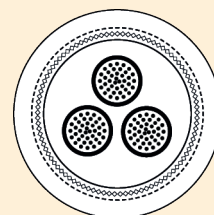
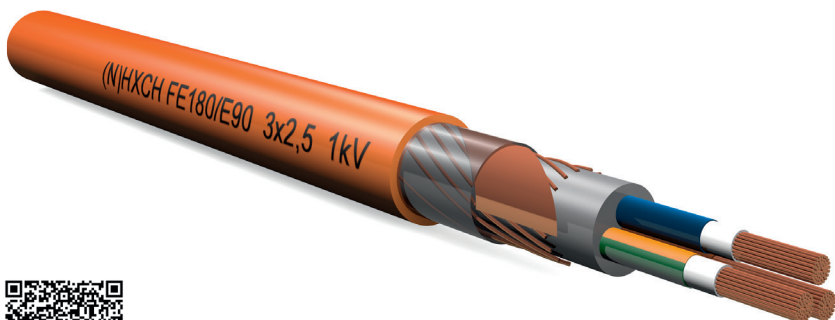


# (N)HXCH FE180/E90

## Fire resistant cable

RoHS

### CROSS SECTION



Acc. to DIN VDE 0266

## APPLICATION

Safety cables are used wherever particular protection against fire and fire damage is required for people and property and high fail-safe periods have to be complied with, e.g. at airports, in hospitals and in schools. Suitable for both indoor and outdoor use but not for direct burying in soil or laying in water. The fire-induced smoke formation that makes it impossible to find emergency exits and the emission of toxic gases are prevented. The insulation integrity of at least 180 minutes, functional integrity of at least 90 minutes and reliability of over 90 minutes ensure the continued functional capability of water-pressure boosting equipment for supplying fire extinguishing water, ventilation systems, smoke and heat extraction systems, fire brigade lifts etc.

## STRUCTURE

<b>Conductor</b>	Copper conductor, bare, single or multi-cored according to DIN VDE 0266, flame retardant according to DIN VDE 0472 part 804, functional integrity according to DIN 4102 part 12. Single core wrapped in flame-retardant and temperature-resistant fabric tape, cores stranded together in layers, fire protection wrapping made from heat-resistant special tape, overlapping. Additional joint core covering made from a Halogen free compound
<b>Cores</b>	Mica tape wrapping and flame-retardant, cross-linked polymer insulation, core colours according to VDE 0293, for fixed installation with a concentric conductor, black, blue, brown, black
<b>Outer sheath</b>	Made from flame-retardant polyolefin acc. to VDE 0207 part 24, halogen free

## SPECIAL FEATURES

**Sheath colour**  
Orange

## TECHNICAL DATA

<b>Nominal voltage</b>	600 V/1000 V
<b>Test voltage</b>	4000 V
<b>Operating temperature</b>	-5°C to +70°C (max. +90°C)
<b>Installation temperature</b>	Min. -5°C/max. +50°C
<b>Flame retardancy</b>	According to DIN VDE 0472 part 804
<b>Min. bending radius</b>	With fixed installation, 15 x cable diameter

### TESTS ACCORDING TO DIN VDE 0472 AND IEC:

<b>Flammability</b>	Test method C according to VDE 0472 part 804 and IEC 332-3
<b>Smoke density</b>	HD 606 and IEC 601034-1, 601034-2 and BS 7622 parts 1+2
<b>Insulation integrity of min. 180 min.</b>	According to VDE 0472 part 814 and IEC 331
<b>Functional integrity of min. 30 min.</b>	According to VDE 0472 part 804 and IEC 332-3
<b>Halogen free nature</b>	According to VDE 0472 part 815
<b>Corrosiveness of combustion gases</b>	According to VDE 0472 part 813
<b>Smoke density</b>	Test method C according to VDE 0472 part 816 and IEC 1034-1
<b>Functional integrity of cable systems</b>	According to DIN 4102 part 12

Product description				Cu weight	Outer Ø (mm)	Weight (kg/km)	Fire load (kWh/m)	Product number
NHXCH 2x1.5 RE/1.5	FE180/E90	Halogen free		52.0	15.0	240	0.72	2075201
NHXCH 2x2.5 RE/2.5	FE180/E90	Halogen free		80.0	15.0	290	0.81	2075202
NHXCH 2x4.0 RE/4.0	FE180/E90	Halogen free		123.0	16.0	360	0.92	2075203
NHXCH 2x6.0 RE/6.0	FE180/E90	Halogen free		182.0	18.0	460	1.03	2075204
NHXCH 2x10 RE/10	FE180/E90	Halogen free		312.0	20.0	640	1.22	2075205
NHXCH 2x16 RE/16	FE180/E90	Halogen free		489.0	22.0	900	1.45	2075206
NHXCH 3x1.5 RE/1.5	FE180/E90	Halogen free		66.0	15.0	260	0.78	2075207
NHXCH 3x2.5 RE/2.5	FE180/E90	Halogen free		104.0	16.0	330	0.89	2075208
NHXCH 3x4 RE/4	FE180/E90	Halogen free		161.0	17.0	420	1.00	2075209
NHXCH 3x6 RE/6	FE180/E90	Halogen free		240.0	19.0	540	1.11	2075210
NHXCH 3x10 RE/10	FE180/E90	Halogen free		408.0	21.0	760	1.33	2075211
NHXCH 3x16 RE/16	FE180/E90	Halogen free		643.0	23.0	1100	1.58	2075212
NHXCH 3x25 RM/25	FE180/E90	Halogen free		1003.0	28.0	1650	2.31	2075213
NHXCH 3x35 RM/35	FE180/E90	Halogen free		1402.0	30.0	2200	2.61	2075214
NHXCH 3x50 RM/50	FE180/E90	Halogen free		2000.0	34.0	2900	3.33	2075215
NHXCH 3x70 RM/70	FE180/E90	Halogen free		2796.0	39.0	4000	4.11	2075216
NHXCH 3x95 RM/95	FE180/E90	Halogen free		3791.0	44.0	5300	4.33	2075217
NHXCH 3x120 RM/120	FE180/E90	Halogen free		4786.0	48.0	6500	6.11	2075218
NHXCH 3x25 RM/16	FE180/E90	Halogen free		902.0	28.0	1550	2.31	2075219
NHXCH 3x35 RM/16	FE180/E90	Halogen free		1190.0	30.0	1950	2.61	2075220
NHXCH 3x50 RM/25	FE180/E90	Halogen free		1723.0	34.0	2700	3.33	2075221
NHXCH 3x70 RM/35	FE180/E90	Halogen free		2410.0	38.0	3600	4.11	2075222
NHXCH 3x95 RM/50	FE180/E90	Halogen free		3296.0	44.0	4800	5.33	2075223
NHXCH 3x120 RM/70	FE180/E90	Halogen free		4236.0	47.0	6000	6.11	2075224
NHXCH 3x150 RM/70	FE180/E90	Halogen free		5100.0	52.0	7300	7.50	2075225
NHXCH 4x1.5 RE/1.5	FE180/E90	Halogen free		81.0	17.0	310	0.89	2075226
NHXCH 4x2.5 RE/2.5	FE180/E90	Halogen free		128.0	18.0	380	1.03	2075227
NHXCH 4x4 RE/4	FE180/E90	Halogen free		200.0	20.0	500	1.17	2075228
NHXCH 4x6 RE/6	FE180/E90	Halogen free		297.0	21.0	640	1.31	2075229
NHXCH 4x10 RE/10	FE180/E90	Halogen free		504.0	23.0	900	1.53	2075230
NHXCH 4x16 RE/16	FE180/E90	Halogen free		796.0	26.0	1300	1.89	2075231
NHXCH 4x25 RM/16	FE180/E90	Halogen free		1142.0	31.0	1900	2.69	2075232
NHXCH 4x35 RM/16	FE180/E90	Halogen free		1526.0	33.0	2400	3.06	2075233
NHXCH 4x50 RM/25	FE180/E90	Halogen free		2203.0	38.0	3400	4.00	2075234
NHXCH 4x70 RM/35	FE180/E90	Halogen free		3082.0	42.0	4500	4.89	2075235
NHXCH 4x95 RM/50	FE180/E90	Halogen free		4208.0	49.0	6100	6.44	2075236
NHXCH 4x120 RM/70	FE180/E90	Halogen free		5388.0	53.0	7600	7.36	2075237
NHXCH 4x150 RM/70	FE180/E90	Halogen free		6540.0	55.0	8500	8.97	2075238
NHXCH 4x185 RM/95	FE180/E90	Halogen free		8159.0	59.0	8900	10.20	2075239
NHXCH 7x1.5 RE/2.5	FE180/E90	Halogen free		134.0	19.0	420	1.19	2075240
NHXCH 7x2.5 RE/2.5	FE180/E90	Halogen free		200.0	21.0	540	1.33	2075241
NHXCH 7x4.0 RE/4.0	FE180/E90	Halogen free		315.0	22.0	700	1.53	2075242
NHXCH 10x1.5 RE/2.5	FE180/E30	Halogen free		176.0	24.0	560	1.56	2075243
NHXCH 10x2.5 RE/4.0	FE180/E30	Halogen free		286.0	25.0	760	1.83	2075244
NHXCH 12x1.5 RE/2.5	FE180/E90	Halogen free		205.0	24.0	620	1.72	2075245
NHXCH 12x2.5 RE/4	FE180/E90	Halogen free		334.0	25.0	850	2.03	2075246
NHXCH 14x1.5 RE/2.5	FE180/E90	Halogen free		234.0	25.0	700	1.89	2075247
NHXCH 14x2.5 RE/4.0	FE180/E90	Halogen free		403.0	27.0	950	2.22	2075248
NHXCH 19x1.5 RE/4.0	FE180/E90	Halogen free		320.0	28.0	950	2.39	2075249
NHXCH 19x2.5 RE/6.0	FE180/E90	Halogen free		523.0	30.0	1200	2.72	2075250
NHXCH 24x1.5 RE/6.0	FE180/E90	Halogen free		413.0	32.0	1150	2.89	2075251
NHXCH 24x2.5 RE/10	FE180/E90	Halogen free		696.0	35.0	1550	3.39	2075252
NHXCH 30x1.5 RE/6.0	FE180/E90	Halogen free		499.0	34.0	1350	3.33	2075253