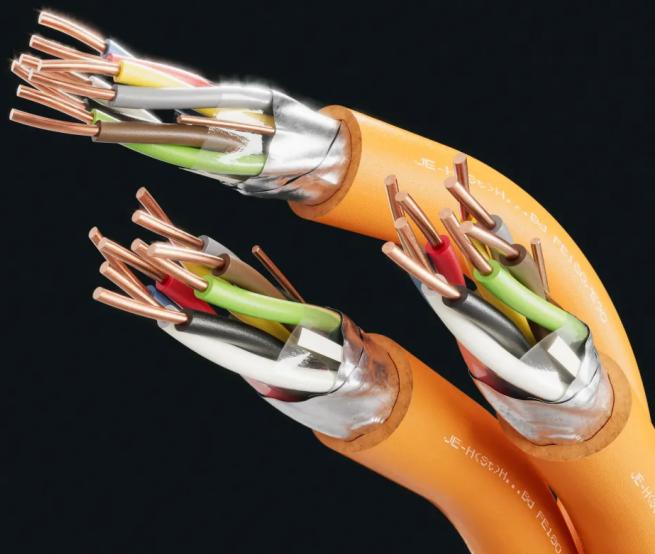


SAFETY CABLES

# JE-H(St)H...Bd FE180/E30-E90

SiR/FRNC halogen-free installation cable with  
insulation integrity and circuit integrity,  
screened



## TECHNICAL DATA



**Standard**  
adapted to DIN VDE 0815



**Certificate**  
VDE Germany



**Test Voltage**  
core/core 500 V / 50 Hz  
core/screen 2000 V / 50 Hz



**Rated Voltage**  
max. 225 Vss



**Bending radius (min.)**  
7,5 x Ø of cable



**Fire properties**  
EN 60332-1-2: self-extinguishing  
EN 60754-2: halogen-free, non-corrosive  
combustion gases  
EN 61034-2: low smoke emission  
EN 60332-3-22: reduced flame propagation  
IEC 60331-23: insulation integrity FE180  
DIN 4102-12: circuit integrity E30-E90



**Core identification**  
DIN VDE 0815



**Temperature range**  
Laying temperature: min. -5°C  
Operating temperature: -30°C up to 70°C

## DESIGN



1 Copper conductor, round solid (RE)



2 Core insulation (silicone rubber), cores pair stranded,  
marking with green thread



3 Inner covering (plastic tape)



4 Screen (plastic laminated aluminium tape with drain wire)



5 Sheath (halogen-free polymer compound, orange or red)

## Electrical Parameters

|                                               |         |      |
|-----------------------------------------------|---------|------|
| Conductor diameter                            | mm      | 0.8  |
| Loop resistance max.                          | Ω/km    | 73.2 |
| Mutual capacitance (approx. value), at 800 Hz | nF/km   | 120  |
| Mutual capacitance, max.                      | nF/km   | 144  |
| Capacitance unbalance, max. k                 | pF/500m | 400  |
| Insulation resistance, min. at 20 °C          | MΩ/km   | 100  |

| Number of pairs x nominal diameter | Outer diameter appr. (mm) | Total weight appr. (kg/km) |
|------------------------------------|---------------------------|----------------------------|
| 1 x 2 x 0.8                        | 7.5                       | 69                         |
| 2 x 2 x 0.8                        | 8.2                       | 89                         |
| 4 x 2 x 0.8                        | 11.3                      | 142                        |
| 8 x 2 x 0.8                        | 14.0                      | 230                        |
| 12 x 2 x 0.8                       | 16.4                      | 314                        |
| 16 x 2 x 0.8                       | 18.8                      | 412                        |
| 20 x 2 x 0.8                       | 20.5                      | 493                        |
| 32 x 2 x 0.8                       | 25.4                      | 752                        |
| 40 x 2 x 0.8                       | 27.9                      | 908                        |
| 52 x 2 x 0.8                       | 31.0                      | 1166                       |



| System / System Manufacturer | System identification                      | Classification | Range         | Distance (a) /Width (b) / Load (g)       | AbP number     | Laying type No. |
|------------------------------|--------------------------------------------|----------------|---------------|------------------------------------------|----------------|-----------------|
| Normtrag                     | Rinne                                      | E90            | n x 2 x = 0.8 | a ≤ 1200 mm<br>b = 300 mm<br>g ≤ 10 kg/m | P-MPA-E-09-016 | 2.2.14 – 2      |
| Normtrag                     | Leiter                                     | E60            | n x 2 x = 0.8 | a ≤ 1200 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-MPA-E-09-016 | 2.2.14 – 1      |
| Normtrag                     | Abstandschele                              | E90            | n x 2 x = 0.8 | a ≤ 300 mm                               | P-MPA-E-09-016 | 2.2.14 – 3      |
| Normtrag                     | Bügeschelle mit LW                         | E90            | n x 2 x = 0.8 | a ≤ 600 mm                               | P-MPA-E-09-016 | 2.2.14 – 4      |
| OBO Bettermann               | GRM 55/ + AW15/<br>(AWG15/)                | E90            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 15 kg/m | P-MPA-E-23-003 | 5.1             |
| OBO Bettermann               | 2056/M                                     | E90            | n x 2 x = 0.8 | a ≤ 800 mm                               | P-MPA-E-23-003 | 8.1             |
| OBO Bettermann               | 2034M                                      | E90            | n x 2 x = 0.8 | a ≤ 500 mm                               | P-MPA-E-23-003 | 10.2            |
| OBO Bettermann               | RKSM 630 +<br>AW55/31                      | E90            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-MPA-E-23-001 | 1.1             |
| OBO Bettermann               | RKSM 640 +<br>AW55/41                      | E90            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-MPA-E-23-001 | 1.2             |
| OBO Bettermann               | FireBox T350ED<br>4-28 AD + 732<br>(decke) | E90            | n x 2 x = 0.8 |                                          | P-1036 DMT DO  | XV              |
| OBO Bettermann               | FireBox T350ED<br>4-28 AD + 732<br>(decke) | E90            | n x 2 x = 0.8 |                                          | P-1036 DMT DO  | XVI             |
| OBO Bettermann               | 2031-M/30                                  | E60            | n x 2 x = 0.8 | a ≤ 600 mm<br>g ≤ 3 kg/m                 | P-MPA-E-23-003 | 6.2             |
| OBO Bettermann               | 732/733                                    | E60            | n x 2 x = 0.8 | a ≤ 800 mm                               | P-MPA-E-23-003 | 8.2             |
| OBO Bettermann               | RKSM 640 +<br>AW55/41                      | E60            | n x 2 x = 0.8 | a ≤ 1550 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | II              |
| OBO Bettermann               | 2031-M/70                                  | E30            | n x 2 x = 0.8 | a ≤ 800 mm<br>g ≤ 6 kg/m                 | P-MPA-E-23-003 | 6.3             |
| OBO Bettermann               | 2033M                                      | E30            | n x 2 x = 0.8 | a ≤ 500 mm                               | P-MPA-E-23-003 | 10.1            |
| OBO Bettermann               | 2031/M30                                   | E30            | n x 2 x = 0.8 | a ≤ 500 mm<br>g ≤ 2.5 kg/m               | P-1016 DMT DO  | XI              |
| OBO Bettermann               | RKSM 630 +<br>AW55/31                      | E30            | n x 2 x = 0.8 | a ≤ 1550 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | I               |
| OBO Bettermann               | RKSM 630 +<br>AW55/31                      | E30            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | XIII            |
| OBO Bettermann               | RKSM 640 +<br>AW55/41                      | E30            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | XIV             |
| Niedax                       | SHS30 (wand)                               | E90            | n x 2 x = 0.8 | a ≤ 600 mm<br>g ≤ 3 kg/m                 | P-MPA-E-09-016 | 2.2.16 – 4      |
| Niedax                       | SHS30 (decke)                              | E90            | n x 2 x = 0.8 | a ≤ 600 mm<br>g ≤ 3 kg/m                 | P-MPA-E-09-016 | 2.2.17 – 6      |
| Niedax                       | Bügeschellen B                             | E60            | n x 2 x = 0.8 | a ≤ 800 mm                               | P-MPA-E-23-003 | 9.1             |
| Niedax                       | Abstandschele SAS                          | E60            | n x 2 x = 0.8 | a ≤ 800 mm                               | P-MPA-E-23-003 | 9.2             |
| Niedax                       | RLVC 60.400 S +<br>KTAS400 (wand)          | E60            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 30 kg/m | P-1036 DMT DO  | XI              |
| Niedax                       | RLVC 60.300 +<br>KTAS300                   | E30            | n x 2 x = 0.8 | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-MPA-E-23-003 | 3.1             |



| System / System Manufacturer | System identification          | Classification | Range           | Distance (a) /Width (b) / Load (g)       | AbP number     | Laying type No. |
|------------------------------|--------------------------------|----------------|-----------------|------------------------------------------|----------------|-----------------|
| Niedax                       | SHS15                          | E30            | n x 2 x = 0.8   | a ≤ 600 mm<br>g ≤ 3 kg/m                 | P-MPA-E-23-003 | 7.1             |
| Niedax                       | SHS80                          | E30            | n x 2 x = 0.8   | a ≤ 800 mm<br>g ≤ 6 kg/m                 | P-MPA-E-23-003 | 7.3             |
| Niedax                       | LLK                            | E30            | n x 2 x = 0.8   | a ≤ 500 mm<br>g ≤ 3 kg/m                 | P-MPA-E-23-003 | 12.1            |
| Niedax                       | RLVC 60.400 S + KTA400         | E30            | n x 2 x 0.8     | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 30 kg/m | P-1016 DMT DO  | II              |
| Niedax                       | RLVC 60.300 S + KTAS300        | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 25 kg/m | P-1036 DMT DO  | VII             |
| Niedax                       | RLVC 60.400 S + KTAS400        | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 30 kg/m | P-1036 DMT DO  | VIII            |
| Niedax                       | SHS30 (decke)                  | E30            | n x 2 x = 0.8   | a ≤ 600 mm<br>g ≤ 3 kg/m                 | P-1036 DMT DO  | IX              |
| Niedax                       | SHS80 (wand)                   | E30            | n x 2 x = 0.8   | a ≤ 800 mm<br>g ≤ 6 kg/m                 | P-1036 DMT DO  | X               |
| Niedax                       | RLVC 60.300 S + KTAS300 (wand) | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 25 kg/m | P-1036 DMT DO  | XII             |
| Niedax                       | MTC 54.050 + GTCB 50/100       | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 50 mm<br>g ≤ 5 kg/m   | P-1036 DMT DO  | XXII            |
| Niedax                       | MTC 54.200 + KTAS200           | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 200 mm<br>g ≤ 15 kg/m | P-1036 DMT DO  | XXI             |
| Lanz                         | WSP-Multibahn 400x60 (decke)   | E90            | n x 2 x 0.8     | a ≤ 1800 mm<br>g ≤ 20 kg/m               | P-1016 DMT DO  | XIV             |
| Lanz                         | G-Kanal 50x100                 | E30            | n x 2 x 0.8     | a ≤ 1500 mm<br>g ≤ 10 kg/m               | P-1016 DMT DO  | IV              |
| Lanz                         | WSP-Multibahn 400x60 (wand)    | E30            | n x 2 x 0.8     | a ≤ 1800 mm<br>g ≤ 20 kg/m               | P-1016 DMT DO  | XIII            |
| PUK                          | RG 60-30S + KWMS 030F          | E90            | n x 2 x = 0.8   | a ≤ 1550 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | IV              |
| PUK                          | RG 60-40S + KWMS 040F          | E90            | n x 2 x = 0.8   | a ≤ 1550 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | V               |
| PUK                          | RG 60-40S + KWMS 040F (wand)   | E90            | n x 2 x = 0.8   | a ≤ 1500 m<br>b = 400 mm<br>g ≤ 20 kg/m  | P-1036 DMT DO  | VI              |
| PUK                          | LGG-BS 60-40-3S + KW 040F      | E60            | n x 2 x = 0.8   | a ≤ 1200 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | XVII            |
| PUK                          | LGG-BS 60-40-3S + KW 040F      | E60            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | XVIII           |
| PUK                          | RG 60-30S + KWMS 030F          | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 20 kg/m | P-1036 DMT DO  | III             |
| PUK                          | GI 30S + KWMS 030F             | E30            | n x 2 x = 0.8   | a ≤ 1500 mm<br>b = 300 mm<br>g ≤ 15 kg/m | P-1036 DMT DO  | XIX             |
| PUK                          | SH QS 15                       | E30            | n x 2 x = 0.8   | a ≤ 500 mm<br>g ≤ 1.5 kg/m               | P-1036 DMT DO  | XX              |
| PohlCon                      | RG-BS 60-40E4 + DB-T 40EC      | E90            | ≥ 2 x 2 x = 0.8 | a ≤ 1500 mm<br>b = 400 mm<br>g ≤ 30 kg/m | P-1043 DMT DO  | I               |



| System / System Manufacturer | System identification     | Classification | Range                                   | Distance (a) /Width (b) / Load (g)                 | AbP number    | Laying type No. |
|------------------------------|---------------------------|----------------|-----------------------------------------|----------------------------------------------------|---------------|-----------------|
| PohlCon                      | RG-BS 60-30E4 + DB-T 30EC | E90            | $\approx 2 \times 2 \times \approx 0.8$ | a $\leq$ 1500 mm<br>b = 300 mm<br>g $\leq$ 15 kg/m | P-1043 DMT DO | II              |
| PohlCon                      | Bügeschelle AC + KHA 8    | E90            | $\approx 2 \times 2 \times \approx 0.8$ | a $\leq$ 800 mm                                    | P-1043 DMT DO | VII             |
| PohlCon                      | Bügeschelle AC + KHA 7    | E90            | $\approx 2 \times 2 \times \approx 0.8$ | a $\leq$ 750 mm                                    | P-1043 DMT DO | IX              |

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