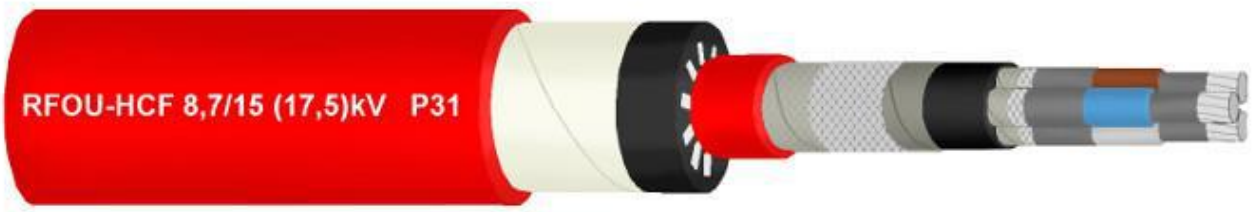
RFOU-HCF 8,7/15 (17,5)kV NEK 606 Code S31

EPR/EPR/TCWB/EVA/HCF/SHF1 1100˚C / 2000˚F / 200 kW/m²

Hydro Carbon Fire resistant, flame retardant halogen-free medium voltage power cable



Application

Fixed installation for medium voltage (MV) power in both EX- and safe areas, emergency and critical systems where requirement for fire resistance is vital.

Construction

Conductor	: Tinned stranded and compressed copper (STCC), IEC 60228 class 2
Conductor screen semi conductive	: Semiconductive layer (EP-rubber)
Insulation	: EP-rubber, IEC 60092-360 (EPR)
Insulation screen semi conductive	: Semiconductive layer (EP-rubber)
Lay up / Shielding	: Cores are laid up together. Cores are identified by Brown, Black or Grey threads under and over the metallic screen on each conductor
Inner covering	: Flame retardant and halogen-free thermoplastic compound
Tape over bedding	: PET tape
Armour/screen	: Tinned copper wire braid
Tape over armour/screen	: PET tape
Outer sheath	: Flame retardant, halogen-free and mud resistant thermoset compound, SHF2 (IEC60092-360)
HCF protection	: Extruded heatblock compound
Tape	: Lapped glassfibre tape
Overall sheath	: Flame retardant, halogen-free thermoplastic compound, SHF1 (IEC 60092-360)
Marking text	: E.g. "meter" "year" “manufacturer “RFOU-HCF 6/10(12)kV P30 1x70/16 mm2 HCF 1100/60 FLEX – FLAME

Outer Sheath Colours

Available colours	: Red

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Installation recommendations

Operating Voltage : 6/10 (12)kV
Min. Bending Radius during Installation : 20 xD
Min. Bending Radius Fix Installed : 12 xD
Max. Operating Temperature : 90°C
Minimum installation : -10°C

Standards applied

IEC 60092-353	Design
IEC 60332-1-2	Flame Retardant
IEC 60332-3-22	Flame Retardant
IEC 60331-21	Fire Resistant
EN 1363-2 / ISO 834	HC Fire resistance
IEC 60754-1,2	Halogen Free
IEC 61034-1,2	Low Smoke

Range and Dimensions

Article Code	Type mm²	Diameter over bedding mm	Thickness of armour wires mm	Diameter sheath mm	Diameter overall incl. HCF protection mm	Weight of Cable Approx. (Kg/Km)	Max. pulling tension (N)
N02F01C070BAKRD8	1x 70/20	26.0 ± 1.5	0.4	32.0 ± 1.5	64.5 ± 3.0	5750	3500
N02F01C120BAKRD8	1x 120/20	29.5 ± 1.5	0.4	36.0 ± 2.0	69.0 ± 3.0	6850	6000
N02F03C035BAKRD8	3x 35/35	49.0 ± 2.0	0.5	57.5 ± 3.0	92.0 ± 4.5	11600	5250

Type mm²	Diameter of copper conductor approx. mm	Insulation thickness, nominal mm	Semiconducting layer thickness approx. mm	Diameter over insulated, screened conductor, approx. mm
1x 70/20	10.3	4.5	0.8	21.8
1x 120/20	13.6	4.5	0.8	26.0
3x 35/35	7.4	4.5	0.8	19.9

The RFOU-HCF MV cables are available on request in all voltage levels from 3,6/6(7,2)kV up to and including 26/45(52)kV. Please be aware that we have a limitation on the cable diameter which allows us to manufacture mainly single core cables on these voltage levels.

Electrical value instrumentation cables

No. of cores x cross section	Conductor resistance DC (Ω/km)		Reactance (Ω/km)	Impedance (Ω/km)at 90°C	Continous Current rating	Short circuit [Ampere]	
	at 20°C	at 90°C	at 50/60Hz	at 50/60Hz	at 45°C	1 sec	0.3 sec
1x 70/20	0.270	0.339	0.130	0.156	225	9800	17892
1x 120/20	0.154	0.193	0.120	0.144	320	16800	30672
3x 35/35	0.529	0.675	0.122	0.685	100	4900	8946

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