

**Type P Power Control Cable Overall shield AL/PS tape (0.6/1kV)
Fire Resistant Multi Conductor (10, 12, 14, 16, 18, 20 AWG)**



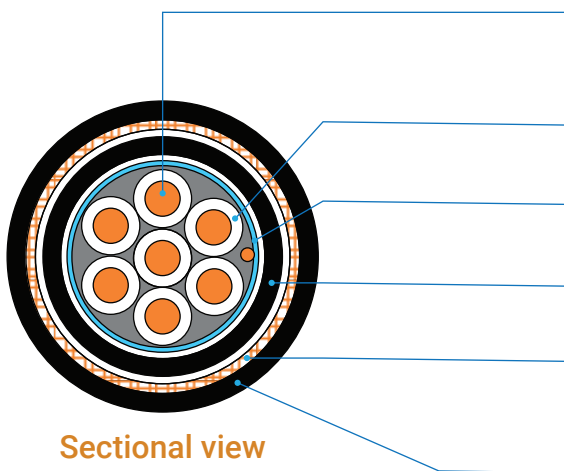
CABLE DESIGNATION

0.6/1kV FS-C(OS)PN, FS-C(OS)PNB, FS-C(OS)PNBS

APPLICATION STANDARD

Design guide	IEEE 1580(2010) , UL 1309(2017)
Insulation material	IEEE 1580, Type P UL 1309, X110
Sheath material	IEEE 1580, Type N
Flame retardant	IEEE 1202 & IEC 60332-3 Category A
Fire resistance	IEC 60331-2I(90min), IEC 60331-1,-2(120min), FS-type only
Cold bend / impact	CSA C22.2 NO. 2556(-40°C/-40°C) (Formerly CSA C22.2 NO.0.3)

CONSTRUCTION



Conductor

- Flexible stranded tinned annealed copper wires as per IEEE 1580
- A suitable separator tape(s) may be applied over the conductor

Insulation

XLPO (Type P) as per IEEE 1580 & XLPO (X110) as per UL 1309

Overall shield

Polyester/aluminum tape (AL/PS tape) + Tinned copper drain wire

Jacket

Thermosetting Neoprene (Type N) as per IEEE 1580 & UL 1309

Armor

- Braid of commercial bronze wires
- A suitable separator tape(s) may be applied under / over the armor

Sheath

- Thermosetting Neoprene (Type N) as per IEEE 1580 & UL 1309
- Outer sheath color : Black

Fire resisting layer(optional)

Mica/glass tape (FS Type cable only)

Cabling

- Insulated conductors shall be cabled
- Flame retardant & non-hygroscopic fillers may be used
- Suitable tape(s) may be applied on the cabled core
- A Filler may be applied to obtain a circular Cable

Core identification

Colored insulation or
Arabic number printing on the insulation

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No. of Cores	Conductor Nominal Area	Thickness of Insulation	Thickness of Jacket	Thickness of Sheath	Unarmor		Armor		Armor and Sheath	
					Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.	Nom.Dia. Approx.	Weight Approx.
No.	AWG or kcmil	mm/inch	mm/inch	mm/inch	mm/inch	kg/km	mm/inch	kg/km	mm/inch	kg/km
3	20	0.76/0.030	1.14 / 0.045	1.52 / 0.060	9.7 / 0.382	130	11.5 / 0.453	230	14.9 / 0.587	340
4			1.14 / 0.045	1.52 / 0.060	10.5 / 0.413	150	12.3 / 0.484	260	15.7 / 0.618	380
5			1.14 / 0.045	1.52 / 0.060	11.4 / 0.449	180	13.2 / 0.520	300	16.6 / 0.654	420
6			1.14 / 0.045	1.52 / 0.060	12.4 / 0.488	210	14.2 / 0.559	340	17.4 / 0.685	460
3	18	0.76/0.030	1.14 / 0.045	1.52 / 0.060	10.3 / 0.406	150	12.1 / 0.476	260	15.3 / 0.602	360
4			1.14 / 0.045	1.52 / 0.060	11.2 / 0.441	180	13.0 / 0.512	300	16.2 / 0.638	410
6			1.14 / 0.045	1.52 / 0.060	13.2 / 0.520	250	15.0 / 0.591	390	18.2 / 0.717	520
25			2.03 / 0.080	2.03 / 0.080	25.8 / 1.016	940	27.6 / 1.087	1,200	31.9 / 1.256	1,500
3	16	0.76/0.030	1.14 / 0.045	1.52 / 0.060	10.6 / 0.417	170	12.4 / 0.488	280	15.6 / 0.614	390
4			1.14 / 0.045	1.52 / 0.060	11.6 / 0.457	200	13.4 / 0.528	320	16.6 / 0.654	440
12			1.52 / 0.060	2.03 / 0.080	18.7 / 0.736	530	20.5 / 0.807	720	24.8 / 0.976	950
3	14	0.76/0.030	1.14 / 0.045	1.52 / 0.060	11.4 / 0.449	200	13.2 / 0.520	330	16.4 / 0.646	440
3	10	0.76/0.030	1.52 / 0.060	1.52 / 0.060	14.7 / 0.579	370	16.5 / 0.650	530	19.7 / 0.776	660

Note. For outer diameter, it is applied to $\pm 5\%$ manufacturing tolerance.