



## Anwendung

als Installations-Mantelleitung für feste Verlegung über, auf, im und unter Putz in trockenen, feuchten und nassen Räumen sowie im Mauerwerk und im Beton, ausgenommen für direkte Einbettung in Schüttel-, Rüttel- oder Stampfbeton.

## Application

installation cable for fixed laying on-wall and in-wall, in dry, humid and wet rooms, in brickwork and concrete exceptional in cast, vibrated or rammed concrete.

## Besonderheiten

- weitgehend beständig gegen Säuren, Laugen und bestimmte Öle.
- LBS-frei/silikonfrei (bei Produktion)

## Special features

- largely resistant to acids, bases and specified types of oil
- free from lacquer damaging substances and silicone (during production)

## Hinweise

- RoHS-konform
- konform zur 2006/95/EG Richtlinie ("Niederspannungsrichtlinie") CE.
- Sonderausführungen, andere Abmessungen, Querschnitte, Ader- und Mantelfarben fertigen wir auf Anfrage.

## Remarks

- conform to RoHS
- conform to 2006/95/EC-Guideline CE
- We are pleased to produce special versions, other dimensions, core and jacket colours on request.

## Aufbau & Technische Daten

|                            |                                                                            |
|----------------------------|----------------------------------------------------------------------------|
| Leiter Werkstoff           | Cu-Leiter blank                                                            |
| Leiterklasse               | nach DIN VDE 0295 Klasse 1 oder 2 bzw. IEC 60228 class 1 oder 2            |
| Aderisolationswerkstoff    | PVC                                                                        |
| Aderkennung                | nach VDE 0293-308                                                          |
| Verseilung                 | Adern in Lagen verseilt                                                    |
| Innenmantelwerkstoff       | Füllmantel                                                                 |
| Außenmantelwerkstoff       | PVC                                                                        |
| Mantelfarbe                | grau                                                                       |
| Nennspannung               | U <sub>0</sub> /U: 300/500 V                                               |
| Prüfspannung               | 2 kV                                                                       |
| Leiterwiderstand           | bei +20 °C nach DIN VDE 0295 Klasse 1 oder 2 bzw. IEC 60228 class 1 oder 2 |
| Strombelastbarkeit         | gem. DIN VDE, siehe Techn. Anhang                                          |
| kleinster Biegeradius fest | 4 x d                                                                      |
| Betriebstemp. fest min/max | -40 °C / +70 °C                                                            |
| Betriebstemp. bew. min/max | - 5 °C / +70 °C                                                            |
| Temperatur am Leiter max.  | + 70 °C im Betrieb; +160 °C im Kurzschlußfall                              |
| Brandverhalten             | nach VDE 0472-804-B und IEC 60332-1                                        |
| Standard                   | nach DIN VDE 0250 Teil 204                                                 |
| Approbation                | VDE                                                                        |

## Structure & Specifications

|                             |                                                                          |
|-----------------------------|--------------------------------------------------------------------------|
| conductor material          | bare copper conductor                                                    |
| conductor class             | acc. to DIN VDE 0295 class 1 or 2 resp. IEC 60228 class 1 or 2           |
| core insulation             | PVC                                                                      |
| core identification         | acc. to VDE 0293-308                                                     |
| stranding                   | cores stranded in layers                                                 |
| inner sheath material       | filler sheath                                                            |
| outer sheath                | PVC                                                                      |
| sheath colour               | grey                                                                     |
| rated voltage               | U <sub>0</sub> /U: 300/500 V                                             |
| testing voltage             | 2 kV                                                                     |
| conductor resistance        | at +20 °C acc. to DIN VDE 0295 class 1 or 2 resp. IEC 60228 class 1 or 2 |
| current carrying capacity   | acc. to DIN VDE, see Technical Guidelines                                |
| min. bending radius fixed   | 4 x d                                                                    |
| operat. temp. fixed min/max | -40 °C / +70 °C                                                          |
| operat. temp. moved min/max | - 5 °C / +70 °C                                                          |
| temp. at conductor          | + 70 °C in operation; +160 °C in case of short-circuit                   |
| burning behavior            | acc. to VDE 0472-804-B and IEC 60332-1                                   |
| standard                    | acc. to DIN VDE 0250 part 204                                            |
| approvals                   | VDE                                                                      |

| Abmessung<br>n x mm <sup>2</sup><br>dimension<br>n x mm <sup>2</sup> | Außen-Ø<br>mm<br>outer Ø<br>mm | Cu-Zahl<br>kg/km<br>copper weight<br>kg/km | Gewicht<br>kg/km<br>weight<br>kg/km |
|----------------------------------------------------------------------|--------------------------------|--------------------------------------------|-------------------------------------|
| <b>NYM-J</b>                                                         |                                |                                            |                                     |
| 1 X 1,5re                                                            | 5,6                            | 14,4                                       | 45,0                                |
| 1 X 2,5re                                                            | 6,2                            | 24,0                                       | 70,0                                |
| 1 X 4re                                                              | 6,7                            | 38,0                                       | 80,0                                |
| 1 X 6re                                                              | 7,3                            | 58,0                                       | 105,0                               |
| 1 X 10re                                                             | 8,4                            | 96,0                                       | 122,5                               |
| 1 X 16rm                                                             | 9,9                            | 154,0                                      | 196,0                               |
| 1 X 25rm                                                             | 12,7                           | 240,0                                      | 330,0                               |
|                                                                      |                                |                                            |                                     |
| 3 X 1,5re                                                            | 9,2                            | 43,0                                       | 135,0                               |
| 3 X 2,5re                                                            | 10,5                           | 72,0                                       | 190,0                               |
| 3 X 4re                                                              | 11,9                           | 115,0                                      | 265,0                               |
| 3 X 6re                                                              | 13,5                           | 173,0                                      | 315,0                               |
| 3 X 10re                                                             | 17,0                           | 288,0                                      | 465,0                               |
|                                                                      |                                |                                            |                                     |
| 4 X 1,5re                                                            | 10,0                           | 58,0                                       | 160,0                               |
| 4 X 2,5re                                                            | 11,5                           | 96,0                                       | 230,0                               |
| 4 X 4re                                                              | 13,5                           | 154,0                                      | 330,0                               |
| 4 X 6re                                                              | 14,8                           | 230,0                                      | 460,0                               |
| 4 X 10re                                                             | 17,5                           | 384,0                                      | 690,0                               |
| 4 X 16rm                                                             | 21,5                           | 614,0                                      | 1.090,0                             |
| 4 X 25rm                                                             | 26,0                           | 960,0                                      | 1.640,0                             |
| 4 X 35rm                                                             | 29,5                           | 1.344,0                                    | 2.090,0                             |
|                                                                      |                                |                                            |                                     |
| 5 X 1,5re                                                            | 11,0                           | 72,0                                       | 190,0                               |
| 5 X 2,5re                                                            | 12,5                           | 120,0                                      | 270,0                               |
| 5 X 4re                                                              | 14,5                           | 192,0                                      | 410,0                               |
| 5 X 6re                                                              | 16,0                           | 288,0                                      | 540,0                               |
| 5 X 10re                                                             | 19,5                           | 480,0                                      | 850,0                               |
| 5 X 16rm                                                             | 24,0                           | 768,0                                      | 1.350,0                             |
| 5 X 25rm                                                             | 32,5                           | 1.200,0                                    | 1.990,0                             |
|                                                                      |                                |                                            |                                     |
| 7 X 1,5re                                                            | 11,7                           | 101,0                                      | 235,0                               |
| 7 X 2,5re                                                            | 13,6                           | 168,0                                      | 350,0                               |
|                                                                      |                                |                                            |                                     |
| 10 X 1,5re                                                           | 13,8                           | 144,0                                      | 380,0                               |
| 12 X 1,5re                                                           | 15,1                           | 173,0                                      | 415,0                               |
|                                                                      |                                |                                            |                                     |
| <b>NYM-O</b>                                                         |                                |                                            |                                     |
| 1 X 1,5re                                                            | 5,6                            | 14,4                                       | 45,0                                |
| 1 X 2,5re                                                            | 6,2                            | 24,0                                       | 70,0                                |
| 1 X 4re                                                              | 6,7                            | 38,0                                       | 80,0                                |
| 1 X 6re                                                              | 7,3                            | 58,0                                       | 105,0                               |
| 1 X 10re                                                             | 8,4                            | 96,0                                       | 122,5                               |
| 1 X 16rm                                                             | 9,9                            | 154,0                                      | 196,0                               |
| 1 X 25rm                                                             | 12,7                           | 240,0                                      | 330,0                               |

| Abmessung<br>n x mm <sup>2</sup><br>dimension<br>n x mm <sup>2</sup> | Außen-Ø<br>mm<br>outer Ø<br>mm | Cu-Zahl<br>kg/km<br>copper weight<br>kg/km | Gewicht<br>kg/km<br>weight<br>kg/km |
|----------------------------------------------------------------------|--------------------------------|--------------------------------------------|-------------------------------------|
| <b>NYM-O</b>                                                         |                                |                                            |                                     |
| 2 X 1,5re                                                            | 8,6                            | 29,0                                       | 115,0                               |
| 2 X 2,5re                                                            | 9,2                            | 48,0                                       | 153,0                               |
| 2 X 4re                                                              | 11,8                           | 77,0                                       | 228,0                               |
|                                                                      |                                |                                            |                                     |
| 3 X 1,5re                                                            | 9,2                            | 43,0                                       | 135,0                               |
| 3 X 2,5re                                                            | 10,5                           | 72,0                                       | 190,0                               |
| 3 X 4re                                                              | 11,9                           | 115,0                                      | 265,0                               |
| 3 X 6re                                                              | 13,5                           | 173,0                                      | 315,0                               |
| 3 X 10re                                                             | 17,0                           | 288,0                                      | 465,0                               |
|                                                                      |                                |                                            |                                     |
| 4 X 1,5re                                                            | 10,0                           | 58,0                                       | 160,0                               |
| 4 X 2,5re                                                            | 11,5                           | 96,0                                       | 230,0                               |
| 4 X 4re                                                              | 13,5                           | 154,0                                      | 330,0                               |
| 4 X 6re                                                              | 14,8                           | 230,0                                      | 460,0                               |
| 4 X 10re                                                             | 17,5                           | 384,0                                      | 690,0                               |
| 4 X 16rm                                                             | 21,5                           | 614,0                                      | 1.090,0                             |
| 4 X 25rm                                                             | 26,0                           | 960,0                                      | 1.640,0                             |
| 4 X 35rm                                                             | 29,5                           | 1.344,0                                    | 2.090,0                             |
|                                                                      |                                |                                            |                                     |
| 5 X 1,5re                                                            | 11,0                           | 72,0                                       | 190,0                               |
| 5 X 2,5re                                                            | 12,5                           | 120,0                                      | 270,0                               |
| 5 X 4re                                                              | 14,5                           | 192,0                                      | 410,0                               |
| 5 X 6re                                                              | 16,0                           | 288,0                                      | 540,0                               |
| 5 X 10re                                                             | 19,5                           | 480,0                                      | 850,0                               |
| 5 X 16rm                                                             | 24,0                           | 768,0                                      | 1.350,0                             |
| 5 X 25rm                                                             | 32,5                           | 1.200,0                                    | 1.990,0                             |
|                                                                      |                                |                                            |                                     |
| 7 X 1,5re                                                            | 11,7                           | 101,0                                      | 235,0                               |
| 7 X 2,5re                                                            | 13,6                           | 168,0                                      | 350,0                               |
|                                                                      |                                |                                            |                                     |
| 10 X 1,5re                                                           | 13,8                           | 144,0                                      | 380,0                               |
| 12 X 1,5re                                                           | 15,1                           | 173,0                                      | 415,0                               |
|                                                                      |                                |                                            |                                     |
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