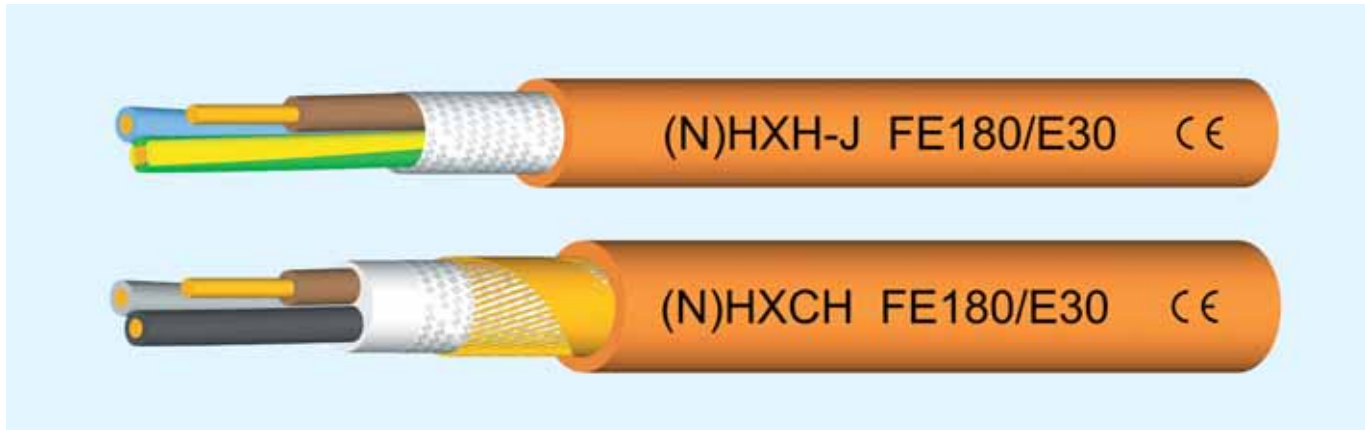


(N)HXH, (N)HXCH FE 180/E30

Fire resistant cables with orange sheath, halogen-free



Cable structure

- Bare copper conductor, solid or stranded according to 0295 IEC 60228 cl. 1 or 2
- Core insulation of cross-linked polymer compound
- Color coded cores according to DIN VDE 0293, green-yellow earth core (3 cores and more)
- Cores stranded in layers and wrapped with glass-fibre tape as flame-protection
- Version (N)HXCH concentric conductor of copper wires and copper tape
- Orange sheath of halogen-free polymer compound according to DIN VDE 0207 part 24, flame retardant

Technical data

- Halogen-free, flame-resistant cable according to DIN VDE 0266, orange
- **Insulation integrity under the impact** of flames 180 min according to IEC 60331, DIN VDE 0472 part 814
- **Function integrity according** to DIN VDE 4102 part 12 E30
- **Temperature range** from -40 °C to +70 °C permitted temperature at conductor +90 °C
- **Nominal voltage** U_0/U 0,6/1 kV
- **Test voltage a.c.** 4000 V
- **Minimum bending radius** approx. 15× cable diameter
- **Radiation resistance** 200×10^6 cJ/kg (up to 200 Mrad)

Tests

- Flame-retardant to DIN VDE 0482 part 266-2 /HD 405.3/BS 4066 PT3/EN 50266-2/IEC 60332-3
- Low corrosiveness of combustion gases to DIN VDE 0482 part 267/BS 6425 PT2/EN 50267-2-2/IEC 60754-2
- Halogen-free to DIN VDE 0482 part 267/BS 6425 PT1/EN 50267-2-1/IEC 60754-1
- Smoke density to DIN VDE 0482 part 268/HD 606/BS 7622 PT1, PT2/EN 50268-1,-2/IEC 61034-1,-2
- Insulation integrity under direct flame propagation according to DIN VDE 0472 part 814, IEC 60331
- Function integrity according to DIN VDE 4102 part 12 of electrical cable system for a period of min. 30 minutes.

Color codes of NHXCH

- 2-core cable: blue/brown
- 3-core cable: brown/black/grey
- 4-core cable: blue/brown/black/grey
- 7-cores and more: black cores with white numbering

Application

These flame-resistant cables are used for all locations where a special protection against fire and fire damage to human life and equipment is necessary such as in industry complexes, power stations, public buildings, hotels, airports, subways, theatres, hospitals etc. These cables are suitable for fixed installation in dry or wet areas but not suitable for direct burial into earth.

FE180: Insulation integrity for 180 min. Test according to IEC 60331 and DIN VDE 0472 part 814 Insulation integrity under direct impact of flames for a period of 180 minutes

E30: Function integrity according to DIN VDE 4102 part 12 of electrical cable system for a period of min. 30 minutes. The function integrity for 30 minutes assures the functional performance of the fire warning and alarm systems, safety and spare lighting, passenger and evacuation lifts in order to evacuate persons and animals from a burning building.

Note

CE = the product is conformed with the EC Low-Voltage Directive 73/23/EEC
Conforms to RoHS.

m = round stranded core

re = round solid core

(N)HXH, (N)HXCH FE 180/E30

Fire resistant cables with orange sheath, halogen-free

(N)HXH FE180/E30

| Part No. | Number of cores x core cross section [mm²] | | Approx. outer Ø [mm] | Cooper weight [kg/km] | Approx. cable weight [kg/km] |
|----------|--|----|----------------------------|--------------------------|------------------------------------|
| 0552700 | 1×4 | re | 8,0 | 38 | 100 |
| 0552701 | 1×6 | re | 8,5 | 58 | 125 |
| 0552702 | 1×10 | re | 9,0 | 96 | 165 |
| 0552703 | 1×16 | rm | 10,5 | 154 | 230 |
| 0552704 | 1×25 | rm | 12,0 | 240 | 345 |
| 0552705 | 1×35 | rm | 13,0 | 336 | 450 |
| 0552706 | 1×50 | rm | 15,0 | 480 | 590 |
| 0552707 | 1×70 | rm | 17,0 | 672 | 800 |
| 0552708 | 1×95 | rm | 19,0 | 912 | 1100 |
| 0552709 | 1×120 | rm | 21,0 | 1152 | 1350 |
| 0552710 | 1×150 | rm | 23,0 | 1440 | 1650 |
| 0552711 | 1×185 | rm | 26,0 | 1776 | 2000 |
| 0552712 | 1×240 | rm | 28,0 | 2304 | 2650 |
| 0552713 | 1×300 | rm | 31,0 | 2880 | 3300 |
| | | | | | |
| 05527141 | 2×1,5 | re | 12,0 | 29 | 210 |
| 0552714 | 2×2,5 | re | 13,0 | 48 | 290 |
| 0552715 | 2×4 | re | 14,0 | 77 | 345 |
| 0552716 | 2×6 | re | 15,0 | 115 | 410 |
| 0552717 | 2×10 | re | 17,0 | 192 | 540 |
| | | | | | |
| 0552721 | 3×1,5 | re | 14,2 | 43 | 300 |
| 0552722 | 3×2,5 | re | 15,4 | 72 | 380 |
| 0552723 | 3×4 | re | 16,0 | 115 | 450 |
| 0552724 | 3×6 | re | 17,0 | 173 | 550 |
| 0552725 | 3×10 | re | 18,5 | 288 | 750 |
| 0552726 | 3×16 | rm | 20,8 | 461 | 1000 |
| 0552727 | 3×25 | rm | 24,9 | 720 | 1500 |
| 05527271 | 3×25/16 | rm | 27,0 | 874 | 1500 |
| 0552728 | 3×35 | rm | 28,5 | 1080 | 1805 |
| 05527281 | 3×35/16 | rm | 29,0 | 1162 | 1800 |
| 0552729 | 3×50 | rm | 31,5 | 1440 | 2365 |
| 05527291 | 3×50/25 | rm | 36,0 | 1680 | 2600 |
| 05527301 | 3×70/35 | rm | 40,0 | 2352 | 3400 |
| 05527311 | 3×95/50 | rm | 46,0 | 3216 | 4600 |
| 05527321 | 3×120/70 | rm | 50,0 | 4128 | 5700 |
| 05527331 | 3×150/70 | rm | 54,0 | 4992 | 6800 |
| 05527341 | 3×185/95 | rm | 60,0 | 6240 | 8500 |
| 05527351 | 3×240/120 | rm | 63,0 | 8064 | 11000 |
| | | | | | |
| 0552736 | 4×1,5 | re | 15,0 | 58 | 350 |
| 0552737 | 4×2,5 | re | 16,0 | 96 | 420 |

(N)HXCH FE180/E30

| | | | | | |
|---------|-----------|----|------|------|-------|
| 0552900 | 2×1,5/1,5 | re | 14,5 | 52 | 255 |
| 0552901 | 2×2,5/2,5 | re | 15,0 | 80 | 300 |
| 0552902 | 2×4/4 | re | 15,8 | 123 | 350 |
| 0552903 | 2×6/6 | re | 16,9 | 182 | 410 |
| 0552904 | 2×10/10 | re | 18,6 | 312 | 700 |
| | | | | | |
| 0552905 | 3×1,5/1,5 | re | 15,0 | 66 | 320 |
| 0552906 | 3×2,5/2,5 | re | 16,0 | 104 | 380 |
| 0552907 | 3×4/4 | re | 17,0 | 161 | 480 |
| 0552908 | 3×6/6 | re | 17,9 | 240 | 600 |
| 0552909 | 3×10/10 | re | 20,0 | 408 | 850 |
| 0552910 | 3×16/16 | rm | 22,0 | 643 | 1200 |
| 0552911 | 3×25/16 | rm | 26,0 | 902 | 1700 |
| 0552912 | 3×35/16 | rm | 28,0 | 1190 | 2200 |
| 0552913 | 3×50/25 | rm | 32,0 | 1723 | 2900 |
| 0552914 | 3×70/35 | rm | 37,0 | 2410 | 3900 |
| 0552915 | 3×95/50 | rm | 42,0 | 3296 | 5200 |
| 0552916 | 3×120/70 | rm | 46,0 | 4236 | 6400 |
| 0552917 | 3×150/70 | rm | 50,5 | 5100 | 7100 |
| 0552918 | 3×185/95 | rm | 55,5 | 6383 | 8800 |
| 0552919 | 3×240/120 | rm | 63,0 | 8242 | 10900 |
| | | | | | |
| 0552920 | 4×1,5/1,5 | re | 15,0 | 81 | 320 |
| 0552921 | 4×2,5/2,5 | re | 16,0 | 128 | 425 |

| Part No. | Number of cores x core cross section [mm²] | | Approx. outer Ø [mm] | Cooper weight [kg/km] | Approx. cable weight [kg/km] |
|----------|--|----|----------------------------|--------------------------|------------------------------------|
| 0552738 | 4×4 | re | 17,0 | 154 | 550 |
| 0552739 | 4×6 | re | 17,8 | 230 | 650 |
| 0552740 | 4×10 | re | 19,8 | 384 | 900 |
| 0552741 | 4×16 | rm | 22,0 | 614 | 1250 |
| 0552742 | 4×25 | rm | 26,5 | 960 | 1800 |
| 0552743 | 4×35 | rm | 30,0 | 1344 | 2250 |
| 0552744 | 4×50 | rm | 33,5 | 1920 | 3100 |
| 0552745 | 4×70 | rm | 39,0 | 2688 | 4200 |
| 0552746 | 4×95 | rm | 44,0 | 3648 | 5600 |
| 0552747 | 4×120 | rm | 47,5 | 4608 | 6900 |
| 0552748 | 4×150 | rm | 53,0 | 5760 | 8375 |
| | | | | | |
| 0552749 | 5×1,5 | re | 16,0 | 72 | 375 |
| 0552750 | 5×2,5 | re | 17,0 | 120 | 445 |
| 0552751 | 5×4 | re | 18,0 | 192 | 560 |
| 0552752 | 5×6 | re | 20,0 | 288 | 690 |
| 0552753 | 5×10 | re | 22,0 | 480 | 950 |
| 0552754 | 5×16 | rm | 24,0 | 768 | 1300 |
| 0552755 | 5×25 | rm | 29,0 | 1200 | 1980 |
| 0552756 | 5×35 | rm | 33,0 | 1680 | 2700 |
| 05527561 | 5×50 | rm | 35,0 | 2400 | 3700 |
| | | | | | |
| 0552757 | 7×1,5 | re | 17,0 | 101 | 365 |
| 0552758 | 7×2,5 | re | 18,0 | 168 | 540 |
| | | | | | |
| 0552759 | 10×1,5 | re | 21,0 | 144 | 580 |
| 0552760 | 10×2,5 | re | 23,0 | 240 | 710 |
| | | | | | |
| 0552761 | 12×1,5 | re | 22,0 | 173 | 640 |
| 0552762 | 12×2,5 | re | 23,0 | 288 | 790 |
| | | | | | |
| 0552763 | 14×1,5 | re | 23,0 | 202 | 740 |
| 0552764 | 14×2,5 | re | 24,0 | 336 | 880 |
| | | | | | |
| 0552765 | 19×1,5 | re | 25,0 | 274 | 880 |
| 0552766 | 19×2,5 | re | 27,0 | 456 | 1150 |
| | | | | | |
| 0552767 | 24×1,5 | re | 28,0 | 346 | 1100 |
| 0552768 | 24×2,5 | re | 31,0 | 576 | 1400 |
| | | | | | |
| 0552769 | 30×1,5 | re | 30,0 | 432 | 1300 |
| 0552770 | 30×2,5 | re | 33,0 | 720 | 1650 |