

## SIWO-KUL® B10 6.6/7.2 kV

SIWO-KUL® B10 6.6/7.2 kV MV high temperature flexible cables designed with a PET braid, PUR varnished

### Description

SIWO-KUL® B10 cables are required when high flexibility and high temperature conditions are present; they are mainly used in medium-voltage motors and generators for connecting stator coils to the terminal box. They are also vital elements for wind converters, transformers, solar power inverters and other MV/LV cabinets. In drives, silicone decreases copper cross-section and gives flexibility for compactness.

SIWO-KUL® B10 6.6/7.2 kV cables are class 5 single core cables.

This product family is designed with a PET **braid, PUR varnished** providing our customers much flexibility according to their process (VPI...).

For voltage starting 6,6 kV & cross section above 16 mm<sup>2</sup>, Nexans has developed a specific patented extruded semi conductive silicon layer enabling much lower partial discharge and increasing de facto the life time of our cables.



### Construction

- Copper conductor tinned, flexible IEC 60228, class 5
- Tape (up 16 mm<sup>2</sup>)
- Semi-conductive layer (only for 6.6 and 13.8 kV)
- Silicone rubber insulation
- Separator tape
- Protective synthetic yarn braiding, PUR varnished

The **use of silicone rubber**, a high grade corona resistant insulation material, gives the cable **excellent dielectric strength**. The braided synthetic yarn covering, which is applied directly over the insulation, gives the cable, because of its short braiding pitch and high compactness, **an excellent mechanical protection by maintaining good flexibility**.

Operating temperature for continuous service extends from –55°C up to 180°C.

*This product family is also part of our Windlink® offer for Wind turbines*

### Approvals

These cables are UL (Underwriters Laboratories inc.) approved for Appliance Wiring Material (AWM), following styles 3640, 3641, 3642 and 3643, CSA File No.: 036040-0-000.

SIWO-KUL® B10 cables are in compliance with EU directives on the limits of certain metals and waste as defined on ROHS (Restriction of Hazardous Substances) and WEE (Waste from Electrical and Electronic Equipment).









SIWO-KUL® B10 is REACH conform substances benzene, C10-C13).



### Standards

**International** IEC 60092; IEC 60331; IEC 60332-1; IEC 60332-3 Cat.C; IEC 60332-3-24; IEC 60754-1; IEC 60754-2; IEC 61034; IEEE 383; LLOYDS Reg. 91/00126(E1); UIC 895

**National** BSS 6195-T5-C-D-E-F; CSA C22.2 N° 210-05; DIN VDE 0472; NF F 16-101/BF1

							
Halogen free Yes	Operating temp. range -55 .. 180 °C	Chemical resistance Good	Oil resistance Yes	Flame retardant IEC 60332-1	Fire retardant IEC 60332-3	Fire resistant IEC 60331	Gases corrosivity IEC 60754-1, IEC 60754-2

## SIWO-KUL® B10 6.6/7.2 kV

### Characteristics

Construction characteristics	
Halogen free	Yes
Dimensional characteristics	
Precision of diameter	+/- 0.3 mm
Usage characteristics	
Operating temperature, range	-55 .. 180 °C
Chemical resistance	Good
Oil resistance	Yes
Flame retardant	IEC 60332-1
Fire retardant	IEC 60332-3
Fire resistant	IEC 60331
Gases corrosivity	IEC 60754-1, IEC 60754-2
Smoke density	IEC 61034
Ozone resistance	Yes
U.V resistance	Yes

### Product List

☎=Make to order, 📦=In stock

Nexans ref.	Name	Ope. volt. (kV)	Cross section (mm <sup>2</sup> )	Test voltage (kV)	Nom. outer diam. (mm)	Breakdown voltage (kV)
☎ 10503478	SIWO-KUL B10 1X2.5 6,6/7,2KV GY	6.6	2.5	20	7.1	30
📦 10148777	SIWO-KUL B10 1X4.0 6,6/7,2KV GY	6.6	4	20	7.55	30
📦 10148778	SIWO-KUL B10 1X6.0 6,6/7,2KV GY	6.6	6	20	8.0	30
📦 10148779	SIWO-KUL B10 1X10 6,6/7,2KV GY	6.6	10	20	8.95	30
📦 10148769	SIWO-KUL B10 1X16 6,6/7,2KV GY	6.6	16	20	11.25	30
📦 10148770	SIWO-KUL B10 1X25 6,6/7,2KV GY	6.6	25	20	12.9	30
📦 10148771	SIWO-KUL B10 1X35 6,6/7,2KV GY	6.6	35	20	14.1	30
📦 10148772	SIWO-KUL B10 1X50 6,6/7,2KV GY	6.6	50	20	16.3	30
📦 10148773	SIWO-KUL B10 1X70 6,6/7,2KV GY	6.6	70	20	18.15	30
📦 10148780	SIWO-KUL B10 1X95 6,6/7,2KV GY	6.6	95	20	19.9	30
📦 10148781	SIWO-KUL B10 1X120 6,6/7,2KV GY	6.6	120	20	21.75	30
📦 10148886	SIWO-KUL B10 1X150 6,6/7,2KV GY	6.6	150	20	24.1	30
📦 10148885	SIWO-KUL B10 1X185 6,6/7,2KV GY	6.6	185	20	26.1	30

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Nexans ref.	Name	Ope. volt. (kV)	Cross section (mm <sup>2</sup> )	Test voltage (kV)	Nom. outer diam. (mm)	Breakdown voltage (kV)
☎ 10148947	SIWO-KUL B10 1X240 6,6/7,2KV GY	6.6	240	20	28.3	30

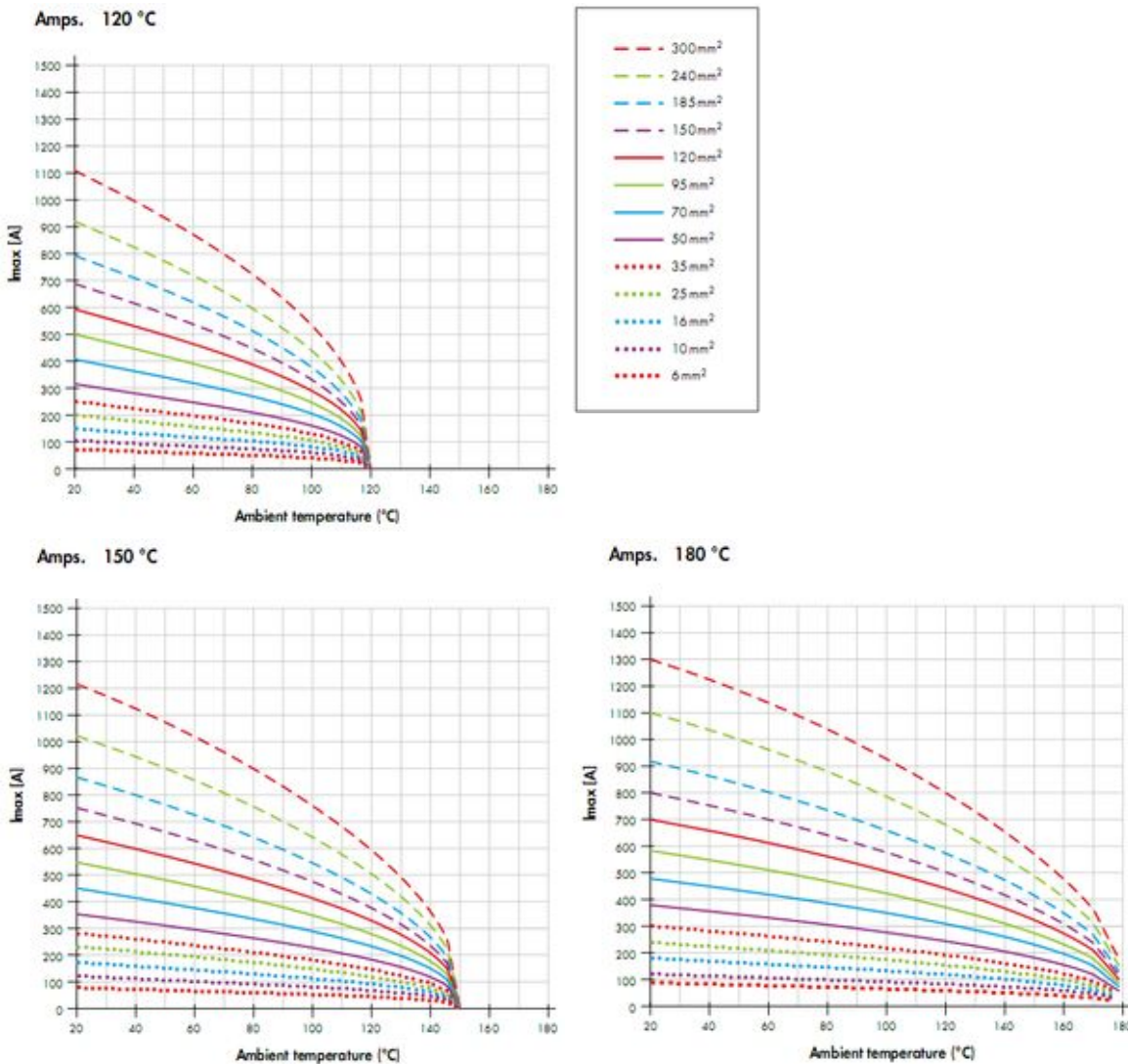
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### Permissible continuous current carrying capacity 6kV

Cables separated: 1D

The values determined from the diagram are based on the following assumptions:

- a) Cables separated.
  - Space between adjacent cables  $\geq 1 \times d$ .
  - b) Conductor temperature = See tables below
  - c) Without additional cooling.
- Sufficient natural air flow ensured.



## **SIWO-KUL® B10 6.6/7.2 kV**

### **Selling information**

#### **Marking**

Our SIWO-KUL® B10 cables have been printed:

NEXANS SWITZERLAND SIWO-KUL® B10 + voltage in kV + section in mm<sup>2</sup> + Standards + Meter marks