,36 | 3,79 | 4,21 | 4,57 | 2,90 | 3,28 | 3,64 | 3,95 | 3,32 | 3,76 | 4,19 | 4,57 | 2,87 | 3,25 | 3,62 | 3,95 |
| 16 | 2,17 | 2,44 | 2,69 | 2,90 | 1,88 | 2,11 | 2,33 | 2,50 | 2,14 | 2,41 | 2,69 | 2,90 | 1,85 | 2,09 | 2,31 | 2,50 |
| 25 | 1,45 | 1,61 | 1,76 | 1,87 | 1,25 | 1,39 | 1,53 | 1,61 | 1,42 | 1,59 | 1,74 | 1,87 | 1,23 | 1,37 | 1,51 | 1,61 |
| 35 | 1,06 | 1,17 | 1,27 | 1,33 | 0,29 | 1,01 | 1,10 | 1,15 | 1,04 | 1,15 | 1,26 | 1,33 | 0,90 | 1 | 1,09 | 1,15 |
| 50 | 0,77 | 0,85 | 0,91 | 0,92 | 0,67 | 0,73 | 0,79 | 0,80 | 0,76 | 0,83 | 0,90 | 0,92 | 0,65 | 0,72 | 0,78 | 0,80 |
| 70 | 0,58 | 0,62 | 0,66 | 0,65 | 0,50 | 0,54 | 0,57 | 0,56 | 0,56 | 0,61 | 0,65 | 0,65 | 0,49 | 0,53 | 0,56 | 0,56 |
| 95 | 0,47 | 0,50 | 0,52 | 0,50 | 0,41 | 0,43 | 0,45 | 0,43 | - | - | - | - | 0,39 | 0,42 | 0,44 | 0,43 |
| 120 | 0,39 | 0,41 | 0,42 | 0,39 | 0,34 | 0,34 | 0,36 | 0,34 | - | - | - | - | - | - | - | - |
| 150 | 0,34 | 0,35 | 0,35 | 0,31 | 0,29 | 0,30 | 0,30 | 0,27 | - | - | - | - | - | - | - | - |
| 185 | 0,30 | 0,30 | 0,30 | 0,26 | 0,26 | 0,26 | 0,26 | 0,22 | - | - | - | - | - | - | - | - |
| 240 | 0,25 | 0,25 | 0,25 | 0,20 | 0,22 | 0,22 | 0,21 | 0,17 | - | - | - | - | - | - | - | - |

Flexible HEPR cables at 90°C

| Cross-section | single-phase system single core | | | | three-phase system single core | | | | single-phase system multi-core | | | | three-phase system multi-core | | | |
|---------------|---------------------------------|-----------|-----------|---------|--------------------------------|-----------|-----------|---------|--------------------------------|-----------|-----------|---------|-------------------------------|-----------|-----------|---------|
| | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 | cos φ 0,7 | cos φ 0,8 | cos φ 0,9 | cos φ 1 |
| 1,5 | 23,95 | 27,31 | 30,65 | 33,92 | 20,71 | 23,62 | 26,51 | 29,34 | 23,88 | 27,25 | 30,61 | 33,92 | 20,66 | 23,57 | 26,48 | 29,34 |
| 2,5 | 14,43 | 16,44 | 18,43 | 20,35 | 12,48 | 14,22 | 15,94 | 17,6 | 14,38 | 16,39 | 18,40 | 20,35 | 12,44 | 14,18 | 15,91 | 17,60 |
| 4 | 9,01 | 10,24 | 11,47 | 12,62 | 7,79 | 8,86 | 9,92 | 10,92 | 8,96 | 10,2 | 11,44 | 12,62 | 7,75 | 8,83 | 9,89 | 10,92 |
| 6 | 6,05 | 6,87 | 7,67 | 8,42 | 5,24 | 5,94 | 6,64 | 7,28 | 6,01 | 6,83 | 7,65 | 8,42 | 5,20 | 5,91 | 6,61 | 7,28 |
| 10 | 3,56 | 4,02 | 4,48 | 4,87 | 3,08 | 3,48 | 3,87 | 4,21 | 3,52 | 3,99 | 4,45 | 4,87 | 3,05 | 3,45 | 3,85 | 4,21 |
| 16 | 2,30 | 2,59 | 2,86 | 3,09 | 1,99 | 2,24 | 2,48 | 2,67 | 2,27 | 2,56 | 2,84 | 3,09 | 1,96 | 2,21 | 2,46 | 2,67 |
| 25 | 1,53 | 1,70 | 1,87 | 1,99 | 1,32 | 1,47 | 1,62 | 1,72 | 1,5 | 1,68 | 1,85 | 1,99 | 1,30 | 1,45 | 1,60 | 1,72 |
| 35 | 1,12 | 1,24 | 1,35 | 1,41 | 0,97 | 1,07 | 1,17 | 1,22 | 1,09 | 1,22 | 1,33 | 1,41 | 0,94 | 1,05 | 1,15 | 1,22 |
| 50 | 0,81 | 0,89 | 0,96 | 0,99 | 0,70 | 0,77 | 0,83 | 0,85 | 0,79 | 0,87 | 0,95 | 0,99 | 0,68 | 0,76 | 0,82 | 0,85 |
| 70 | 0,61 | 0,66 | 0,70 | 0,70 | 0,53 | 0,57 | 0,61 | 0,60 | 0,59 | 0,64 | 0,69 | 0,70 | 0,51 | 0,55 | 0,59 | 0,60 |
| 95 | 0,49 | 0,52 | 0,55 | 0,53 | 0,42 | 0,45 | 0,47 | 0,46 | 0,47 | 0,51 | 0,54 | 0,53 | 0,40 | 0,44 | 0,46 | 0,46 |
| 120 | 0,40 | 0,43 | 0,44 | 0,41 | 0,35 | 0,37 | 0,38 | 0,36 | 0,39 | 0,41 | 0,43 | 0,41 | 0,34 | 0,36 | 0,37 | 0,36 |
| 150 | 0,35 | 0,36 | 0,37 | 0,33 | 0,30 | 0,31 | 0,32 | 0,29 | 0,33 | 0,35 | 0,36 | 0,33 | 0,29 | 0,30 | 0,31 | 0,29 |
| 185 | 0,31 | 0,32 | 0,32 | 0,27 | 0,26 | 0,27 | 0,27 | 0,24 | - | - | - | - | 0,25 | 0,26 | 0,27 | 0,24 |
| 240 | 0,26 | 0,26 | 0,26 | 0,21 | 0,22 | 0,23 | 0,22 | 0,18 | - | - | - | - | 0,21 | 0,22 | 0,22 | 0,18 |
| 300 | 0,23 | 0,23 | 0,22 | 0,17 | 0,20 | 0,20 | 0,19 | 0,15 | - | - | - | - | 0,19 | 0,19 | 0,18 | 0,15 |
| 400 | 0,20 | 0,20 | 0,19 | 0,13 | 0,18 | 0,17 | 0,16 | 0,12 | - | - | - | - | 0,17 | 0,16 | 0,16 | 0,12 |
| 500 | 0,18 | 0,17 | 0,16 | 0,11 | 0,16 | 0,15 | 0,14 | 0,091 | - | - | - | - | - | - | - | - |
| 630 | 0,16 | 0,16 | 0,14 | 0,09 | 0,14 | 0,14 | 0,12 | 0,075 | - | - | - | - | - | - | - | - |

Protection devices must take into consideration the maximum and the minimum short-circuit currents that are reported below

MAXIMUM SHORT-CIRCUIT CURRENT

Voltage Calculation for Alternative Current:

$$S \geq = \frac{I_{cc} \sqrt{T}}{C}$$

The maximum short circuit current accepted by a conductor:
S is calculated with the following formula:

$$I_{cc} (\text{max}) = \frac{S \cdot C}{\sqrt{T}}$$

Key:

T = short circuit duration (seconds)

S = cross-section of copper conductor (mm²)

I_{cc} = short circuit current (A)

C = 115 for PVC copper cables (160 °C)

143 for G7 rubber copper cables (250 °C)

NOTE:

The formula above is valid for intermediate breaks (a maximum of 5 sec.).

For calculating effective short-circuit current allowed by shielding, see the CEI 64-8 standard, appendix D

Celsius coefficient values for copper conductors dependent on the difference in temperature between start and end of short-circuit acc. to the table 2.02.02 of the CEI 11-17 standard.

| Starting temperature Θ _o °C | Ending temperature Θ _o °C | | | | | |
|---|---|-----|-----|-----|-----|-----|
| | 140 | 160 | 180 | 200 | 220 | 250 |
| 90 | 86 | 100 | 112 | 122 | 131 | 143 |
| 85 | 90 | 104 | 115 | 125 | 134 | 146 |
| 80 | 94 | 108 | 119 | 129 | 137 | 149 |
| 75 | 99 | 111 | 122 | 132 | 140 | 151 |
| 70 | 103 | 115 | 125 | 135 | 143 | 154 |
| 65 | 107 | 119 | 129 | 138 | 146 | 157 |
| 60 | 111 | 122 | 132 | 141 | 149 | 160 |
| 50 | 118 | 129 | 139 | 147 | 155 | 165 |
| 40 | 126 | 136 | 145 | 153 | 161 | 170 |
| 30 | 133 | 143 | 152 | 159 | 166 | 176 |

MINIMUM SHORT-CIRCUIT CURRENT

Minimum short-circuit current happens during a short-circuit between phase and neutral (or between phase and phase, for a non distributed neutral), at the farthest point of the conduit.

In a system powered by multiple origins, the only source to be taken into consideration is the one corresponding to the minimum value.

The minimum short-circuit current can be calculated using the formulas a) and b), considering: 50% resistance increase at 20 °C (due to the heating of conductors) and 80% rated voltage reduction, due to the effect of the short-circuit on the current carrying capacities.

If the impedance of the incoming circuit is well-known, the coefficient 0,8 must be replaced by a specific value.

$$a) I_{cc} = \frac{0,8 U}{1,5 \rho \frac{2L}{S}} \quad b) I_{cc} = \frac{0,8 U_0}{1,5 \rho (1+m) \frac{L}{S}}$$

Key:

a) for a neutral not distributed conductor, where:

U = line voltage supplied, linked rated voltage volts

ρ = resistivity of the conductor compounds at 20°C, ohm • mm² (0,018 for copper - 0,027 for aluminum)

L = length of protected conductor in meters

S = conductor cross-section in mm²

I_{cc} = short-circuit current

b) for a neutral distributed conductor, where:

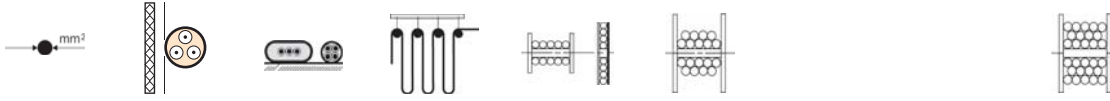
U₀ = phase rating voltage, volts

m = ratio of the neutral conductor resistance and the phase conductor resistance
(if composed of the same material, the ratio is the result between the phase conductor cross-section and the neutral conductor cross-section)

CURRENT CARRYING CAPACITY

Current carrying capacities in amperes with correction factors for ambient air temperature other than 30°C

PVC insulation Rubber up to 10 kV



| Cross-section mm ² | Three loaded conductors | Stretched laying A factor 1 | Suspended freely in air A 1,05 | Reeled in 1 layer A 0,8 | 2 layers A 0,61 | 3 layers* A 0,49 | 4 layers A 0,42 | 5 layers A 0,38 | 6 layers A 0,27 | 7 layers A 0,22 |
|-------------------------------|-------------------------|-----------------------------|--------------------------------|-------------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|
| 1 | 18,5 | 18 | 19 | 14 | 11 | 9 | 8 | 7 | 5 | 4 |
| 1,5 | 25 | 23 | 24 | 18 | 14 | 11 | 10 | 9 | 6 | 5 |
| 2,5 | 34 | 30 | 32 | 24 | 18 | 15 | 13 | 11 | 8 | 7 |
| 4 | 43 | 41 | 43 | 33 | 25 | 20 | 17 | 16 | 11 | 9 |
| 6 | 60 | 53 | 56 | 42 | 32 | 26 | 22 | 20 | 14 | 12 |
| 10 | 80 | 74 | 78 | 59 | 45 | 36 | 31 | 28 | 20 | 16 |
| 16 | 101 | 99 | 104 | 79 | 60 | 49 | 42 | 38 | 27 | 22 |
| 25 | 126 | 131 | 138 | 105 | 80 | 64 | 55 | 50 | 35 | 29 |
| 35 | 153 | 162 | 170 | 130 | 99 | 79 | 68 | 62 | 44 | 36 |
| 50 | 196 | 202 | 212 | 162 | 123 | 99 | 85 | 78 | 55 | 44 |
| 70 | 238 | 250 | 263 | 200 | 153 | 123 | 105 | 95 | 68 | 55 |
| 95 | 276 | 301 | 316 | 241 | 184 | 147 | 126 | 114 | 81 | 66 |
| 120 | 319 | 352 | 370 | 282 | 215 | 172 | 148 | 134 | 95 | 77 |
| 150 | 364 | 404 | 424 | 323 | 246 | 198 | 170 | 154 | 109 | 89 |
| 185 | 430 | 461 | 484 | 369 | 281 | 226 | 194 | 175 | 124 | 101 |
| 240 | 497 | 540 | 567 | 432 | 329 | 265 | 227 | 205 | 146 | 119 |
| 300 | - | 620 | 651 | 496 | 378 | 304 | 260 | 236 | 167 | 136 |
| Rubber - starting at 15 kV | | | | | | | | | | |
| 16 | 101 | 105 | - | 84 | 64 | 51 | 44 | 40 | 28 | 23 |
| 25 | 126 | 139 | - | 111 | 85 | 68 | 58 | 53 | 38 | 31 |
| 35 | 153 | 172 | - | 138 | 105 | 84 | 72 | 65 | 46 | 38 |
| 50 | 196 | 216 | - | 172 | 131 | 105 | 90 | 82 | 58 | 47 |
| 70 | 238 | 265 | - | 212 | 162 | 130 | 111 | 101 | 72 | 58 |
| 95 | 276 | 319 | - | 255 | 195 | 156 | 134 | 121 | 86 | 70 |
| 120 | 319 | 371 | - | 297 | 226 | 182 | 156 | 141 | 100 | 82 |
| 150 | 364 | 428 | - | 342 | 261 | 210 | 180 | 163 | 116 | 94 |
| 185 | 430 | 488 | - | 390 | 298 | 239 | 205 | 185 | 132 | 107 |
| 240 | 497 | 574 | - | 459 | 350 | 281 | 241 | 218 | 155 | 126 |
| 300 | - | 660 | - | 528 | 403 | 323 | 277 | 251 | 178 | 145 |

* The reduction factor is also valid for flat reeling cables (spirally)

Current carrying capacities in A are calculated according to the IEC 60287 standard.

They are calculated assuming the following values:

Ambient temperature for installation in open air : 30 °C

Ambient temperature for underground burial : 20 °

Laying depths:
 U = 3÷10 kV 0,8 m
 U = 15÷30 kV 1,0 M
 U = 45 kV 1,2 M

Metallic screens interconnected and grounded at both ends

CORRECTION FACTORS

| Insulation | Conductor temperature °C | Cables type | Ambient temperature °C | | | | | | | | | | | |
|--------------|--------------------------|----------------|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | | | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 |
| PVC | 70 | in air cables* | 1,22 | 1,17 | 1,12 | 1,06 | 1 | 0,94 | 0,87 | 0,79 | 0,71 | 0,61 | 0,50 | - |
| EPR / RUBBER | 90 | in air cables* | 1,15 | 1,12 | 1,08 | 1,04 | 1 | 0,96 | 0,91 | 0,87 | 0,82 | 0,76 | 0,71 | 0,65 |
| | 90 | buried cables | 1,07 | 1,04 | 1 | 0,96 | 0,93 | 0,89 | 0,85 | 0,80 | 0,76 | - | - | - |


* Not directly exposed to the sun

THREE-CORE CABLES GROUNDED LAYING
or single-core cables enclosed in trefoil

| Number of cables or trefoil-set (horizontally) | Number of cables or trefoil-set (horizontally) | | | | |
|--|--|------|------|------|------|
| | 2 | 3 | 4 | 6 | |
| Empty space between cables or trefoil-set | 7 CM | 0.84 | 0.74 | 0.67 | 0.60 |
| | 25 CM | 0.86 | 0.78 | 0.74 | 0.69 |




THREE-CORE CABLES GROUNDED PIPE LAYING

| Number of cables (horizontally) | Number of cables (horizontally) | | |
|---------------------------------|---------------------------------|------|------|
| | 1 | 2 | 3 |
| | 0.82 | 0.69 | 0.61 |




THREE-CORE CABLES SUSPENDED FREELY IN AIR



| Number of sets of three (horizontally) | Number of sets of three (horizontally) | | | | |
|--|--|-----|------|------|------|
| | 1 | 2 | 3 | 6 | 9 |
| Single layer | 0,95 | 0,9 | 0,88 | 0,85 | 0,84 |
| Layers number (vertical) | 1 | 1 | 0,98 | 0,96 | 0,93 |
| | 2 | 1 | 0,95 | 0,93 | 0,9 |
| | 3 | 1 | 0,94 | 0,92 | 0,89 |
| | 6 | 1 | 0,93 | 0,9 | 0,87 |


| Number of sets of three (vertical) | Number of sets of three (vertical) | | | | |
|------------------------------------|------------------------------------|------|-----|------|------|
| | 1 | 2 | 3 | 6 | 9 |
| | 1 | 0,93 | 0,9 | 0,87 | 0,86 |



| Cables number (horizontally) | Cables number (horizontally) | | | | |
|------------------------------|------------------------------|------|------|------|------|
| | 1 | 2 | 3 | 6 | 9 |
| Single layer | 0,95 | 0,84 | 0,8 | 0,75 | 0,73 |
| Layers number (vertical) | 1 | 0,95 | 0,8 | 0,76 | 0,71 |
| | 2 | 0,95 | 0,78 | 0,74 | 0,7 |
| | 3 | 0,95 | 0,78 | 0,74 | 0,7 |
| | 6 | 0,95 | 0,76 | 0,72 | 0,68 |

| Cables number (horizontally) | Cables number (horizontally) | | | | |
|------------------------------|------------------------------|------|------|------|------|
| | 1 | 2 | 3 | 6 | 9 |
| | 0,95 | 0,78 | 0,73 | 0,68 | 0,66 |



SINGLE CORE TREFOIL CORES CABLES SUSPENDED FREELY IN AIR

| Number of sets of three (horizontally) | | 1 | 2 | 3 | 6 | 9 | |
|--|---|------|------|------|------|------|--|
| Single layer | | 0,95 | 0,9 | 0,88 | 0,85 | 0,84 | |
| Layers number (vertical) | 1 | 1 | 0,98 | 0,96 | 0,93 | 0,92 | |
| | 2 | 1 | 0,95 | 0,93 | 0,9 | 0,89 | |
| | 3 | 1 | 0,94 | 0,92 | 0,89 | 0,88 | |
| | 4 | 1 | 0,93 | 0,9 | 0,87 | 0,86 | |

| Number of sets of three (vertical) | | 1 | 2 | 3 | |
|------------------------------------|--|------|------|------|--|
| | | 0,89 | 0,86 | 0,84 | |

| Number of single core (horizontally) | | 1 | 2 | 3 | |
|--------------------------------------|---|------|------|------|--|
| Single layer | | 0,92 | 0,89 | 0,88 | |
| Layers number (vertical) | 1 | 1 | 0,97 | 0,96 | |
| | 2 | 0,97 | 0,94 | 0,93 | |
| | 3 | 0,96 | 0,93 | 0,92 | |
| | 6 | 0,94 | 0,91 | 0,9 | |

| Number of single core (vertical) | | 1 | 2 | 3 | |
|----------------------------------|--|------|------|------|--|
| | | 0,94 | 0,91 | 0,89 | |

PHASE SPLITTING

Single core cables assembled in line

Cables lying in trefoil formation

Number 3 core units in the same layer

| 2 | | 3 | | | 4 | | | |
|----|----|----|----|----|----|----|----|----|
| T | T | T | T | T | T | T | T | T |
| RS | SR | RS | SR | RS | RS | SR | RS | SR |

Cables lying in line horizontally or vertically

Number 3 core units in the same layer(*)

| 2 | | 4 | | | |
|-----|-----|-----|-----|-----|-----|
| RST | TSR | RST | TSR | RST | TSR |

(*) Cables installed in layers: indicated arrangements are repeated for each layer

RESISTANCE

Cables insulated with elastomeric compounds

Observable resistance of red copper conductor and aluminum at 90°C and at 50 Hz

| Conductor cross-section (mm ²) | Single core cables (copper-aluminum conductor) | | | | Single core cables (copper-aluminum conductor any rated voltage) | | | | three core cables (copper-aluminum conductor any rated voltage) | | | |
|--|--|--------|------------------------------|--------|--|--------|-------------------|--------|---|--------|----------|-------|
| | 1,8/3 kV - 3,6/6 kV (Ohm/km) | | 6/10 kV - 8,7/15 kV (Ohm/km) | | 12/20 kV - 18/30 kV (Ohm/km) | | 26/45 kV (Ohm/km) | | (Ohm/km) | | (Ohm/km) | |
| | CU | AL | CU | AL | CU | AL | CU | AL | CU | AL | CU | AL |
| 10 | 2,33 | 3,91 | 2,33 | 3,91 | - | - | - | - | 2,33 | 3,91 | 2,33 | 3,91 |
| 16 | 1,47 | 2,47 | 1,47 | 2,47 | - | - | - | - | 1,47 | 2,47 | 1,47 | 2,47 |
| 25 | 0,92 | 1,56 | 0,929 | 1,56 | 0,929 | 1,56 | - | - | 0,929 | 1,56 | 0,929 | 1,56 |
| 35 | 0,67 | 1,12 | 0,671 | 1,13 | 0,671 | 1,13 | - | - | 0,67 | 1,13 | 0,669 | 1,12 |
| 50 | 0,495 | 0,832 | 0,495 | 0,832 | 0,495 | 0,832 | - | - | 0,495 | 0,832 | 0,494 | 0,83 |
| 70 | 0,347 | 0,583 | 0,344 | 0,58 | 0,344 | 0,58 | 0,344 | 0,58 | 0,344 | 0,58 | 0,343 | 0,57 |
| 95 | 0,248 | 0,416 | 0,248 | 0,416 | 0,248 | 0,416 | 0,248 | 0,416 | 0,248 | 0,416 | 0,247 | 0,415 |
| 120 | 0,198 | 0,333 | 0,198 | 0,333 | 0,198 | 0,333 | 0,198 | 0,333 | 0,198 | 0,333 | 0,196 | 0,329 |
| 150 | 0,161 | 0,27 | 0,161 | 0,27 | 0,161 | 0,27 | 0,161 | 0,27 | 0,161 | 0,27 | 0,160 | 0,269 |
| 185 | 0,130 | 0,218 | 0,130 | 0,218 | 0,130 | 0,218 | 0,130 | 0,218 | 0,130 | 0,218 | 0,129 | 0,217 |
| 240 | 0,0984 | 0,165 | 0,0983 | 0,165 | 0,0982 | 0,165 | 0,0981 | 0,165 | 0,1 | 0,168 | 0,1 | 0,168 |
| 300 | 0,0789 | 0,132 | 0,0788 | 0,132 | 0,0787 | 0,132 | 0,0786 | 0,132 | 0,081 | 0,136 | 0,08 | 0,134 |
| 400 | 0,0625 | 0,105 | 0,0624 | 0,105 | 0,0623 | 0,105 | 0,0622 | 0,105 | 0,065 | 0,109 | 0,065 | 0,109 |
| 500 | 0,0496 | 0,0833 | 0,0494 | 0,0830 | 0,0493 | 0,0828 | 0,0491 | 0,0825 | 0,053 | 0,0890 | 0,0536 | 0,09 |
| 630 | 0,0396 | 0,0665 | 0,0394 | 0,0662 | 0,0393 | 0,0662 | 0,0391 | 0,0657 | 0,044 | 0,0739 | - | - |

Insulation resistance per phase (MOhm/km)

| Conductor cross-section (mm ²) | Nominal voltage | | | | | | |
|--|-----------------|----------|---------|-----------|----------|----------|----------|
| | 1,8/3 kV | 3,6/6 kV | 6/10 kV | 8,7/15 kV | 12/20 kV | 18/30 kV | 26/45 kV |
| 10 | 1590 | - | - | - | - | - | - |
| 16 | 1360 | 1505 | 1645 | 1990 | - | - | - |
| 25 | 1140 | 1315 | 1445 | 1760 | 2130 | - | - |
| 35 | 995 | 1180 | 1300 | 1595 | 1830 | 2455 | - |
| 50 | 885 | 1075 | 1185 | 1460 | 1680 | 2155 | - |
| 70 | 755 | 945 | 1045 | 1300 | 1505 | 1950 | 2105 |
| 95 | 655 | 835 | 925 | 1155 | 1345 | 1760 | 1905 |
| 120 | 595 | 770 | 855 | 1070 | 1250 | 1645 | 1785 |
| 150 | 540 | 705 | 785 | 990 | 1160 | 1535 | 1665 |
| 185 | 485 | 645 | 720 | 910 | 1070 | 1420 | 1550 |
| 240 | 430 | 580 | 645 | 820 | 965 | 1295 | 1415 |
| 300 | 390 | 530 | 590 | 755 | 890 | 1200 | 1310 |
| 400 | 350 | 470 | 520 | 670 | 790 | 1070 | 1165 |
| 500 | 340 | 450 | 470 | 600 | 720 | 980 | 1065 |
| 630 | 330 | 400 | 420 | 540 | 650 | 890 | 970 |

REACTANCE

Single core cables phase reactance at 50 Hz

| Conductor cross-section (mm ²) | Single core cables (average values) | | | | | | |
|---|--|----------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|
| | 1,8/3 kV (Ohm/km) | 3,6/6 kV (Ohm/km) | 6/10 kV (Ohm/km) | 8,7/15 kV (Ohm/km) | 12/20 kV (Ohm/km) | 18/30 kV (Ohm/km) | 26/45 kV (Ohm/km) |
| 10 | 0,19 | 0,20 | 0,21 | - | - | - | - |
| 16 | 0,18 | 0,19 | 0,20 | 0,21 | - | - | - |
| 25 | 0,18 | 0,18 | 0,19 | 0,20 | 0,21 | - | - |
| 35 | 0,17 | 0,18 | 0,19 | 0,19 | 0,20 | 0,21 | - |
| 50 | 0,16 | 0,17 | 0,18 | 0,19 | 0,19 | 0,20 | - |
| 70 | 0,16 | 0,17 | 0,17 | 0,18 | 0,19 | 0,20 | 0,21 |
| 95 | 0,16 | 0,16 | 0,17 | 0,17 | 0,18 | 0,19 | 0,20 |
| 120 | 0,15 | 0,16 | 0,16 | 0,17 | 0,18 | 0,18 | 0,19 |
| 150 | 0,15 | 0,16 | 0,16 | 0,17 | 0,17 | 0,18 | 0,19 |
| 185 | 0,14 | 0,15 | 0,16 | 0,16 | 0,17 | 0,18 | 0,18 |
| 240 | 0,14 | 0,15 | 0,16 | 0,16 | 0,16 | 0,17 | 0,18 |
| 300 | 0,14 | 0,15 | 0,15 | 0,16 | 0,16 | 0,17 | 0,17 |
| 400 | 0,14 | 0,15 | 0,15 | 0,15 | 0,16 | 0,16 | 0,17 |
| 500 | 0,14 | 0,14 | 0,15 | 0,5 | 0,15 | 0,16 | 0,17 |
| 630 | 0,14 | 0,14 | 0,15 | 0,15 | 0,15 | 0,16 | 0,16 |

NOTE:
Valid for copper and aluminum cables

For single core cables in trefoil formation with phase reactance at 50 Hz

| Conductor cross-section (mm ²) | Single core cables | | | | | | |
|---|----------------------|----------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|
| | 1,8/3 kV (Ohm/km) | 3,6/6 kV (Ohm/km) | 6/10 kV (Ohm/km) | 8,7/15 kV (Ohm/km) | 12/20 kV (Ohm/km) | 18/30 kV (Ohm/km) | 26/45 kV (Ohm/km) |
| 10 | 0,14 | 0,16 | 0,16 | - | - | - | - |
| 16 | 0,13 | 0,14 | 0,15 | 0,16 | - | - | - |
| 25 | 0,12 | 0,13 | 0,14 | 0,15 | 0,15 | - | - |
| 35 | 0,11 | 0,12 | 0,13 | 0,14 | 0,14 | 0,16 | - |
| 50 | 0,11 | 0,12 | 0,12 | 0,13 | 0,13 | 0,15 | - |
| 70 | 0,1 | 0,11 | 0,12 | 0,12 | 0,13 | 0,14 | 0,15 |
| 95 | 0,098 | 0,11 | 0,11 | 0,12 | 0,12 | 0,13 | 0,14 |
| 120 | 0,097 | 0,1 | 0,11 | 0,11 | 0,12 | 0,13 | 0,14 |
| 150 | 0,092 | 0,099 | 0,1 | 0,11 | 0,11 | 0,12 | 0,13 |
| 185 | 0,089 | 0,096 | 0,1 | 0,11 | 0,11 | 0,12 | 0,12 |
| 240 | 0,086 | 0,093 | 0,096 | 0,1 | 0,1 | 0,11 | 0,12 |
| 300 | 0,084 | 0,092 | 0,094 | 0,098 | 0,1 | 0,11 | 0,12 |
| 400 | 0,082 | 0,090 | 0,092 | 0,095 | 0,099 | 0,11 | 0,11 |
| 500 | 0,081 | 0,088 | 0,089 | 0,092 | 0,095 | 0,1 | 0,11 |
| 630 | 0,079 | 0,086 | 0,087 | 0,090 | 0,093 | 0,099 | 0,10 |

NOTE:
Valid for copper and aluminum cables

Three core cables phase reactance at 50 Hz

| Conductor cross-section | Three core cables | | | | | | |
|-------------------------|----------------------|----------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|
| (mm ²) | 1,8/3 kV (Ohm/km) | 3,6/6 kV (Ohm/km) | 6/10 kV (Ohm/km) | 8,7/15 kV (Ohm/km) | 12/20 kV (Ohm/km) | 18/30 kV (Ohm/km) | 26/45 kV (Ohm/km) |
| 10 | 0,11 | 0,13 | 0,14 | - | - | - | - |
| 16 | 0,1 | 0,12 | 0,13 | 0,14 | - | - | - |
| 25 | 0,096 | 0,11 | 0,12 | 0,13 | 0,14 | - | - |
| 35 | 0,091 | 0,1 | 0,11 | 0,12 | 0,13 | 0,14 | - |
| 50 | 0,086 | 0,1 | 0,11 | 0,11 | 0,12 | 0,13 | - |
| 70 | 0,083 | 0,095 | 0,1 | 0,11 | 0,11 | 0,13 | 0,14 |
| 95 | 0,080 | 0,091 | 0,096 | 0,1 | 0,11 | 0,12 | 0,13 |
| 120 | 0,078 | 0,088 | 0,093 | 0,099 | 0,1 | 0,12 | 0,13 |
| 150 | 0,076 | 0,086 | 0,091 | 0,096 | 0,1 | 0,11 | 0,12 |
| 185 | 0,075 | 0,083 | 0,088 | 0,093 | 0,098 | 0,11 | 0,12 |
| 240 | 0,073 | 0,081 | 0,085 | 0,09 | 0,094 | 0,1 | - |
| 300 | 0,071 | 0,081 | 0,083 | 0,088 | 0,092 | 0,1 | - |
| 400 | 0,07 | 0,08 | 0,081 | 0,086 | - | - | - |
| 500 | 0,07 | 0,08 | 0,081 | - | - | - | - |

NOTE:
Valid both for copper and aluminium cables

MAX CURRENT CARRYING (kA) IN SHORT CIRCUIT

Conditions: 1 second duration; temperature 90°C

| Conductor | Sections-mm | | | | | | | | | | | | | | |
|-----------|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 10 | 15 | 25 | 35 | 50 | 70 | 95 | 120 | 150 | 185 | 240 | 300 | 400 | 500 | 630 |
| COPPER | 1,4 | 2,3 | 3,6 | 5 | 7,1 | 10 | 14 | 17 | 21 | 26 | 34 | 43 | 57 | 72 | 90 |
| ALLUMINUM | 0,92 | 1,5 | 2,3 | 3,2 | 4,6 | 6,4 | 8,7 | 11 | 14 | 17 | 22 | 28 | 37 | 46 | 58 |

Minimum Bending Radius acc. to DIN VDE 0298 part. 3

Cables for fixed laying:

| Cable type: | Voltage up to 0,6/1 kV | | | Voltage above to 0,6/1 kV |
|-----------------------------|---|-------------------|----------|---------------------------|
| | Outer diameter of cable (or thickness of flat cables) in mm | | | |
| | UP TO 10 | ABOVE 10 UP TO 25 | ABOVE 25 | |
| Fixed laying: | 4 x D* | 4 x D | 4 x D | 6 x D |
| Single bended installation: | 1 x D | 2 x D | 3 x D | 4 x D |

Flexible cables:

| Cable type: | Voltage up to 0,6/1 kV | | | | Voltage above to 0,6/1 kV |
|------------------------------------|---|------------------|-------------------|----------|---------------------------|
| | Outer diameter of round cable (or thickness of flat cables) in mm | | | | |
| | UP TO 8 | ABOVE 8 UP TO 12 | ABOVE 12 UP TO 20 | ABOVE 20 | |
| Fixed laying: | 3 x D | 3 x D | 4 x D | 4 x D | 6 x D |
| Freely movable: | 3 x D | 4 x D | 5 x D | 5 x D | 10 x D |
| Cable entry/gland | 3 x D | 4 x D | 5 x D | 5 x D | 10 x D |
| MECHANICAL RESTRAINT ¹⁾ | | | | | |
| Cable-drum mode | 5 x D | 5 x D | 5 x D | 6 x D | 12 x D |
| Festoon mode: | 3 x D | 4 x D | 5 x D | 5 x D | 10 x D |
| Drag-chain mode: | 4 x D | 4 x D | 5 x D | 5 x D | 10 x D |
| Roller reversing: | 7,5 x D | 7,5 x D | 7,5 x D | 7,5 x D | 15 x D |

NOTES:

D* = Outer diameter of cable

¹⁾ = Special structural support is required for suitability in the application

| Substance | Concentr % | Temp °C | PVC | PUR | PE | Silicon | FEP | PFA | ETFE |
|--------------------------|------------|---------|-----|-----|----|---------|-----|-----|------|
| ACETONE | | 20 | - | - | + | + | + | + | + |
| ATHYLENCHLORID | | 50 | - | - | + | + | + | + | + |
| ATHYLENGLYKOL | | 100 | + | - | + | + | + | + | + |
| ALUM | | 20 | + | + | + | - | + | + | + |
| AMMONIA | 25 | 20 | + | + | + | + | + | + | + |
| ANILINE | | 50 | - | - | + | + | + | + | + |
| BENZINE | | 20 | - | + | - | + | + | + | + |
| BENZOL | 100 | 50 | - | - | - | - | + | + | + |
| BORIC ACID | sat. | 20 | + | + | + | + | + | + | + |
| BREAK FLUID | | 100 | + | - | - | + | + | + | + |
| BUTTER | | 50 | + | + | + | + | + | + | + |
| CHLOROBENZINE | | 30 | - | - | + | - | + | + | + |
| DIETHILETER | | 20 | + | + | + | - | + | + | + |
| DIETHILENE GLICOL | | 50 | + | + | + | + | + | + | + |
| PURE ACETIC ACID | concentr. | 50 | - | - | + | + | - | - | - |
| FREON | | 20 | - | + | + | - | + | + | + |
| GEAR OIL | | 100 | + | + | - | + | + | + | + |
| GLYCERINE | all | 50 | + | + | + | + | + | + | + |
| HYDRAULIC OIL | | 20 | + | + | - | - | + | + | + |
| POTASSIUM CHLORIDE | sat. | 20 | + | - | + | + | + | - | - |
| POTASSIUM NITRATE | | 20 | + | + | + | + | + | + | + |
| COPPER SALT | | 20 | + | + | + | + | + | + | + |
| MACHINE OIL | | 20 | - | + | - | + | + | + | + |
| METHANOL | | 50 | + | - | + | + | + | + | + |
| DICHLOROMETANE | 100 | 20 | - | - | + | - | + | + | + |
| MOTOR OIL | | 120 | - | - | - | + | + | + | + |
| SODIUM CHLORIDE | 50 | 20 | + | + | + | + | + | + | + |
| CAUSTIC SODA | 50 | 50 | + | + | + | - | + | + | + |
| NITROBENZENE | 100 | 50 | - | - | + | + | + | + | + |
| OLIVE OIL | | 50 | + | + | + | + | + | + | + |
| MERCURYSALT | | 20 | - | - | + | + | + | + | + |
| NITRIC ACID | | 20 | - | - | + | - | + | + | + |
| HIDROCHLORIC ACID | concentr. | 20 | - | - | + | - | + | + | + |
| SULPHURIC ACID | 50 | 50 | + | - | + | - | + | + | + |
| SILVER SALTS | | 20 | + | + | + | + | + | + | + |
| PHENOL FROM TAR (TECTAL) | | 20 | + | - | - | - | + | + | + |
| CARBON TETRACHLORIDE | 100 | 20 | + | - | - | - | + | + | + |
| TRICHOETYLENE | 100 | 50 | - | - | - | + | + | + | + |
| DETERGENT LYE | 2 | 100 | - | - | - | - | + | + | + |
| DESTILLED WATER | | 100 | + | + | + | - | + | + | + |
| DESTILLED WATER | | 20 | + | + | + | + | + | + | + |
| TARTARIC ACID | sat. | 20 | + | - | + | + | + | + | + |
| CITRIC ACID | | 20 | + | + | + | + | + | + | + |

- = Poor resistance + = Good resistance

Examination of the vertical flame length, test method 1 kV - flame with gas/air mixture

| Description | VDE 0482 PART.265-2-1, EN 50265-2-1 AND IEC 60332-1 | VDE 0482 PART.265-2-2, EN 50265-2-2 AND IEC 60332-2 |
|--------------------|---|---|
| Length of sample | 600 mm | 600 mm |
| Burner | Acc. to EN 60695-2-4-1 | Acc. to VDE 0482 part.265-1 and EN 50265-1 |
| Test temperature | 1 kW flame | Defined by the stipulated setting of the Flame length |
| Position of sample | Vertical | Vertical |
| Position of flame | 45° to vertical sample | 45° to vertical sample |
| Duration of flame | See table 1 | 20 seconds |
| Conditions | Cable must be self-extinguishing. The damage or carbonization may only reach max. 50 mm under the upper fixing clamp. | Cable must be self-extinguishing. The damage or carbonization may only reach max. 10 mm under the upper fixing clamp. |

Table 1

outer diameter * of sample in mm

| Nominal value | Duration of flame test in seconds |
|------------------|-----------------------------------|
| $D \leq 25$ | 60 |
| $25 < D \leq 50$ | 120 |
| $50 < D \leq$ | 240 |
| $D > 75$ | 480 |

* If the insulated cables are not round (i.e. flat cables), dimensions must be measured to determine an equivalent diameter.



Description UL 1581 section 1080
(VW-1 Flame test)

| | |
|--------------------|--|
| Length of sample | 455 mm |
| Burner | Bunsen burner with added air supply Ø 9,5 mm |
| Test temperature | 500 W flame |
| Position of sample | Vertical |
| Position of flame | 20° to vertical sample |
| Duration of flame | Five 15 second trials with 15 seconds between each flame test |
| Conditions | Paper (25% carbonized) The sample may keep on burning for a maximum of 1 minute after any application. Material droppings must not ignite the cotton lying under the sample. |

Description UL 1581 section 1061
(Cable Flame Test)

| | |
|--------------------|--|
| Length of sample | 455 mm |
| Burner | Bunsen burner with added air supply Ø 9,5 mm |
| Test temperature | 500 W flame |
| Position of sample | Vertical |
| Position of flame | 20° to vertical sample |
| Duration of flame | Three 60 seconds trials with 30 seconds between each flame test |
| Conditions | Paper (25% carbonized) The sample may keep on burning for a maximum of 1 minute after any application. Material droppings must not ignite the cotton lying under the sample. |

Description UL 1581 section 1060
(Vertical Flame and FT1 Test)

| | |
|--------------------|---|
| Length of sample | 455 mm |
| Burner | Bunsen burner with added air supply Ø 9,5 mm |
| Test temperature | 500 W flame |
| Position of sample | Vertical |
| Position of flame | 20° to vertical sample |
| Duration of flame | Five 15 seconds trials with 15 seconds between each flame test |
| Conditions | Paper (25% carbonized) The sample may keep on burning for a maximum of 1 minute after any application. |

Assessment of the vertical flame length for vertical extended bundle of insulated cables

Description IEC 60332-3, EN 50266, DIN VDE 0482 part. 266

| | |
|--------------------|--|
| Length of sample | 3500 mm |
| Burner | Flat burner (Ribbon gas burner) |
| Test temperature | 500 W flame |
| Position of sample | Vertical |
| Position of flame | Horizontal |
| Duration of flame | Category A, B: 40 minutes Category C, D: 20 minutes |
| Conditions | The burned portion of the sample must be shorter than 2,5 m measured from the bottom edge of the burner, unless specified otherwise. |

EN 60332-

IEC 60332-

| | | |
|---|------|------|
| Category A-7 l/m | 3/22 | 3/22 |
| Category B-3,5 l/m | 3/23 | 3/23 |
| Category C-1,5 l/m > 12 mm cable- ϕ | 3/24 | 3/24 |
| Category D-0,5 l/m \leq 12 mm cable- ϕ | 3/25 | 3/25 |
| Volume % of non metallic material x meter | | |



Tests for electric cables under fire conditions - Circuits integrity

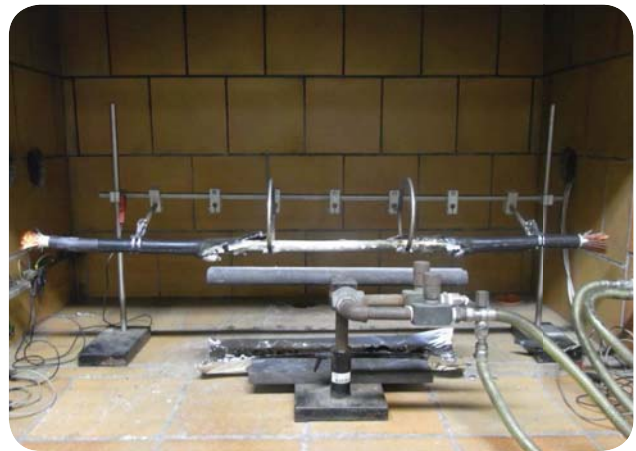
| | |
|-----------------|--|
| Description: | IEC 60331, CEI 20-36 |
| | This test serves to verify the circuit can remain integral even during a fire. A sample of cable is held on an open flame at 750°C for a minimum period of 90 min, under the rated voltage. No break or short circuit should occur during the test in order to receive the rating. The test can also be performed with temperatures up to 1100 °C. Likewise, fibre optic cables can be tested in the same conditions while monitoring the attenuation of the signal of one or more fibres. |
| Classification: | IEC 60331-21 - CEI 20-36/2-1 - Electrical cables up to 0,6/1 kV IEC 60331-23 - CEI 20-36/2-3 - Data cables IEC 60331-25 - CEI 20-36/2-5 - Fibre optic cables |

Tests for electric cables under fire conditions - Circuits integrity - part.2

| | |
|--------------------|--|
| Description: | IEC 60331-2 |
| | Test method for fire with shock at a temperature of at least 830°C for cables of rated voltage up to 0,6/1 kV and with an overall diameter not exceeding 20 mm |
| Test temperature: | 830°C (+40/-0°C) |
| Duration: | 30*, 60, 90, 120 min (*with water spray BS EN 50200 annex E) |
| Mechanical shocks: | every 5 min. |
| Water spray: | 0,8 lt/min. (last 15 min.) (with water spray BS EN 50200 annex E) |

Tests for electric cables under fire conditions - Circuits integrity - part.1

| | |
|--------------------|---|
| Description: | IEC 60331-1 |
| | Test method for fire with shock at a temperature of at least 830 °C for cables of rated voltage up to 0,6/1 kV and with an overall diameter exceeding 20 mm |
| Test temperature: | 830°C (+40/-0°C) |
| Duration: | 60, 90, 120 min |
| Mechanical shocks: | every 5 min. |



Fire Resistance

| | |
|-----------------|--|
| Description: | BS EN 50200 |
| | This test serves to verify the circuit integrity of cables while exposed to fire at 830°C as well as mechanical shocks. |
| Classification: | PH 15 - flame exposure for 15 min. PH 30 - flame exposure for 30 min. PH 60 - flame exposure for 60 min. PH 90 - flame exposure for 90 min. PH 120 - flame exposure for 120 min. |

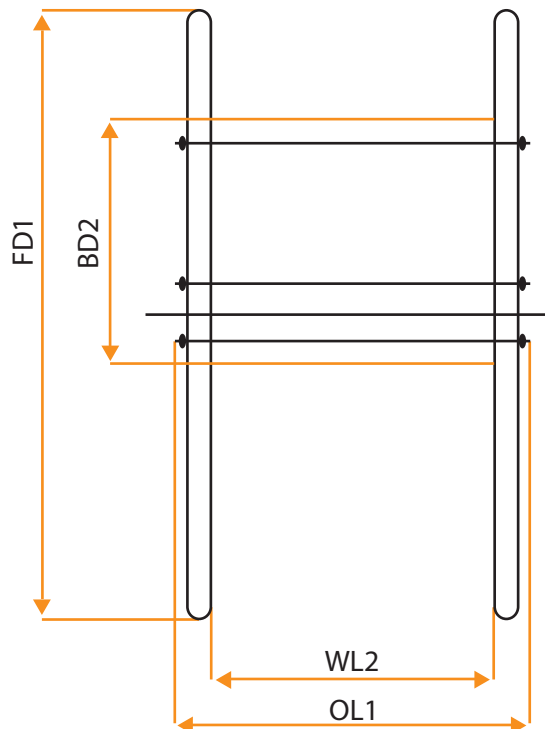
| | |
|--------------------|--|
| Description | NF C 32-070 "C1" |
| Length of sample | 1600 mm |
| Test temperature | + 830°C +/- 50°C |
| Position of sample | Vertical in the chimney |
| Duration of test | 30 minutes |
| Conditions | The outstanding cable above the chymney may not be damaged |

WOODEN DRUMS

| Drum Type | Flange ∅ FD1 (mm) | Barrel ∅ BD2 (mm) | Overall width OL1 (mm) | Winding width WL2 (mm) | Max. carrying capacity (kg) | Drum weight (kg) |
|-----------|----------------------------|----------------------------|---------------------------------|---------------------------------|-----------------------------------|------------------------|
| 051 | 500 | 150 | 470 | 410 | 100 | 8 |
| 061 | 630 | 315 | 415 | 315 | 250 | 17 |
| 071 | 710 | 355 | 520 | 400 | 250 | 25 |
| 081 | 800 | 400 | 520 | 400 | 400 | 31 |
| 091 | 900 | 450 | 690 | 560 | 750 | 47 |
| 101 | 1000 | 500 | 710 | 560 | 900 | 71 |
| 121 | 1250 | 630 | 890 | 670 | 1700 | 144 |
| 141 | 1400 | 710 | 890 | 670 | 2000 | 175 |
| 161 | 1600 | 800 | 1100 | 850 | 3000 | 280 |
| 181 | 1800 | 1000 | 1100 | 840 | 4000 | 380 |
| 201 | 2000 | 1250 | 1350 | 1045 | 5000 | 550 |
| 221 | 2240 | 1400 | 1450 | 1140 | 6000 | 710 |
| 250 | 2500 | 1400 | 1450 | 1140 | 7500 | 875 |
| 251 | 2500 | 1600 | 1450 | 1130 | 7500 | 900 |
| 281 | 2800 | 1800 | 1635 | 1280 | 10000 | 1175 |

PLASTIC DRUMS

| Drum Type | Flange ∅ FD1 (mm) | Barrel ∅ BD2 (mm) | Overall width OL1 (mm) | Winding width WL2 (mm) | Max. carrying capacity (kg) | Drum weight (kg) |
|-----------|----------------------------|----------------------------|---------------------------------|---------------------------------|-----------------------------------|------------------------|
| 050 | 500 | 150 | 456 | 404 | 100 | 4 |
| 070 | 710 | 355 | 510 | 400 | 250 | 15 |
| 080 | 800 | 400 | 510 | 400 | 350 | 16 |
| 090 | 900 | 450 | 680 | 560 | 400 | 23 |
| 100 | 1000 | 500 | 704 | 560 | 500 | 32 |



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