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



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# **Applications**

This specification describes cables based on aluminum conductors to be used in energy networks for fixed installations internally, externally or underground. These cables can be used for single or three phase system, not exceeding 600 V between phase and ground. The cables fully comply with IEC 60502-1 and IS 1516-1.

#### **Standards**

- SI 1516-1
- IEC 60502-1
- SI 60228, IEC 60228
- IEC 60332-1

# **Marking Designation and Certification**

- NA2XY FR1
- All cables are approved by the Standards Institute of Israel see certifications

### Construction

Conductor:	Aluminum, 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 or rubber, compatible with XLPE insulation.			
Jacket:	PVC compound type ST2, green			

#### **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	Brown - Brown with black strip -		
	with orange strip - Yellow/green	Brown with orange strip – Blue		
5	Brown - Brown with black strip -	-		
	Brown with orange strip – Blue -			
	Yellow/green			



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# **Electrical and Mechanical Properties – Round Conductors**

Catalog Number	No. X nominal area of the conductors	Min. no. of wires in phase conductor	Nominal insulation thickness	Nominal outer sheath thickness	Overall approx. diameter	Cable weight approx.	DC resistance @ 20°C
	No.* sqmm		mm	mm	mm	kg/km	Ω/km
3380402R	3*35+16	6	0.8	1.9	25.7	817	0.868
3400404R	3*50+25	6	1.0	2.0	29.0	1080	0.641
3440403R	3*70+35	12	1.0	2.0	33.4	1432	0.443
3460403R	3*95+50	15	1.1	2.2	37.6	1854	0.320
3480404R	3*120+70	15	1.2	2.3	42.4	2378	0.253
3500403R	3*150+70	15	1.4	2.5	46.2	2811	0.206
3520401R	3*185+95	30	1.6	2.5	51.0	3425	0.164
3560403R	3*240+120	30	1.7	2.9	57.5	4489	0.125

#### **Additional Parameters**

- Cable code:
  - Cable type: NA2XY
  - Number of cores x cores cross section = screen cross section (when present)
  - Nominal voltage 0.6/1 kV
  - Flame retardant behavior FR1 per IEC 60332-1
- Maximum conductor temperature: 90°C
- Current Rating per YADU Document.
- Maximum conductor temperature at short circuit: 250°C
- Minimum bending radius: 12 x Outer sheath diameter
- Minimum installation temperature: -5<sup>o</sup>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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