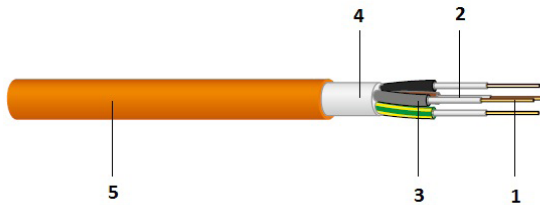


## (N)HXH FE180 E30-E60

Safety cable, 0.6/1kV, Keram

Halogen-free, with improved fire characteristics;  
with reference to VDE 0266 and CENELEC HD 604 S1,  
circuit integrity (FE180) in accordance with VDE 0472-814, IEC 60331,  
System Circuit Integrity E30-E60\* in accordance with DIN 4102-12



- 1 Conductor: solid/stranded
- 2 Fire barrier: high-performance Keram compound
- 3 Insulation: cross-linked polymer, zero halogen
- 4 Filler: flame retardant, zero halogen
- 5 Sheath: FRNC/LSZH



### Descrizione

Safety cables are installed in all areas that require special protection of people and equipment against fire and fire damages and where strict security requirements must be fulfilled.

Suitable for indoor applications. For outdoor applications, protection must be provided against exposure to direct sunlight. The cable should only be laid directly in earth or water if a protective conduit is used.

System Circuit Integrity is provided up to 400 V operating voltage.

Permitted operating temperature at conductor of +90°C.

### Costruzione

|                                |   |
|--------------------------------|---|
| Conduttore                     | Bare copper, solid or stranded, IEC 60228 and EN 60228 (VDE 0295)                         |
| Isolamento                     | Double insulation, cross-linked, high-performance Keram special compound, VDE 0266 "HXI1" |
| Colori delle anime             | CENELEC HD 308 S2, VDE 0293   |
| Riempitrice                    | Flame retardant, halogen-free thermoplastic compound                                      |
| Materiale della guaina esterna | Flame retardant Polyolefin compound, CENELEC HD 604 S1 and VDE 0276-604 "HM4"             |
| Colore della guaina esterna    | arancia   |

### Proprietà generali

|                           |                 |
|---------------------------|-----------------|
| Integrità del circuito    | E30-E60*        |
| Integrità dell'isolamento | FE 180          |
| Installation temperature  | -5 °C - +50 °C  |
| Operating temperature     | -45 °C - +90 °C |

### Proprietà elettriche

|                          |         |
|--------------------------|---------|
| Nominal voltage          | 0.6/1kV |
| Tensione di prova a 50Hz | 4.000 V |

## Proprietà meccaniche

|  |   |
|--|---|
| Curvatura minima durante l'installazione (anima singola) | 15 x D  |
| Curvatura minima durante l'installazione (multicore)     | 12 x D  |
| Minimum bending radius permanent (multi core)            | 12 x D  |
| Minimum bending radius permanent (single core)           | 15 x D  |
| Remarks bending radius                                   | 50% reduction if installation at 30°C and with a template |

## Standards

|                                   |   |
|-----------------------------------|---|
| Integrità del circuito (FE180)    | IEC 60331-11/-21 (180 minutes), VDE 0472-814 (FE180), BS 6387 C/W/Z, IEC 60331-1 (120 minutes), IEC 60331-2 (120 minutes), EN 50200 (PH120 minutes), NBN 713-020 (Rf1), VDE 0482-200 (PH120), AREI-RGIE Art.104-FR1 |
| Integrità del circuito di sistema | DIN 4102-12, AREI-RGIE Art.104-FR2, NBN 713-020 (Rf1)   |
| Densità del fumo                  | IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2, AREI-RGIE Art.104-SD   |
| Zero alogeni nessun gas corrosivo | IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2, AREI-RGIE Art.104-SA  |
| Propagazione della fiamma         | AREI-RGIE Art.104-F1, EN 60332-1-2, IEC 60332-1-2, SEV TP 20B/3C 3.4.1.1, VDE 0482-332-1-2  |
| Flame spread                      | IEC 60332-3-24, EN 60332-3-24, VDE 0482-332-3-24, SEV TP 20B/3C 3.4.1.3, AREI-RGIE Art.104-F2   |

## Nota

\* System Circuit Integrity is dependent on installation method

## Versioni

| Codice art. | Prodotto                       | Diametro esterno della guaina [mm] | Tasso di CU [kg/km] | Weight [kg/km] | Fire load [kWh/m] | Conductor | Construction | Peso [kg] | Unità di imballaggio | GTIN / EAN     |
|-------------|--------------------------------|------------------------------------|---------------------|----------------|-------------------|-----------|--------------|-----------|----------------------|----------------|
| 171290      | (N)HXH-0 FE180 E30-E60 1 x 6   | 7,6                                | 58,6                | 112            | 0,23              | solid     | L            |           | al metro             | 40393910078862 |
| 171291      | (N)HXH-0 FE180 E30-E60 1 x 10  | 8,4                                | 96                  | 156            | 0,27              | solid     | L            |           | al metro             | 40393910078855 |
| 171370      | (N)HXH-0 FE180 E30-E60 1 x 16  | 9,8                                | 154                 | 227            | 0,34              | stranded  | L            |           | al metro             | 40393910078756 |
| 171377      | (N)HXH-0 FE180 E30-E60 1 x 25  | 11,3                               | 240                 | 329            | 0,43              | stranded  | L            |           | al metro             | 40393910078749 |
| 171386      | (N)HXH-0 FE180 E30-E60 1 x 35  | 12,4                               | 336                 | 428            | 0,48              | stranded  | L            |           | al metro             | 40393910078725 |
| 171394      | (N)HXH-0 FE180 E30-E60 1 x 50  | 13,9                               | 480                 | 565            | 0,58              | stranded  | L            |           | al metro             | 40393910078701 |
| 171429      | (N)HXH-0 FE180 E30-E60 1 x 70  | 15,7                               | 672                 | 773            | 0,68              | stranded  | L            |           | al metro             | 40393910078671 |
| 170842      | (N)HXH-0 FE180 E30-E60 1 x 95  | 18,1                               | 912                 | 1.035          | 0,91              | stranded  | L            |           | al metro             | 40393910079135 |
| 170845      | (N)HXH-0 FE180 E30-E60 1 x 120 | 19,2                               | 1.152               | 1.270          | 0,97              | stranded  | L            |           | al metro             | 40393910079128 |
| 170850      | (N)HXH FE180 E30-E60 1 x 150   | 21,4                               | 1.440               | 1.590          | 1,20              | stranded  | L            |           | al metro             | 40393910079098 |
| 170855      | (N)HXH-0 FE180 E30-E60 1 x 185 | 23,6                               | 1.776               | 1.961          | 1,46              | stranded  | L            |           | al metro             | 40393910079074 |
| 170858      | (N)HXH-0 FE180 E30-E60 1 x 240 | 26,8                               | 2.304               | 2.563          | 1,81              | stranded  | L            |           | al metro             | 40393910079067 |
| 170860      | (N)HXH FE180 E30-E60 1x300     | 29,2                               | 2.880               | 3.051          | 2,13              | stranded  | L            |           | al metro             | 40393910079050 |
| 192572      | (N)HXH FE180 E30-E60 2 x 1.5   | 11                                 | 29                  | 177            | 0,48              | solid     | 2L           |           | al metro             | 40393910067101 |

| Codice art. | Prodotto                              | Diametro esterno della guaina [mm] | Tasso di CU [kg/km] | Weight [kg/km] | Fire load [kWh/m] | Conductor | Construction | Peso [kg] | Unità di imballaggio | GTIN / EAN     |
|-------------|---------------------------------------|------------------------------------|---------------------|----------------|-------------------|-----------|--------------|-----------|----------------------|----------------|
| 186280      | (N)HXH FE180 E30-E60 2 x 1.5          | 11                                 | 29                  | 177            | 0,48              | solid     | LN           |           | al metro             | 40393910076134 |
| 192582      | (N)HXH FE180 E30-E60 2 x 2.5          | 11,8                               | 48                  | 216            | 0,54              | solid     | 2L           |           | al metro             | 40393910067057 |
| 186921      | (N)HXH FE180 E30-E60 2 x 2.5          | 11,8                               | 48                  | 216            | 0,54              | solid     | LN           |           | al metro             | 40393910075588 |
| 186922      | (N)HXH FE180 E30-E60 2 x 4            | 12,8                               | 77                  | 271            | 0,62              | solid     | LN           |           | al metro             | 40393910075571 |
| 186923      | (N)HXH FE180 E30-E60 2 x 6            | 13,8                               | 115                 | 335            | 0,70              | solid     | LN           |           | al metro             | 40393910075564 |
| 186924      | (N)HXH FE180 E30-E60 2 x 10           | 15,4                               | 192                 | 455            | 0,83              | solid     | LN           |           | al metro             | 40393910075557 |
| 186952      | (N)HXH FE180 E30-E60 2 x 16           | 18,2                               | 307                 | 660            | 1,09              | solid     | LN           |           | al metro             | 40393910075274 |
| 190404      | (N)HXH FE180 E30-E60 2 x 25           | 21,2                               | 480                 | 950            | 1,42              | stranded  | LN           |           | al metro             | 40393910070989 |
| 18692500ZZ  | (N)HXH-J FE180 E30-E60 3 x 1.5        | 11,5                               | 43                  | 199            | 0,53              | solid     | LNPE         |           | al metro             | 40393910038088 |
| 18692500ZL  | (N)HXH-J FE180 E30-E60 3 x 1.5        | 11,5                               | 43                  | 200            | 0,53              | solid     | LNPE         |           | 500 m tamburo        | 40393910038125 |
| 18692500ZK  | (N)HXH-J FE180 E30-E60 3 x 1.5        | 11,5                               | 43                  | 200            | 0,53              | solid     | LNPE         |           | 1000 m tamburo       | 40393910038132 |
| 18692600ZZ  | (N)HXH-J FE180 E30-E60 3 x 2.5        | 12,4                               | 72                  |                | 0,60              | solid     | LNPE         | 0,25 kg   | al metro             | 40393910038026 |
| 18692600ZL  | (N)HXH-J FE180 E30-E60 3 x 2.5        | 12,4                               | 72                  | 250            | 0,60              | solid     | LNPE         |           | 500 m tamburo        | 40393910038057 |
| 18692600ZK  | (N)HXH-J FE180 E30-E60 3 x 2.5        | 12,4                               | 72                  | 250            | 0,60              | solid     | LNPE         |           | 1000 m tamburo       | 40393910038064 |
| 186927      | (N)HXH-J FE180 E30-E60 3 x 4          | 13,5                               | 115                 | 319            | 0,68              | solid     | LNPE         |           | al metro             | 40393910075526 |
| 186928      | (N)HXH-J FE180 E30-E60 3 x 6          | 14,6                               | 173                 | 400            | 0,77              | solid     | LNPE         |           | al metro             | 40393910075519 |
| 186929      | (N)HXH-J FE180 E30-E60 3 x 10         | 16,3                               | 288                 | 554            | 0,91              | solid     | LNPE         |           | al metro             | 40393910075502 |
| 186953      | (N)HXH FE180 E30-E60 3 x 16           | 19,3                               | 461                 | 809            | 1,19              | stranded  | LNPE         |           | al metro             | 40393910075267 |
| 186955      | (N)HXH FE180 E30-E60 3 x 25           | 22,6                               | 720                 | 1.182          | 1,56              | stranded  | LNPE         |           | al metro             | 40393910075243 |
| 186954      | (N)HXH FE180 E30-E60 3 x 25 + 1 x 16  | 23,9                               | 874                 | 1.357          | 1,73              | stranded  | 3LPE         |           | al metro             | 40393910075250 |
| 186957      | (N)HXH FE180 E30-E60 3 x 35           | 24,9                               | 1.008               | 1.529          | 1,80              | stranded  | LNPE         |           | al metro             | 40393910075229 |
| 186956      | (N)HXH FE180 E30-E60 3 x 35 + 1 x 16  | 25,9                               | 1.162               | 1.693          | 1,93              | stranded  | 3LPE         |           | al metro             | 40393910075236 |
| 186959      | (N)HXH FE180 E30-E60 3 x 50           | 28,2                               | 1.440               | 2.026          | 2,24              | stranded  | LNPE         |           | al metro             | 40393910075205 |
| 186958      | (N)HXH FE180 E30-E60 3 x 50 + 1 x 25  | 29,9                               | 1.680               | 2.311          | 2,52              | stranded  | 3LPE         |           | al metro             | 40393910075212 |
| 186961      | (N)HXH FE180 E30-E60 3 x 70           | 32,7                               | 2.016               | 2.814          | 32,7              | stranded  | LNPE         |           | al metro             | 40393910075182 |
| 186960      | (N)HXH FE180 E30-E60 3 x 70 + 1 x 35  | 34                                 | 2.352               | 3.146          | 3,07              | stranded  | 3LPE         |           | al metro             | 40393910075199 |
| 186962      | (N)HXH FE180 E30-E60 3 x 95 + 1 x 20  | 39,3                               | 3.216               | 4.222          | 4,18              | stranded  | 3LPE         |           | al metro             | 40393910075175 |
| 186963      | (N)HXH FE180 E30-E60 3 x 120 + 1 x 70 | 42,6                               | 4.098,28            | 5.255          | 4,74              | stranded  | 3LPE         |           | al metro             | 40393910075168 |

| Codice art. | Prodotto                                    | Diametro esterno della guaina [mm] | Tasso di CU [kg/km] | Weight [kg/km] | Fire load [kWh/m] | Conductor | Construction | Peso [kg] | Unità di imballaggio | GTIN / EAN     |
|-------------|---|------------------------------------|---------------------|----------------|-------------------|-----------|--------------|-----------|----------------------|----------------|
| 186964      | (N)HXH FE180<br>E30-E60 3 x 150 +<br>1 x 70 | 46,6                               | 4.992               | 6.361          | 5,63              | stranded  | 3LPE         |           | al metro             | 40393910075151 |
| 186965      | (N)HXH FE180<br>E30-E60 3 x 185 +<br>1 x 90 | 52                                 | 6.240               | 7.954          | 6,99              | stranded  | 3LPE         |           | al metro             | 40393910075144 |
| 186930      | (N)HXH-J FE180<br>E30-E60 4 x 1.5           | 12,4                               | 58                  | 233            | 0,61              | solid     | 3LPE         |           | al metro             | 40393910075496 |
| 186931      | (N)HXH-J FE180<br>E30-E60 4 x 2.5           | 13,4                               | 96                  | 290            | 0,69              | solid     | 3LPE         |           | al metro             | 40393910075489 |
| 186932      | (N)HXH-J FE180<br>E30-E60 4 x 4             | 14,6                               | 154                 | 381            | 0,78              | solid     | 3LPE         |           | al metro             | 40393910075472 |
| 186933      | (N)HXH-J FE180<br>E30-E60 4 x 6             | 15,8                               | 230                 | 486            | 0,90              | solid     | 3LPE         |           | al metro             | 40393910075465 |
| 186934      | (N)HXH-J FE180<br>E30-E60 4 x 10            | 17,8                               | 384                 | 688            | 1,07              | solid     | 3LPE         |           | al metro             | 40393910075458 |
| 186967      | (N)HXH FE180<br>E30-E60 4 x 16              | 21,1                               | 614                 | 1.005          | 1,40              | stranded  | 3LPE         |           | al metro             | 40393910075120 |
| 186968      | (N)HXH FE180<br>E30-E60 4 x 25              | 24,8                               | 960                 | 1.479          | 1,86              | stranded  | 3LPE         |           | al metro             | 40393910075113 |
| 186969      | (N)HXH FE180<br>E30-E60 4 x 35              | 27,4                               | 1.344               | 1.929          | 2,15              | stranded  | 3LPE         |           | al metro             | 40393910075106 |
| 186970      | (N)HXH FE180<br>E30-E60 4 x 50              | 31,5                               | 1.920               | 2.598          | 2,79              | stranded  | 3LPE         |           | al metro             | 40393910075090 |
| 186971      | (N)HXH FE180<br>E30-E60 4 x 70              | 36,2                               | 2.688               | 3.578          | 3,38              | stranded  | 3LPE         |           | al metro             | 40393910075083 |
| 186972      | (N)HXH FE180<br>E30-E60 4 x 95              | 41,7                               | 3.648               | 4.785          | 4,68              | stranded  | 3LPE         |           | al metro             | 40393910075076 |
| 187532      | (N)HXH FE180<br>E30-E60 4x95                | 41,7                               | 3.648               | 4.785          | 4,68              | stranded  | 3LN          |           | al metro             | 40393910073713 |
| 186973      | (N)HXH FE180<br>E30-E60 4 x 120             | 44,6                               | 4.608               | 5.837          | 5,19              | stranded  | 3LPE         |           | al metro             | 40393910075069 |
| 186974      | (N)HXH FE180<br>E30-E60 4 x 150             | 50                                 | 5.760               | 7.361          | 6,52              | stranded  | 3LPE         |           | al metro             | 40393910075052 |
| 187548      | (N)HXH-J FE180<br>E30-E60 4 x 185           | 55,3                               | 7.104               | 9.066          | 7,98              | stranded  | 3LPE         |           | al metro             | 40393910073652 |
| 187077      | (N)HXH FE180<br>E30-E60 4 x 240             | 62,9                               | 9.216               | 11.863         | 10,05             | stranded  | 3LPE         |           | al metro             | 40393910074727 |
| 186935      | (N)HXH-J FE180<br>E30-E60 5 x 1.5           | 13,4                               | 72                  | 276            | 0,71              | solid     | 3LNPE        |           | al metro             | 40393910075441 |
| 186936      | (N)HXH-J FE180<br>E30-E60 5 x 2.5           | 14,5                               | 120                 | 346            | 0,81              | solid     | 3LNPE        |           | al metro             | 40393910075434 |
| 186937      | (N)HXH-J FE180<br>E30-E60 5 x 4             | 15,8                               | 192                 | 457            | 0,93              | solid     | 3LNPE        |           | al metro             | 40393910075427 |
| 186938      | (N)HXH-J FE180<br>E30-E60 5 x 6             | 17,2                               | 288                 | 584            | 1,05              | solid     | 3LNPE        |           | al metro             | 40393910075410 |
| 186939      | (N)HXH-J FE180<br>E30-E60 5 x 10            | 19,3                               | 480                 | 824            | 1,25              | solid     | 3LNPE        |           | al metro             | 40393910075403 |
| 186975      | (N)HXH FE180<br>E30-E60 5 x 16              | 23,1                               | 768                 | 1.220          | 1,67              | stranded  | 3LNPE        |           | al metro             | 40393910075045 |
| 186976      | (N)HXH FE180<br>E30-E60 5 x 25              | 27,2                               | 1.200               | 1.803          | 2,22              | stranded  | 3LNPE        |           | al metro             | 40393910075038 |
| 186977      | (N)HXH FE180<br>E30-E60 5 x 35              | 30,5                               | 1.680               | 2.385          | 2,66              | stranded  | 3LNPE        |           | al metro             | 40393910075021 |
| 186978      | (N)HXH FE180<br>E30-E60 5 x 50              | 34,8                               | 2.400               | 3.191          | 3,41              | stranded  | 3LNPE        |           | al metro             | 40393910075014 |
| 186979      | (N)HXH FE180<br>E30-E60 5 x 70              | 40                                 | 3.360               | 4.391          | 4,26              | stranded  | 3LNPE        |           | al metro             | 40393910075007 |
| 190587      | (N)HXH FE180<br>E30-E60 5 x 95              | 46,6                               | 4.560               | 5.925          | 5,89              | stranded  | 3LNPE        |           | al metro             | 40393910070613 |
| 196283      | (N)HXH FE180<br>E30-E60 6x10                | 21                                 | 576                 | 973            | 1.434             | solid     | 5LPE         |           | al metro             | 40393910061512 |

| Codice art. | Prodotto                           | Diametro esterno della guaina [mm] | Tasso di CU [kg/km] | Weight [kg/km] | Fire load [kWh/m] | Conductor | Construction | Peso [kg] | Unità di imballaggio | GTIN / EAN     |
|-------------|------------------------------------|------------------------------------|---------------------|----------------|-------------------|-----------|--------------|-----------|----------------------|----------------|
| 171272      | (N)HXH-J FE180<br>E30-E60 7 x 1.5  | 14,4                               | 101                 | 329            | 0,81              | solid     | 6LPE         |           | al metro             | 40393910079036 |
| 171273      | (N)HXH-J FE180<br>E30-E60 7 x 2.5  | 15,6                               | 168                 | 419            | 0,92              | solid     | 6LPE         |           | al metro             | 40393910079029 |
| 191080      | (N)HXH-J FE180<br>E30-E60 7 x 6    | 18,6                               | 403                 | 725            | 1,17              | solid     | 5LNPE        |           | al metro             | 40393910069914 |
| 171279      | (N)HXH-J FE180<br>E30-E60 12 x 1.5 | 18,3                               | 173                 | 512            | 1,20              | solid     | 11LPE        |           | al metro             | 40393910078961 |
| 171280      | (N)HXH-J FE180<br>E30-E60 12 x 2.5 | 20                                 | 288                 | 671            | 1,37              | solid     | 11LPE        |           | al metro             | 40393910078954 |
| 171283      | (N)HXH-J FE180<br>E30-E60 19 x 1.5 | 21,2                               | 274                 | 714            | 1,63              | solid     | 18LPE        |           | al metro             | 40393910078923 |
| 171284      | (N)HXH-J FE180<br>E30-E60 19 x 2.5 | 23,2                               | 456                 | 947            | 1,83              | solid     | 18LPE        |           | al metro             | 40393910078916 |
| 171285      | (N)HXH-J FE180<br>E30-E60 24 x 1.5 | 24,6                               | 346                 | 900            | 1,99              | solid     | 23LPE        |           | al metro             | 40393910078909 |
| 171286      | (N)HXH-J FE180<br>E30-E60 24 x 2.5 | 27                                 | 576                 | 1.199          | 2,27              | solid     | 23LPE        |           | al metro             | 40393910078893 |
| 171287      | (N)HXH-J FE180<br>E30-E60 30 x 1.5 | 26                                 | 432                 | 1.056          | 2,28              | solid     | 29LPE        |           | al metro             | 40393910078886 |
| 171288      | (N)HXH-J FE180<br>E30-E60 30 x 2.5 | 28,8                               | 720                 | 1.430          | 2,68              | solid     | 29LPE        |           | al metro             | 40393910078879 |

Con riserva di modifiche tecniche

A partire da 2023-10-30 08:22:38