

Contact Cables for Industrial Applications Phone: 01908 250840 iandi.sales@nexans.com

## SIWO-KUL® B10 1.1 kV

SIWO-KUL® B10 1.1 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 1.1 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...).

### Construction

- Copper conductor tinned, flexible IEC 60228, class 5
- 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



Yes



range -55 .. 180 °C



resistance

Good





IEC 60332-3



IEC 60331



IEC 60754-1, IEC 60754-2

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resistance

Yes

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retardant

IEC 60332-1

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# SIWO-KUL® B10 1.1 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	l <mark>roduct List</mark> <b>℃</b> =Make to order, 🛓 =In sto					
Nexans ref.	Name	Operating voltage (kV)	Conductor cross-section (mm <sup>2</sup> )	Nominal outer diameter (mm)		
<b>x</b> 10148820	SIWO-KUL B10 1x1.5 1,1KV YE	1.1	1.5	4.0		
101/18808	SIWO-KUL B10 1x2.5 1,1KV YE	1.1	2.5	4.5		
<b></b> 10148821	SIWO-KUL B10 1x4.0 1,1KV YE	1.1	4	4.95		
10148877	SIWO-KUL B10 1x6.0 1,1KV YE	1.1	6	5.4		
<b></b> 10148823	SIWO-KUL B10 1x10 1,1KV YE	1.1	10	6.35		
<b>F</b> 1111/1/2/8/1/4	SIWO-KUL B10 1x16 1,1KV YE	1.1	16	8.55		
- 101/1880/	SIWO-KUL B10 1x25 1,1KV YE	1.1	25	10.3		
<b>H</b> 10148824	SIWO-KUL B10 1x35 1,1KV YE	1.1	35	11.6		
	SIWO-KUL B10 1x50 1,1KV YE	1.1	50	13.6		
<b>m</b> 10148876	SIWO-KUL B10 1x70 1,1KV YE	1.1	70	15.45		
			📞 = N	lake to order, 🗳 = In stock		







resistance

Good



IEC 60332-1





IEC 60331



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Gases corrosivity IEC 60754-1, IEC 60754-2

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# SIWO-KUL® B10 1.1 kV

	Nexans ref.	Name	Operating voltage (kV)	Conductor cross-section (mm <sup>2</sup> )	Nominal outer diameter (mm)
冑	10148827	SIWO-KUL B10 1x95 1,1KV YE	1.1	95	17.6
よ	10148828	SIWO-KUL B10 1x120 1,1KV YE	1.1	120	19.55
冑	10148829	SIWO-KUL B10 1x150 1,1KV YE	1.1	150	21.9
畾	10148830	SIWO-KUL B10 1x185 1,1KV YE	1.1	185	24.3
冑	10148995	SIWO-KUL B10 1x240 1,1KV YE	1.1	240	26.9
晶	10162914	SIWO-KUL B10 1x300 1,1KV YE	1.1	300	30.6
				<b>%</b> = N	/lake to order, 🛔 = In stock

## Permissible continuous current carrying capacity 1kV

Cables separated: 1D

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

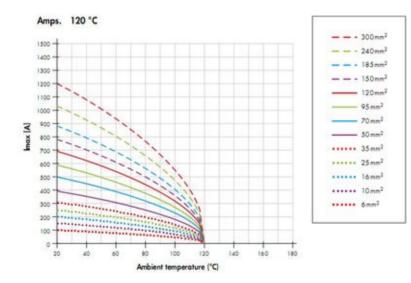
a) Cables separated.

Space between adjacent cables  $\geq 1 \times d$ .

b) Conductor temperature = See tables below

c) Without additional cooling

Suffcient natural air fow ensured.





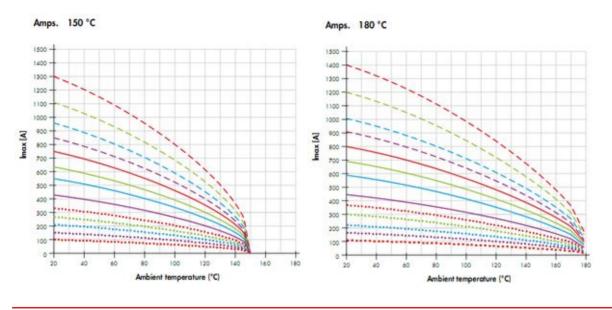
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### Selling information

## 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

















Operating temperature, range -55 .. 180 °C

Chemical resistance resistance Good

Flame retardant IEC 60332-1





60754-2

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Yes

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