

PREVENTIVE FIRE PROTECTION

(N)HXCH FE180 E30-E60

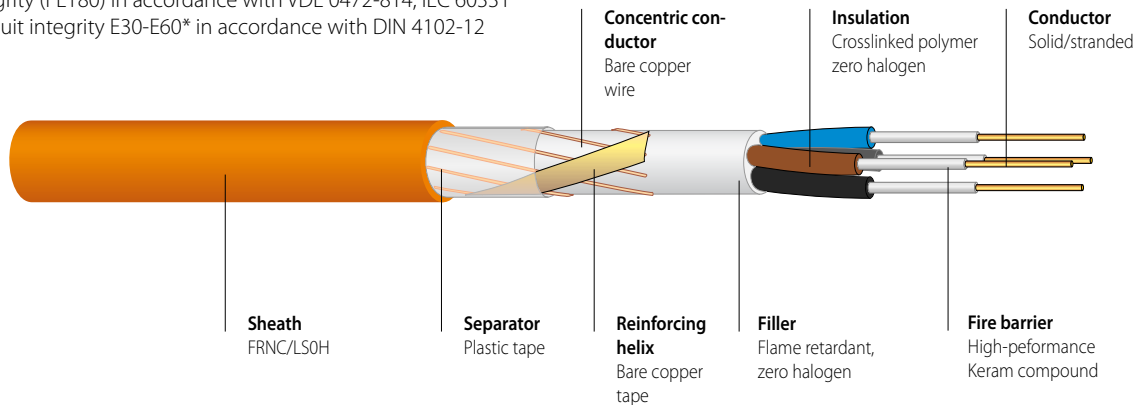
Safety cable 0.6/1kV, pyrofil® Keram

Halogen-free, with improved fire characteristics

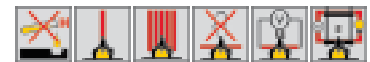
With reference to VDE 0266 and CENELEC HD 604 S1

Circuit integrity (FE180) in accordance with VDE 0472-814, IEC 60331

System Circuit integrity E30-E60* in accordance with DIN 4102-12



PRODUCT INFORMATION



APPLICATION

Safety cables are used in all situations that require special protection against fire and flame damage for people and equipment and where a high degree of safety conditions 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. These cables correspond to the demands of System Circuit integrity E30-E60* in accordance with DIN 4102-12. System Circuit integrity is guaranteed at an operating voltage up to 400V. Permitted operating temperature at conductor +90°C.

CONSTRUCTION

Conductor	Bare copper, solid or stranded, IEC 60228, EN 60228, (VDE 0295)
Insulation	Double insulation, cross-linked, high-performance Keram special compound, VDE 0266 "HX11"
Filler	Flame retardant, halogen-free, thermoplastic compound
Concentric conductor	Bare copper wires with reinforced helix
Separator	Plastic tape
Outer sheath	Polyolefin compound, CENELEC HD 604 S1 and VDE 0276-604 "HM4"
Core colours	CENELEC HD 308 S2 and VDE 0293
Sheath colour	Orange
Imprint	DATWYLER PYROFIL KERAM (N)HXCH FE180 E30-E60 1kV SWISS MADE "N X MM" VDE REG. NR. 7780 "ORDER NO.:" "YEAR" "METRE MARKING" or on request

ELECTRICAL PROPERTIES

Nominal voltage	0.6/1kV
Test voltage	4000V, 50Hz

GENERAL PROPERTIES

Minimum bending radius	during and permanent installation	15 x D (single core cable) 12 x D (multicore cable) (D = outer diameter)
Operating temperature	permanent installation	-45°C to +90°C
	during installation	-5°C to +50°C
Zero halogen,		
non corrosive gases		IEC 60754-2, EN 50267-2-2, VDE 0482-267-2-2
Flame propagation		IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Flame spread		IEC 60332-3-22/-24 Cat. A/C, EN 60332-3-22/-24 Cat. A/C, VDE 0482-332-3-22/24 Cat. A/C
Smoke density		IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Circuit integrity [FE/PH]		IEC 60331-11/-21 (180 minutes), VDE 0472 part 814 (FE180) IEC 60331-1, IEC 60331-2 (120 minutes), EN 50200, VDE 0482-200 (PH120) and EN 50362, VDE 0482-362 (120 minutes), BS 6387 C/W/Z
System Circuit integrity [E30-E60]*		DIN 4102 part 12

* System Circuit integrity is dependent on installation method.

pyrofil® (N)HXCH FE180/E30-E60 Keram 05/11/e

PRODUCT INFORMATION

Article No.	No. of cores x cross section		Cu content kg/km	Total weight app. kg/km	Outer diameter app. mm	Fire load kWh/m
	n	n x mm ²				
186 943	2	x 1,5 RE/1,5	52	224	12,7	0,60
186 944	2	x 2,5 RE/2,5	80	273	13,5	0,66
187 232	2	x 4 RE/4	123	355	15,0	0,78
187 234	2	x 6 RE/6	182	436	16,0	0,86
187 236	2	x 10 RE/10	312	622	18,0	1,07
186 945	3	x 1,5 RE/1,5	66	248	13,2	0,65
186 946	3	x 2,5 RE/2,5	104	308	14,1	0,72
187 233	3	x 4 RE/4	161	404	15,7	0,84
187 235	3	x 6 RE/6	240	504	16,8	0,94
187 237	3	x 10 RE/10	408	727	18,9	1,15
187 238	3	x 16 RM/16	643	1148	23,9	1,63
187 239	3	x 25 RM/16	902	1437	25,0	1,90
187 240	3	x 35 RM/16	1190	1796	27,3	2,20
187 241	3	x 50 RM/25	1723	2408	30,8	2,84
187 242	3	x 70 RM/35	2410	3381	36,0	3,52
186 985	3	x 95 RM/50	3296	4513	41,1	4,66
186 986	3	x 120 RM/70	4236	5576	44,5	5,30
186 987	3	x 150 RM/70	5100	6799	49,2	6,46
187 243	3	x 185 RM/95	6383	8300	56,0	7,90
186 988	3	x 240 RM/120	8242	11065	61,5	9,93
186 947	4	x 1,5 RE/1,5	81	286	14,1	0,73
186 948	4	x 2,5 RE/2,5	128	358	15,1	0,82
186 949	4	x 4 RE/4	200	473	16,8	0,96
186 950	4	x 6 RE/6	297	621	18,1	1,13
186 951	4	x 10 RE/10	504	868	20,1	1,33
186 989	4	x 16 RM/16	796	1254	23,4	1,70
186 990	4	x 25 RM/16	1142	1752	27,2	2,20
186 991	4	x 35 RM/16	1526	2210	29,8	2,56
186 992	4	x 50 RM/25	2203	3049	34,8	3,41
186 993	4	x 70 RM/35	3082	4198	39,5	4,18
186 994	4	x 95 RM/50	4208	5600	45,2	5,58
186 995	4	x 120 RM/70	5388	6940	49,1	6,37
186 996	4	x 150 RM/70	6540	8500	54,3	7,83
186 997	4	x 185 RM/95	8159	10615	59,8	9,55
186 998	4	x 240 RM/120	10546	13830	67,9	12,00
187 244	7	x 1,5 RE/2,5	133	393	16,1	0,94
187 245	30	x 1,5 RE/6	499	1252	29,1	2,67

RE = circular, solid conductor, RM= circular, stranded conductor

Additional dimensions available on request. * Circuit integrity is dependent on installation method