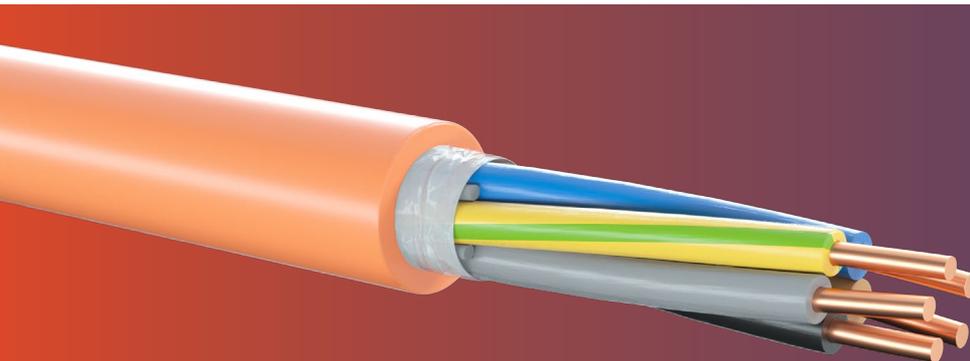


SAFETY CABLES

BETAflam[®] (N)HXH FE180/E30–E60 S

DIN VDE 0266



Applications

Three-phase power cable 0.6/1 kV for fixed installation in electrical cable systems with improved fire behaviour and system integrity according to DIN 4102 Part 12:

- Safety lighting systems, fire alarm systems and smoke extraction systems
- Recommended in public buildings to protect human life and health as well as constructions and their equipment

Construction

Conductors	Bare annealed copper
Core insulation	Cross-linked silicone
Shared inner covering	Tape or filler
Sheath	BETAflam[®] Copolymer
Core colours	Acc. to VDE 0266 and HD 308 S2
Sheath colour	Orange

Benefits

- Maximum safety performance
- System integrity acc. to DIN 4102 Part 12
- DIN approval with **BETAfixss[®]** laying system
- Numerous ABP's for standard laying systems as well as all common special laying systems
- Halogen-free

Electrical characteristics

Nominal voltage	U_0/U	0.6/1 kV
Test voltage		4 kV, 50 Hz

Thermal characteristics

Operating temperature	–30°C to +90°C	
Laying temperature	–5°C to +70°C	
Short-circuit temperature	up to +250°C (max. 5 s)	

Bending radius

	Single-core	Multicore
During laying	>15 × outer-Ø	>12 × outer-Ø
Fixed	>8 × outer-Ø	>7 × outer-Ø

Standards / material properties

Halogen-free	IEC 60754-1; EN 50267-2-1; VDE 0482-754-1
No corrosive gases	IEC 60754-2; EN 50267-2-2; VDE 0482-754-2
No toxic gases	NF X 70-100; NF C20-454
Low smoke density	IEC 61034-1 and -2; EN 61034-1 and -2; VDE 0482-1034-1 and -2
Flame-retardant	IEC 60332-1; EN 60332-1; VDE 0482-332-1
No flame spread	IEC 60332-3-10 and -3-24; EN 60332-3-10-24; VDE 0482-332-3-24
Circuit integrity FE180	IEC 60331-11 and -21; VDE 0472-814
Circuit integrity with mechanical shock	EN 50200 PH30 (up to Ø 20 mm)
System circuit integrity	DIN 4102-12, E30 or E60, depending on laying system

Laying conditions

- Fixed, indoors, in air or concrete
- Installation in earth or water only in tubes where water cannot collect
- Installation outdoors only when protected from direct sunlight and external impacts

Cable type	Nominal cross-section (n×mm ²)	Core function	Outer-Ø (mm)	Weight (kg/km)	Fire load (kWh/m)	Order no.
(N)HXH-O FE180/E30-E60 S OR	1×4 RE	L	7.1	89	0.22	315670
(N)HXH-O FE180/E30-E60 S OR	1×6 RE	L	7.6	112	0.25	312002
(N)HXH-O FE180/E30-E60 S OR	1×10 RE	L	8.4	153	0.28	312003
(N)HXH-O FE180/E30-E60 S OR	2×1.5 RE	LN	10.3	139	0.45	312005
(N)HXH-O FE180/E30-E60 S OR	2×2.5 RE	LN	11.1	168	0.51	312006
(N)HXH-O FE180/E30-E60 S OR	2×4 RE	LN	12.2	219	0.60	312007
(N)HXH-O FE180/E30-E60 S OR	2×6 RE	LN	13.2	275	0.69	315671
(N)HXH-O FE180/E30-E60 S OR	2×10 RE	LN	14.9	374	0.82	315672
(N)HXH-J FE180/E30-E60 S OR	1×4 RE	PE	7.1	89	0.22	315664
(N)HXH-J FE180/E30-E60 S OR	1×6 RE	PE	7.6	112	0.25	315665
(N)HXH-J FE180/E30-E60 S OR	1×10 RE	PE	8.4	153	0.28	315666
(N)HXH-J FE180/E30-E60 S OR	3×1.5 RE	LNPE	10.8	149	0.48	312008
(N)HXH-J FE180/E30-E60 S OR	3×2.5 RE	LNPE	11.6	186	0.54	312009
(N)HXH-J FE180/E30-E60 S OR	3×2.5 RE	LNPE	11.6	186	0.54	31200905 ¹
(N)HXH-J FE180/E30-E60 S OR	3×4 RE	LNPE	12.9	248	0.63	312010
(N)HXH-J FE180/E30-E60 S OR	3×4 RE	LNPE	12.9	248	0.63	31201005 ¹
(N)HXH-J FE180/E30-E60 S OR	3×6 RE	LNPE	13.9	316	0.70	312011
(N)HXH-J FE180/E30-E60 S OR	3×10 RE	LNPE	15.8	449	0.82	312012
(N)HXH-J FE180/E30-E60 S OR	4×1.5 RE	3LPE	11.7	183	0.59	312013
(N)HXH-J FE180/E30-E60 S OR	4×2.5 RE	3LPE	12.6	231	0.65	312014
(N)HXH-J FE180/E30-E60 S OR	4×4 RE	3LPE	14.0	312	0.76	312015
(N)HXH-J FE180/E30-E60 S OR	4×6 RE	3LPE	15.2	403	0.86	312016
(N)HXH-J FE180/E30-E60 S OR	4×10 RE	3LPE	17.4	578	1.01	312017
(N)HXH-J FE180/E30-E60 S OR	5×1.5 RE	3LNPE	12.7	221	0.69	312021
(N)HXH-J FE180/E30-E60 S OR	5×2.5 RE	3LNPE	13.7	280	0.78	312022
(N)HXH-J FE180/E30-E60 S OR	5×4 RE	3LNPE	15.2	381	0.91	312023
(N)HXH-J FE180/E30-E60 S OR	5×6 RE	3LNPE	16.5	494	1.03	312024
(N)HXH-J FE180/E30-E60 S OR	5×10 RE	3LNPE	18.9	712	1.21	312025

Cable type	Nominal cross-section (n×mm ²)	Core function	Outer-Ø (mm)	Weight (kg/km)	Fire load (kWh/m)	Order no.
(N)HXH-J FE180/E30-E60 S OR	7×1.5 RE	NRPE	13.8	273	0.81	312027
(N)HXH-J FE180/E30-E60 S OR	7×2.5 RE	NRPE	15.0	351	0.92	312028
(N)HXH-J FE180/E30-E60 S OR	12×1.5 RE	NRPE	17.8	427	1.23	312029
(N)HXH-J FE180/E30-E60 S OR	12×2.5 RE	NRPE	19.0	557	1.40	312030
(N)HXH-J FE180/E30-E60 S OR	19×1.5 RE	NRPE	21.5	672	1.93	312031
(N)HXH-J FE180/E30-E60 S OR	19×2.5 RE	NRPE	23.4	879	2.19	312032
(N)HXH-J FE180/E30-E60 S OR	24×1.5 RE	NRPE	23.3	781	2.17	312033
(N)HXH-J FE180/E30-E60 S OR	24×2.5 RE	NRPE	25.6	1035	2.48	315669
(N)HXH-J FE180/E30-E60 S OR	30×1.5 RE	NRPE	24.7	928	2.53	312034
(N)HXH-J FE180/E30-E60 S OR	30×2.5 RE	NRPE	27.2	1240	2.89	312035

-J = with green/yellow core

-O = without green/yellow core

RE = round single-wire, class 1

L = phase conductor colour brown/black/grey

N = neutral conductor colour blue

NR = phase conductor colour black/numbered

PE = protective earth colour green/yellow

¹ in a length of 1×500m

Other designs on request.