

# 400kV WATER TIGHT POWER CABLES (220/400/420kV) N2XS(FL)2YBY



**CONSTRUCTION:**

Stranded and compacted copper conductor, inner semi conductor, XLPE insulation, outer semi conductor, Water blocking semi conducting tape, copper wire screen plus copper tape applied helically, water blocking tape, PE-AL-PE (AL copolymer coated) water tight tape applied longitudinally, PE inner sheath, Aluminum tape armor, PVC outer sheath

**ABBREVIATION:**

Cu/SC/XLPE/SC/WBSCT/CWS/WBT/PE-AL-PE/PE/ATA/PVC

**STANDARD:**

IEC 62067, IEC 60228

**DIMENSIONAL AND MECHANICAL DATA:**

Number of cores x cross section / Screen cross section	Conductor diameter	Insulation thickness	Diameter over insulation	AL copolymer coated tape thickness	Armor tape thickness	Outer sheath thickness	Overall diameter
No.xmm <sup>2</sup>	mm	mm	mm	mm	mm	mm	mm
1x630 RM/150	30.2	30	95	0.3	0.8	5	124
1x800 RM/150	34.5	30	100	0.3	0.8	5.1	128
1x1000 RM/150	39	30	104	0.3	0.8	5.3	133
1x1200 RM/150	42	30	107	0.3	0.8	5.4	137
1x1600 RM/150	51.2	30	116	0.3	0.8	5.7	147
1x2000 RM/150	56.5	30	121.5	0.3	0.8	5.9	153
1x2500 RM/150	61	30	126	0.3	0.8	6.1	158

**ELECTRICAL DATA:**

Number of cores x cross section / Screen cross section	Max. DC resistance of conductor at 20°C	Max. AC resistance of conductor at 90°C	Reactance		Capacitance
			Trefoil	Flat	
No.xmm <sup>2</sup>	Ω/km	Ω/km	Ω/km	Ω/km	μF/km
1x630 RM/150	0.0283	0.0388	0.139	0.197	0.128
1x800 RM/150	0.0221	0.0317	0.134	0.192	0.137
1x1000 RM/150	0.0176	0.0267	0.129	0.187	0.148
1x1200 RM/150	0.0151	0.0200	0.126	0.185	0.154
1x1600 RM/150	0.0113	0.0156	0.120	0.178	0.175
1x2000 RM/150	0.0090	0.0124	0.117	0.175	0.187
1x2500 RM/150	0.0072	0.0098	0.114	0.172	0.197

Current ratings: see current ratings page 124

Max. conductor temperature in continuous operation: 90°C

Max. conductor temperature in short circuit: 250°C

Technical data : see page 127

Conductor sizes including and above 1000mm<sup>2</sup> are segmental