



Member of the NKT Group

High-voltage cable accessories 72 kV up to 245 kV



Completing the picture

www.nktcables.com

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nkt cables: The Profile

nkt cables is a global front-line supplier to the energy sector and as such **nkt cables** develops, manufactures and markets high-quality cables and solutions for power grid infrastructure, construction sites, railways and the automotive industry. **nkt cables** supplies creative, high-tech and sustainable products.

nkt cables' manufacturing plants are among the most modern, flexible and cost-effective facilities worldwide. At **nkt cables** we work tirelessly to reduce our carbon footprint; neutral production and waste prevention are high priorities. **nkt cables** invests heavily to ensure that the company maintains leading-edge capability.

The brand-new state-of-the-art factory in Cologne is an example of this commitment. Being among the most modern factories in the world, it is at the forefront of technological developments.

nkt cables is part of NKT Holding A/S, which is listed on the Danish Stock Exchange. NKT Holding owns a number of companies, which are active in different industries, and has production facilities on four continents.



The product range

High-voltage cable accessories

All high-voltage cable accessories from **nkt cables** are developed by their R&D department, who take into account specific customer requirements as well as national and international standards in designing and producing customer defined solutions.

All materials are subjected to intensive quality control procedures. The production- and process-testing equipment from **nkt cables** can guarantee the highest level of quality in all the products. The complete product range has been type-tested by reputable international testing institutes.

The product range from **nkt cables** includes accessories for all applications in the 50 kV up to 550 kV voltage range, also as a modular component system.

nkt cables offers various technical versions of accessory systems like plug-in technology, dry-type technology and conventional technology with insulating oil.

The range of accessories covers the following applications:

- Self-supporting outdoor terminations, porcelain or composite
- Non-self-supporting outdoor terminations, silicone
- Terminations for gas-insulated switchgears
- Transformer terminations
- Straight-through joints
- Insulating joints/cross-bonding joints
- Transition joints, XLPE-insulated/oil-filled cables
- Complete range for the connection/installation of low-pressure oil-filled cables, 50 kV – 170 kV
- CabSnap® accessories for preassembled cable connection systems



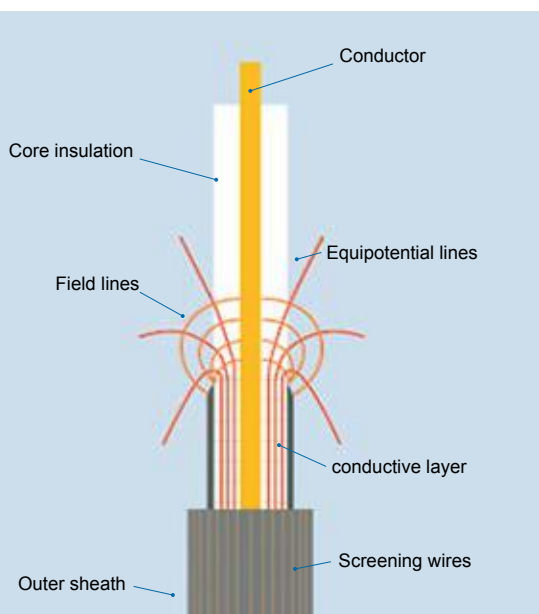
Silicone rubber and Stress control

Silicone rubber is a preferred material for cable accessories due to its excellent mechanical and electrical properties. For more than 40 years silicone has been used successfully as high-quality electrical insulation for voltages up to 400 kV. Silicone rubber features high quality electrical insulation, superior corona and tracking resistance, combined with high elasticity. It facilitates multi range application, where one silicone rubber body can be used for various conductor cross sections. Optimal flexibility ensures easy assembly of the accessories.

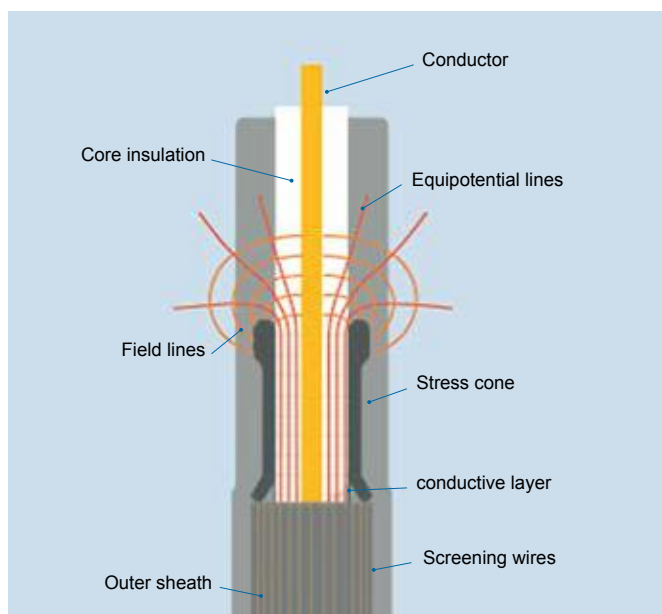
Outstanding features of the silicone rubber insulation material are:

- UV and ozone resistance
- Durable water rejection
- Weather and aging resistance
- Non-flammable, self-extinguishing, heat resistant/applicable for use at temperatures between -50°C and $+180^{\circ}\text{C}$
- High elasticity
- High tracking resistance
- Unlimited storage life
- Friendly to the environment

The specific electrical problems of the cable termination are found at the point between the high-grade solid electrical insulation of the cable and the gaseous insulation air which has a significantly lower dielectric strength. In order to achieve sufficient insulating clearance, the outer conductive layer of the cable must be stripped to below the end of the core. This causes unacceptably high field intensities at the end of the outer conductive layer (see figure 1) which must be eliminated by means of special measures. Figure 2 shows the field of the cable termination controlled capacitively by a funnel shaped electrode. It is dimensioned in such a way that field intensities do not exceed at any point. This prevents harmful corona or partial discharge.

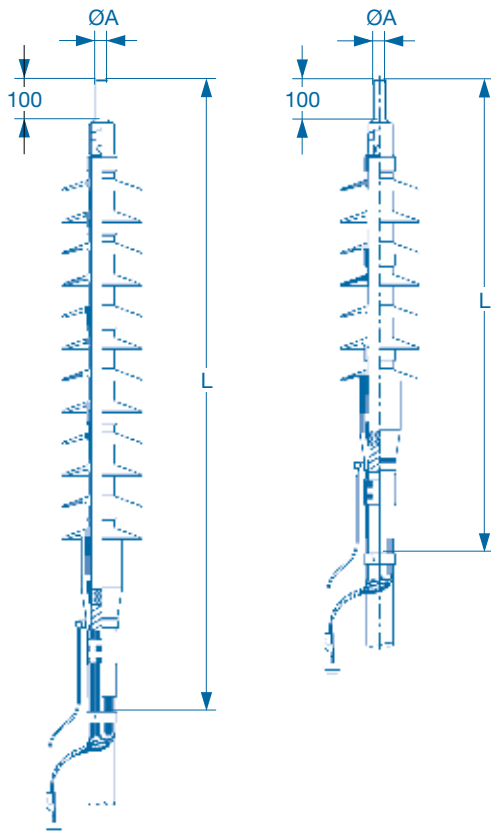


Electrical field without stress control (figure 1)



Electrical field with capacitive stress control (figure 2)

Dry type termination without supporting function



Application:

This two versions of silicone rubber terminations are designed for indoor and outdoor conditions. Main components of the termination are the pretested push-on silicone components with integrated stress cone for electrical field control.

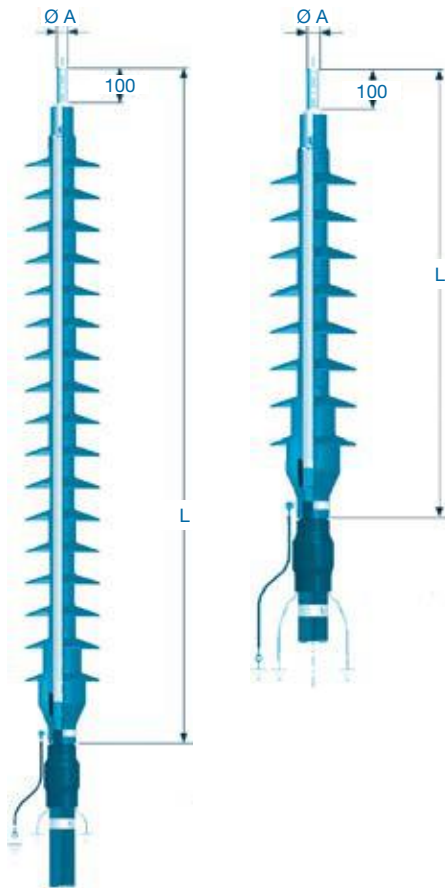
- Integrated capacitive stress control system
- Piece tested silicone components
- Screw type top bolt, no special tools are required
- Top bolt covered by top part of silicone rubber
- Quick and easy assembly
- Long creepage distance due to optimised shed design
- Type test certificate in accordance with IEC 60840 available

Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Connection type Screw/Press	Length (L)	Pollution level	Creepage distance min.	Diameter (A)	No. of sheds
Um (kV)		mm ²	mm		mm		mm	mm	
72.5	THV 72 II size 36	...800	40.0...54.0	S	1100-1160	c (II)	>1450	30	8
72.5	THV 72 IV size 36	...800	40.0...54.0	S	1450-1540	e (IV)	>2248	30	11
72.5	THV 72 II size 46	...1200	51.5...65.0	S	1000-1040	c (II)	>1450	30/50	8
72.5	THV 72 IV size 46	...1200	51.5...65.0	S	1250-1280	e (IV)	>2248	30/50	11
72.5	THV 72 II size 56	...1600	63.0...78.0	S	1250-1280	c (II)	>1450	50	8
72.5	THV 72 IV size 56	...1600	63.0...78.0	S	1250-1280	e (IV)	>2248	50	11

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Dry type termination without supporting function



Application:

This two versions of silicone rubber terminations are designed for indoor and outdoor conditions. Main components of the termination are the pretested push-on silicone components with integrated stress cone for electrical field control.

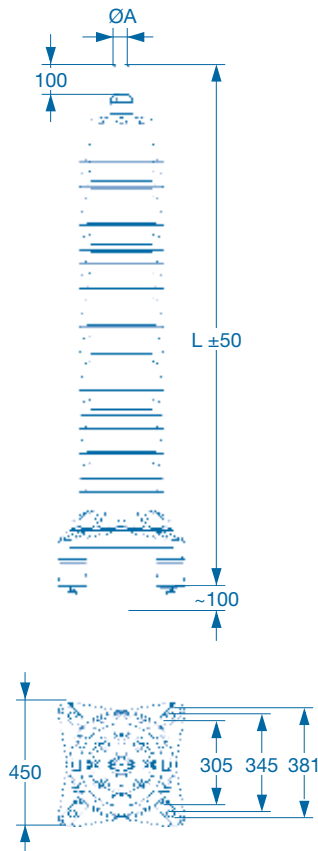
- Integrated capacitive stress control system
- Piece tested silicone components
- Screw type top bolt, no special tools are required
- Top bolt covered by top part of silicone rubber
- Quick and easy assembly
- Long creepage distance due to optimised shed design
- Type test certificate in accordance with IEC 60840 available

Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Connection type Screw/Press	Length (L)	Pollution level	Creepage distance min.	Diameter (A)	No. of sheds
Um (kV)		mm ²	mm		mm		mm	mm	
100	THV 100 I size 46	...1000	51.5...65.0	S	1020-1060	b (I)	>1600	50	8
100	THV 100 I size 56	...1600	63.0...78.0	S	1020-1060	b (I)	>1600	50	8
100	THV 100 III size 46	...1000	51.5...65.0	S	1500-1550	d (III)	>2500	50	14
100	THV 100 III size 56	...1600	63.0...78.0	S	1780-1830	d (III)	>2500	50	17
145	THV 145 IV size 50	...500	55.0...66.0	S	approx. 2300	e (IV)	>4495	50	17
145	THV 145 IV size 60	...1200	66.0...78.0	S	approx. 2300	e (IV)	>4495	50	17

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Outdoor termination with composite insulator



Application:

The different versions of this outdoor termination type FEV-V are designed for operation under several outdoor conditions. Main components of the termination are the composite insulator with upper metal work, metal base plate with supporting insulators and premoulded stress cone for electrical field control.

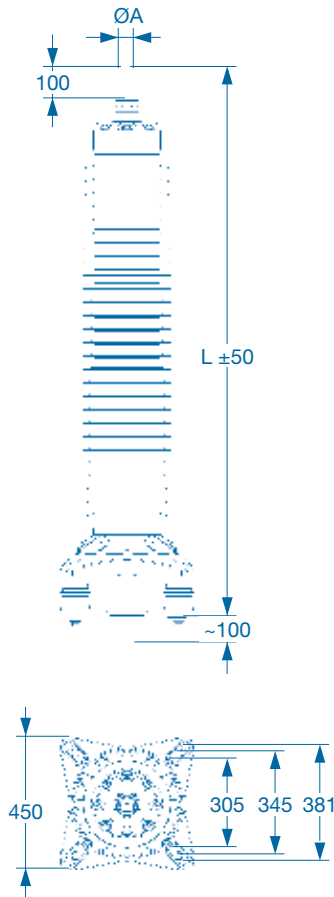
- Integrated premoulded stress control system made of silicone rubber
- All metal work made of corrosion resistant aluminum alloy
- Termination is standing on supporting pedestal insulators, so that the cable screen can be isolated from earth
- Top bolt available in two versions, screw type or press type
- Different top bolt diameter available suiting to the cable dimensions
- Type test certificate in accordance with IEC 60840 available

Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Connection type Screw/Press	Connection type Screw/Press	Length (L)	Pollution level	Creepage distance min.	Diameter (A)
Um (kV)		mm ²	mm	mm		mm		mm	mm
72.5	FEV 72-V	...2500	34.5...97.0	...105	S/P	1400	d (III)	>1813	30/50
145	FEV 145-V	...2500	34.5...84.0	...105	S/P	1900/2100	b (II)/e (IV)	>3075. >5270	30/50
170	FEV 170-V	...2500	34.5...108.00	...105	S/P	2100	e (IV)	>5270	30/50
245	FEV 245-V	...2500	64.0...120.0		S/P	2750/3150	d (III)/e (IV)	6800/8400	30/50

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Outdoor termination with porcelain insulator



Application:

The different versions of this outdoor termination type FEV-P are designed for operation under several outdoor conditions. Main components of the termination are the composite insulator with upper metal work, metal base plate with supporting insulators and premoulded stress cone for electrical field control.

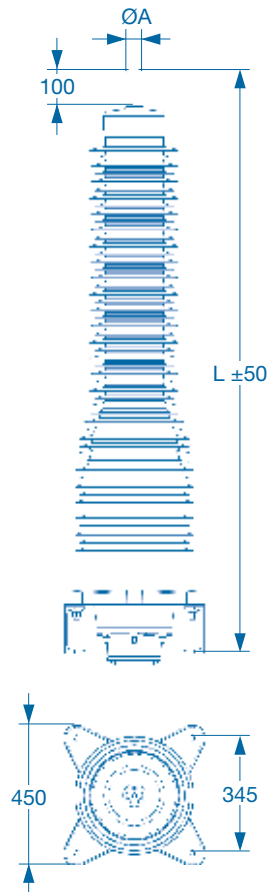
- Integrated premoulded stress control system made of silicone rubber
- All metal work made of corrosion resistant aluminum alloy
- Termination is standing on supporting pedestal insulators, so that the cable screen can be isolated from earth
- Top bolt available in two versions, screw type or press type
- Different top bolt diameter available suiting to the cable dimensions
- Type test certificate in accordance with IEC 60840 available

Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Connection type Screw/Press	Connection type Screw/Press	Length (L)	Pollution level	Creepage distance min.	Diameter (A)
Um (kV)		mm ²	mm	mm		mm		mm	mm
72.5	FEV 72-P	...2500	34.5...84.0	...105	S/P	1500	IV	>2248	30/50
145	FEV 145-P	...2500	34.5...97.0	...105	S/P	1950	IV	>4495	30/50
170	FEV 170-P	...2500	34.5...108.00	...105	S/P	2150	III	>4250	30/50
245	FEV 245-P	...2500	56.0...82.0		S/P	2530	IV	>7600	30/40

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Dry type outdoor termination



Application:

This new generation of dry type termination is free of any liquid and gaseous insulation medium. Main components of the termination are the push-on silicone components with integrated stress cone for electrical field control and the liquid free epoxy resin insulator with silicone sheds.

- Free of insulation liquid, no filling procedure
- Less parts to be assembled therefore faster installation
- Prefabricated capacitive silicone stress control system
- Plug-in part comprising four components (stress cone made of silicone rubber, cable gland, connection bolt, spring loaded compression device)
- Easy to fit screw type conductor connector
- All metal work made of corrosion resistant aluminum alloy
- Type test certificate in accordance with IEC 60840 available

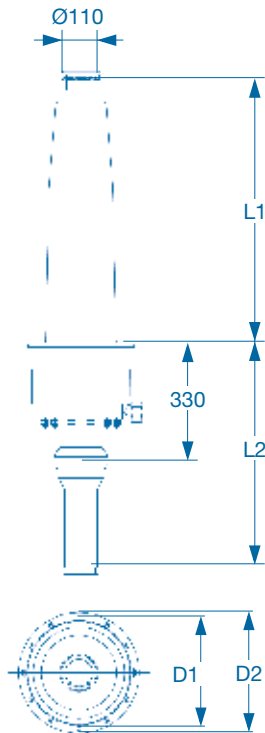
Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Diameter over sheath max.	Connection type Screw/Press	Length (L)	Pollution level	Creepage distance min.	Diameter (A)
Um (kV)		mm ²	mm	mm		mm		mm	mm
123	KFEV 123 size 6	...2500	40.7...100.0	...135	S	1754	e (IV)	>4495	60
145	KFEV 145 size 4	...1200	34.5...76.0	...99	S	1750	e (IV)	>4495	50

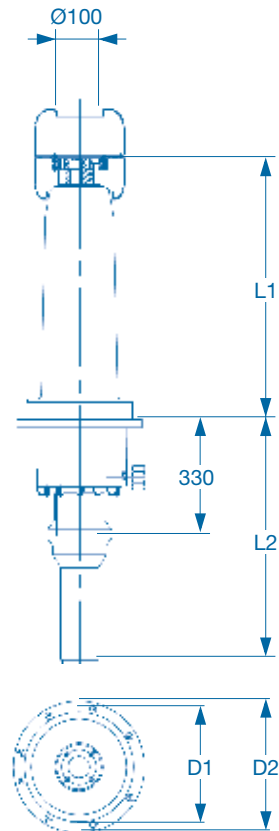
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Fluid filled GIS / transformer termination

SEV 72 kV



TEV 145/170 kV



Application:

The termination is designed for direct installation in SF6 gas insulated switchgear (GIS) or in the oil filled cables box of the transformer. Major components of the termination are the pressure tight epoxy resin insulator with embedded electrode, metal fixing ring, metal cable gland and prefabricated stress cone for electrical field control.

- Integrated prefabricated stress control system with silicon rubber
- Pressure tight epoxy resin insulator is cast in one piece with integrated insulation ring at the bottom allowing to separate the cable screen from earth
- Cable gland made of corrosion resistant aluminum alloy
- Possible installation position vertical up to 45° then up to 90° oil expansion vessel required
- Type test according to IEC 60840 is available

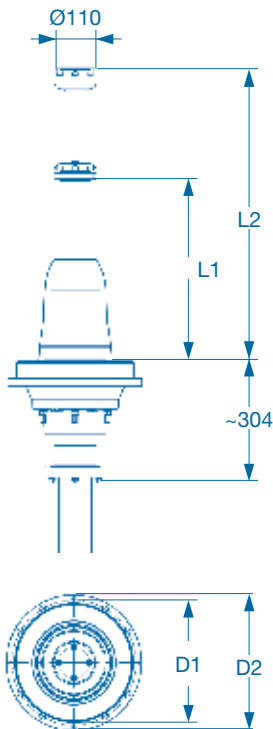
Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Diameter over sheath max.	Connection type Screw/Press	Creepage distance	L1	L2	D1	D2
Um (kV)		mm ²	mm	mm				mm	mm	mm
72.5	SEV 72 TEV 72	...1000	34.4...74.0	...85	S/P	500	583±1	~ 630	270±0.5	300
145	SEV 145 TEV 145	...2500	41.6...108.00	...105	S/P	650	757±1	~ 630	320±0.5	350
170	SEV 170 TEV 170	...2500	41.6...108.00	...105	S/P	750	757±1	~ 630	320±0.5	350

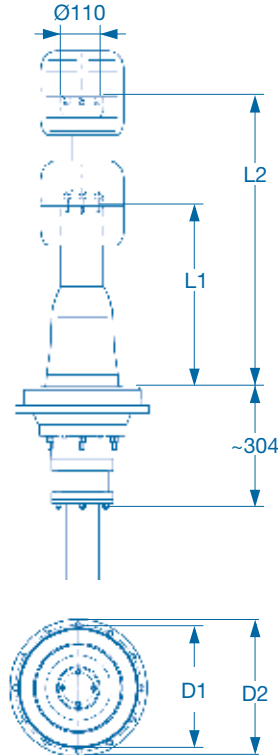
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Dry type plug-in GIS / transformer termination

GIS KSEV



Transformer KTEV



Application:

All versions of dry-type termination are designed for installation in SF6 gas insulated switchgear (GIS) or for installation in the oil filled cable box of the transformer. The complete termination consists of epoxy resin insulator with embedded electrode, fixing ring which is fitting to the cable, comprising metal cable gland, compression device and premoulded plug-in stress cone for electrical field control.

- Plug-in part comprising four components (stress cone made of silicone rubber, cable gland, connection bolt, spring loaded compression device)
- Insulator according with IEC 62271-209 for GIS and DIN EN 50299 for transformer termination
- Conductor connection bolt designed as mechanical screw type connector
- Type test certificate in accordance with IEC 60840 available
- Dead-end plug available (see page 16)

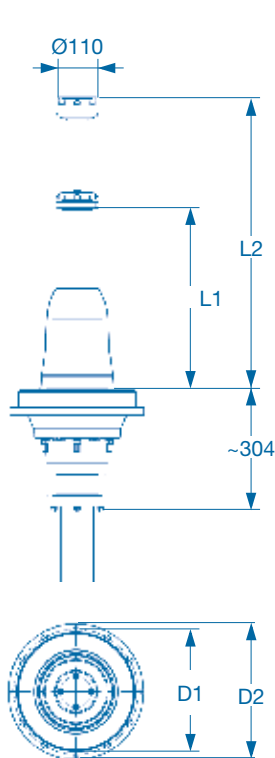
Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Diameter over sheath max.	Connection type Screw/Press	L1	L2	D1	D2
Um (kV)		mm ²	mm	mm		mm	mm	mm	mm
72.5	KSEV 72/KTEV 72 size 2	...1000	35.5...76.0	...99	S	310±0.5	583±0.5	270±0.5	300
123...145	KSEV 145/KTEV 145 size 4	...1200	35.5...76.0	...99	S	470±0.5	757±0.5	320±0.5	350

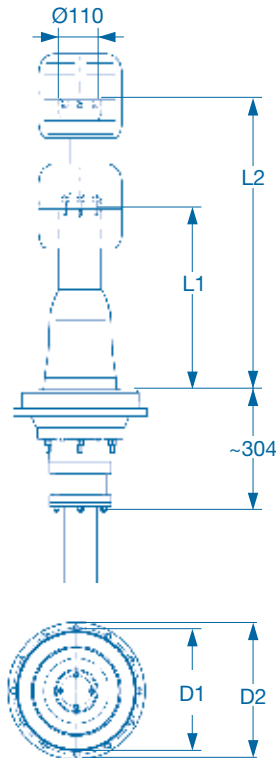
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Dry type plug-in GIS / transformer termination

GIS KSEV



Transformer KTEV



Application:

The new version of dry-type plug-in termination is designed for the voltage level up to 300 kV and to the biggest conductor cross-section up to 2500 mm². With this large application range the termination still fulfils the dimensions according to the IEC standards. The termination is also applicable in the 145 kV voltage level with conductor cross section above 1200 mm².

- Very large application range for conductor cross sections up to 2500 mm²
- Insulator according with IEC 62271-209 for GIS and DIN EN 50299 for transformer termination
- Conductor connection bolt designed as mechanical screw type connector
- Type test certificate in accordance with IEC 60840/62067 available
- Dead-end plug available (see page 16)

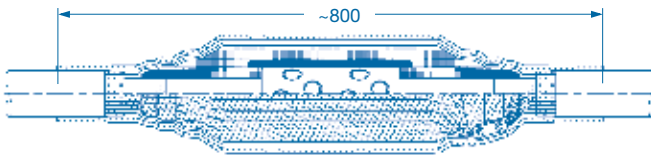
Technische details:

Operation voltage	Type	Conductor Cu/Al max.	Diameter over prepared cable core min.-max.	Diameter over sheath max.	Connection type Screw/Press	L1	L2	D1	D2
Um (kV)		mm ²	mm	mm		mm	mm	mm	mm
123...170	KSEV/KTEV size 6	...2500	47.0...100.0	...135	S/P	470±0.5	757±0.5	320±0.5 L1, 320±0.5 L2	350 L1, 350 L2
245	KSEV/KTEV size 6	...2500	47.0...100.0	...135	S/P	620±2	960±2	475±0.5 L1, 582±0.5 L2	500 L1, 620 L2
245...300	KSEV/KTEV size 9	...3200	81.0...140.0	...185	S/P	620±2	960±2	475±0.5 L1, 582±0.5 L2	500 L1, 620 L2

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Straight three piece joint

Application:



This premoulded straight joint in three piece design with compact dimensions is made of silicone rubber. Main components of the standard straight joint are conductor connection sleeve, cable adapters, main joint sleeve and outer protective covering.

- Integrated premoulded stress control system with silicone rubber
- Three piece design with compact dimensions
- Screw type conductor connector
- Minimum tool requirement
- Version with screen separation available
- Type test certificate in accordance with IEC 60840/62067 available
- Various possibilities to connect different cable cross sections

Technische details:

Operation voltage	Type	Conductor Cu max.	Conductor Al max.	Diameter over prepared cable core min.-max.	Diameter approx.	Connection type Screw/Press
Um (kV)		mm ²	mm ²	mm	mm	
72.5	SM 72 size 36	...630	...630	40.0...54.0	150	S
72.5	SM 72 size 46	...1000	...1000	51.5...65.0	150	S
72.5	SM 72 size 56	...1600	...1600	63.0...78.0	150	S
145	SM 145 size 3	...1200* ¹	...1200* ¹	34.5...75.0	180	S/P
145	SM 145 size 4	...2500* ¹	...1200* ¹	72.0...84.0	205	S/P
145	SM 145 size 4x	...2500* ¹	...2500* ¹	72.0...84.0	205	S/P
145	SM 145 size 6	...2500* ¹	...1200* ¹	81.5...108.0	240	S/P
145	SM 145 size 6x	...2500* ¹	...2500* ¹	81.5...108.0	240	S/P
170	SM 170 size 5	...2500* ¹	...1200* ¹	50.0...84.0	235	S/P
170	SM 170 size 5x	...2500* ¹	...2500* ¹	50.0...84.0	235	S/P
170	SM 170 size 6	...2500* ¹	...1200* ¹	56.0...108.0	240	S/P
170	SM 170 size 6x	...2500* ¹	...2500* ¹	56.0...108.0	240	S/P
245	SM 245 size 5	...2500* ¹	...1200* ¹	50.0...84.0	235	S/P
245	SM 245 size 5x	...2500* ¹	...2500* ¹	50.0...84.0	235	S/P
245	SM 245 size 7	...2500* ¹	...1200* ¹	81.5...108.0	280	S/P
245	SM 245 size 7x	...2500* ¹	...2500* ¹	81.5...108.0	280	S/P

*¹ >1200 up to 2500 mm² special crimping tool is required

Straight three piece joint



Application:

This premoulded straight joint in one piece design with compact dimensions is made of silicone rubber. Main components of the standard straight joint are conductor connection sleeve, main joint sleeve and outer protective covering.

- Very short and compact design
- Easy push on installation
- Minimum tools end installation space needed
- Easy conductor connection screw or compression type possible
- Available as cross bonding or straight through application
- Big coverage of application range from 40 to 120 mm Ø
- Advanced production technology
- Optimized cover housing in size and material
- Routine tested piece by piece
- Insulating material LSR silicone rubber of the highest quality
- Type test certificate in accordance with IEC 60840/62067 available

Technische details:

Operation voltage	Type	Conductor Cu max.	Conductor Al max.	Diameter over prepared cable core min.-max.	Diameter approx.	Connection type Screw/Press
Um (kV)		mm ²	mm ²	mm	mm	
72.5	SME 72 size 36	...630	...630	40.0...54.0	150	S
72.5	SME 72 size 46	...1000	...1000	51.5...65.0	150	S
145	SME 145 size 4	...1600	...1600	41.6...84.0	170	S
145	SME 145 size 4x	...1600* ¹	...1600* ¹	41.6...84.0	170	P
170	SME 170 size 6	...2500	...2500	56.0...120.0	240	S
170	SME 170 size 6x	...2500* ¹	...2500* ¹	56.0...120.0	240	P
245	SME 245 size 6	...2500	...2500	56.0...120.0	240	S
245	SME 245 size 6x	...2500* ¹	...2500* ¹	56.0...120.0	240	P

*¹ >1200 up to 2500 mm² special crimping tool is required

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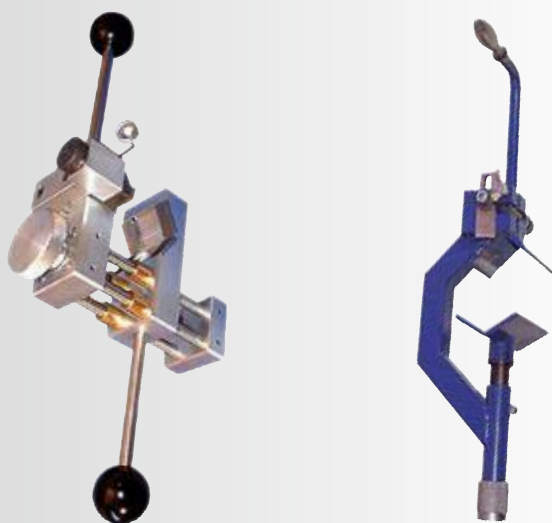
Accessories

Link box for special bonded or earthed cable systems available for indoor and outdoor gantry mounted, outdoor within concrete pit in horizontal position. Link box has three zinc oxide sheath voltage limiters. All metal work in stainless steel.

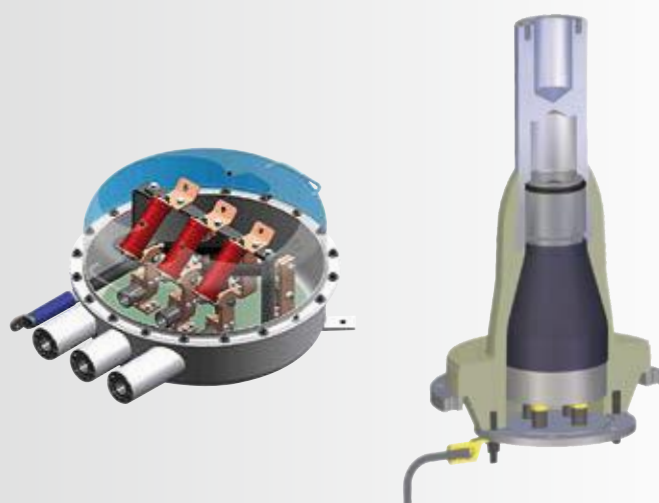
All joints are available with screen separation for special bonded or earthed cable systems.

Tools for cable preparation are the sheath stripper and the cable peeling tool to remove outer conductive layer.

Training course and supervision to guarantee perfect installation in our assembly department or on site are possible.



Cable peeling tool and sheath stripper



Link box with voltage limiters and dead-end plug for KSEV/KTEV

Cable data

Requested information

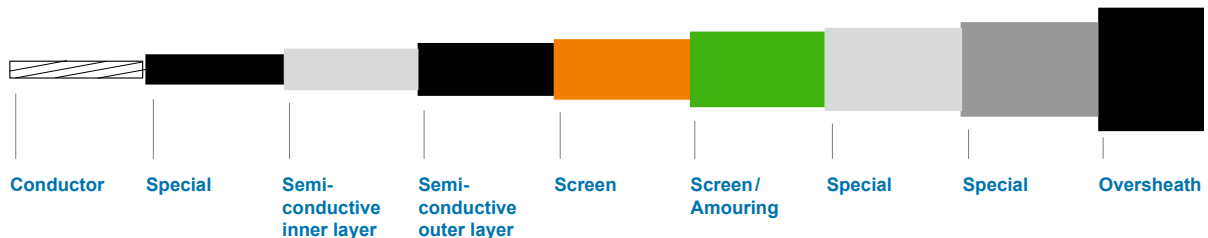
To supply the optimal accessories solution detailed cable data are required. Please send this completed cable data form with your inquiry.

Customer Name: _____ Remarks: _____

Project Name: _____

Offer No.: _____ / _____

Date and Name: _____



	Conductor	Special	Semi-conductive inner layer	Semi-conductive outer layer	Screen	Screen/Amouring	Special	Special	Oversheath
Diameter (mm)	_____	_____	_____	_____	_____	_____	_____	_____	_____
Diameter (mm) min.	_____	_____	_____	_____	_____	_____	_____	_____	_____
Diameter (mm) max.	_____	_____	_____	_____	_____	_____	_____	_____	_____
Cross section (mm ²)	_____	_____	_____	_____	_____	_____	_____	_____	_____
Thickness (mm)	_____	_____	_____	_____	_____	_____	_____	_____	_____

- | | | | | | | |
|--|------------------------------|----------------------------------|---|---|---|---|
| ☐ Al | ☐ XLPE | ☐ Cu wires | ☐ Cu wires | ☐ Cu wires | ☐ Cu wires | ☐ PE |
| ☐ Cu | ☐ EPR | ☐ Cu tapes | ☐ Cu tapes | ☐ Cu tapes | ☐ Cu tapes | ☐ PVC |
| ☐ Solid round | ☐ Rubber | ☐ Lead | ☐ Lead | ☐ Lead | ☐ Lead | |
| ☐ Solid sector | ☐ Paper | ☐ Al screen | ☐ Al screen | ☐ Al screen | ☐ Al screen | |
| ☐ Stranded Al wire | | ☐ Al wire | ☐ Al wire | ☐ Al wire | ☐ Al wire | |
| ☐ Circular | | ☐ Al tape | ☐ Al tape | ☐ Al tape | ☐ Al tape | |
| ☐ Milliken | | ☐ Steel wire | ☐ Steel wire | ☐ Steel wire | ☐ Steel wire | |
| ☐ Keystone | | ☐ Steel tape | ☐ Steel tape | ☐ Steel tape | ☐ Steel tape | |
| | | ☐ Corrug. Al | ☐ Corrug. Al | ☐ Corrug. Al | ☐ Corrug. Al | |
| | | ☐ Corrug. Cu | ☐ Corrug. Cu | ☐ Corrug. Cu | ☐ Corrug. Cu | |
| | | | ☐ Filler | ☐ Filler | ☐ Filler | |
| | | | ☐ Laminated dffoil Al | ☐ Laminated dffoil Al | ☐ Laminated dffoil Al | ☐ Laminated dffoil Al |
| | | | ☐ Laminated dffoil Cu | ☐ Laminated dffoil Cu | ☐ Laminated dffoil Cu | ☐ Laminated dffoil Cu |

Network Data:

Operation voltage _____ kV
 Basic impulse level _____ kV
 Short circuit current (conductor) _____ kA
 Short circuit current (shield) _____ kA

System grounding ☐ solid ☐ isolated ☐ resonant



Certificates

nkt cables is certified according to all main international standards and at all locations. High-voltage cable accessories from **nkt cables** are produced in Cologne, Germany. All certificates are available on our websites.

Certificate	
Standard	ISO 9001:2008
Certificate Registr. No.	09 100 3032
Certificate Holder:	nkt cables GmbH Düsseldorfer Str. 400 D - 51061 Köln
	including the locations according to annex
Scope:	Development, production and sales of power cable systems and fibre optic cable systems, metal products
	Proof has been furnished by means of an audit that the requirements of ISO 9001:2008 are met.
	The due date for all future audits is 18.11.
Validity:	The certificate is valid from 01.01.2014 until 31.12.2016.
	First certification 1993
	02.12.2013
	<i>Job. Rf.</i> TUV Rheinland Cert GmbH Am Grauen Stein - 51105 Köln
	DAKKS Deutscher Akreditationsrat für die DIN EN ISO 9001

Certificate	
Standard	ISO 14001:2004
Certificate Registr. No.	01 104 8221
Certificate Holder:	nkt cables GmbH Düsseldorfer Str. 400 D - 51061 Köln
	including the locations according to annex
Scope:	Development, production and sales of power cable systems and fibre optic cable systems, metal products
	Proof has been furnished by means of an audit that the requirements of ISO 14001:2004 are met.
	The due date for all future audits is 18.11.
Validity:	The certificate is valid from 01.01.2014 until 31.12.2016.
	First certification 1998
	02.12.2013
	<i>Job. Rf.</i> TUV Rheinland Cert GmbH Am Grauen Stein - 51105 Köln
	DAKKS Deutscher Akreditationsrat für die DIN EN ISO 14001

Zertifikat

Prüfungsnorm **ISO 50001:2011**
Zertifikat-Registrier-Nr. 01 407 8221

Unternehmen: **nkt cables GmbH**
Düsseldorfer Str. 400
D - 51061 Köln
mit den Standorten gemäß Anlage

Geltungsbereich: Entwicklung, Produktion und Vertrieb von Energiekabel- und Lichtwellenleitersystemen, Metallprodukten

Durch ein Audit wurde der Nachweis erbracht, dass die Forderungen der ISO 50001:2011 erfüllt sind.
Das Fälligkeitsdatum für Folgeaudits ist der 14.11.

Gültigkeit: Dieses Zertifikat ist gültig vom 29.11.2013 bis zum 28.11.2016.

02.12.2013

Jo. B.
TÜV Rheinland Cert GmbH
Am Grauen Stein - 51105 Köln



Zertifikat

Prüfungsnorm **SCC*: 2006**
Zertifikat-Registrier-Nr. 01 013 092930

TÜV Rheinland Cert GmbH bescheinigt:

Zertifikatsinhaber: **nkt cables GmbH**
Chempark Leverkusen
Düsseldorfer Straße 400
D - 51061 Köln



Geltungsbereich: Vertrieb, Projektentwicklung und Montage von Hochspannungs- und Seekabelanlagen

Durch ein Audit, Bericht Nr. 092930, wurde der Nachweis erbracht, dass die Forderungen des Regelwerks „Sicherheits Zertifikat Kontraktoren“ (SCC), Version 2006, an ein Arbeitsschutzmanagementsystem in Übereinstimmung mit dem Standard SCC* erfüllt sind.
Das Fälligkeitsdatum für Folgeaudits ist der 03. Dezember.

Gültigkeit: Dieses Zertifikat ist gültig vom 30.12.2009 bis zum 29.12.2012. Erstzertifizierung 2009

Köln, 04.01.2010

S. J.

TÜV Rheinland Cert GmbH
Am Grauen Stein - 51105 Köln



Certificate

Standard **BS OHSAS 18001:2007**
Certificate Registr. No. 01 213 092930

TÜV Rheinland Cert GmbH certifies:

Certificate Holder: **nkt cables GmbH**
Düsseldorfer Str. 400
D - 51061 Köln
including the location
Lichtlöcherberg 40
D - 06333 Hettstedt

Scope: Development, production, and sales of power cable systems and fibre optic cable systems, metal products

An audit was performed, Report No. 092930.
Proof has been furnished that the requirements according to BS OHSAS 18001:2007 are fulfilled.

The due date for all future audits is 21-11 (dd.mm).

Validity: The certificate is valid from 2012-12-12 until 2015-12-11.

2012-12-12

T. Rele
TÜV Rheinland Cert GmbH
Am Grauen Stein - 51105 Köln



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