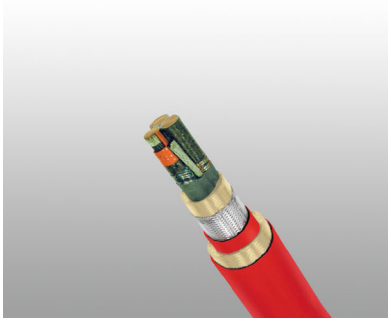
P30 RFOU-HCF / TFOU-HCF 6/10(12) kV

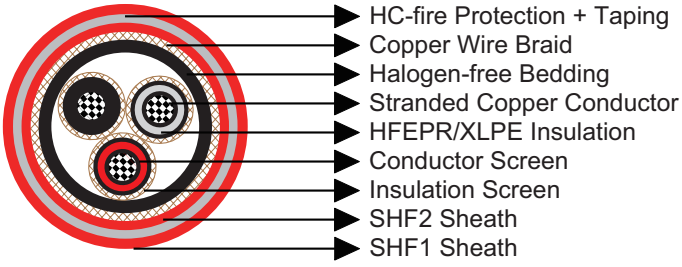
Applications

These cables are fire resistant, flame retardant, low smoke and halogen free, used for emergency control, power and lighting systems that need to be operational during a 1100℃ hydrocarbon fire.



Standards

- IEC 60092-354
- IEC 60092-351
- IEC 60092-359
- IEC 60331-21
- IEC 60332-1
- IEC 60332-3-22
- IEC 60754-1,2
- IEC 61034-1,2
- NEK 606:2004



Construction

- **Conductors:** Circular tinned annealed stranded copper to IEC 60228 class 2.
- **Conductor Screen:** Semi conducting material.
- **Insulation:** Halogen-free EPR. XLPE can be offered as an option.
- **Insulation Screen:** Semi conducting material and tinned copper wire braid.
- **Bedding:** Halogen free compound.
- **Armour:** Tinned copper wire braid.
- **Outer Sheath1:** Halogen free thermosetting compound, SHF2, coloured red.
- **HC-fire protection:** Extruded thermoplastic fire protection compound.
- **Taping:** Lapped glass fibre tape.
- **Outer Sheath2:** Flame retardant halogen-free thermoplastic compound, SHF1, coloured red.

Optional

P31 RFOU-HCF / TFOU-HCF 8.7/15kV
P32 RFOU-HCF / TFOU-HCF 12/20(24) kV
P33 RFOU-HCF / TFOU-HCF 18/30(36) kV

Electrical Characteristics

Nominal Cross Section Area	mm²	70	95	120	150	185	240	300
Nominal Conductor Diameter	mm	10.3	12.2	13.8	15.1	17.0	19.6	21.9
Maximum DC Resistant@20℃	Ω/km	0.27	0.195	0.154	0.126	0.1	0.0762	0.0607
Continuous Current Rating@45℃ 1 Core	A	242	293	339	389	444	522	601
Continuous Current Rating@45℃ 3 Core	A	169	205	237	272	311	365	421
Short Circuit Current 1s	A	10020	13590	17170	21460	26470	34340	42930
Operating Voltage	KV	6/10	6/10	6/10	6/10	6/10	6/10	6/10

Ambient Temperature Correction Factors

Ambient Temperature Correction Factors	35	40	45	50	55	60	65	70	75	80
Rating Factor	1.1	1.05	1.0	0.94	0.88	0.82	0.74	0.67	0.58	0.47

Mechanical and Thermal Properties

- Bending Radius: 20×OD (during installation); 12×OD (fixed installed)
- Temperature Range: -20℃ ~ +90℃

Dimensions and Weight

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Diameter Over Bedding mm	Nominal Diameter Over Sheath1 mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×70	3.4	23.5	30.0	62.0	5220
1×95	3.4	25.5	32.0	64.5	5900
1×120	3.4	27.5	34.0	66.5	6340
1×150	3.4	28.5	35.0	67.5	6670

Fire Resistant Medium Voltage Power Cables

Construction No. of cores×Cross section(mm²)	Nominal Insulation Thickness mm	Nominal Diameter Over Bedding mm	Nominal Diameter Over Sheath1 mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×185	3.4	30.5	36.5	69.0	7320
1×240	3.4	33.0	39.0	72.0	8250
1×300	3.4	35.0	41.5	74.5	9280
3×50	3.4	47.0	55.0	89.0	10970
3×95	3.4	54.0	62.5	97.0	14230
3×150	3.4	60.0	70.5	106.0	17400