

# Low Voltage Cables, Copper Conductors XLPE Insulation and PVC Jacket Per SI 1516-1

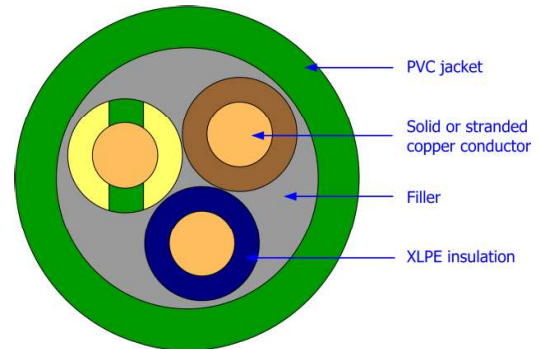


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## Applications

This specification describes cables to be used at lighting and energy networks as fixed installation cables internally, externally or underground if there are not mechanical stresses. These cables can be used for single or three phase system, not exceeding 600 V between phase and ground. The cables are designed for maximum conductor rated temperature of 90°C during continuous normal operation and 250°C for short circuit maximum conductor temperature.



## Standards

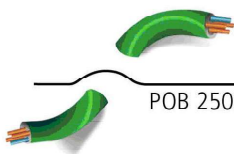
- SII 1516-1
- IEC 60502-1
- SI 60228 / IEC 60228
- IEC 60332-1

## Marking Designation and Certification

- N2XY FR1
- All cables are approved by the Standards Institute of Israel – see certifications

## Construction

Conductor:	Copper , class 1 (solid) or class 2 (stranded) per IEC 60228/SI 60228
Insulation:	XLPE . Wall thickness and core color identification is per SI 1516-1 – see table below
Cabling:	Stranding
Inner covering and filler:	PVC, compatible with XLPE insulation.
Jacket:	PVC compound type ST2, green



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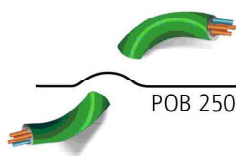
## Color Code

No. of cores	Cable with ground conductor	Cable without grounding conductor
3	Brown – Blue - Yellow/green	Brown - Brown with black strip - Brown with orange strip
4	Brown - Brown with black strip-Brown with orange strip - Yellow/green	Brown - Brown with black strip - Brown with orange strip – Blue
5	Brown - Brown with black strip - Brown with orange strip – Blue - Yellow/green	-

Other color code or wall thickness in accordance with IEC 60502

## Electrical and Mechanical Properties

Catalog Number	No. X nominal area of the conductors No.* sqmm	Min. no. of wires in phase conductor	Nominal insulation thickness mm	Nominal outer sheath thickness mm	Overall approx. diameter mm	Cable weight approx. kg/km	DC resistance @ 20°C Ω/km	Ampacity @ 30°C	
								Air A	Earth A
<b>2 conductors</b>									
1180204	2x1.5	1	0.7	1.8	10	125	12.1	24	31
1220204	2x2.5	1	0.7	1.8	11	160	7.41	32	40
1260204	2x4	1	0.7	1.8	12	210	4.61	42	52
1260204	2x4	7	0.7	1.8	12	230	4.61	42	52
1280204	2x6	1	0.7	1.8	13	270	3.08	53	64
1280204	2x6	7	0.7	1.8	14	300	3.08	53	64
1300204	2x10	6	0.7	1.8	15	410	1.83	74	86
1320204	2x16	6	0.7	1.8	17	575	1.15	98	112
1340204	2x25	6	0.9	1.8	20	840	0.727	133	145
1380204	2x35	6	0.9	1.8	22	1100	0.524	162	174
1400204	2x50	6	1.0	1.8	25	1450	0.387	197	206
<b>3 conductors</b>									
1180304	3x1.5	1	0.7	1.8	10	150	12.1	24	31
1220304	3x2.5	1	0.7	1.8	11	185	7.41	32	40
1260304	3x4	1	0.7	1.8	12	250	4.61	42	52
1280304	3x6	1	0.7	1.8	13	330	3.08	53	64
1300304	3x10	6	0.7	1.8	16	500	1.83	74	86
1320304	3x16	6	0.7	1.8	18	710	1.15	98	112
1340304	3x25	6	0.9	1.8	21	1050	0.727	133	145
1380304	3x35	6	0.9	1.8	24	1400	0.524	162	174
1400304	3x50	6	1.0	1.8	27	1850	0.387	197	206



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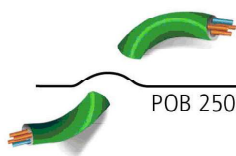
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Catalog Number	No. X nominal area of the conductors No.* sqmm	Min. no. of wires in phase conductor	Nominal insulation thickness mm	Nominal outer sheath thickness mm	Overall approx. diameter mm	Cable weight approx. kg/km	DC resistance @ 20°C Ω/km	Ampacity @ 30°C	
								Air A	Earth A
<b>3+1 conductors</b>									
1320403	3x16/10	6	0.7/0.7	1.8	20	830	1.15	98	112
1340403	3x25/16	6	0.9/0.7	1.8	23	1230	0.727	133	145
1380403	3x35/16	6	0.9/0.7	1.8	25	1550	0.524	162	174
1400403	3x50/25	6	1.0/0.9	1.9	28	2100	0.387	197	206
1440403	3x70/35	12	1.1/0.9	2.0	33	2930	0.268	250	254
1460403	3x95/50	15	1.1/1.0	2.1	37	3920	0.193	308	305
1480403	3x120/70	18	1.2/1.1	2.3	42	5020	0.153	359	348
1500403	3x150/70	18	1.4/1.1	2.4	45	6020	0.124	412	392
1520403	3x185/95	30	1.6/1.1	2.6	50	7550	0.0991	475	444
1560403	3x240/120	34	1.7/1.2	2.8	57	9750	0.0754	564	517
1580403	3x300/150	34	1.8/1.4	3.0	63	12300	0.0601	649	585
<b>4 conductors</b>									
1180404	4x1.5	1	0.7	1.8	11	175	12.1	24	31
1220404	4x2.5	1	0.7	1.8	12	225	7.41	32	40
1260404	4x4	1	0.7	1.8	13	300	4.61	42	52
1260404	4x4	7	0.7	1.8	14	320	4.61	42	52
1280404	4x6	1	0.7	1.8	14	400	3.08	53	64
1280404	4x6	7	0.7	1.8	15	430	3.08	53	64
1300404	4x10	6	0.7	1.8	18	620	1.83	74	86
1320404	4x16	6	0.7	1.8	20	905	1.15	98	112
1340404	4x25	6	0.9	1.8	23	1325	0.727	133	145
1380404	4x35	6	0.9	1.8	26	1760	0.524	162	174
1400404	4x50	6	1.0	1.9	30	2350	0.387	197	206
1440404	4x70	12	1.1	2.0	35	3320	0.268	250	254
1460404	4x95	15	1.1	2.2	39	4450	0.193	308	305
1480404	4x120	18	1.2	2.3	43	5580	0.153	359	348
1500404	4x150	18	1.4	2.5	48	6920	0.124	412	392
1500404	4x185	30	1.6	2.7	53	8600	0.0991	475	444
1500404	4x240	34	1.7	2.9	60	11150	0.0754	564	517
1580404	4x300	34	1.8	3.0	67	14100	0.0601	649	585
<b>5 conductors</b>									
1180504	5x1.5	1	0.7	1.8	12	205	12.1	24	31
1220504	5x2.5	1	0.7	1.8	13	275	7.41	32	40
1260504	5x4	1	0.7	1.8	14	360	4.61	42	52
1260504	5x4	7	0.7	1.8	15	390	4.61	42	52
1280504	5x6	1	0.7	1.8	16	480	3.08	53	64
1280504	5x6	7	0.7	1.8	17	515	3.08	53	64
1300504	5x10	6	0.7	1.8	19	760	1.83	74	86
1320504	5x16	6	0.7	1.8	22	1100	1.15	98	112
1340504	5x25	6	0.9	1.8	25	1630	0.727	133	145



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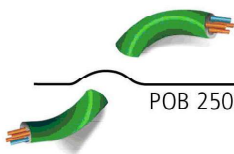
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## Additional Parameters

- Cable code:
  - Cable type: N2XY
  - Number of cores x cores cross section
  - Nominal voltage 0.6/1 kV
  - Flame retardant behavior FR1 per IEC 60332-1
- Maximum conductor temperature: 90°C
- Maximum conductor temperature at short circuit: 250°C
- Minimum bending radius: 12 x Outer sheath diameter
- Minimum installation temperature: -5°C
- Service temperature: -20 to +90°C

*Yair Duchovni Cables reserves the right to modify the products described in this data sheet without prior notice*



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