



300/500V, unshielded, CPR Cca

**APPLICATION**

halogen-free and environmentally power, control and connecting cable in electrical facilities, in fire vulnerable areas and facilities with high concentration of people and property values, for fixed laying and flexible applications without tensile stress and without defined cable routing. Suitable for use in dry and humid rooms. Outdoor use only with UV-protection, no laying underground.

**SPECIAL FEATURES**

- FRNC (Flame Retardant, Non Corrosive)
- LSF 0H ( Low smoke in fume, zero halogen)
- improved behaviour in case of fire (acc. to IEC 60332-3-25 Cat. A)

**REMARKS**

- RoHS compliant
- compliant with 2014/35/EU Directive ("Low Voltage Directive") CE
- LABS-free/silicone-free (during production)

**PRODUCT DETAILS****DESIGN**

|                       |  |
|-----------------------|--|
| Conductor material    | bare copper strand   |
| Conductor class       | acc. to IEC 60228 cl. 5  |
| Core insulation       | special halogen-free compound                                  |
| Core identification   | acc. to DIN VDE 0293 black cores with white numerals; G = GNYE |
| Stranding             | stranded in layers   |
| Outer sheath material | special halogen-free compound                                  |
| Sheath colour         | grey, RAL 7001   |

**ELECTRICAL PROPERTIES**

|                           |   |
|---------------------------|---|
| Rated voltage AC IEC      | U <sub>0</sub> /U: 300/500 V              |
| Testing voltage           | 3 kV                                      |
| Conductor resistance      | acc. to IEC 60228 cl. 5                   |
| Insulation resistance     | min. 20 MΩ x km                           |
| Current carrying capacity | acc. to DIN VDE, see technical Guidelines |

**MECHANICAL & DYNAMIC PROPERTIES**

|                           |        |
|---------------------------|--------|
| Min. bending radius fixed | 4 x d  |
| Min. bending radius moved | 15 x d |

**THERMAL PROPERTIES**

|                                    |                 |
|------------------------------------|-----------------|
| Operat. temp. fixed min./max. [°C] | -40 °C / +70 °C |
| Operat. temp. moved min/max [°C]   | -15 °C / +70 °C |

## PROPERTIES IN CASE OF FIRE

|                            |  |
|----------------------------|--|
| Halogen-free               | acc. to IEC 60754-1  |
| Smoke density              | acc. to IEC 61034-2  |
| Corrodibility              | acc. to IEC 60754-2  |
| Burning behavior           | halogen-free and flame-retardant acc. to IEC 60332-1-2 and IEC 60332-3-24 Cat. C resp. IEC 60332-3-25 Cat. A |
| CPR - declared Performance | Cca - s1, d1, a1   |

## STANDARDS &amp; APPROVALS

|          |                          |
|----------|--------------------------|
| Standard | similar to EN 50525-2-51 |
|----------|--------------------------|

## ITEM OVERVIEW

## FLAME-JZ/OZ-H FRNC Cca

| Item no.<br>[TKD] | Dimension | Outer-Ø<br>[mm] | Cu Index<br>[kg/km] | Weight<br>[kg/km] |
|-------------------|-----------|-----------------|---------------------|-------------------|
| 1005680           | 2 X 0,5   | 5,0             | 9,6                 | 34,0              |
| 1005681           | 3 G 0,5   | 5,3             | 14,4                | 41,0              |
| 1005682           | 3 X 0,5   | 5,3             | 14,4                | 41,0              |
| 1005683           | 4 G 0,5   | 5,7             | 19,2                | 50,0              |
| 1005684           | 4 X 0,5   | 5,7             | 19,2                | 50,0              |
| 1005685           | 5 G 0,5   | 6,3             | 24,0                | 63,0              |
| 1005686           | 5 X 0,5   | 6,3             | 24,0                | 63,0              |
| 1005687           | 7 G 0,5   | 6,8             | 33,6                | 78,0              |
| 1005688           | 7 X 0,5   | 6,8             | 33,6                | 78,0              |
| 1005689           | 12 G 0,5  | 9,1             | 57,6                | 139,0             |
| 1005691           | 18 G 0,5  | 10,8            | 86,4                | 199,0             |
| 1005692           | 25 G 0,5  | 12,5            | 120,0               | 269,0             |
| 1005693           | 34 G 0,5  | 14,9            | 163,0               | 377,0             |
| 1005694           | 2 X 0,75  | 5,4             | 14,4                | 42,0              |
| 1005695           | 3 G 0,75  | 5,7             | 21,6                | 51,0              |
| 1005696           | 3 X 0,75  | 5,7             | 21,6                | 51,0              |
| 1005697           | 4 G 0,75  | 6,2             | 28,8                | 66,0              |
| 1005698           | 4 X 0,75  | 6,2             | 28,8                | 66,0              |
| 1005699           | 5 G 0,75  | 6,8             | 36,0                | 80,0              |
| 1005700           | 5 X 0,75  | 6,8             | 36,0                | 80,0              |
| 1005701           | 7 G 0,75  | 7,6             | 50,4                | 104,0             |
| 1005702           | 7 X 0,75  | 7,6             | 50,4                | 104,0             |
| 1005703           | 12 G 0,75 | 9,9             | 86,4                | 177,0             |
| 1005704           | 18 G 0,75 | 12,0            | 130,0               | 261,0             |
| 1005705           | 25 G 0,75 | 13,9            | 180,0               | 354,0             |
| 1005706           | 34 G 0,75 | 16,5            | 245,0               | 493,0             |
| 1005707           | 2 X 1     | 5,7             | 19,2                | 50,0              |
| 1005708           | 3 G 1     | 6,1             | 28,8                | 64,0              |
| 1005709           | 3 X 1     | 6,1             | 28,8                | 64,0              |
| 1005710           | 4 G 1     | 6,6             | 38,4                | 78,0              |
| 1005711           | 4 X 1     | 6,6             | 38,4                | 78,0              |
| 1005712           | 5 G 1     | 7,2             | 48,0                | 95,0              |
| 1005713           | 5 X 1     | 7,2             | 48,0                | 95,0              |
| 1005714           | 7 G 1     | 8,0             | 67,2                | 124,0             |
| 1005715           | 7 X 1     | 8,0             | 67,2                | 124,0             |
| 1005716           | 12 G 1    | 10,7            | 115,0               | 209,0             |
| 1005717           | 18 G 1    | 12,7            | 173,0               | 313,0             |
| 1005718           | 25 G 1    | 14,9            | 240,0               | 433,0             |
| 1005719           | 34 G 1    | 17,7            | 326,0               | 601,0             |
| 1005720           | 2 X 1,5   | 6,3             | 28,8                | 67,0              |
| 1005721           | 3 G 1,5   | 6,7             | 43,2                | 83,0              |
| 1005722           | 3 X 1,5   | 6,7             | 43,2                | 83,0              |
| 1005723           | 4 G 1,5   | 7,5             | 57,6                | 107,0             |
| 1005724           | 4 X 1,5   | 7,5             | 57,6                | 107,0             |
| 1005725           | 5 G 1,5   | 8,2             | 72,0                | 131,0             |
| 1005726           | 5 X 1,5   | 8,2             | 72,0                | 131,0             |
| 1005727           | 7 G 1,5   | 9,1             | 101,0               | 170,0             |
| 1005728           | 7 X 1,5   | 9,1             | 101,0               | 170,0             |
| 1005729           | 12 G 1,5  | 12,1            | 173,0               | 297,0             |
| 1005730           | 18 G 1,5  | 14,4            | 259,0               | 428,0             |
| 1005731           | 25 G 1,5  | 16,8            | 360,0               | 590,0             |
| 1005732           | 34 G 1,5  | 20,0            | 490,0               | 817,0             |

**FLAME-JZ/OZ-H FRNC Cca**

| Item no.<br>[TKD] | Dimension | Outer-Ø<br>[mm] | Cu Index<br>[kg/km] | Weight<br>[kg/km] |
|-------------------|-----------|-----------------|---------------------|-------------------|
| 1005733           | 2 X 2,5   | 7,7             | 48,0                | 104,0             |
| 1005734           | 3 G 2,5   | 8,2             | 72,0                | 130,0             |
| 1005735           | 3 X 2,5   | 8,2             | 72,0                | 130,0             |
| 1005736           | 4 G 2,5   | 9,1             | 96,0                | 166,0             |
| 1005737           | 5 G 2,5   | 10,0            | 120,0               | 204,0             |
| 1005738           | 7 G 2,5   | 11,1            | 168,0               | 265,0             |
| 1005739           | 12 G 2,5  | 15,0            | 288,0               | 470,0             |
| 1005740           | 18 G 2,5  | 17,9            | 432,0               | 687,0             |
| 1005741           | 25 G 2,5  | 20,9            | 600,0               | 943,0             |
| 1005742           | 34 G 2,5  | 24,9            | 816,0               | 1.312,0           |
| 1005743           | 2 X 4     | 9,2             | 77,0                | 153,0             |
| 1005744           | 3 G 4     | 9,7             | 115,0               | 194,0             |
| 1005745           | 4 G 4     | 10,9            | 154,0               | 248,0             |
| 1005746           | 5 G 4     | 12,1            | 192,0               | 310,0             |
| 1005747           | 7 G 4     | 13,4            | 269,0               | 404,0             |
| 1005748           | 2 X 6     | 10,8            | 115,0               | 220,0             |
| 1005749           | 3 G 6     | 11,5            | 173,0               | 220,0             |
| 1005750           | 4 G 6     | 12,8            | 230,0               | 358,0             |
| 1005751           | 5 G 6     | 14,3            | 288,0               | 448,0             |
| 1005752           | 7 G 6     | 15,9            | 403,0               | 584,0             |
| 1005754           | 3 G 10    | 14,7            | 288,0               | 452,0             |
| 1005755           | 4 G 10    | 16,3            | 384,0               | 585,0             |
| 1005756           | 5 G 10    | 18,2            | 480,0               | 730,0             |
| 1005757           | 7 G 10    | 20,0            | 672,0               | 952,0             |
| 1005758           | 3 G 16    | 17,0            | 461,0               | 669,0             |
| 1005759           | 4 G 16    | 18,8            | 614,0               | 866,0             |
| 1005760           | 5 G 16    | 21,2            | 768,0               | 1.079,0           |
| 1005761           | 7 G 16    | 23,6            | 1.075,0             | 1.424,0           |
| 1005762           | 4 G 25    | 23,7            | 960,0               | 1.345,0           |
| 1005763           | 5 G 25    | 26,6            | 1.200,0             | 1.687,0           |
| 1005764           | 4 G 35    | 26,9            | 1.344,0             | 1.812,0           |
| 1005765           | 5 G 35    | 30,2            | 1.680,0             | 2.270,0           |
| 1005767           | 4 G 50    | 32,7            | 1.920,0             | 2.746,0           |