



**PT SUPREME CABLE**

MANUFACTURING & COMMERCE Tbk.

(PT SUCACO Tbk.)



Product Catalogue  
**HIGH  
VOLTAGE  
CABLE**

[www.sucaco.com](http://www.sucaco.com)

 @supreme\_cable

 @supreme\_cable

**QUALITY CABLE  
YOU CAN TRUST**

Scan For  
Catalogue



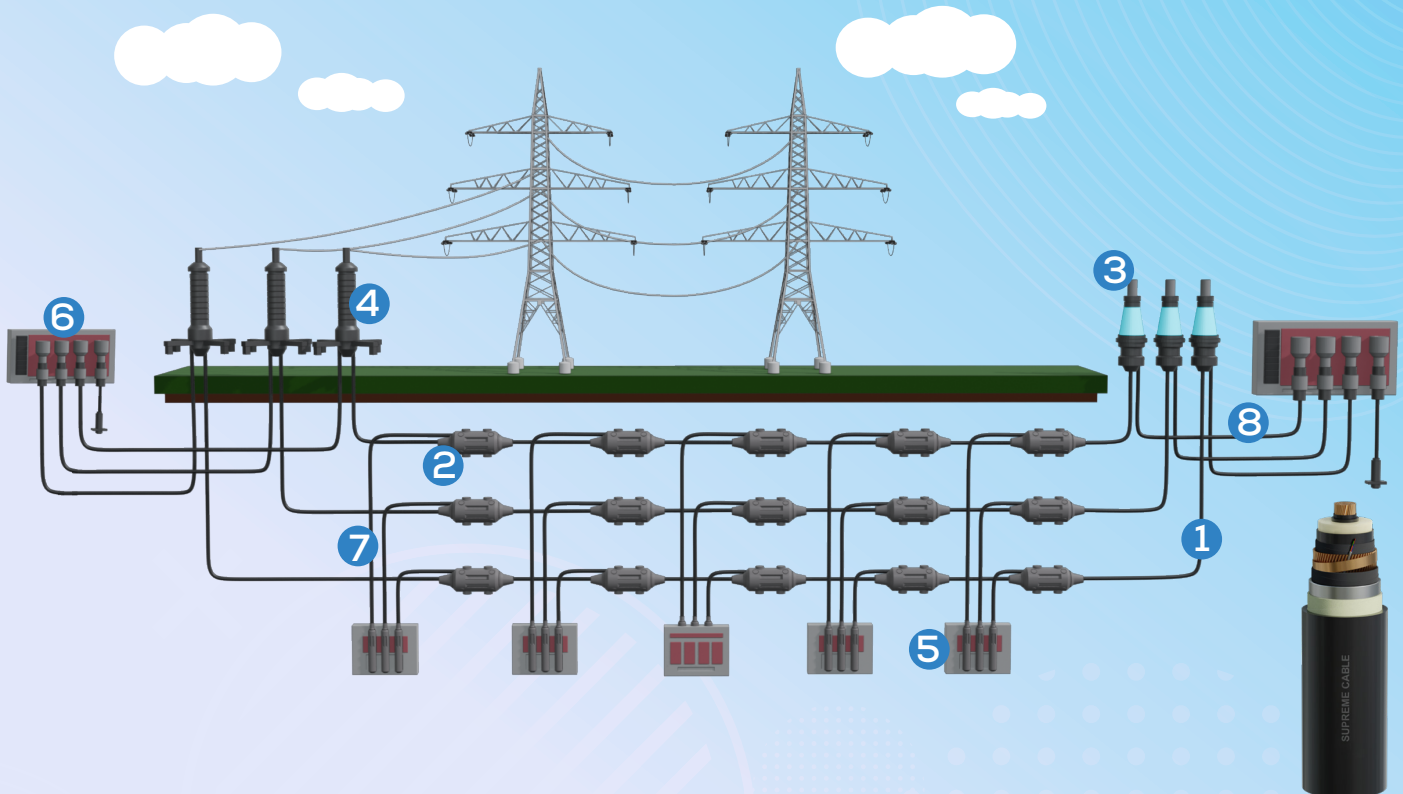
# INTRODUCTION

To meet the demands of high voltage transmission, which recently is showing remarkable development, we have modern facilities for the production of high voltage power cable and have established a complete high voltage laboratory staffed with engineers and technicians of the qualified skill and knowlegde.

Supported by these high quality techniques, the first 150 kV Supreme Cable for a commercial power lines has been produced at 1996. We have support and supply 150 kV Supreme Cable for Suralaya Power Plant Project - West Java - in 2005. Not only populer domestically, our products of high voltage 132 kV single core 1,000 mm<sup>2</sup> has also exported to Japan - in 2005. And in 2009 we are producing more than 120 km totally lengths of 150 kV single core 1,000 mm<sup>2</sup> Supreme Cable for Areva T & D Indonesia as main contractor and PT. PLN (Persero) as user.



# HV CABLE SYSTEM



1. HV Cable

2. Jointing

3. GIS/ Oil Insulated Termination

4. AIS/ Outdoor termination

5. Link box Cross Bonding

6. Link box Earthing

7. Concentric Bonding cable (N2XCY)

8. Single Bonding cable (N2XY)

# N2X(CAS)2Y / NA2X(CAS)2Y

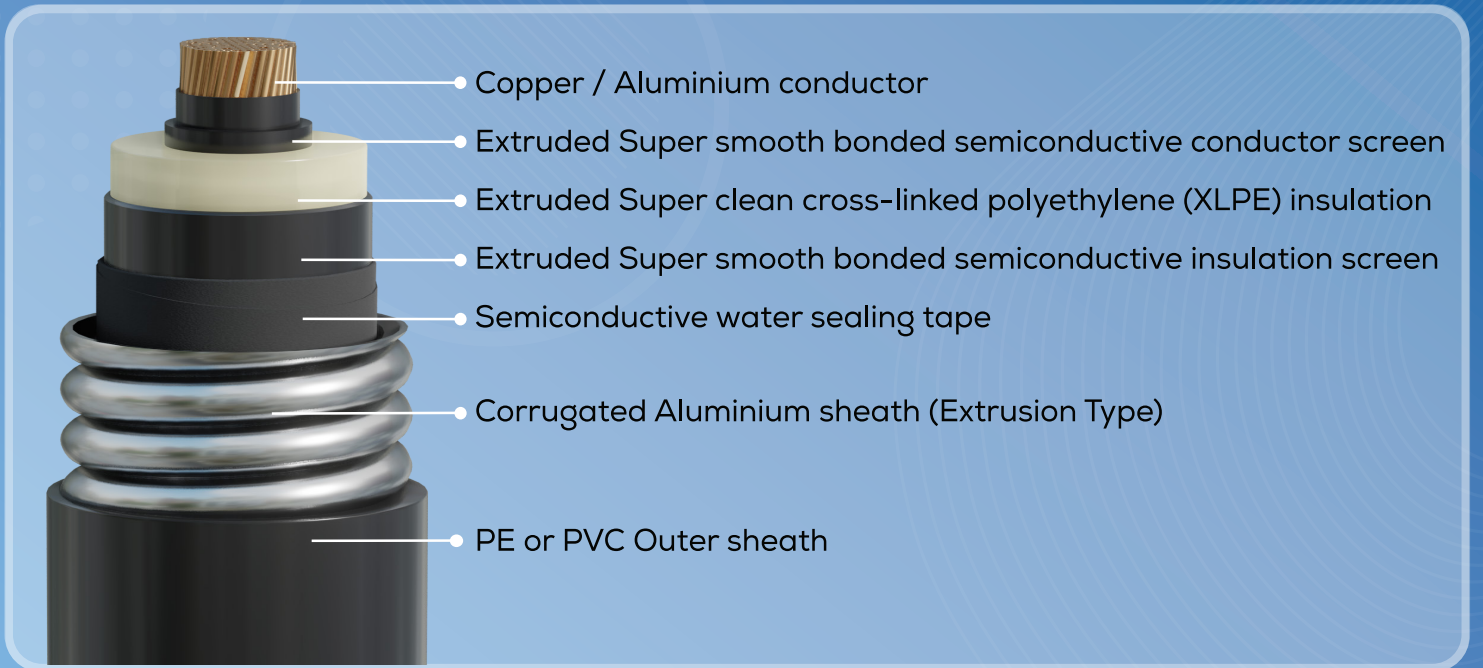
87/150 (170kV)

SPLN T3.006-2 ; IEC 60840

Copper/Aluminium conductor, XLPE Insulated, Water sealing, Corrugated Aluminium Sheathed and PE Sheathed Cable

## MAIN USES :

This cable design considers factors such as high short circuit fault currents, the ability of the cable to withstand water penetration and the environmental conditions of installation using either with High Density Polyethylene (HDPE) pipe, concrete or other cable ducts. This cable design is not intended for direct burial without additional protection.



## Dimensional and Electrical Data

1 CORE

Nominal cross section area		mm <sup>2</sup>	300	400	500	630	800	1000	1200	1600	2000
Conductor shape		-	Round compacted (cm)				Milliken segmental (rs)				
Conductor diameter (approx)		mm	20.9	23.4	26.3	31.5	35.2	39.3	43.1	49.8	55.5
Nominal insulation thickness		mm	18-19								
Insulation diameter (approx)		mm	62	65	68	73	77	82	85	91	97
Nominal outer sheath thickness		mm	4.5								
Overall cable diameter (approx)		mm	96	99	102	107	114	117	120	131	139
Cable net weight (approx)	Cu	kg/km	8,890	9,910	11,130	13,180	15,790	17,600	19,550	24,450	29,400
	Al	kg/km	6,980	7,500	8,140	8,910	10,010	11,100	11,800	14,260	16,470
Max. DC conductor resistance	Cu	Ω/km	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176	0.0151	0.0113	0.0090
	Al	Ω/km	0.100	0.0778	0.0605	0.0469	0.0367	0.0291	0.0247	0.0186	0.0149
Max. Capacitance per phase		μF/km	0.154	0.164	0.176	0.196	0.213	0.227	0.240	0.267	0.290
Inductance per phase, flat formation ( 000 )		mH/km	0.958	0.935	0.912	0.876	0.855	0.833	0.813	0.786	0.763
Max. Short circuit of conductor	Cu	kA/sec	43.41	57.79	72.16	90.83	115.23	143.93	172.62	230.12	287.50
	Al	kA/sec	28.67	38.14	47.60	59.90	75.96	94.85	113.73	152.26	190.18
Min. Short circuit of metallic screen		kA/sec	40								
Max. Current carrying capacity in ground at 30°C, flat formation ( 000 )	Cu	A	596	678	771	881	981	1095	1174	1298	1397
	Al	A	463	532	608	693	781	887	958	1089	1190
AC test voltage		kV/30 min	218								

Note : This only general information. For other specific requirement, please contact our marketing

# N2XCK2Y/NA2XCK2Y+Fiber Optic

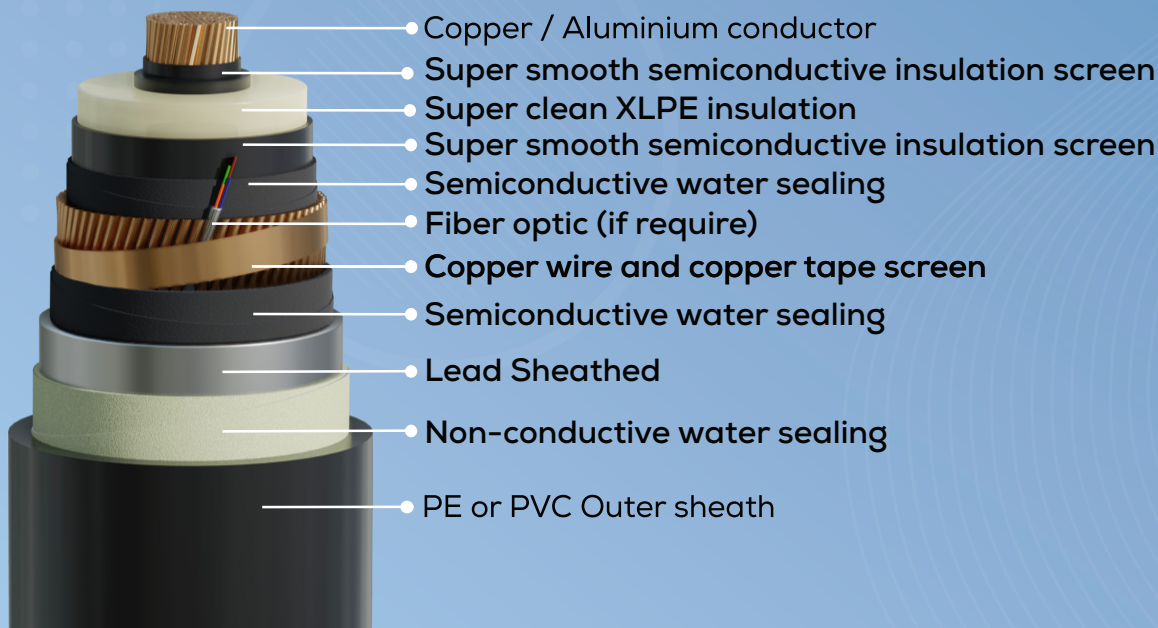
87/150(170) kV

SPLN T3.006-1 ; IEC 60840

Copper/Aluminium conductor, XLPE insulated, Copper wire screened, Water sealing, Lead sheathed, PE sheathed cable

## MAIN USES :

This cable design considers factors such as high short circuit fault currents, the ability of the cable to withstand water penetration and the corrosive environmental conditions. This design can be applied to all installations in the ground.



## Dimensional and Electrical Data

1 CORE

Nominal cross section area		mm <sup>2</sup>	300	400	500	630	800	1000	1200	1600	2000
Conductor shape		-	Round Compacted (cm)				Milliken Segmental (rs)				
Conductor diameter (approx)		mm	20.9	23.4	26.3	31.5	35.2	39.3	43.1	49.8	55.5
Nominal insulation thickness		mm	18 - 19								
insulation diameter (approx)		mm	64	67	70	75	79	83	87	92	99
Nominal outer sheath thickness		mm	4.5								
overall cable diameter (approx)		mm	91	93	96	101	105	110	113	116	120
Cable net weight (approx)	Cu	kg/km	15,710	16,880	18,250	20,600	22,830	25,810	28,260	31,500	37,100
	Al	kg/km	13,770	14,460	15,270	16,240	17,370	19,240	20,540	22,100	24,800
Max. DC conductor resistance at 20°C	Cu	Ω/km	0.0601	0.0470	0.0366	0.0283	0.0221	0.0176	0.0151	0.0113	0.0090
	Al	Ω/km	0.100	0.0778	0.0605	0.0469	0.0367	0.0291	0.0247	0.00186	0.0149
Max. capacitance per phase		μF/km	0.149	0.158	0.169	0.189	0.203	0.218	0.232	0.249	0.274
Inductance per phase, Flat formation (0 0 0)		mH/km	0.666	0.648	0.631	0.606	0.591	0.578	0.566	0.352	0.340
Max. short circuit current of conductor	Cu	kA/sec	43.41	57.79	72.16	90.83	115.23	143.93	172.62	229	286
	Al	kA/sec	28.67	38.14	47.60	59.90	75.96	94.85	113.73	150	188
Min. Short circuit of metallic screen		kA/sec	40								
Maximum current carrying capacity in Ground at 30°C, Flat formation (0 0 0)	Cu	A	572	650	738	841	941	1,037	1,104	1,491	1,647
	Al	A	446	511	584	667	756	851	920	984	1,064
AC test Voltage		kV/30 min	218								

Note : This only general information. For other specific requirement, please contact our marketing



Head Office :  
 Jl. Kebon Sirih No. 71, Jakarta 10340  
 Phone : (62-21) 3100525  
 Website : www.sucaco.com

Marketing Office :  
 Jl. Daan Mogot Km. 16, Jakarta 11850  
 Phone : (62-21) 5402066, 6190044  
 E-mail : sales@sucaco.com