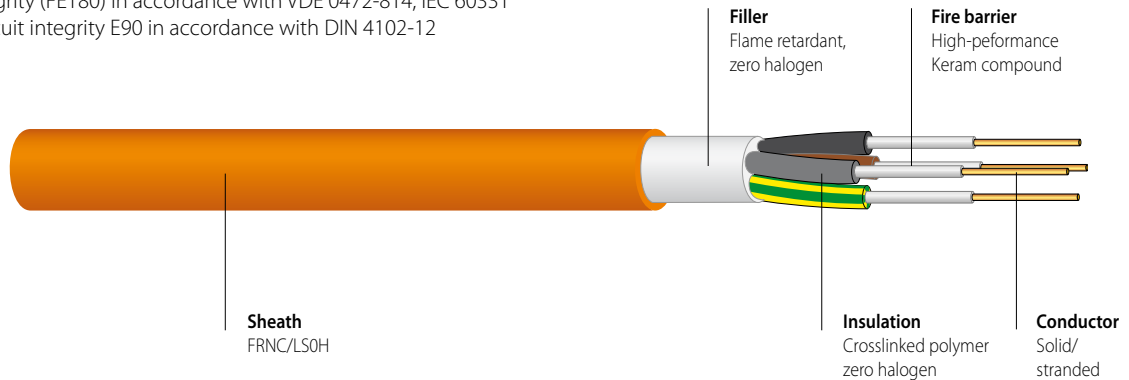


PREVENTIVE FIRE PROTECTION

(N)HXH FE180 E90

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 E90 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 E90 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
Outer sheath	Flame retardant 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)HXH FE180 E90 1kV "N X MM2" VDE REG. NR. 7780 "VDS" "ORDER NO." SWISS MADE "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)	
	permanent installation	*50% reduction if installation at 30°C and with a template	
Operating temperature	permanent installation	-45°C to +90°C	
	during installation	-5°C to +50°C	
Zero halogen, non corrosive gases Flame propagation Flame spread		IEC 60754-2, EN 50267-2-2, VDE 0482-267-2-2 IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2 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 Circuit integrity [FE/PH]		IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2 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 [E90] System Circuit integrity under effect of water		DIN 4102 part 12 VdS 3423 [single core cable ≥ 16mm ²]

Safety cables

Support systems

Fixing devices

Firestop systems

Distribution boxes

Accessories

Information

pyrofil® (N)HXH FE180/E90 Keram 0511/e

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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 x mm ²					
191 069	3 x	35 + 1 x 16 RM	1162	1833	27,4	2,13
191 002	3 x	50 + 1 x 25 RM	1680	2457	31,3	2,69
191 003	3 x	70 + 1 x 35 RM	2352	3362	35,6	3,34
191 004	3 x	95 + 1 x 50 RM	3216	4488	40,7	4,24
191 005	3 x	120 + 1 x 70 RM	4128	5532	44,0	4,82
191 006	3 x	150 + 1 x 70 RM	4992	6666	48,0	5,70
191 008	3 x	185 + 1 x 95 RM	6240	8315	53,4	7,00
186 175	4 x	1,5 RE	58	234	12,4	0,61
186 178	4 x	2,5 RE	96	296	13,4	0,69
186 183	4 x	4 RE	154	381	14,6	0,78
186 187	4 x	6 RE	230	490	15,8	0,90
186 190	4 x	10 RE	384	695	17,8	1,07
186 155	4 x	16 RM	614	1089	22,1	1,54
186 156	4 x	25 RM	960	1618	26,3	2,05
186 157	4 x	35 RM	1344	2083	29,0	2,36
186 158	4 x	50 RM	1920	2752	32,8	2,97
186 159	4 x	70 RM	2688	3804	37,6	3,55
186 160	4 x	95 RM	3648	5092	43,1	4,75
187 274	4 x	120 RM	4608	6133	46,0	5,27
186 161	4 x	150 RM	5760	7662	51,2	6,49
187 275	4 x	185 RM	7104	9425	56,5	7,85
190 493	4 x	240 RM	9216	12334	64,1	9,85

RE = circular, solid conductor

RM = circular, stranded conductor

Additional dimensions available on request.