

P19 or P19/P21 RFOU 12/20KV



- Armour
- Conductors
- Conductor Screen
- Insulation Screen
- Insulation
- Inner Sheath
- Outer Sheath

<b>Applications :</b>	These cables are flame retardant, low smoke, halogen free and mud resistant, used for fixed installation for medium voltage power.
<b>Standards :</b>	IEC 60092-354; IEC 60092-351; IEC 60092-359; IEC 60332-1; IEC 60332-3-22; IEC 60754-1,2; IEC 61034-1,2; NEK 606:2004
<b>Conductors :</b>	Circular tinned annealed stranded copper to IEC 60228 class 2.
<b>Conductor Screen :</b>	Semi conducting material.
<b>Insulation :</b>	Halogen-free EPR. XLPE can be offered as an option (for TFOU cable).
<b>Insulation Screen :</b>	Semi conducting material and tinned copper wire braid.
<b>Bedding :</b>	Halogen free compound.
<b>Armour :</b>	Tinned copper wire braid.
<b>Outer Sheath :</b>	Halogen free thermosetting compound, SHF2 (for TYPE P4), or halogen free mud resistant thermosetting compound, SHF MUD (for TYPE P4/P11), coloured red.

Electrical Characteristics :

<b>Nominal Cross Section Area</b>	mm <sup>2</sup>	25	35	50	70	95	120	
<b>Nominal Conductor Diameter</b>	mm	6.5	7.4	8.7	10.3	12.2	13.8	
<b>Maximum DC Resistant@20°C</b>	Ω/km	0.734	0.529	0.391	0.27	0.195	0.154	
<b>Continuous Current Rating@45°C1 Core</b>	A	127	157	196	242	293	339	
<b>Continuous Current Rating@45°C3 Core</b>	A	89	110	137	169	205	237	
<b>Short Circuit Current 1s</b>	A	3580	5010	7150	10020	13590	17170	
<b>Operating Voltage</b>	KV	8.7/15	8.7/15	8.7/15	8.7/15	8.7/15	8.7/15	
<b>Nominal Cross Section Area</b>	mm <sup>2</sup>	150	185	240	300	400	500	630
<b>Nominal Conductor Diameter</b>	mm	15.1	17.0	19.6	21.9	24.5	27.5	32.3
<b>Maximum DC Resistant@20°C</b>	Ω/km	0.126	0.1	0.0762	0.0607	0.0475	0.0369	0.0286

<b>Continuous Current Rating@45°C1 Core</b>	A	389	444	522	601	690	780	890
<b>Continuous Current Rating@45°C3 Core</b>	A	272	311	365	421	483	546	623
<b>Short Circuit Current 1s</b>	A	21460	26470	34340	42930	57230	71540	90140
<b>Operating Voltage</b>	KV	8.7/15	8.7/15	8.7/15	8.7/15	8.7/15	8.7/15	8.7/15

Ambient Temperature Correction Factors :

<b>Ambient Temperature Correction Factors</b>	35	40	45	50	55	60	65	70	75	80
<b>Rating Factor</b>	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 :15×OD (during installation); 9×OD (fixed installed).

Temperature Range : -20°C ~ +90°C.

Dimensions and Weight :

Construction No. of cores×Cross section (mm²)	Nominal Insulation Thickness mm	Nominal Sheath Thickness mm		Nominal Overall Diameter mm	Nominal Weight kg/km
		Inner	Outer		
1×25	4.5	1.6	1.2	28.4	1305
1×35	4.5	1.6	1.3	29.3	1430
1×50	4.5	1.7	1.3	30.7	1620
1×70	4.5	1.8	1.3	32.4	1900
1×95	4.5	1.8	1.4	34.4	2250
1×120	4.5	1.9	1.5	36.6	2625
1×150	4.5	2.0	1.5	38.1	2940
1×185	4.5	2.0	1.5	40.6	3545
1×240	4.5	2.1	1.6	43.4	4220
1×300	4.5	2.2	1.7	46.3	5070
1×400	4.5	2.4	1.8	50.2	5760
1×500	4.5	2.5	1.8	53.6	6880
1×630	4.5	2.6	1.9	57.9	8460
3×25	4.5	2.6	1.9	55.3	4725
3×35	4.5	2.7	2.0	57.5	5215
3×50	4.5	2.8	2.0	60.6	5960
3×70	4.5	2.9	2.1	64.4	7035
3×95	4.5	3.1	2.2	68.7	8370
3×120	4.5	3.2	2.3	72.7	9745

3×150	4.5	3.4	2.4	76.8	11140
3×185	4.5	3.6	2.6	84.2	13490
3×240	4.5	3.8	2.7	90.6	15860
3×300	4.5	4.0	2.9	96.6	18320