

ПРОИЗВОДСТВО
ВЫСОКОВОЛЬТНЫХ ИЗОЛЯТОРОВ



PRODUCTION OF
HIGH - VOLTAGE INSULATORS

ИСТА INSTA



HIGH-VOLTAGE COMPOSITE INSULATORS

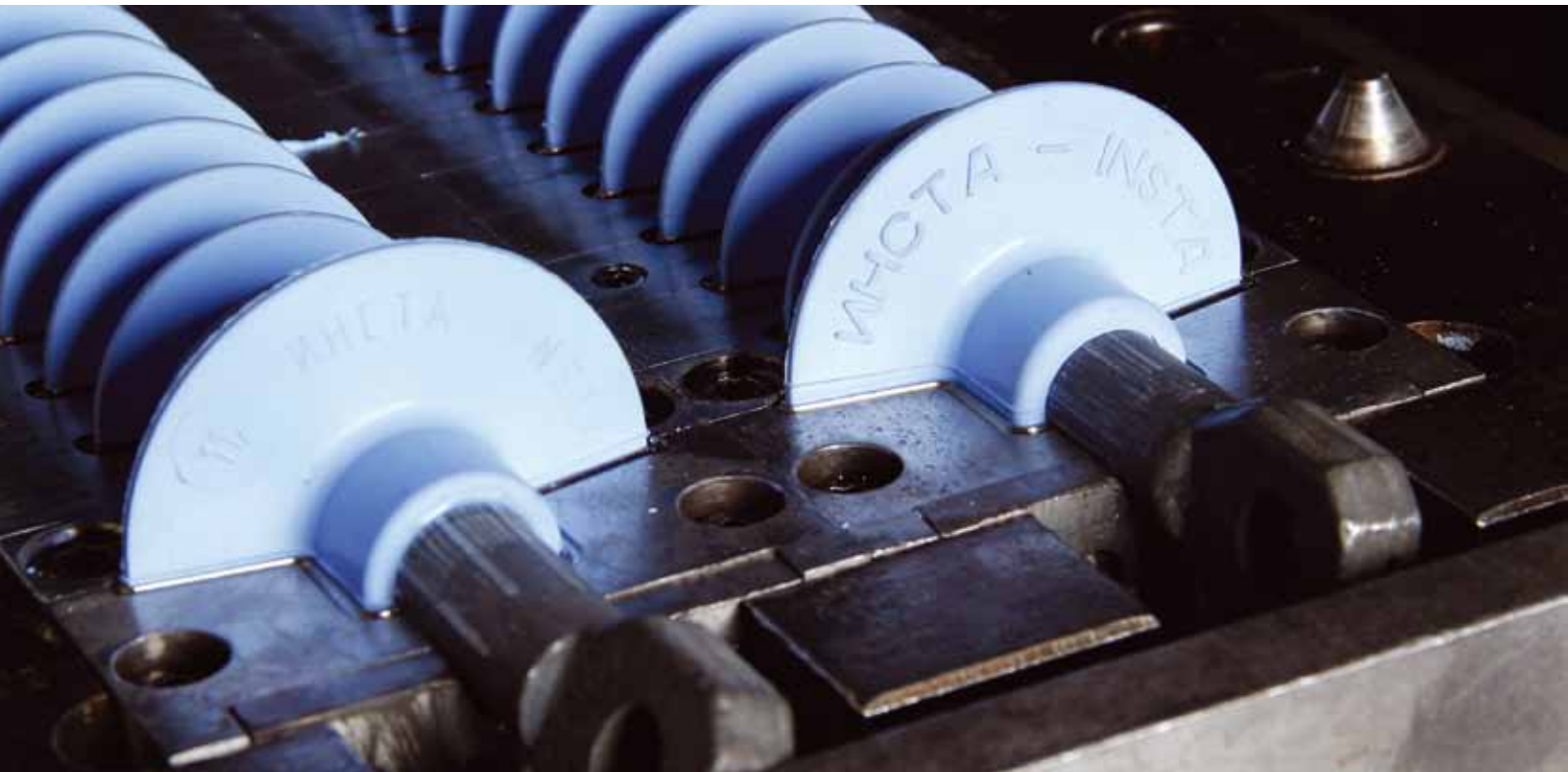
ФОРЭНЕРГО
ПРОИЗВОДСТВЕННАЯ КОМПАНИЯ



FORENERGO®
INDUSTRIAL GROUP

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ABOUT COMPANY «INSTA»

LLC "INSTA" – a company specializing in development and batch production of composite high-voltage insulators and the isolating structures for HV lines and substations.

The head office of LLC "INSTA", marketing services and one of warehouses are located in Moscow. The manufacture is situated in Lysva city, Perm Region. LLC "INSTA" began the production of modern composite insulators for HV lines and substations in 2005. Development of insulator's design and the production technology is carried out with active participation of the leading branch organization – LLC "Special Technological Construction Bureau for Insulators and Fittings".

Nowadays, LLC "INSTA" is one of the top three Russian producers of composite insulators. During 13 years of existence more than 2 million and 400 thousand composite insulators of different voltage levels and mechanical durability have been made and put into operation. Production of LLC "INSTA" is successfully applied on power facilities in Kazakhstan, Kyrgyzstan, Uzbekistan, Moldova, Belarus, Turkmenistan and Georgia.

Since 2009 LLC "INSTA" has been a part of a huge Russian industry group "FORENERGO".





PRODUCTION

We use only modern technological equipment for the production of composite insulators. There are six injection automatic presses located on the territory of industrial complex. They are capable to produce over 50 thousand composite insulators monthly. Also, six transfer molding presses produce over 20 thousand products per month.

The press molding shop of end-fittings is equipped with five radial press units with ultrasonic control of the quality. There are three stands of press molding of the flanges for post composite insulators. The modern technological line is used for production of compounded rubber.

The modern insulator design and high-automated processing equipment almost completely exclude influence of subjective factors on quality of the insulators, which have stable high level of quality output.





QUALITY

The high quality of products is a priority task of the enterprise. Since 2009 the high quality management system has been certified in accordance with ISO 9001:2015. We also have the certificates of Occupational Health and Safety Management System.

The test center LLC "INSTA-SIL" is a division of LLC "INSTA", and has the accreditation certificate of confirming their technical competence.



Certificate ISO 9001: 2015



Certificates of Occupational Health and Safety Management System

The test center of the plant is certified in the Federal Accreditation Service system on work according to area of accreditation, national and international standards.





BRACKET LINE INSULATORS



ADVANTAGES OF POLYMERIC BRACKET INSULATORS

Advantages of polymeric bracket insulators of LShP and ShPF types over porcelain and glass bracket insulators of ShF and ShS types:

- Moisture discharge characteristics in polluted conditions are improved due to high hydrophobic quality of insulators' surface;
- weight is reduced, hence shipping costs;
- significantly improved durability in case of mechanic (vandalic) impacts;
- breakage during shipment is reduced, LShP insulators have no breakages during shipping.

COMPOSITE BRACKET LINE INSULATORS OF LShP TYPE

OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 6-20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

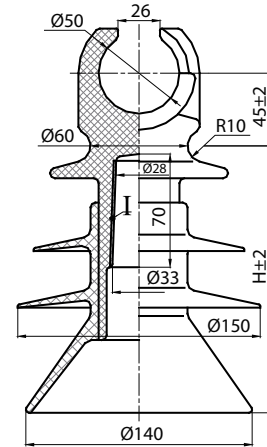
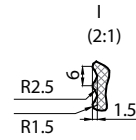
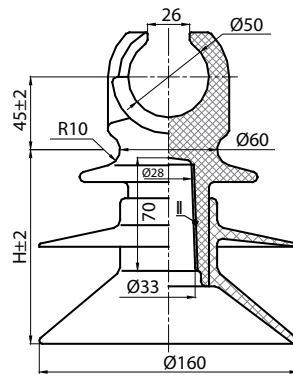
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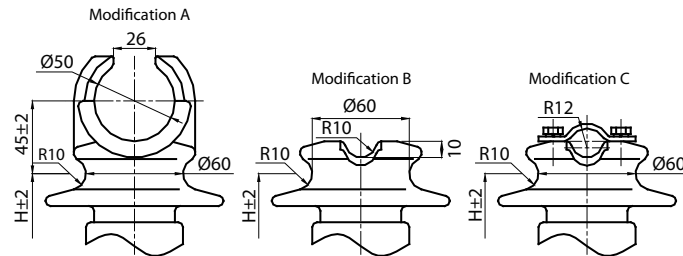
LShP 10



LShP 20



Insulator modifications variants, by wire connection types



KP-22

KP-22 cap is supplied as part of set

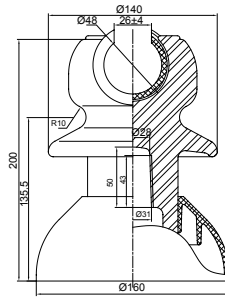
Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	Leakage current path distance, not less than	Insulating height H, not more	Withstanding voltage, kV			Disruptive voltage in insulating medium, kV, not less	Weight, kg, not exceeding
					full lightning impulse	50 Hz in dry condition	50 Hz under rain		
LShP 10	10	13	330	120	120	65	45	160	0,76
LShP 20	20		450	165	165	90	75		0,88

COMPOSITE BRACKET LINE INSULATORS OF ShPH TYPE

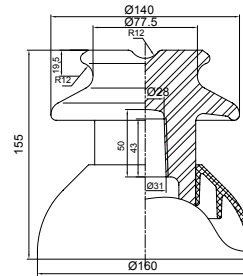
OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 6-20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

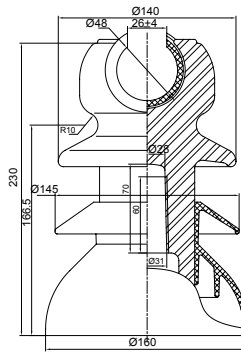
Conforms IEC, ANSI.



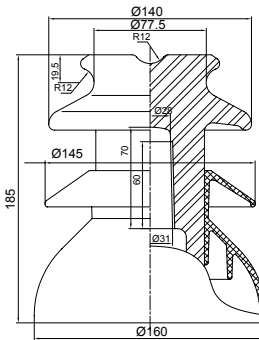
ShPF 10A



ShPF 10B



ShPF 20A



ShPF 20B



Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	Leakage current path distance, mm, not less than	Withstanding voltage, kV			Disruptive voltage in insulating medium, kV, not less	Weight, kg, not exceeding
				full lightning impulse	50 Hz in dry condition	50 Hz under rain		
ShPF 10	10	12,5	370	100	70	50	170	2,0
ShPF 20	20	13,0	470	140	90	70	190	2,4



SUPPORT LINE INSULATORS



IMPROVEMENT IN RELIABILITY OF ATTACHMENT FITTINGS AND SUPPORTS INSULATION OF HV LINES (VLZ) 6-35 kV DUE TO USAGE OF INSULATORS OF OLSK TYPE

Main advantage of OLSK type insulators over ShF and ShS type insulators are their “impenetrability” in cases of all types of electric impacts.

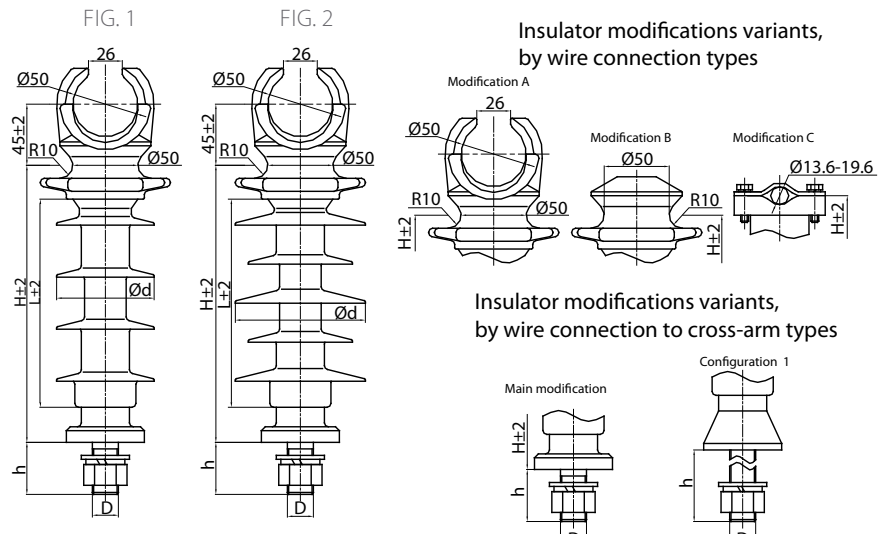
Besides, OLSK type insulators provide:

- high mechanical strength of attachment fitting and wires insulation on support due to elimination of the weakest elements from its structure: brackets and caps;
- reduction in mass and, consequently, cost of cross-arms;
- reduction of shipping costs for cross-arms;
- transportability of compact cross-arms without brackets;
- reduction of installation workload capacity;
- the best anti-corrosion protection of flanges with the use of thermodiffusion or hot dip galvanizing.

SUPPORT LINE INSULATORS OF OLSK TYPE FOR 6-10 kV VOLTAGE

OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 6-10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C.
Conforms IEC, ANSI.



Name	Fig.	H, mm	L, mm	d, mm	Ly, mm	h*, mm	D, mm
OLSK 6-10-A(B)-2	1	215	160	75	290	40	M20
OLSK 6-10-C-2		230	170	100	300		
OLSK 6-10-A(B)-4	2	215	160	100	410	45	M24
OLSK 6-10-C-4		230	170	115	420		
OLSK 12,5-10-A(B)-2	1	215	155	75	290	90, 135, 210	M24**
OLSK 12,5-10-C-2		230	165	100	300		
OLSK 12,5-10-A(B)-4	2	215	155	115	410	90, 135, 210	M24**
OLSK 12,5-10-C-4		230	165	115	420		
OLSK 6-10-A(B)-2-h Configuration 1	1	230	160	75	290	90, 135, 210	M20**
OLSK 6-10-C-2-h Configuration 1		245	170	100	300		
OLSK 6-10-A(B)-4-h Configuration 1	2	230	160	100	410	90, 135, 210	M24**
OLSK 6-10-C-4-h Configuration 1		245	170	115	420		
OLSK 12,5-10-A(B)-2-h Configuration 1	1	230	155	75	290	90, 135, 210	M24**
OLSK 12,5-10-C-2-h Configuration 1		245	165	100	300		
OLSK 12,5-10-A(B)-4-h Configuration 1	2	230	155	115	410	90, 135, 210	M24**
OLSK 12,5-10-C-4-h Configuration 1		245	165	115	420		

* - stud length is taken from size range or can be defined in order

** - It is possible, in accordance with Clients desire, to change studs threading for insulators of configuration 1

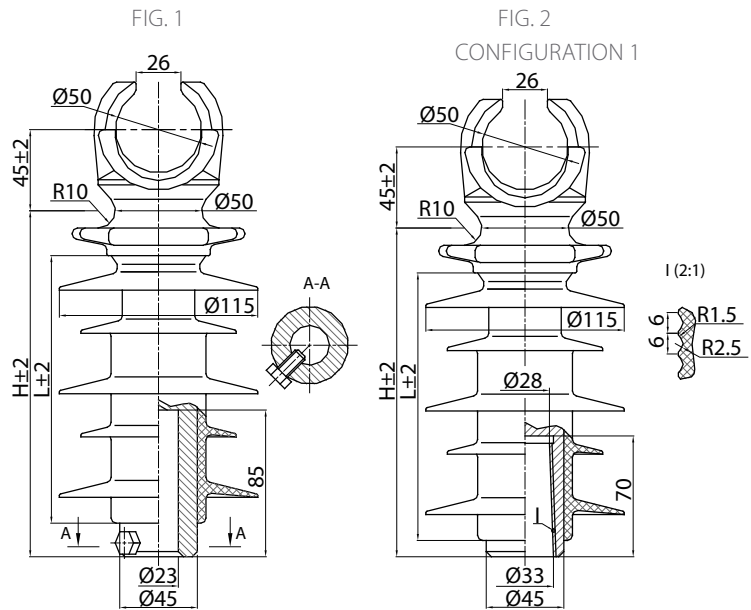
Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN,	Withstanding voltage, kV		
			full lightning impulse	50 Hz in dry condition	50 Hz under rain
OLSK 6-10-2	10	6,0	120	80	45
OLSK 6-10-4					
OLSK 12,5-10-2		12,5			
OLSK 12,5-10-4					

SUPPORT LINE INSULATORS OF OLSK TYPE FOR 6-10 kV VOLTAGE

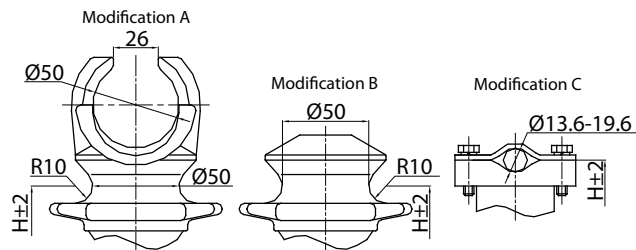
OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 6-10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C.

Conforms IEC, ANSI.



Insulator modifications variants, by wire connection types



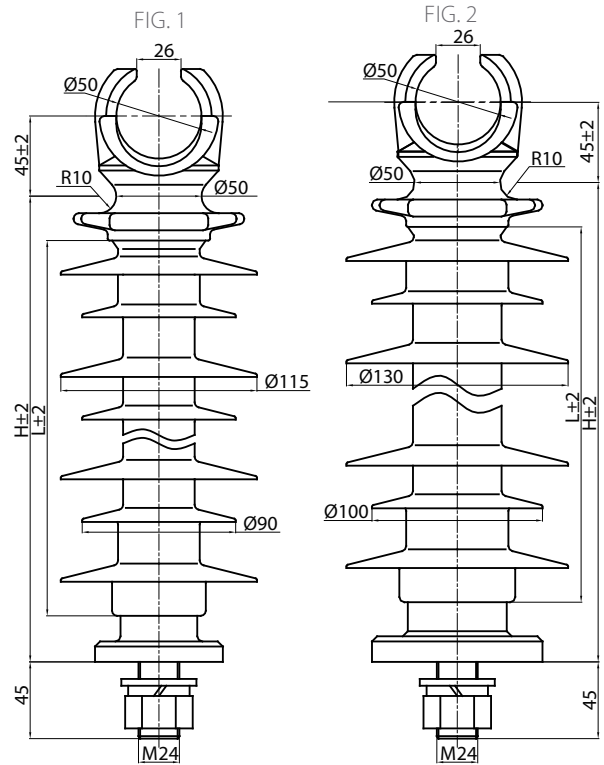
Insulator designation	Fig.	H, mm	L, mm	Ly, mm
OLSK 12,5-10-A(B)P-4	1	200	155	390
OLSK 12,5-10-CP-4		220	165	400
OLSK 12,5-10-A(B)P-4 Configuration 1*	2	190	155	390
OLSK 12,5-10-CP-4 Configuration 1*		210	165	400

* - supplied with KP-22 cap in set

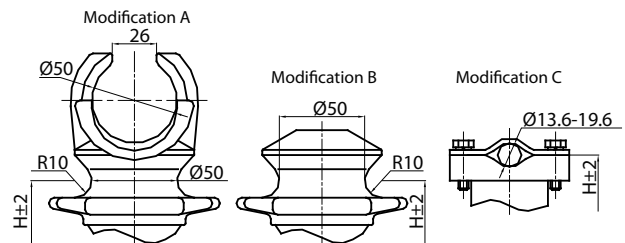
SUPPORT LINE INSULATOR OF OLSK TYPE FOR 20 kV VOLTAGE

OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C. Conforms IEC, ANSI.



Insulator modifications variants, by wire connection types

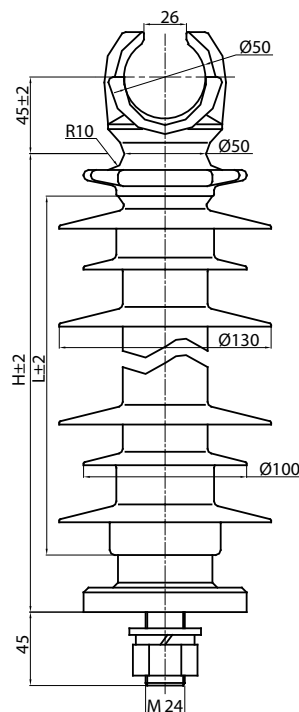


Name	Figure	Rated voltage, kV	Standardized destructive force at bending, kN	Standardized mechanical destructive force at stretching, kN	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV		
								full lightning impulse	50 Hz in dry condition	50 Hz under rain
OLSK 10-20-A(B)-4	1	20	10,0	8,0	330	280	770	150	90	60
OLSK 10-20-C-4					350	290	780			
OLSK 16-20-A(B)-4	2		16,0	12,0	340	280	780			
OLSK 16-20-C-4					360	290	790			

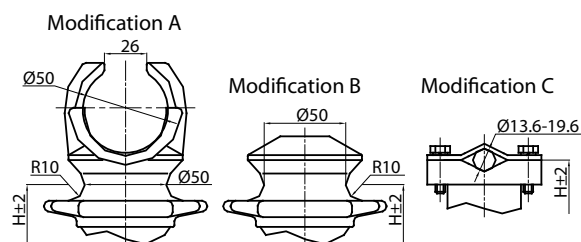
SUPPORT LINE INSULATORS OF OLSK TYPE FOR 35 kV VOLTAGE

OBJECTIVE:

Intended to fixation and insulation of uninsulated wire and MV covered conductor overhead cable at overhead power lines, switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



Insulator modifications variants, by wire connection types



Name	Rated voltage, kV	Standardized destructive force at bending, kN	Standardized mechanical destructive force at stretching, kN	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
							full lightning impulse	50 Hz in dry condition	50 Hz under rain
OLSK 12,5-35-A(B)-2	35	12,5	10,0	400	340	960	210	165	120
OLSK 12,5-35-B-2				420	350	970			
OLSK 12,5-35-A(B)-4				465	425	1150	240	180	140
OLSK 12,5-35-C-4				485	435	1160			



PREFABRICATED INSULATING CROSS-ARMS



ADVANTAGES OF USAGE OF COMPOSITE INSULATING CROSS-ARMS

Advantages of using of insulating cross-arms during construction of HV lines for 35-110 kV:

- HV line construction costs reduction due to stretching of horizontal spans: reduction in number of intermediate supports with simultaneous increasing of wires connection height;
- reduction of transverse dimensions of HV line: reduction of HV line restricted area, of width of forest corridor for HV line;
- possibility of erection of compact HV lines;
- reduction of operational costs in comparison with operational costs for glass insulators, especially in regions with high level of pollution and high vandals' activity;
- upgrade of HV line reliability due to increasing in levels of insulation of insulating cross-arms elements during impacts of lightning overvoltages in conditions of pollution and dampness.

**COMPOSITE CONSOLE
INSULATING CROSS-ARMS,
ROTATING WITH RODS FOR
VOLTAGE OF 35 AND 110 kV**

OBJECTIVE:

Intended for fixation and insulation of wires on steel (mesh and multi-faceted) and reinforced concrete supports of HV lines with voltage of 35 and 110 kV, frequency up to 100 Hz in condition of air temperature from -60 to +50 °C.
Conforms IEC, ANSI.

CROSS-ARMS DESIGNATIONS:

Cross-arms designations:

- Console insulating cross-arm with rod, rotating TKP 35-G70T3R70C45-4;
- Console insulating cross-arm with rod, rotating with increased construction length TKPY 35-G70T3R70C45-4;
- Console insulating cross-arm with rod, rotating TKP 110-G70T3R70C45-4;
- Console insulating cross-arm with rod, rotating with increased construction length TKPY 110-G70T3R70C45-4.

where letters and figures mean:

First letters group - structure type:

- TKP - Console insulating cross-arm with rod, rotating;
- TKPY - Console insulating cross-arm with rod, rotating with increased distance "wire - support".

TKP 110-G70T3R70C45

35, 110 - Voltage class, kV;

Group of letters and figures for designation of operative direction and value of standardized destructive forces (kN), applied to the line part of cross-arm:

GXX – vertical bending force in cross-arm plane;

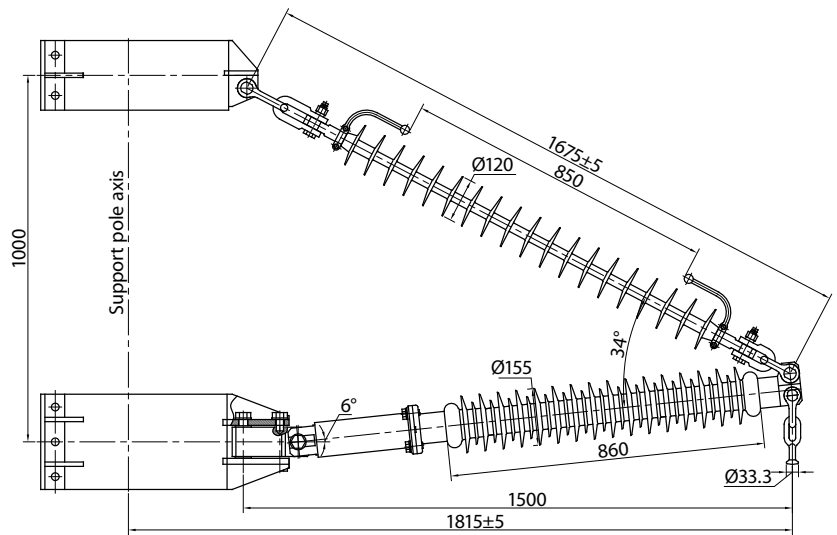
TXX – horizontal bending force in plane, perpendicular to cross-arm plane (standardized installation force);

RXX – horizontal stretching force in cross-arm plane;

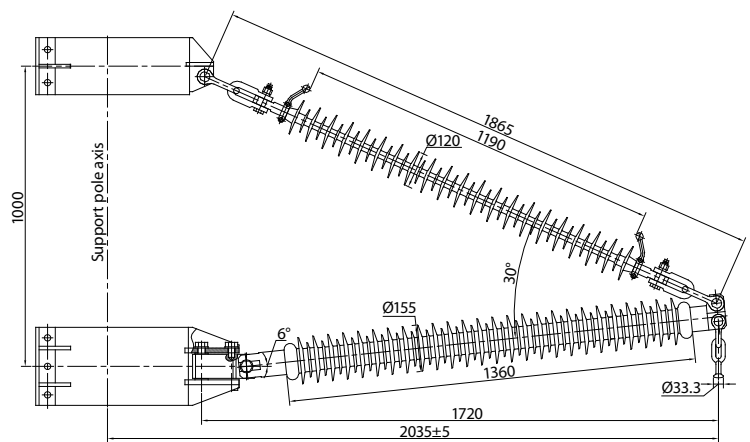
CXX – horizontal compressing force in cross-arm plane;

R, F, M – arrangement of cross-arm attachment fixations for its compatibility with tower body (F – metallic meshed; R – reinforced concrete; M – metallic multi-faceted);

For cross-arms, intended for installation on reinforced concrete poles at the end tower body diameter at the point of cross-arm console fixation is stated.



TKP 35-G70T3R70C45



TKP 110-G70T3R70C45

Name	Rated voltage, kV	Vertical bending force in cross-arm plane G, kN	Horizontal bending force in plane, perpendicular to cross-arm plane T (force, maintained by assembly bracket), kN	Horizontal stretching force in cross-arm plane R, kN	Horizontal compressing force in cross-arm plane C, kN	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
							full lightning impulse	alternating temporary in dry condition	alternating temporary under rain
TKP 35-G70T3R70C45-4	35	70	3	70	45	2600	400	220	200
TKPY 35-G70T3R70C45-4									
TKP 110-G70T3R70C45-4	110	70	3	70	45	3990	600	350	300
TKPY 110-G70T3R70C45-4									

COMPOSITE CONSOLE INSULATING CROSS-ARMS, FIXED FOR VOLTAGE OF 110 kV

OBJECTIVE:

Intended for fixation and insulation of wires on steel (mesh and multi-faceted) and reinforced concrete supports of HV lines with voltage of 110 kV, frequency up to 100 Hz in condition of air temperature from -60 to +50 °C.

Conforms IEC, ANSI.

CROSS-ARMS DESIGNATIONS:

- console insulating cross-arm TK 110-G12,5T12,5R50C50-4;
- console insulating cross-arm with rod TKF 110-G90T12,5R60C60-4;
- console insulating cross-arm with rod of increased construction length TKFY 110-G70T12,5R60C60-4.

where letters and figures mean:

First letters group - structure type:

TK - Polymeric console insulating cross-arm;

TKF - Polymeric console insulating cross-arm with rod, fixed;

TKFY - Polymeric console insulating cross-arm with rod with increased distance "wire - support".

110 - Voltage class, kV

Group of letters and figures for designation of operative direction and value of standardized destructive forces (kN), applied to the line part of cross-arm:

GXX - vertical bending force in cross-arm plane;

TXX - horizontal bending force in plane, perpendicular to cross-arm plane;

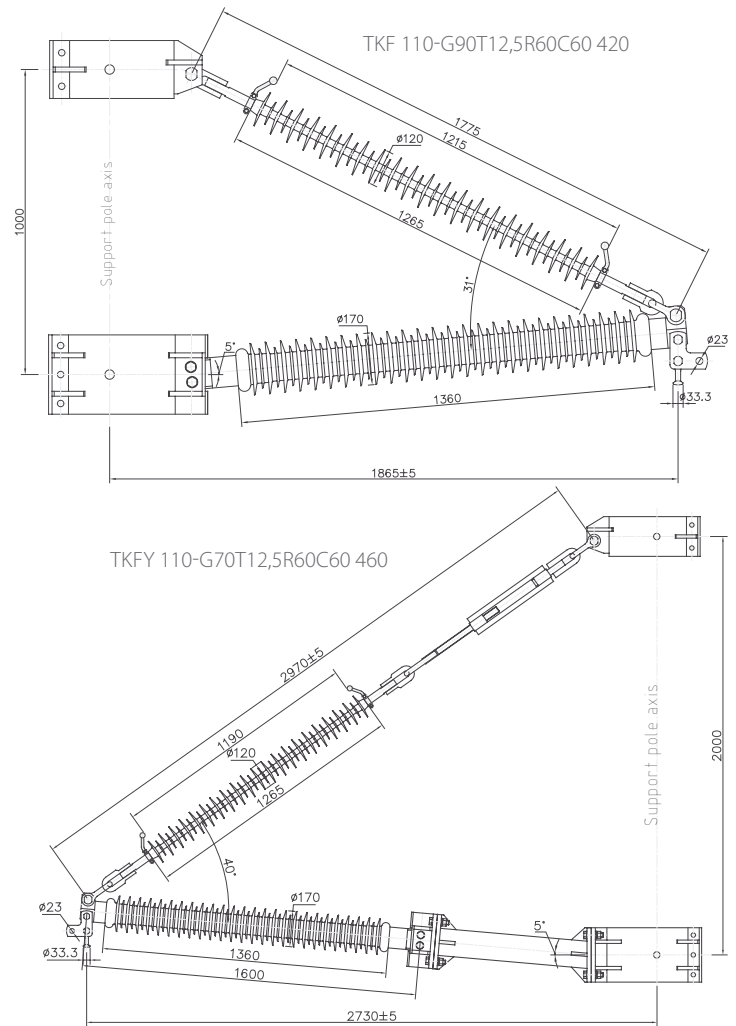
RXX - horizontal stretching force in cross-arm plane;

CXX - horizontal compressing force in cross-arm plane;

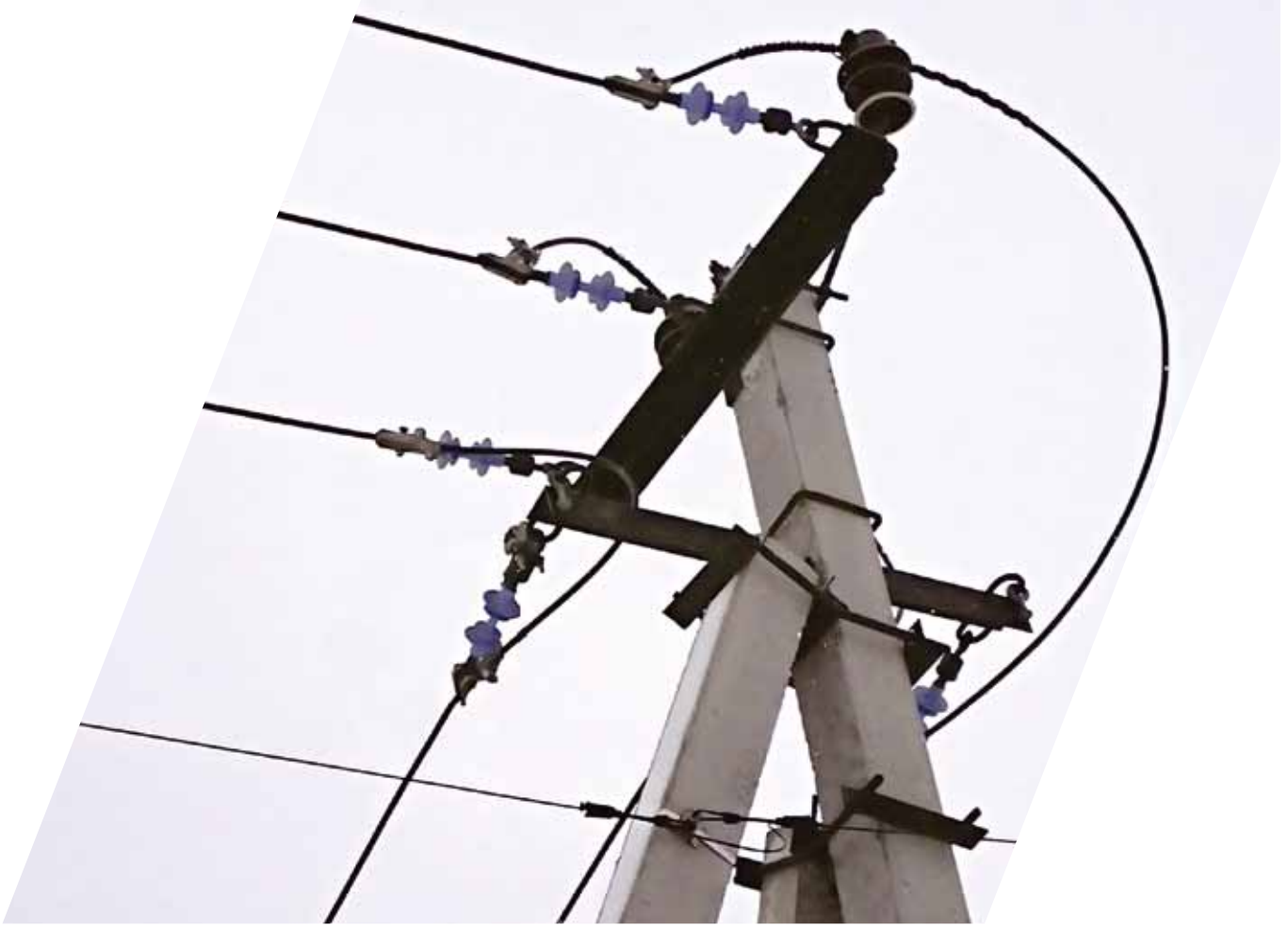
F, R, M - arrangement of cross-arm attachment fixations for its compatibility with tower body (F - metallic meshed; R - reinforced concrete; M - metallic multi-faceted);

For cross-arms, intended for installation on reinforced concrete poles at the end tower body diameter at the point of cross-arm console fixation is stated.

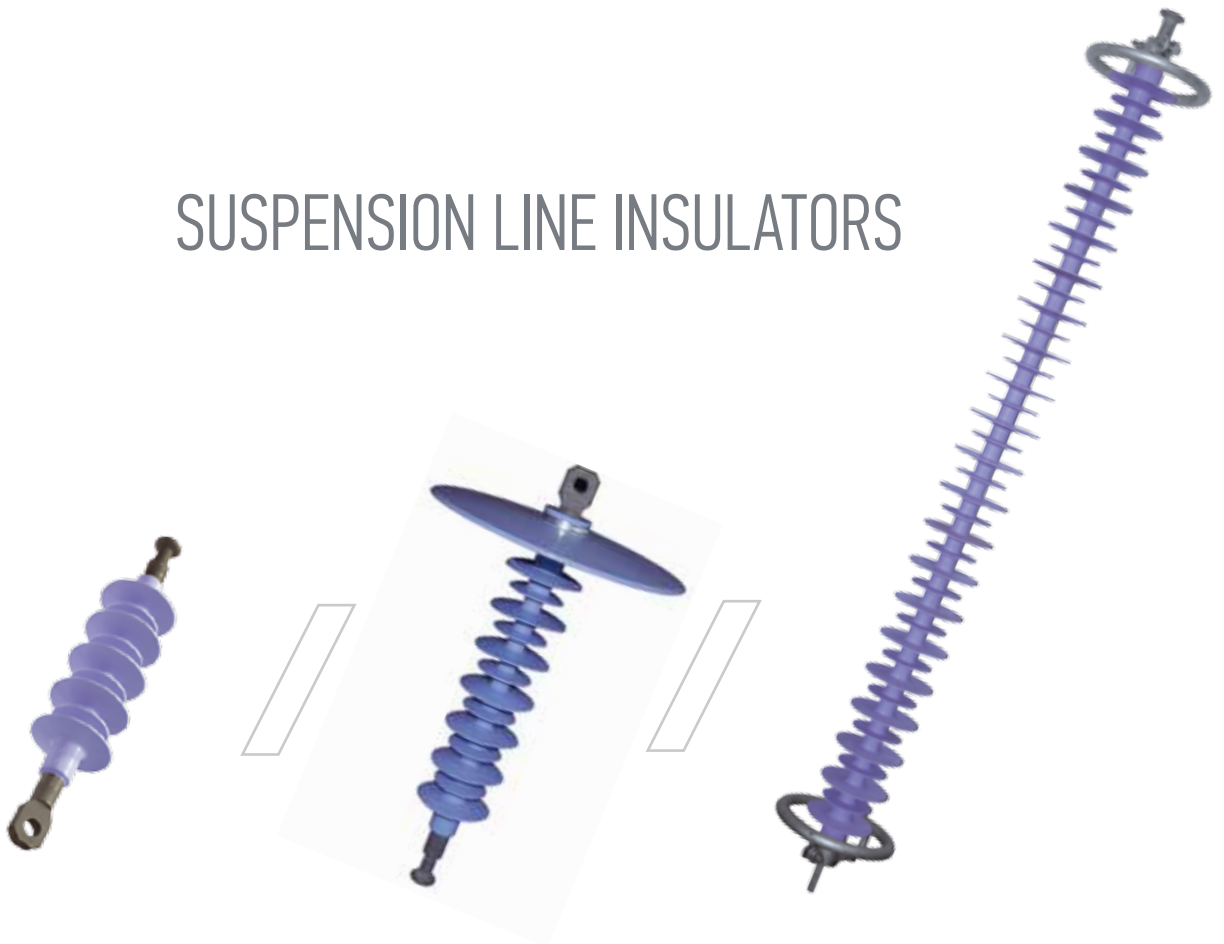
In consent with Client, mechanical and electric strength of cross-arms may be changed.



Name	Rated voltage, kV	Vertical bending force in cross-arm plane G, kN	Horizontal bending force in plane, perpendicular to cross-arm plane T, kN	Horizontal stretching force in cross-arm plane R, kN	Horizontal compressing force in cross-arm plane C, kN	Leakage current path distance, mm, not less than	Withstanding voltage, kV,		
							full lightning impulse	alternating temporary in dry condition	alternating temporary under rain
TKF 110-G90T12,5R60C60-4		90							
TKFY 110-G70T12,5R60C60-4	110	70	12,5	60	60	3990	600	340	240
TK 110-G12,5T12,5R50C50-4		12,5		50	50				

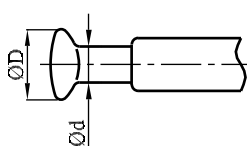
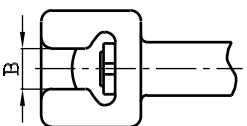
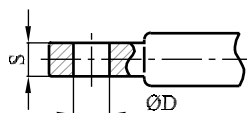
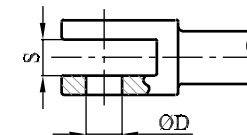
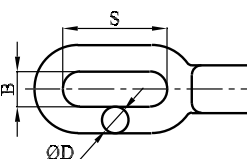


SUSPENSION LINE INSULATORS



THE END-FITTING'S TYPES OF LINEAR SUSPENDED ROD COMPOSITE INSULATORS AND THEIR MOUNTING SIZES DEPENDING ON THE RATED MECHANICAL DESTROYING FORCE AT STRETCHING

The end-fittings's connecting sizes correspond to requirements of interstate and international standards such as IEC 60120 and IEC 61466-1.

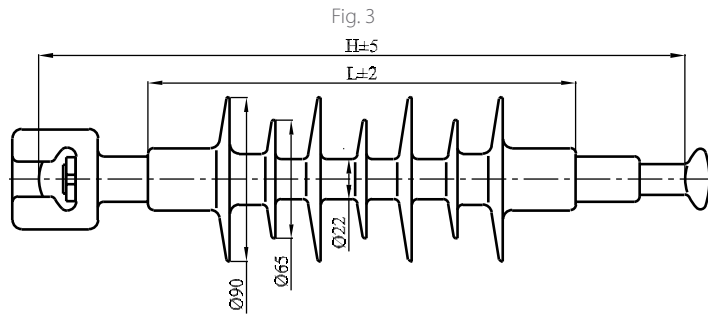
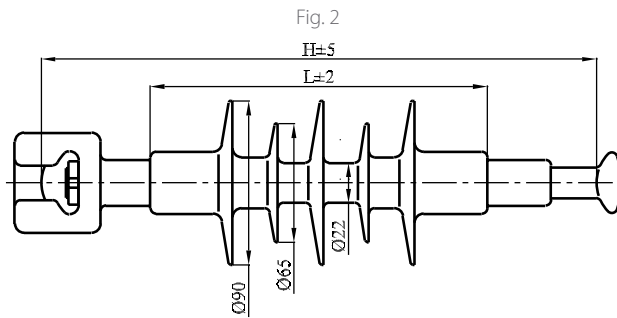
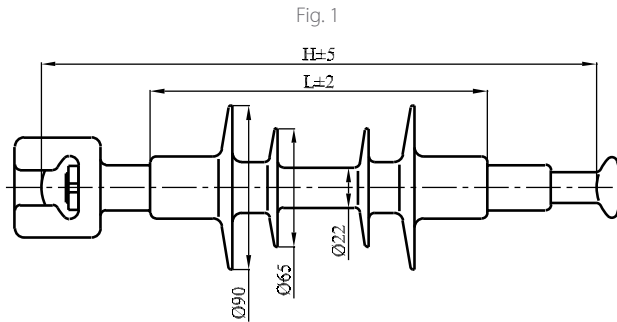
form of end-fitting	type	70 kN	120 kN	160 kN	210 kN
	B – Ball IEC 60120	D=33,3 d=17	D=33,3 d=17	D=41 d=21	D=41 d=21
		Size 16		Size 20	
	S – Soket IEC 60120	B=19.2	B=19.2	B=23	B=23
		Size 16A		Size 20	
	T – Tongue IEC 61466-1	S=14 D=17,5	S=16 D=24	S=16 D=24	S=22 D=24
		Size 16N	Size 19N	Size 19N	Size 22N
	C – Clevis IEC 61466-1	S=18 D=17,5	S=23 D=20	S=23 D=20	S=26 D=22
		Size 16N	Size 19N	Size 19N	Size 22N
	E – Eye IEC 61466-1	B=20 S=31 D=12	B=26 S=52 D=18	B=26 S=52 D=18	B=26 S=52 D=22
		Size 17	Size 24	Size 24	Size 25

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 10 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 10 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency	
CS 70-170/360 *	ЛК 70/10-И-3	1	10	12	70	305	185	360	170	90	55	0,95
CS 70-170/420	ЛК 70/10-И-4	2				355	235	420				1,0
CS 70-215/565	ЛК 70/10-ИГ-6	3				565	215	105				1,25
CS 120-170/360	ЛК 120/10-И-3	1			120	330	185	360	170	90	55	1,25
CS 120-170/420	ЛК 120/10-И-4	2						420				1,3
CS 120-215/565	ЛК 120/10-ИГ-6	3						565				215

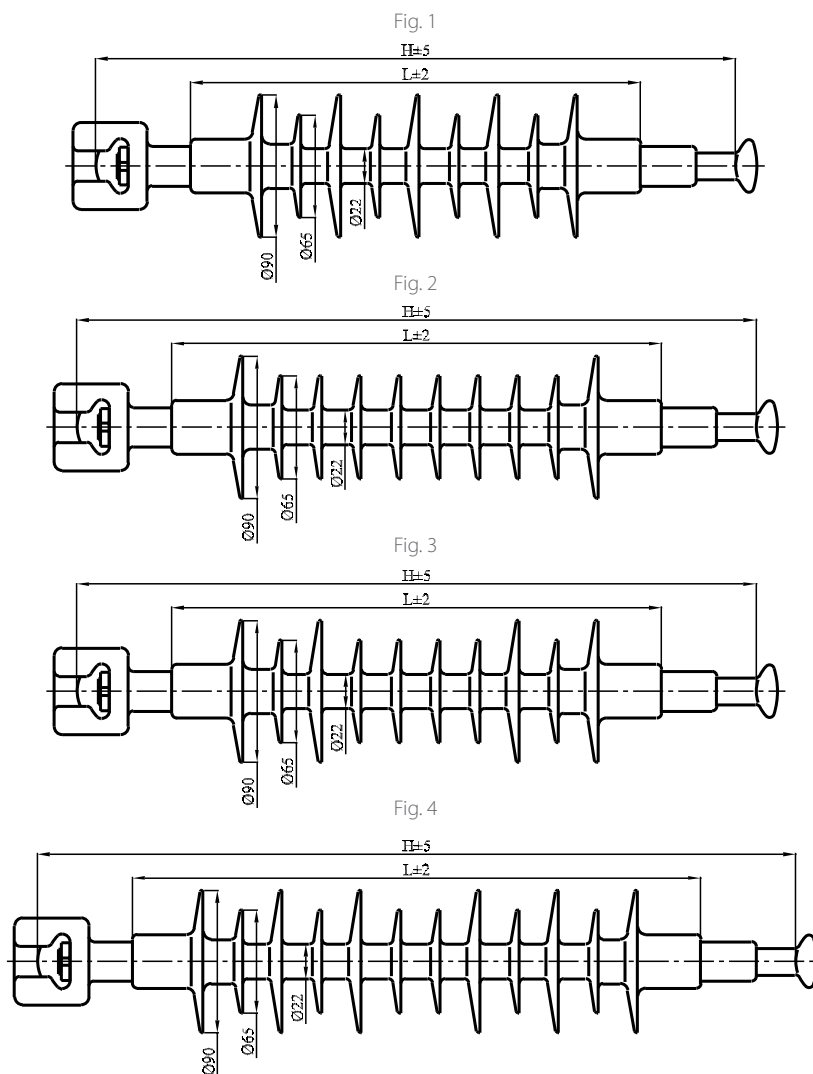
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 20 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 20 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Withstand voltage, kV			Weight, kg, max		
IEC 61466-1	GOST R 55189							full lightning impulse	dry power-frequency	wet power-frequency			
CS 70-215/710*	ЛК 70/20-И-2	1	20	24	70	405	285	710	215	105	65	1,0	
CS 70-215/715	ЛК 70/20-И-3	2				430	310	715				1,1	
CS 70-215/800	ЛК 70/20-И-4	3				480	360	800				1,2	
CS 70-275/880	ЛК 70/20-ИГ-6	4			430	285	710	275	130	110	1,56		
CS 120-215/710	ЛК 120/20-И-2	1			120	120	430	285	710	215	105	65	1,3
CS 120-215/715	ЛК 120/20-И-3	2					455	310	715				1,4
CS 120-215/800	ЛК 120/20-И-4	3					480	360	800				1,5
CS 120-275/880	ЛК 120/20-ИГ-6	4					505	360	880	275	130	110	1,75

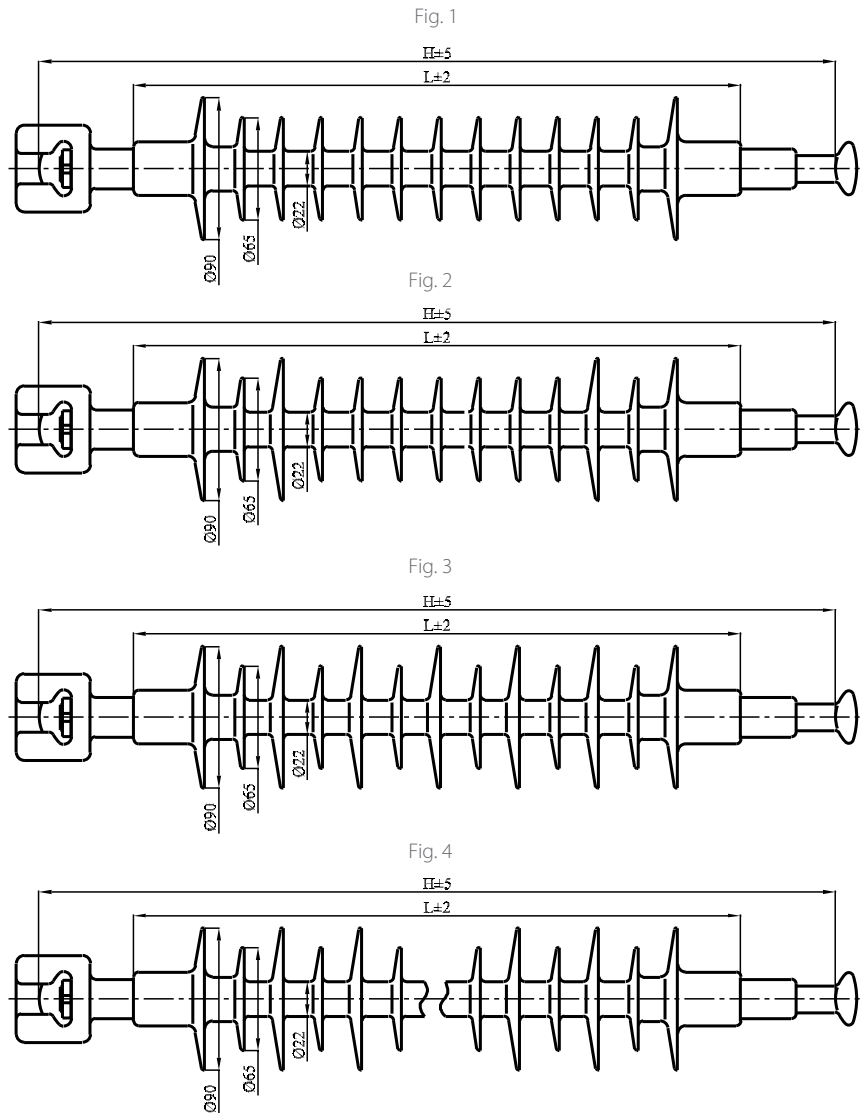
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 35 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 35 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max			
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency				
CS 70-295/895*	ЛК 70/35-И-2	1	35	40,5	70	505	385	895	295	150	115	1,1			
CS 70-295/940	ЛК 70/35-И-3	2						940				1,2			
CS 70-295/1020	ЛК 70/35-И-4	3						1020				1,3			
CS 70-325/1160	ЛК 70/35-ИГ-5	4						1160				325	160	135	1,75
CS 70-340/1350	ЛК 70/35-ИГ-6							1350				340	180	150	1,75
CS 120-295/895	ЛК 120/35-И-2	1						120				70	530	385	895
CS 120-295/940	ЛК 120/35-И-3	2	940	1,5											
CS 120-295/1020	ЛК 120/35-И-4	3	1020	1,6											
CS 120-325/1160	ЛК 120/35-ИГ-5	4	1160	325	160	135	1,96								
CS 120-340/1350	ЛК 120/35-ИГ-6		1350	340	180	150	1,96								

* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 110 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 110 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.

Fig. 1

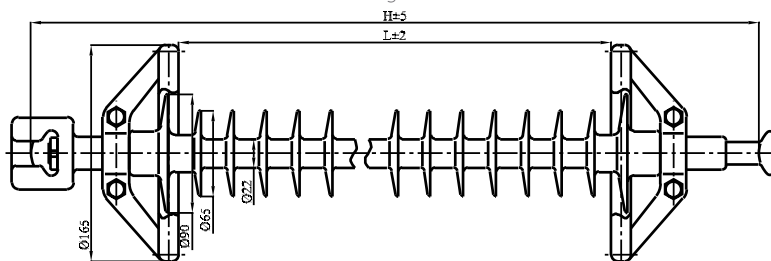


Fig. 2

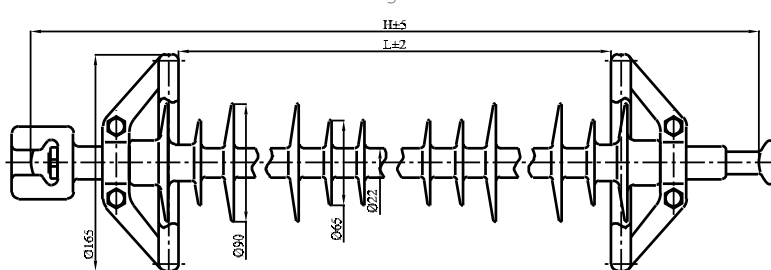


Fig. 3

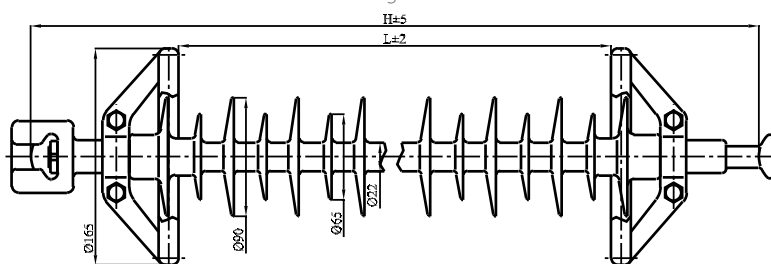
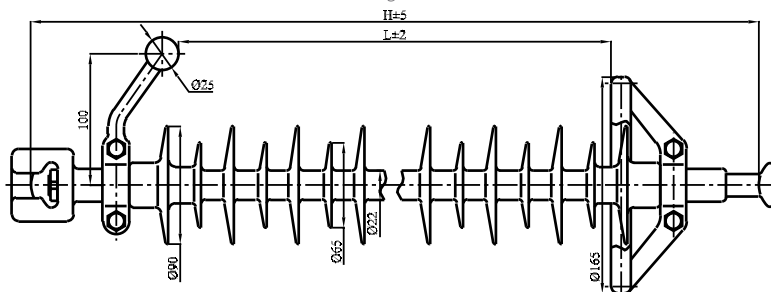


Fig. 4



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency	
CS 70-575/2610*	ЛК 70/110-И-2	1	110	126	70	1195	1000	2610	575	335	305	2,8
CS 70-575/2790	ЛК 70/110-И-3	2						2790				3,0
CS 70-575/3145	ЛК 70/110-И-4	3						3145				3,1
CS 70-630/3340	ЛК 70/110-ИГ-5	4				1295	1080	3340	630	370	330	3,2
CS 70-690/3780	ЛК 70/110-ИГ-6					1445	1230	3780	690	430	380	3,2
CS 120-575/2610	ЛК 120/110-И-2					1	2610	3,1				
CS 120-575/2790	ЛК 120/110-И-3	2			2790	3,3						
CS 120-575/3145	ЛК 120/110-И-4	3			3145	3,4						
CS 120-630/3340	ЛК 120/110-ИГ-5	4			1330	1080	3340	630	370	330	3,5	
CS 120-690/3780	ЛК 120/110-ИГ-6				1480	1230	3780	690	430	380	3,5	

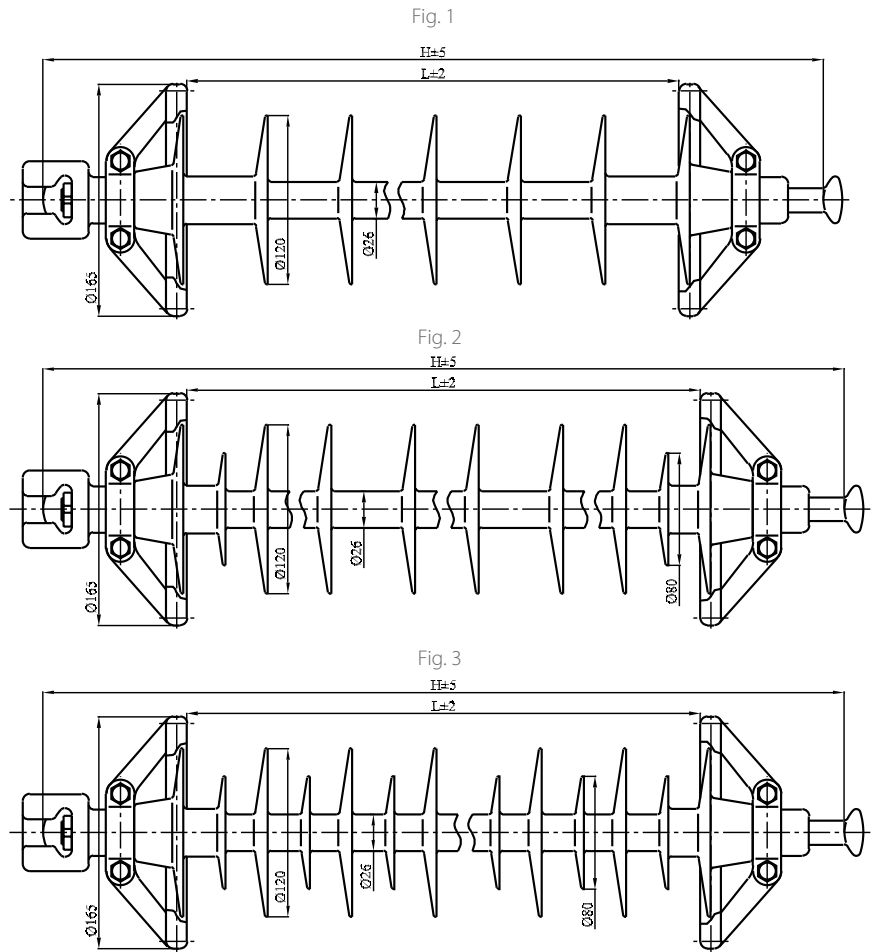
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 110 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 110 kV, frequency up to 100 Hz with the air temperature from -60 to +50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max				
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency					
CS 70-585/2735*	ЛК 70/110-ИД-2	1	110	126	70	1275	1070	2735	585	370	350	3,8				
CS 70-600/3165	ЛК 70/110-ИД-3	2				1335	1130	3165	600	390	370	4,1				
CS 70-610/3990	ЛК 70/110-ИД-4	3				1395	1190	3990	610	400	390	4,6				
CS 120-585/2735	ЛК 120/110-ИД-2	1			120	120	120	1280	1070	2735	585	370	350	4,0		
CS 120-600/3165	ЛК 120/110-ИД-3	2						1340	1130	3165	600	390	370	4,3		
CS 120-610/3990	ЛК 120/110-ИД-4	3						1400	1190	3990	610	400	390	4,8		
CS 160-585/2735	ЛК 160/110-И-2	1					160	160	160	1320	1070	2735	585	370	350	4,6
CS 160-600/3165	ЛК 160/110-И-3	2								1380	1130	3165	600	390	370	4,9
CS 160-610/3990	ЛК 160/110-И-4	3								1440	1190	3990	610	400	390	5,4

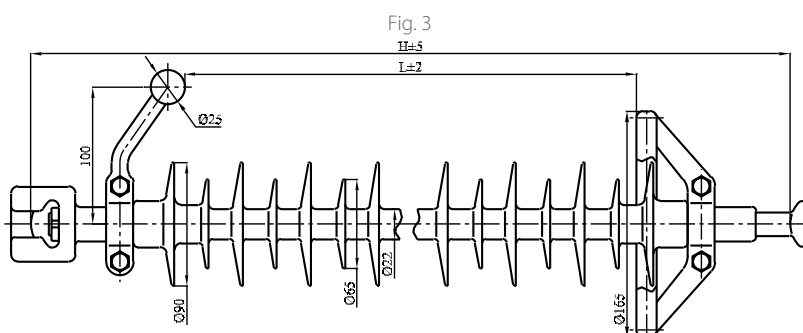
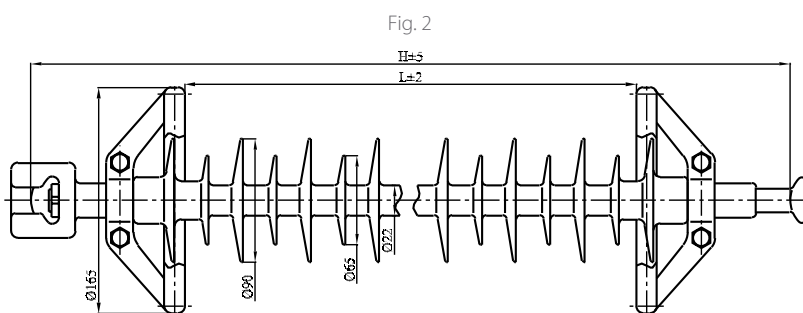
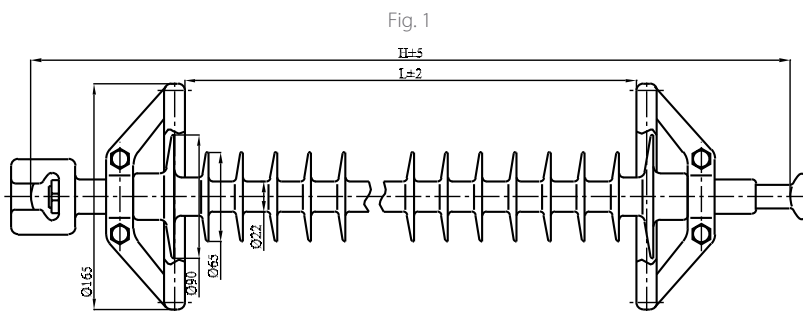
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 150 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 150 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



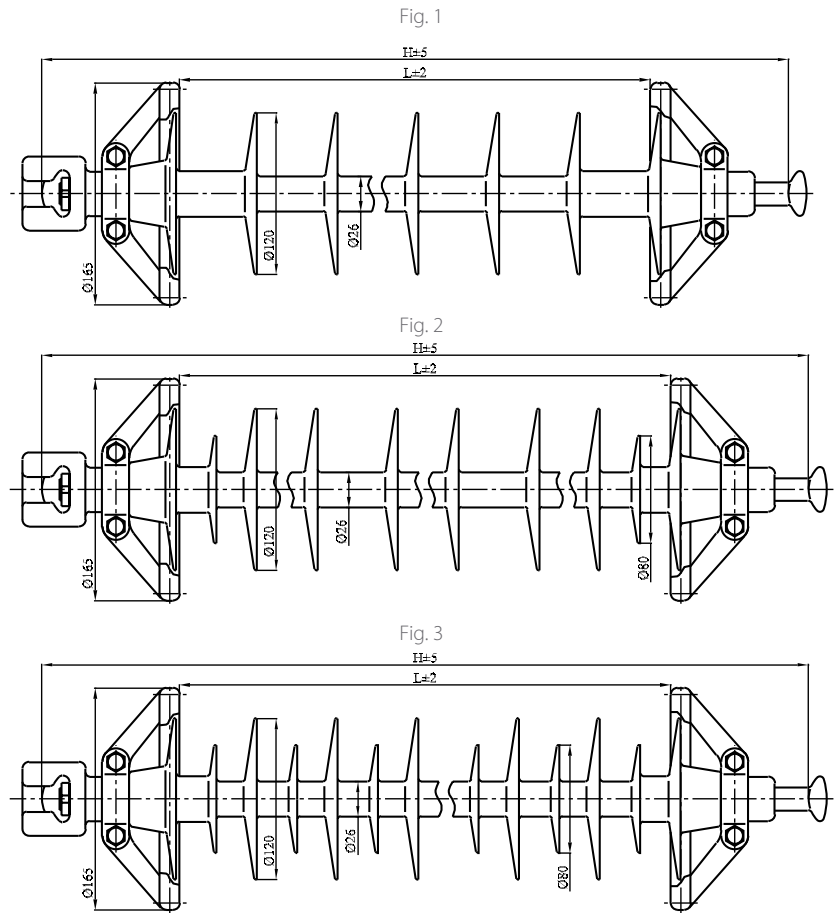
Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max	
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency		
CS 70-750/3480*	ЛК 70/150-И-2	1	150	172	70	1580	1330	3480	750	430	400	4,5	
CS 70-750/4080	ЛК 70/150-И-3	2				4080	815	520	485	5,6			
CS 70-815/4520	ЛК 70/150-И-4					1695	1480	4520	890		570	530	
CS 70-890/4960	ЛК 70/150-ИГ-5	3				1845	1630	4960	950		600	560	
CS 70-950/5255	ЛК 70/150-ИГ-6					1945	1730	5255	950		600	560	
CS 120-750/3480	ЛК 120/150-И-2	1				120	1580	1330	3480		750	430	400
CS 120-750/4080	ЛК 120/150-И-3	2			4080		815	520	485		6,5		
CS 120-815/4520	ЛК 120/150-И-4				1730		1480	4520	890	570		530	
CS 120-890/4960	ЛК 120/150-ИГ-5	3			1880		1630	4960	950	600		560	
CS 120-950/5255	ЛК 120/150-ИГ-6				1980		1730	5255	950	600		560	

* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 150 kV

PURPOSE

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 150 kV, frequency up to 100 Hz with the air temperature from -60 to +50 °C. Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max				
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency					
CS 70-750/3460*	ЛК 70/150-ИД-2	1	150	172	70	1575	1370	3460	750	450	450	5,0				
CS 70-775/4235	ЛК 70/150-ИД-3	2				1695	1490	4235	775	475	475	5,3				
CS 70-800/5350	ЛК 70/150-ИД-4	3				1815	1610	5350	800	500	500	5,7				
CS 120-750/3460	ЛК 120/150-ИД-2	1			150	172	120	1580	1370	3460	750	450	450	5,2		
CS 120-775/4235	ЛК 120/150-ИД-3	2						1700	1490	4235	775	475	475	5,7		
CS 120-800/5350	ЛК 120/150-ИД-4	3						1820	1610	5350	800	500	500	5,9		
CS 160-750/3460	ЛК 160/150-И-2	1					150	172	160	1620	1370	3460	750	450	450	5,8
CS 160-775/4235	ЛК 160/150-И-3	2								1740	1490	4235	775	475	475	6,1
CS 160-800/5350	ЛК 160/150-И-4	3								1860	1610	5350	800	500	500	6,5

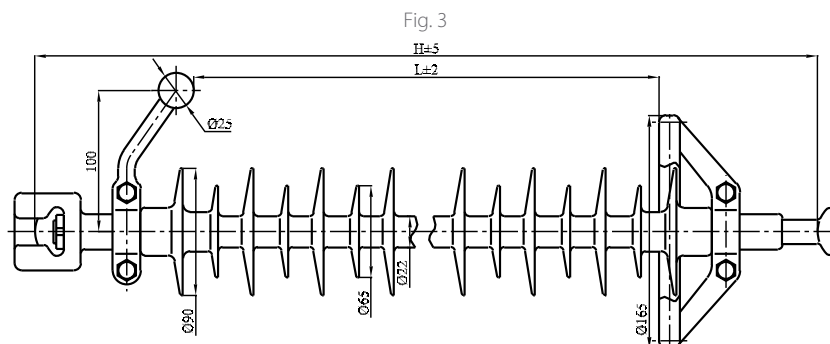
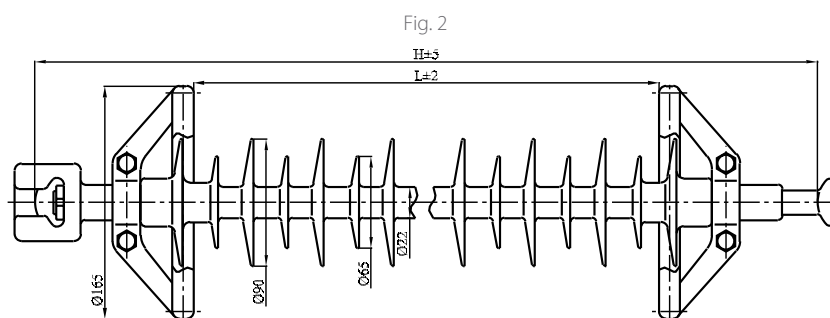
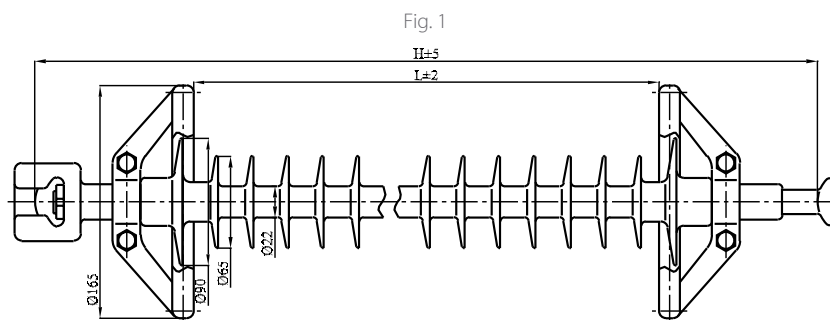
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 220 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 220 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max		
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency			
CS 70-1070/4720*	ЛК 70/220-И-2	1	220	252	70	2045	1830	4720	1070	655	620	5,0		
CS 70-1070/5550	ЛК 70/220-И-3	2				2345	2130	6440	1175	700	670			
CS 70-1175/6440	ЛК 70/220-И-4	2				2495	2280	6880	1250	750	715	6,3		
CS 70-1250/6880	ЛК 70/220-ИГ-5	3				2645	2430	7325	1330	790	760			
CS 70-1330/7325	ЛК 70/220-ИГ-6	3												
CS 120-1070/4720	ЛК 120/220-И-2	1						2080	1830	4720	1070	655	620	5,2
CS 120-1070/5550	ЛК 120/220-И-3	2							5550					
CS 120-1175/6440	ЛК 120/220-И-4	2					120	2380	2130	6440	1175	700	670	
CS 120-1250/6880	ЛК 120/220-ИГ-5	3						2530	2280	6880	1250	750	715	6,8
CS 120-1330/7325	ЛК 120/220-ИГ-6	3						2680	2430	7325	1330	790	760	

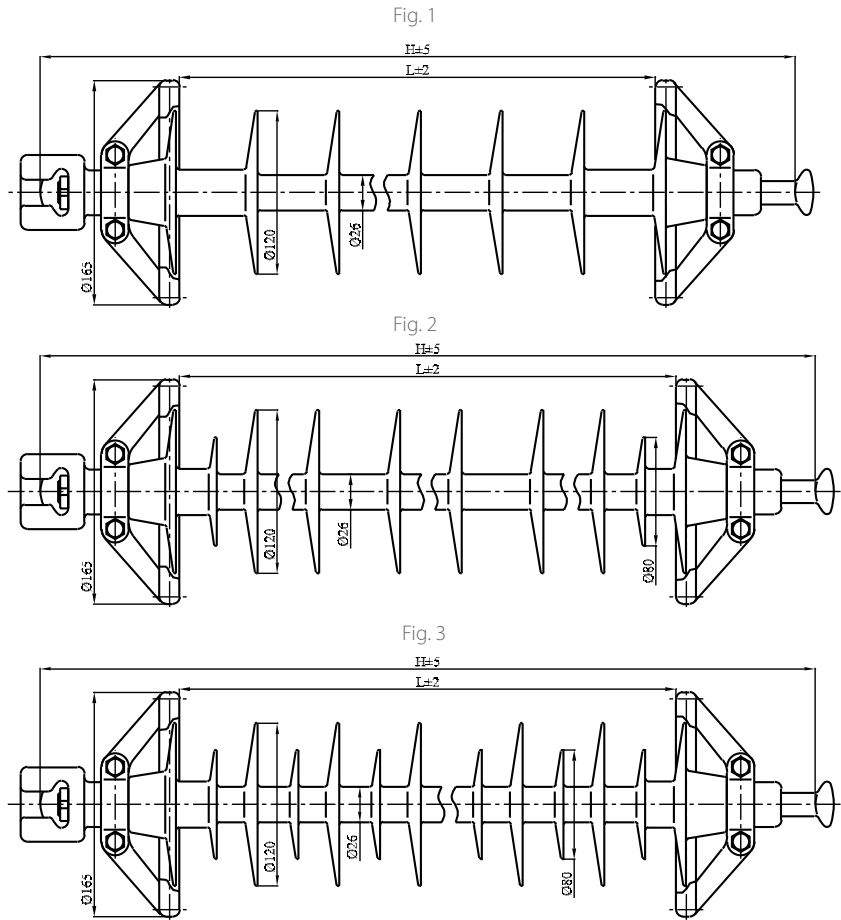
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 220 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 220 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	Withstand voltage, kV			Weight, kg, max				
IEC 61466-1	GOST R 55189								full lightning impulse	dry power-frequency	wet power-frequency					
CS 70-1150/5060*	ЛК 70/220-ИД-2	1	220	252	70	2235	2030	5060	1150	700	670	6,0				
CS 70-1200/6125	ЛК 70/220-ИД-3	2				2355	2150	6125	1200	720	700	6,9				
CS 70-1300/7670	ЛК 70/220-ИД-4	3				2535	2330	7670	1300	760	730	7,7				
CS 120-1150/5060	ЛК 120/220-ИД-2	1			220	252	120	2240	2030	5060	1150	700	670	6,3		
CS 120-1200/6125	ЛК 120/220-ИД-3	2						2360	2150	6125	1200	720	700	7,2		
CS 120-1300/7670	ЛК 120/220-ИД-4	3						2540	2330	7670	1300	760	730	8,0		
CS 160-1150/5060	ЛК 160/220-И-2	1					220	252	160	2280	2030	5060	1150	700	670	6,8
CS 160-1200/6125	ЛК 160/220-И-3	2								2400	2150	6125	1200	720	700	7,7
CS 160-1300/7670	ЛК 160/220-И-4	3								2580	2330	7670	1300	760	730	8,5

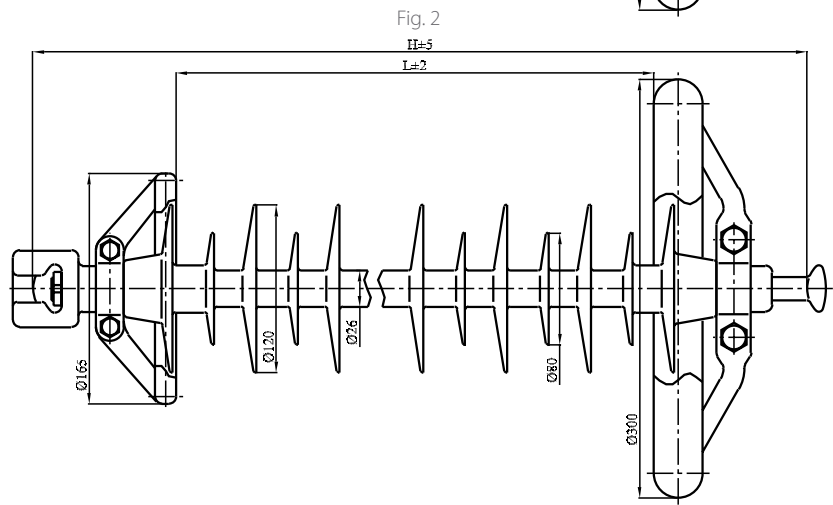
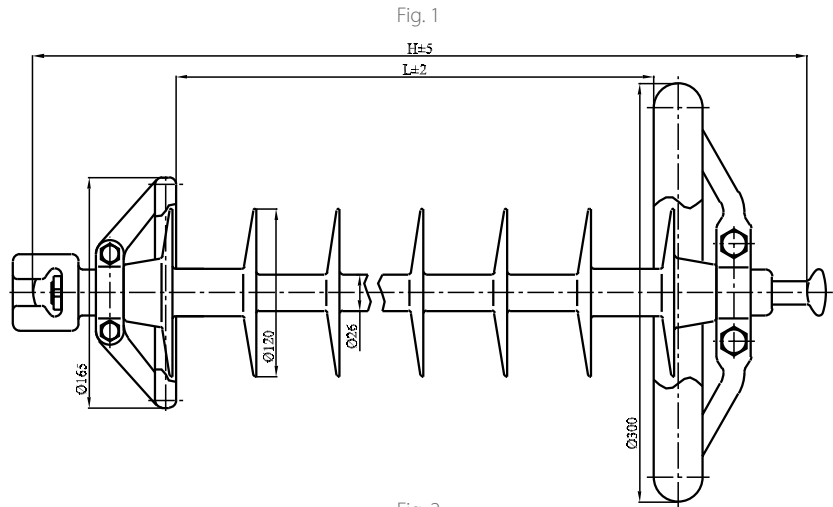
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 330 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 330 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Fig.	Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Withstand voltage, kV				Weight, kg, max																			
IEC 61466-1	GOST R 55189					Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	full lightning impulse		switching impulse	dry power-frequency	wet power-frequency																
CS 70-1450/7285*	ЛК 70/330-И-2	1	330	363	70	2955	2745	7285	1450	1000	750	650	9,5																
CS 70-1450/9030	ЛК 70/330-И-3	2				3495	3285	10770						9030	10,3														
CS 70-1450/10770	ЛК 70/330-И-4	2				3500	3285	10770						10770	11,5														
CS 120-1450/7285	ЛК 120/330-И-2	1			120	363	120	2960						2745	7285	1450	1000	750	650	9,7									
CS 120-1450/9030	ЛК 120/330-И-3	2						3500						3285	10770						9030	10,5							
CS 120-1450/10770	ЛК 120/330-И-4	2						3500						3285	10770						10770	11,7							
CS 160-1450/7285	ЛК 160/330-И-2	1					160	363						160	3300						2745	7285	1450	1000	750	650	10,3		
CS 160-1450/9030	ЛК 160/330-И-3	2													3540						3825	10770						9030	10,8
CS 160-1450/10770	ЛК 160/330-И-4	2													3540						3825	10770						10770	12,0

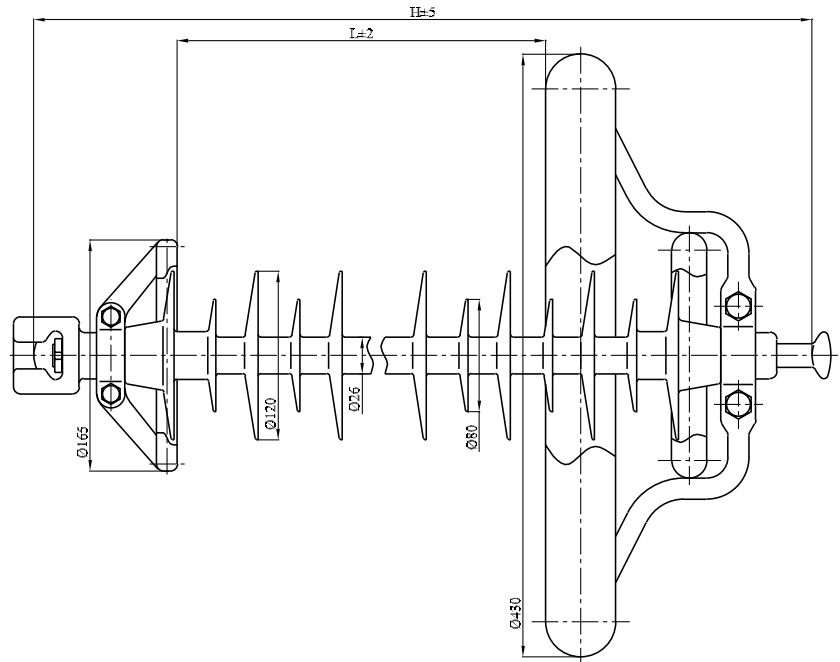
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

INSULATORS LINEAR SUSPENSION CORE COMPOSITE WITH A NOMINAL VOLTAGE 500 kV

OBJECTIVE:

Insulators are designed to fix and insulate wires of power transmission lines with the nominal voltage 500 kV, frequency up to 100 Hz with the air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Rated voltage, kV	Maximum working voltage, kV	Minimum mechanical failing load, kN	Withstand voltage, kV							
IEC 61466-1	GOST R 55189				Spacing, H, mm, max	Insulation spacing, L, mm, min	Creepage distance, mm, min	full lightning impulse	switching impulse	dry power-frequency	wet power-frequency	Weight, kg, max
CS 120-2000/10770*	ЛК 120/500-И-2	500	525	120	3500	3205	10770	2000	1300	925	800	12,2
CS 120-2000/12130	ЛК 120/500-И-3				3920	3625	12130					14,1
CS 160-2000/10770	ЛК 160/500-И-2			160	3540	3205	10770					12,5
CS 160-2000/12130	ЛК 160/500-И-3				3960	3625	12130					14,4
CS 210-2000/10770	ЛК 210/500-И-2			210	3630	3205	10770					13,1
CS 210-2000/12130	ЛК 210/500-И-3				4050	3625	12130					15,0

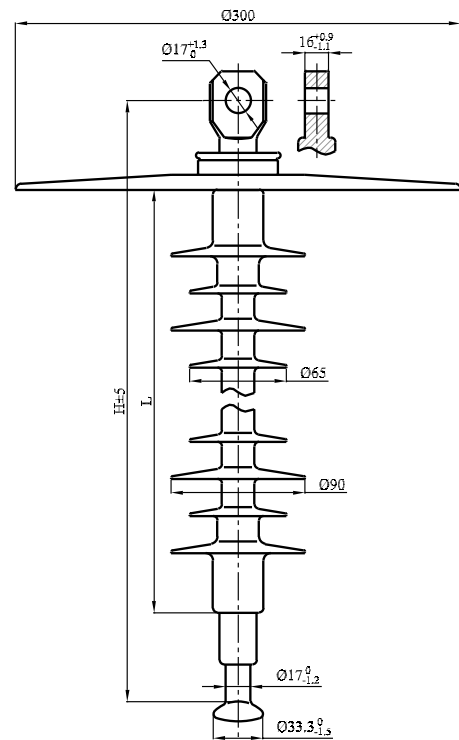
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

COMPOSITE SUSPENSION LINE INSULATORS WITH PROTECTION OF BIRDS, FOR VOLTAGE OF 10-35 kV AND 110-220 kV

OBJECTIVE:

Insulators are intended for protection of birds from electric shock in case of contact with insulator, and usage of CSP insulators prevents HV line shutdown due to electrical short circuits in insulators because of birds and contaminations, flowing onto insulators from tower's cross-arm. With these insulators there is no need in usage of additional bird-protecting devices. As CS insulators, these insulators are intended for fixation and insulation of uninsulated wires at HV overhead lines and switchboards at power plants and substations of alternate current with 10-35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



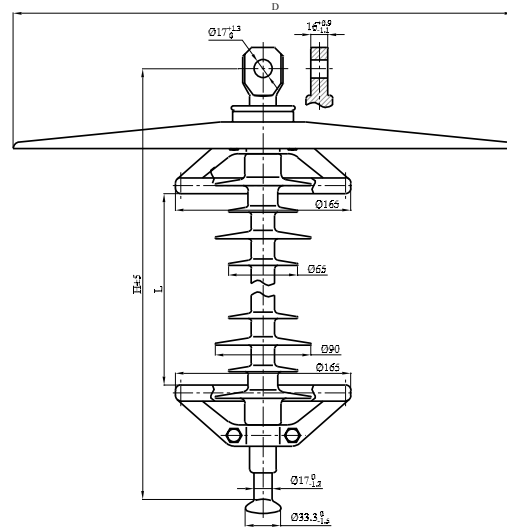
Designation		Insulator class, kN/kV	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV		
IEC 61466-1	GOST R 55189					full lightning impulse	50 Hz in dry condition	50 Hz under rain
CSP 70-170/360 *	ЛКП 70/10-И-3*	70/10	305	185	360	170	90	55
CSP 70-170/420	ЛКП 70/10-И-4		420	215	420	105	65	
CSP 70-215/565	ЛКП 70/10-ИГ-6		565	215	565	105	65	
CSP 70-215/710	ЛКП 70/20-И-2	70/20	405	285	710	215	105	65
CSP 70-215/715	ЛКП 70/20-И-3		715	105	65			
CSP 70-215/800	ЛКП 70/20-И-4		800	105	65			
CSP 70-275/880	ЛКП 70/20-ИГ-6	70/35	480	360	880	275	130	110
CSP 70-295/895	ЛКП 70/35-И-2		895	150	115			
CSP 70-295/940	ЛКП 70/35-И-3		940	150	115			
CSP 70-295/1020	ЛКП 70/35-И-4	70/35	505	385	940	295	150	115
CSP 70-325/1160	ЛКП 70/35-ИГ-5		1020	160	135			
CSP 70-340/1350	ЛКП 70/35-ИГ-6		1350	180	150			
CSP 120-170/360	ЛКП 120/10-И-3	120/10	330	185	360	170	90	55
CSP 120-170/420	ЛКП 120/10-И-4		420	105	65			
CSP 120-215/565	ЛКП 120/10-ИГ-6		565	105	65			
CSP 120-215/710	ЛКП 120/20-И-2	120/20	430	285	710	215	105	65
CSP 120-215/715	ЛКП 120/20-И-3		715	105	65			
CSP 120-215/800	ЛКП 120/20-И-4		800	105	65			
CSP 120-275/880	ЛКП 120/20-ИГ-6	120/35	505	360	880	275	130	110
CSP 120-295/895	ЛКП 120/35-И-2		895	150	115			
CSP 120-295/940	ЛКП 120/35-И-3		940	150	115			
CSP 120-295/1020	ЛКП 120/35-И-4	120/35	530	385	940	295	150	115
CSP 120-325/1160	ЛКП 120/35-ИГ-5		1020	160	135			
CSP 120-340/1350	ЛКП 120/35-ИГ-6		1350	180	150			

* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

OBJECTIVE:

Insulators are intended for protection of birds from electric shock in case of contact with insulator, and usage of CSP insulators prevents HV line shutdown due to electrical short circuits in insulators because of birds and contaminations, flowing onto insulators from tower's cross-arm. With these insulators there is no need in usage of additional bird-protecting devices. As CS insulators, these insulators are intended for fixation and insulation of uninsulated wires at HV overhead lines of alternate current with 110-220 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Insulators conform to the requirements of IEC 61109.



Designation		Insulator class, kN/kV	Diameter of the bird-protection screen, D, mm, not less	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV							
IEC 61466-1	GOST R 55189						full lightning impulse	50 Hz in dry condition	50 Hz under rain					
CSP 70-575/2610*	ЛКП 70/110-И-2*	70/110	300**	1205	1000	2610	575	335	305					
CSP 70-575/2790	ЛКП 70/110-И-3			2790	3145									
CSP 70-575/3145	ЛКП 70/110-И-4			3145	630	370				330				
CSP 70-630/3340	ЛКП 70/110-ИГ-5			1305	1080	3340				630	370	330		
CSP 70-690/3780	ЛКП 70/110-ИГ-6			1455	1230	3780				690	430	380		
CSP 70-750/3480	ЛКП 70/150-И-2			1555	1330	3480				750	430	400		
CSP 70-750/4080	ЛКП 70/150-И-3	70/150	470	4080	750	430	400							
CSP 70-815/4520	ЛКП 70/150-И-4			1705				1480	4520	815	520	485		
CSP 70-890/4960	ЛКП 70/150-ИГ-5			1855				1630	4960	890	570	530		
CSP 70-950/5255	ЛКП 70/150-ИГ-6			1955				1730	5255	950	600	560		
CSP 70-1070/4720*	ЛКП 70/220-И-2			2055				1830	4720	1070	655	620		
CSP 70-1070/5550	ЛКП 70/220-И-3			5550				70/220	470	1175	700	670		
CSP 70-1175/6440	ЛКП 70/220-И-4	2355	2130	6440	1175	700	670							
CSP 70-1250/6880	ЛКП 70/220-ИГ-5	2505	2280	6880	1250	750	715							
CSP 70-1330/7325	ЛКП 70/220-ИГ-6	2655	2430	7325	1330	790	760							
CSP 120-575/2610	ЛКП 120/110-И-2	120/110	300**	1230	1000	2610	575						335	305
CSP 120-575/2790	ЛКП 120/110-И-3			2790	3145									
CSP 120-575/3145	ЛКП 120/110-И-4			3145	630	370		330						
CSP 120-630/3340	ЛКП 120/110-ИГ-5			1330	1080	3340		630	370	330				
CSP 120-690/3780	ЛКП 120/110-ИГ-6			1480	1230	3780		690	430	380				
CSP 120-750/3480	ЛКП 120/150-И-2			1580	1330	3480		750	430	400				
CSP 120-750/4080	ЛКП 120/150-И-3	4080	120/150	470	750	430	400							
CSP 120-815/4520	ЛКП 120/150-И-4	1630						1480	4520	815	520	485		
CSP 120-890/4960	ЛКП 120/150-ИГ-5	1880						1630	4960	890	570	530		
CSP 120-950/5255	ЛКП 120/150-ИГ-6	1980						1730	5255	950	600	560		
CSP 120-1070/4720	ЛКП 120/220-И-2	2080						1830	4720	1070	655	620		
CSP 120-1070/5550	ЛКП 120/220-И-3	5550						120/220	470	1175	700	670		
CSP 120-1175/6440	ЛКП 120/220-И-4	2380	2130	6440	1175	700	670							
CSP 120-1250/6880	ЛКП 120/220-ИГ-5	2530	2280	6880	1250	750	715							
CSP 120-1330/7325	ЛКП 120/220-ИГ-6	2680	2430	7325	1330	790	760							

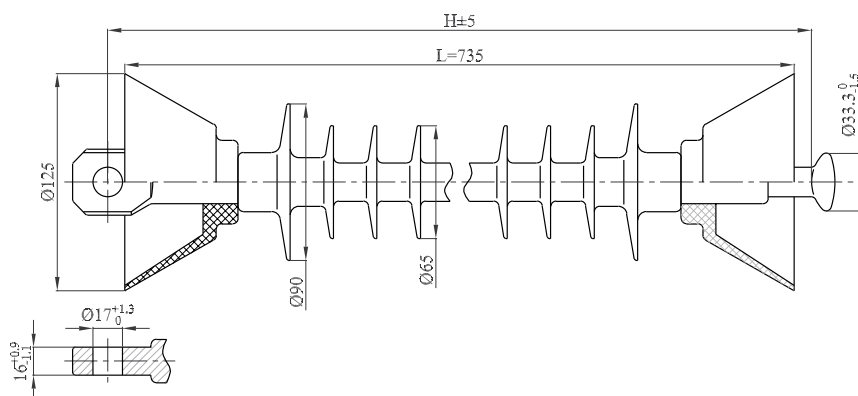
* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.

COMPOSITE TENSION LINE INSULATORS WITH BIRDS PROTECTION FOR THE VOLTAGE UP TO 35 kV

OBJECTIVE:

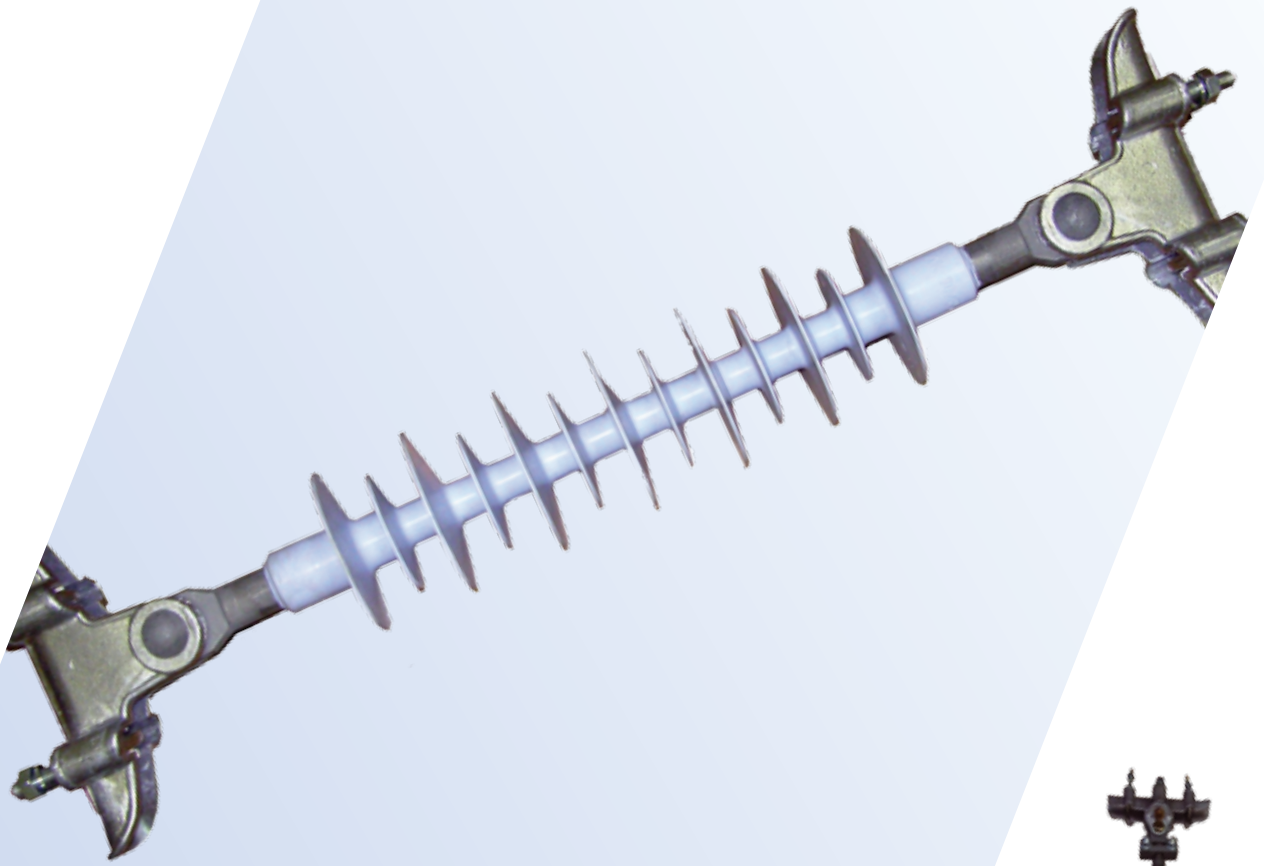
Insulators are intended for protection of birds from electric shock in case of contact with insulator, and usage of CSPn insulators prevents HV line shutdown due to electrical short circuits in insulators because of birds and contaminations. Tension line insulators with protection of birds have clearance of more than 700 mm, accordingly to Rosseti JSC standard. With these insulators there is no need in usage of additional bird-protecting devices. As CS insulators, these insulators are intended for fixation and insulation of uninsulated wires at HV overhead lines of alternate current with 10-35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.

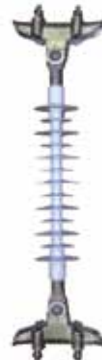


Name	Insulator class, kN/kV	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
					full lightning impulse	50 Hz in dry condition	50 Hz under rain	
CSPn 70-80/1485*	ЛКПН 70/35-И-4*	755	735	1485	380	200	180	4,5
CSPn 120-80/1485	ЛКПН 120/35-И-4	790						

* — There are four types of insulators classified by the end fitting types: TB, SB, ST, TT. Other end fittings are available by a special request.



INTERPHASE INSULATING SPACERS



ADVANTAGES OF INTERPHASE INSULATING SPACERS BY INSTA LLC

Interphase insulating spacers made by INSTA LLC are notable for:

- sheath overlaps end terminals, which provide full tightness and durability of spacers due to full elimination of glued joints in structure;
- unique fabrication technology - ultrasonic control, which guarantee that there are no hidden rod damages after end terminals embossing;
- are made with usage of fiberglass rod of ECR type, which used for prevention of spacers destruction due to acid corrosion of the rod in cases of breaking of protective containment during vandals' activities or in case of careless handling during storage and installation;
- the best anti-corrosion protection of end terminals with the use of thermodiffusion or hot zinc coating;
- wide range of application in diameters of wires and interphase distances.
- non-magnetic clamps are used.

Polymeric interphase insulating spacers of RMI type are made on the base of CS insulators, metal insert (if it is required to increase construction length), bars and special "boat" clamps. Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines.

New generation of interphase insulating polymeric spacers of RMID type, as RMI spacers, are made on the base of LK insulators and special "boat" clamps. Unlike conventional RMI spacers with increased construction lengths, there is fiberglass rod used as required extension part, and it is protected by silicone protective coat. No rigid inserts in central part of interphase spacers, it significantly improves its lifecycle. RMID spacers withstand not less than 20000 cycles of compression and stretching.

Interphase insulating spacers of RMI and RMID types are recommended for installation with protector usage. Interphase insulating spacers of RMI and RMID types are recommended for installation with protector usage.

**INTERPHASE INSULATING
SPACERS OF RMI TYPE FOR THE
VOLTAGE OF 10 - 35 kV**

OBJECTIVE:

Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines of 10-35 kV, with frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C.
Conforms IEC, ANSI.

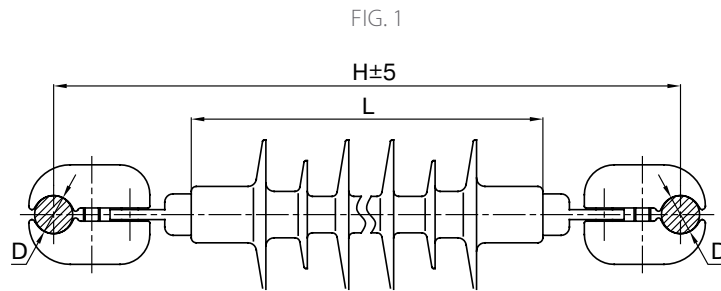


Table for fig. 1

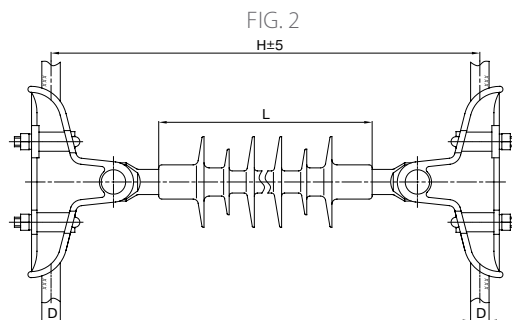
Name	Construction length, H, mm	Insulation length, L, mm	Leakage current path distance, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMI 16/10-400-R(R1, R2)-3	400	235	565	5,0	
RMI 16/10-450-R(R1, R2)-4	450	285	710	5,0	
RMI 16/20-475-R(R1, R2)-2	475	310	800	5,0	8,4-11,4 – R
RMI 16/20-550-R(R1, R2)-3	550	385	1020	4,0	13,0÷15,8 – R1
RMI 16/35-600-R(R1, R2)-1	600	435	1160	3,0	16,8÷19,8 – R2
RMI 16/35-650-R(R1, R2)-2	650	485	1350	2,5	

* - If protector is used, its diameter shall be taken into consideration.

INTERPHASE INSULATING SPACERS OF RMI TYPE FOR THE VOLTAGE OF 10 - 35 kV

It is recommended for installation with the use of protector.

Table for fig. 2



Name	Construction length, H, mm	Insulation length, L, mm	Leakage current path distance, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMI 25/10-465-P1-3	465	235	565	8,0	6,4÷12,6 – P1
RMI 25/10-515-P1-4	515	285	710	8,0	
RMI 25/20-540-P1-2	540	310	800	6,0	
RMI 25/20-615-P1-3	615	385	1020	5,0	
RMI 25/35-665-P1-1	665	435	1160	5,0	
RMI 25/35-715-P1-2	715	485	1350	4,0	
RMI 30/10-480-P2(P3)-3	480	235	565	8,0	13,5÷19,6 – P2 18÷28 – P3
RMI 30/10-530-P2(P3)-4	530	285	710	8,0	
RMI 30/20-555-P2(P3)-2	555	310	800	6,0	
RMI 30/20-630-P2(P3)-3	630	385	1020	5,0	
RMI 30/35-680-P2(P3)-1	680	435	1160	5,0	
RMI 30/35-730-P2(P3)-2	730	485	1350	4,0	

FIG. 3

It is recommended for installation with the use of protector.

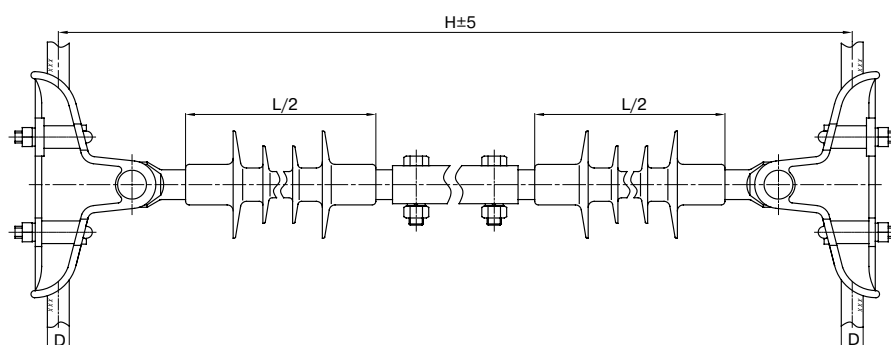


Table for fig. 3

Name	Construction length, H**, mm	Insulation length, L, mm	Leakage current path distance, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMI 25/10-H-P1-4	700-2500	370	720	3,0	6,4÷12,6 – P1
RMI 25/20-H-P1-2		370	840	3,0	
RMI 25/20-H-P1-3	900-2500	470	1130	3,0	
RMI 25/20-H-P1-4		570	1420	3,0	
RMI 25/35-H-P1-2	1000-3000	570	1420	2,0	
RMI 25/35-H-P1-3	1250-3000	770	1790	2,0	
RMI 25/35-H-P1-4		920	2510	1,5	13,5÷19,6 – P2 18÷28 – P3
RMI 30/10-H-P2(P3)-4	700-2500	370	720	3,0	
RMI 30/20-H-P2(P3)-2		370	840	3,0	
RMI 30/20-H-P2(P3)-3	900-2500	470	1130	3,0	
RMI 30/20-H-P2(P3)-4		570	1420	3,0	
RMI 30/35-H-P2(P3)-2	1000-3000	570	1420	2,0	
RMI 30/35-H-P2(P3)-3	1250-3000	770	1790	2,0	
RMI 30/35-H-P2(P3)-4		920	2510	1,5	

* - If protector is used, its diameter shall be taken into consideration

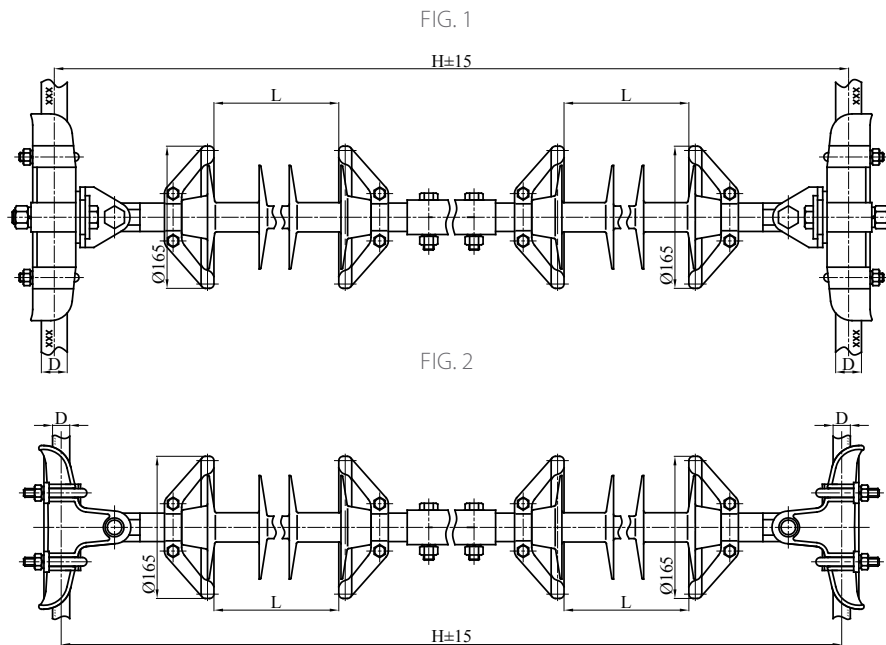
** - According to Client choice

INTERPHASE INSULATING SPACERS OF RMI TYPE FOR THE VOLTAGE OF 110 - 220 kV

OBJECTIVE:

Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines of 110-220 kV, with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



It is recommended for installation with the use of protector.

Name	Fig.	Minimum construction length, H**, mm	Minimum insulation length, L, mm	Leakage current path distance, Ly, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMI 60/110-H-4	1				1	13,5÷29,1
RMI 30/110-H-P2-4	2	2650÷6800	1070	5650		13,5÷19,6
RMI 30/110-H-P3-4						18÷28
RMI 60/220-H-4	1					13,5÷29,1
RMI 30/220-H-P2-4	2	4700÷6800	2030	11100		13,5÷19,6
RMI 30/220-H-P3-4						18÷28

* - If protector is used, its diameter shall be taken into consideration

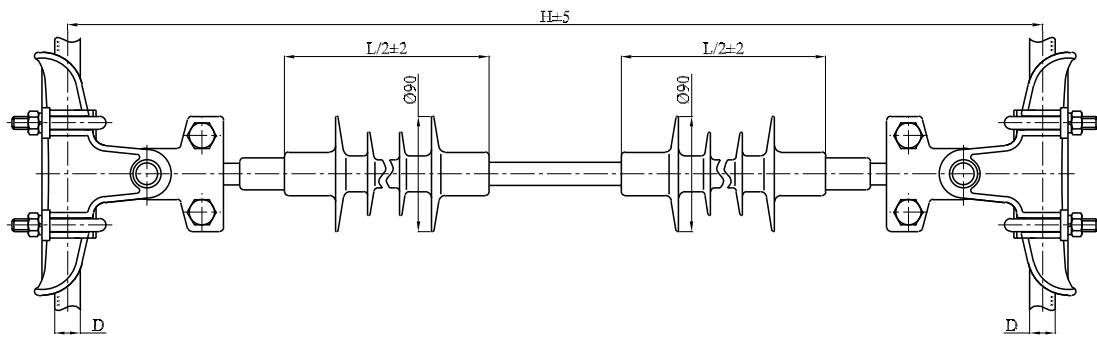
** - According to Client choice

INTERPHASE INSULATING SPACERS OF RMID TYPE FOR THE VOLTAGE OF 10 - 35 kV

OBJECTIVE:

Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines of 10-35 kV.

Conforms IEC, ANSI.



It is recommended for installation with the use of protector.

Name	Construction length, H, mm**	Insulation length, L, mm	Leakage current path distance, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMID 25/10-H-P1-4	950-2500	–	730	1,0	6,4÷12,6 –P1
RMID 25/20-H-P1-4	1270-2500	370	1400		
RMID 25/35-H-P1-2	1270-3000	370	1400		
RMID 25/35-H-P1-4	1450-3000	770	2340	1,0	13,5÷19,6 – P2 18÷28 – P3
RMID 30/10-H-P2(P3)-4	950-2500	–	730		
RMID 30/20-H-P2(P3)-4	1270-2500	370	1400		
RMID 30/35-H-P2(P3)-2	1270-3000	370	1400		
RMID 30/35-H-P2(P3)-4	1450-3000	770	2340		

* - If protector is used, its diameter shall be taken into consideration

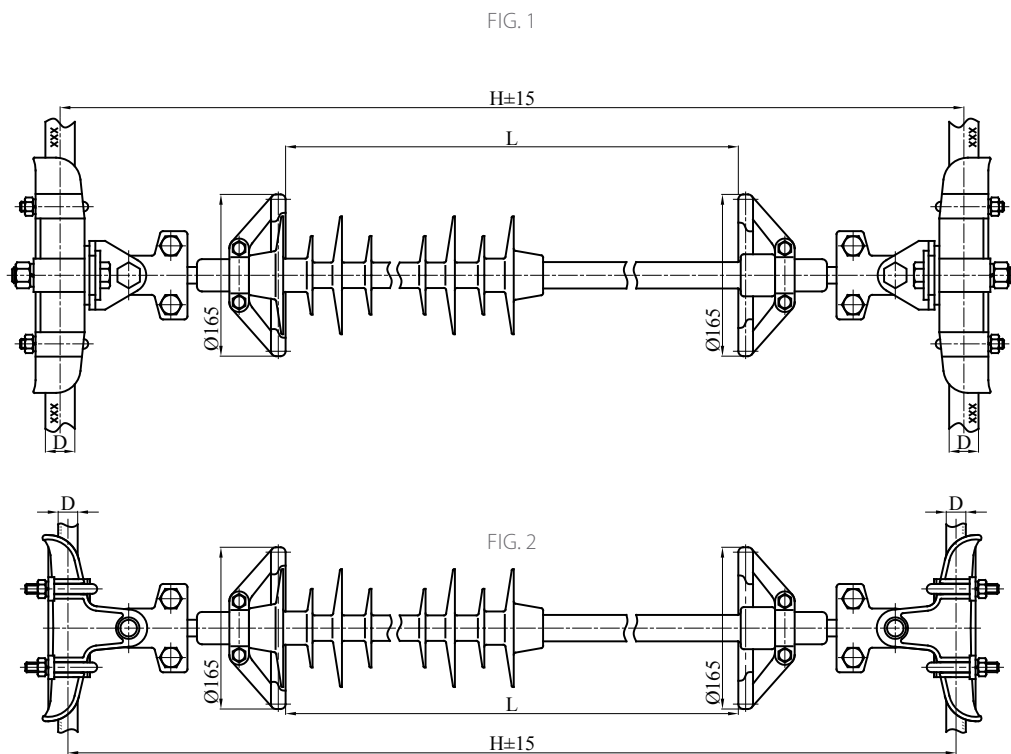
** - According to Client choice

INTERPHASE INSULATING SPACERS OF RMI TYPE FOR THE VOLTAGE OF 110 - 220 kV

OBJECTIVE:

Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines of 110-220 kV.

Conforms IEC, ANSI.



It is recommended for installation with the use of protector.

Name	Fig.	Minimum construction length, H**, mm	Minimum insulation length, L, mm	Leakage current path distance, Ly, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm
RMID 60/110-H-4	1					13,5÷29,1
RMID 30/110-H-P2-4	2	L, mm	2750	5550		13,5÷19,6
RMID30/110-H-P3-4						18÷28
RMID 60/220-H-4	1				1	13,5÷29,1
RMID 30/220-H-P2-4	2	5300÷6800	4850	11130		13,5÷19,6
RMID 30/220-H-P3-4						18÷28

* - If protector is used, its diameter shall be taken into consideration

** - According to Client choice

INTERPHASE INSULATING SPACERS OF RMID TYPE FOR THE VOLTAGE OF 330 AND 500 KV

OBJECTIVE:

Intended for insulated fixation of wires and cables of overhead powerlines in the span. Significantly restrict oscillation amplitude and provide preservation of required distances between wires of distinct phases and between wires and strands of HV lines of 330 and 500 kv. Conforms IEC, ANSI.

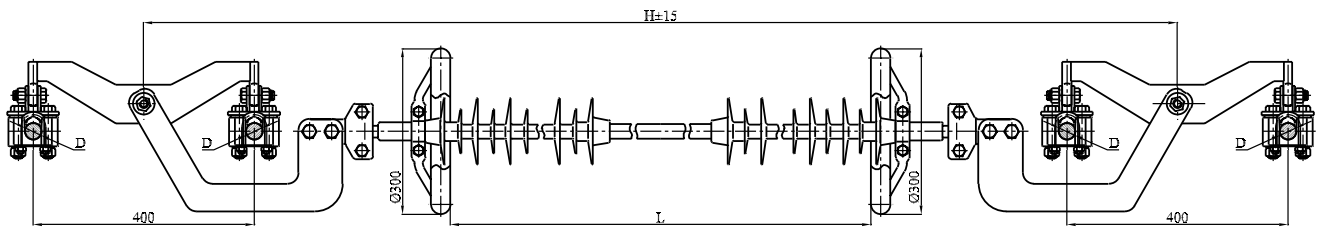


FIG. 1

It is recommended for installation with the use of protector.

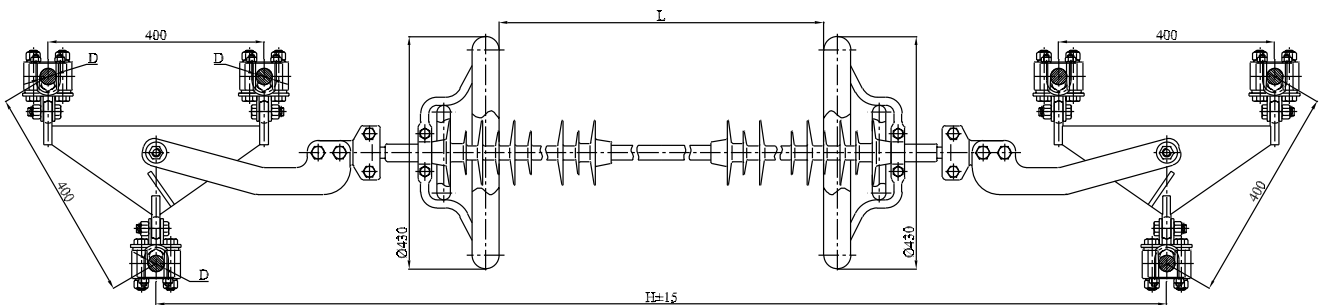


FIG. 2

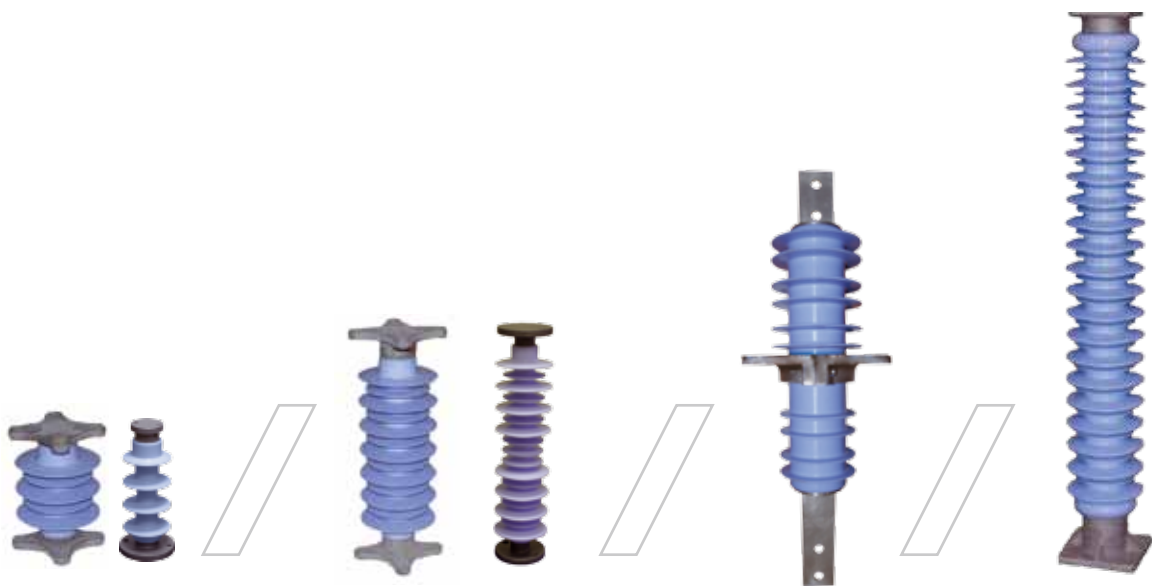
Name	Fig.	Minimum construction length, H**, mm	Minimum insulation length, L, mm	Leakage current path distance, Ly, mm	Standardized mechanical destructive force at compression, kN	Wire diameter D*, mm		
RMID 60/330-H-2	1	6500	5900	10900	1	13,5÷31,0		
RMID 60/330-H-P4-2				16000		13,0÷40,0		
RMID 60/330-H-4				16500		13,5÷31,0		
RMID 60/330-H-P4-4						13,0÷40,0		
RMID 60/500-H-2	2	7000	6350	16500		13,5÷31,0		
RMID 60/500-H-P4-2				19500		13,0÷40,0		
RMID 60/500-H-3				10000		9350	19500	13,5÷31,0
RMID 60/500-H-P4-3								13,0÷40,0

* - If protector is used, its diameter shall be taken into consideration

** - According to Client choice



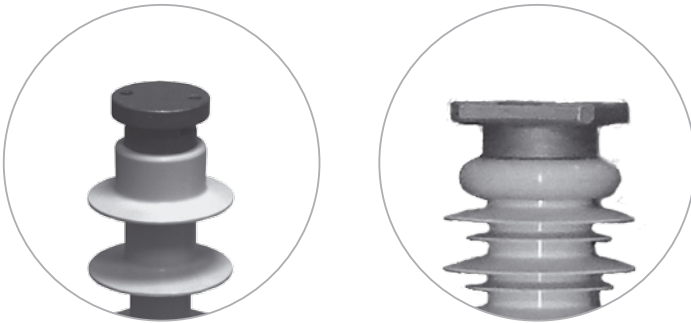
SUPPORT AND ENTRANCE INSULATORS



ADVANTAGES OF POLYMERIC SUPPORT INSULATORS OF HIGHER RELIABILITY

III generation OSK type insulators of improved reliability made by INSTA LLC are notable for:

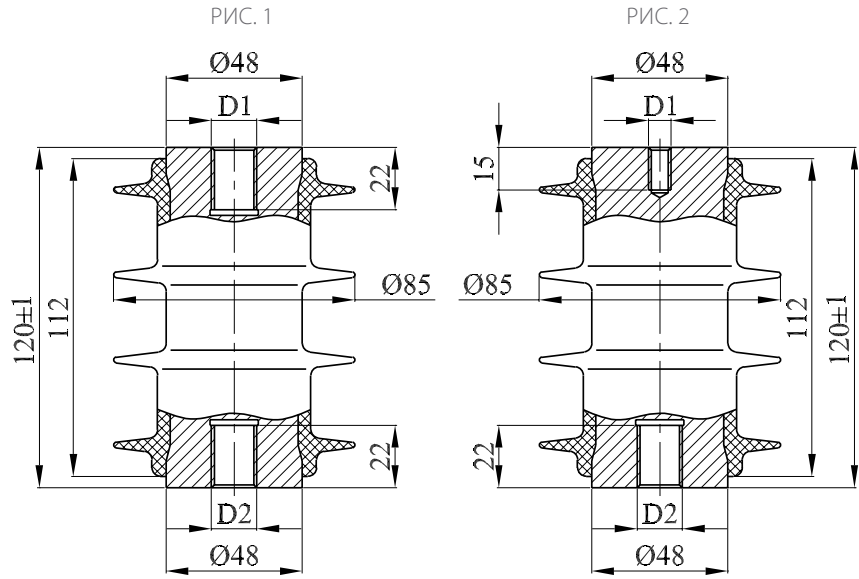
- solid silicon coating overlaps flanges, which provide full tightness and durability of insulators due to full elimination of glued joints in structure;
- unique fabrication technology, which guarantees that there are no hidden rod damages after flanges embossing;
- the best anti-corrosion protection of flanges with the use of thermodiffusion or hot zinc coating;



COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 3 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 3 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



It is available with other connection sizes upon request from Client

Name	Standardized destructive force at bending, kN	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
				lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 16-3-4	16	112	220	80	42	28

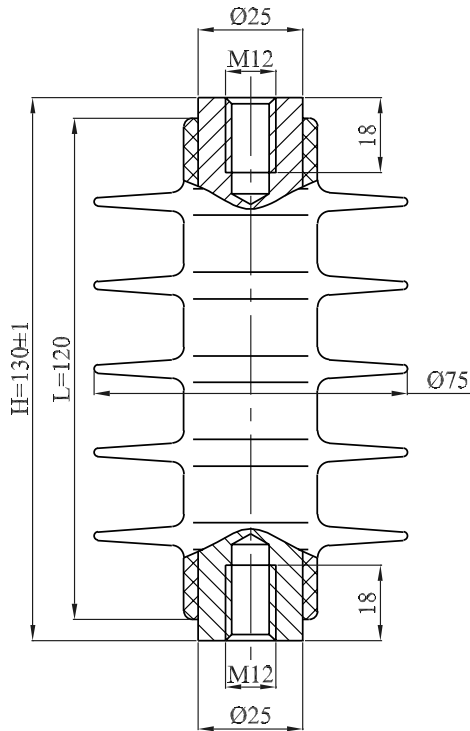
CONNECTION SIZES OF INSULATORS

Name	Fig.	Construction height H, mm	Upper flange D1, mm	Lower flange D2, mm
OSK 16-3-A-4	1	120	M20	M20
OSK 16-3-A01-4	2		M10	M20
OSK 16-3-A02-4	1		M16	M16

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 10 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.
Conforms IEC, ANSI.



It is available with other connection sizes upon request from Client

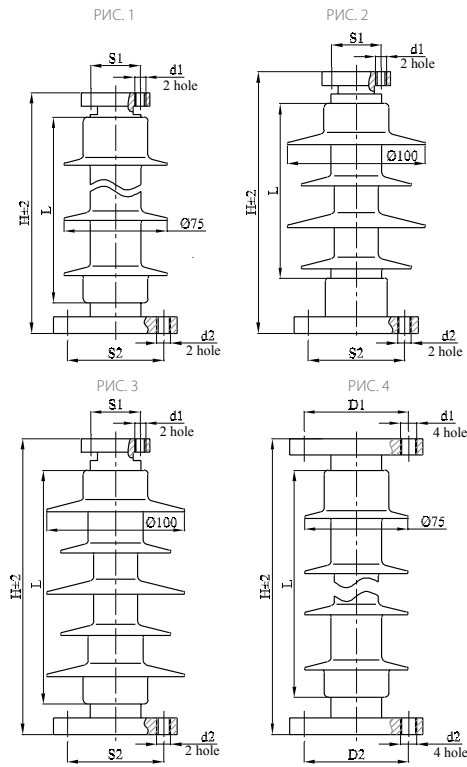
Name	Standardized destructive force at bending, kN	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
				lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 3-10-2	3	120	300	80	45	30

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 10 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



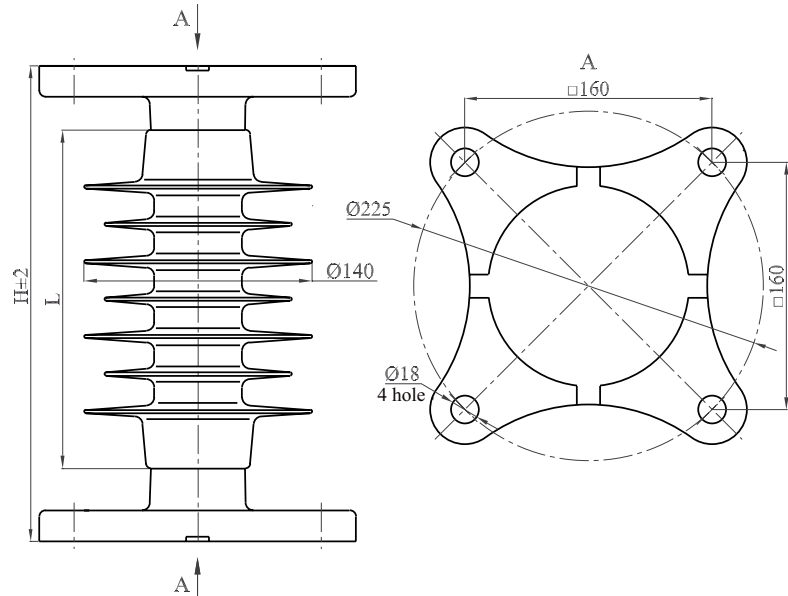
It is available with other connection sizes upon request from Client

Name	Figure	Standardized destructive force at bending, kN	Standardized destructive torque, N m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, not less than	Connection sizes of end terminals, mm.			Withstanding voltage, kV			
							Upper flange		Lower flange		full lightning impulse	50 Hz in dry condition	50 Hz under rain
							S1	D1	d1	S2			
OSK 4-10-A-1	1	4	200	175	125	225	18	2M6	105	2M10	85	45	30
OSK 4-10-A01-1							36	2M8	70	2M10			
OSK 4-10-A02-1							18	2M8	70	2M10			
OSK 4-10-2							36	2M8	70	2M10			
OSK 4-10-A-2	2	190	130	300	36	2M8	70	2M10	130	75	45		
OSK 4-10-A-4	1	215	170		36	2M8	70	2M10					
OSK 4-10-B-4	3	305	225		460	36	2M8	70				2M10	
OSK 4-10-B01-4	4	305	225	460	36	2M8	70	2M10	185	130	85		
							Ø76	4M12	Ø76	4M12			
OSK 6-10-A-1	1	6	200	175	125	225	18	2M6	105	2M10	85	45	30
OSK 6-10-A01-1							36	2M8	70	2M10			
OSK 6-10-A02-1							18	2M8	70	2M10			
OSK 6-10-2							36	2M8	70	2M10			
OSK 6-10-A-2	2	190	130	300	36	2M8	70	2M10	130	75	45		
OSK 6-10-A-4	1	215	170		36	2M8	70	2M10					
OSK 6-10-B-4	3	305	225		460	36	2M8	70				2M10	
OSK 6-10-B01-4	4	305	225	460	36	2M8	70	2M10	185	130	85		
							Ø76	4M12	Ø76	4M12			

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 10 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



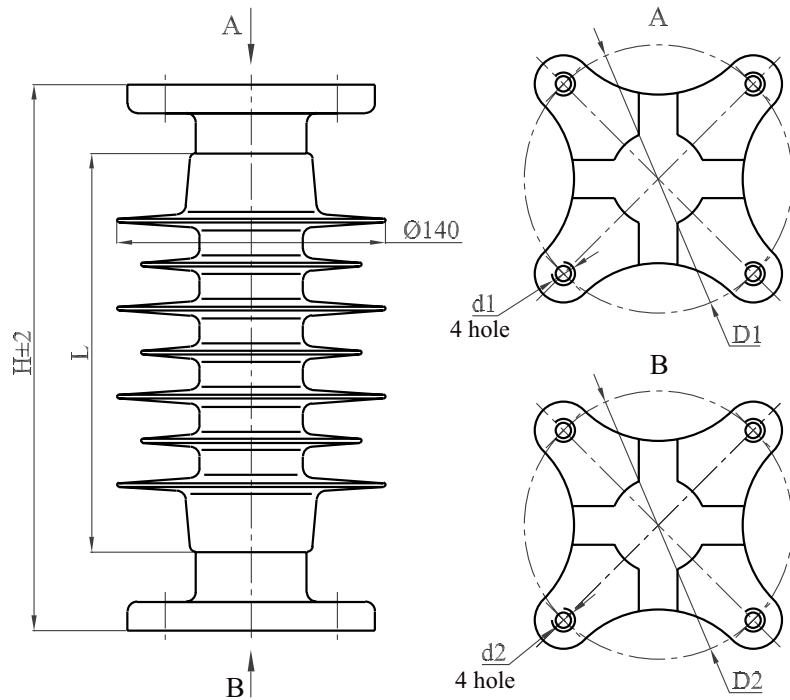
It is available with other connection sizes upon request from Client

Name	Standardized destructive force at bending, kN	Standardized destructive torque, N m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 20-10-4	20	1,0	284	160	460	85	45	30

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 10 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



Name	Standardized destructive force at bending, kN	Standardized destructive torque, N m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 20-10-A-4	20	1,0	210	160	460	85	45	30
OSK 20-10-B-4		2,0	280	208	650	130	80	50
OSK 20-10-V-4			285					

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

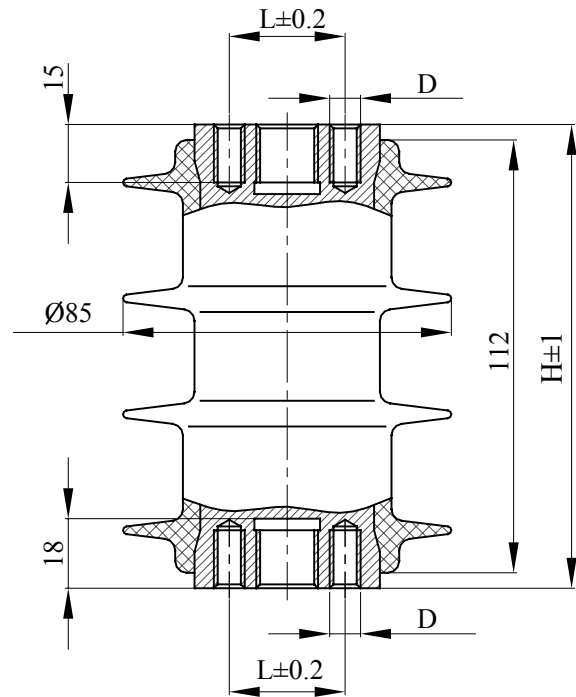
Name	H, mm	Upper flange		Lower flange	
		D1, mm	d1, mm	D2, mm	d2, mm
OSK 20-10-A-4	210	Ø120	4M12	Ø120	4Ø15
OSK 20-10-A01-4		Ø127	4Ø13	Ø127	4Ø13
OSK 20-10-B-4	280	Ø140	4M16	Ø140	4Ø18
OSK 20-10-B01-4		Ø140	4M12	Ø127	4Ø13
OSK 20-10-V-4	285	Ø127	4Ø13	Ø127	4Ø13
OSK 20-10-V01-4		Ø140	4M12	Ø140	4Ø15
OSK 20-10-V02-4		Ø140	4Ø15	Ø140	4Ø15
OSK 20-10-V03-4		Ø120	4Ø15	Ø120	4Ø15
OSK 20-10-V04-4		Ø120	4M12	Ø120	4Ø15
OSK 20-10-V05-4		Ø76	4M12	Ø76	4M12

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 10 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Standardized destructive force at bending, kN	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
				lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 8-10-1	8	112	220	80	45	30

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

Insulator designation	H, mm	Upper flange		Lower flange	
		L, mm	D, mm	L, mm	D, mm
OSK 8-10-01-1, OSK 8-10-A01-1	120	–	1-M16 hole	–	1-M16 hole
OSK 8-10-02-1, OSK 8-10-A02-1		30	2-M8 hole	30	2-M8 hole
OSK 8-10-03-1		23	2-M10 hole	23	2-M10 hole
OSK 8-10-04-1		–	1-M16 hole	30	2-M8 hole
OSK 8-10-05-1		–	1-M16 hole	23	2-M10 hole
OSK 8-10-06-1, OSK 8-10-A06-1		30	1-M16 hole 2-M8 hole	30	1-M16 hole 2-M8 hole
OSK 8-10-07-1		–	1-M12 hole	18	2-M8 hole
OSK 8-10-08-1		30	1-M16 hole 2-M8 hole	–	1-M16 hole
OSK 8-10-09-1		–	1-M12 hole	–	1-M12 hole
OSK 8-10-10-1		–	1-M10 hole	23	2-M10 hole
OSK 8-10-11-1		–	1-M10 hole	–	1-M12 hole
OSK 8-10-011-1, OSK 8-10-A011-1	124	–	1-M16 hole	–	1-M16 hole
OSK 8-10-021-1, OSK 8-10-A021-1		30	2-M8 hole	30	2-M8 hole
OSK 8-10-031-1		23	2-M10 hole	23	2-M10 hole
OSK 8-10-041-1		–	1-M16 hole	30	2-M8 hole
OSK 8-10-051-1		–	1-M16 hole	23	2-M10 hole
OSK 8-10-061-1, OSK 8-10-A061-1		30	1-M16 hole 2-M8 hole	30	1-M16 hole 2-M8 hole
OSK 8-10-071-1		–	1-M12 hole	18	2-M8 hole
OSK 8-10-081-1		30	1-M16 hole 2-M8 hole	–	1-M16 hole
OSK 8-10-091-1		–	1-M12 hole	–	1-M12 hole
OSK 8-10-101-1		–	1-M10 hole	23	2-M10 hole
OSK 8-10-111-1		–	1-M10 hole	–	1-M12 hole
OSK 8-10-012-1, OSK 8-10-A012-1	130	–	1-M16 hole	–	1-M16 hole
OSK 8-10-022-1, OSK 8-10-A022-1		30	2-M8 hole	30	2-M8 hole
OSK 8-10-032-1		23	2-M10 hole	23	2-M10 hole
OSK 8-10-042-1		–	1-M16 hole	30	2-M8 hole
OSK 8-10-052-1		–	1-M16 hole	23	2-M10 hole
OSK 8-10-062-1, OSK 8-10-A062-1		30	1-M16 hole 2-M8 hole	30	1-M16 hole 2-M8 hole
OSK 8-10-072-1		–	1-M12 hole	18	2-M8 hole
OSK 8-10-082-1		30	1-M16 hole 2-M8 hole	–	1-M16 hole
OSK 8-10-092-1		–	1-M12 hole	–	1-M12 hole
OSK 8-10-102-1		–	1-M10 hole	23	2-M10 hole
OSK 8-10-112-1		–	1-M10 hole	–	1-M12 hole

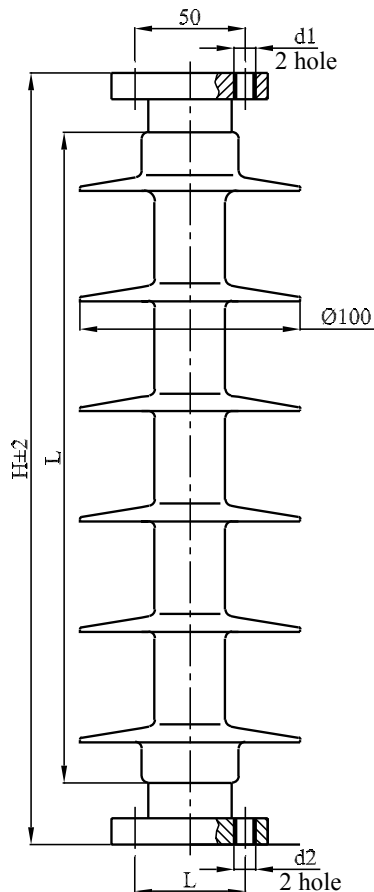
Letter A in designation of insulator modification means that insulators flanges are made of non-magnetic material

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 20 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C.

Conforms IEC, ANSI.



Name	Rated voltage, kV	Standardized destructive force at bending, kN	Standardized destructive torque, N·m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
							полного грозового импульса	50 Гц в сухом состоянии	50 Гц под дождем	
OSK 4-20-A-2	20	4	200	350	295	630	190	150	110	2,5

CONNECTION SIZES OF INSULATORS

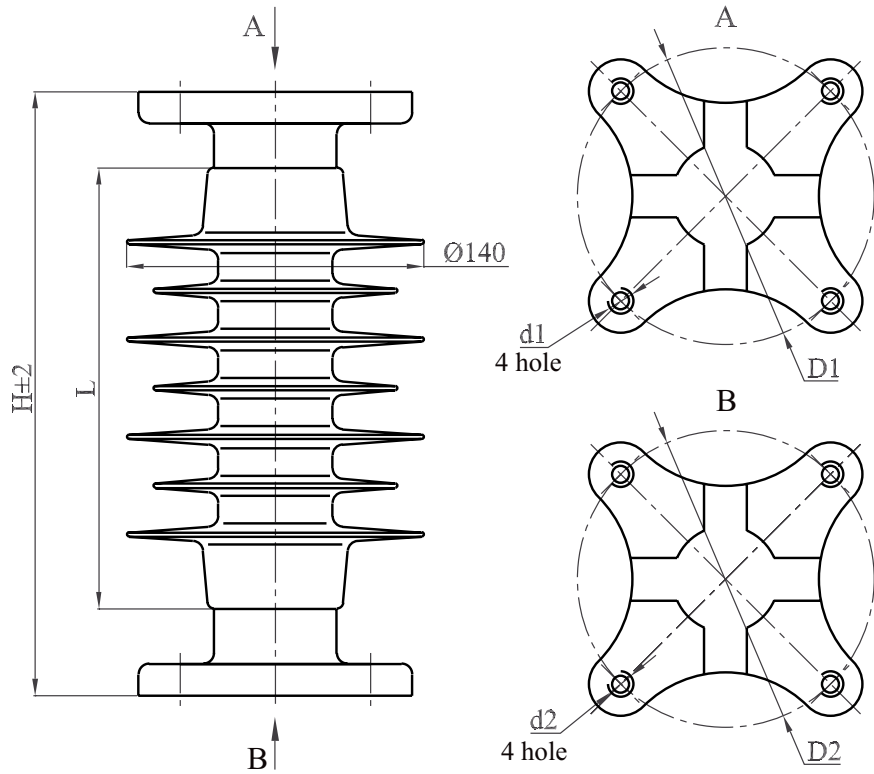
It is available with other connection sizes upon request from Client

Insulator designation	d1, mm	L, mm	d2, mm
OSK 4-20-A-2	2 отв. M10	50	2 отв. M10
OSK 4-20-A01-2	2 отв. M12	50	2 отв. M12
OSK 4-20-A02-2	2 отв. M10	70	2 отв. M12

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 20 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



Name	Standardized destructive force at bending, kN	Standardized destructive torque, N m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 10-20-A-2	10	2,0	280	208	650	130	80	50
OSK 20-20-A-2	20							

CONNECTION SIZES OF INSULATORS

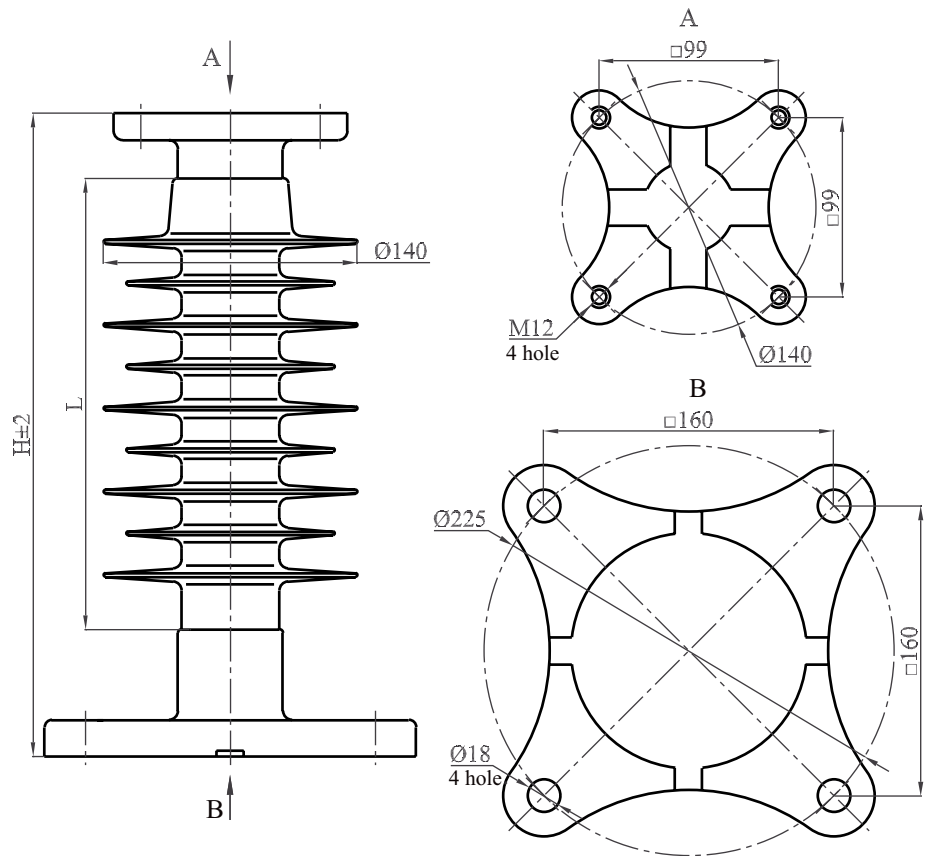
It is available with other connection sizes upon request from Client

Name	H, mm	Upper flange		Lower flange	
		D1, mm	d1, mm	D2, mm	d2, mm
OSK 10-20-A-2	280	Ø140	4M16	Ø140	4Ø18
OSK 10-20-A01-2		Ø140	4Ø15	Ø140	4Ø15
OSK 10-20-A02-2		Ø140	4M12	Ø140	4Ø15
OSK 20-20-A-2		Ø140	4M16	Ø140	4Ø18
OSK 20-20-A01-2		Ø140	4Ø15	Ø140	4Ø15
OSK 20-20-A02-2		Ø140	4M12	Ø140	4Ø15

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 20 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



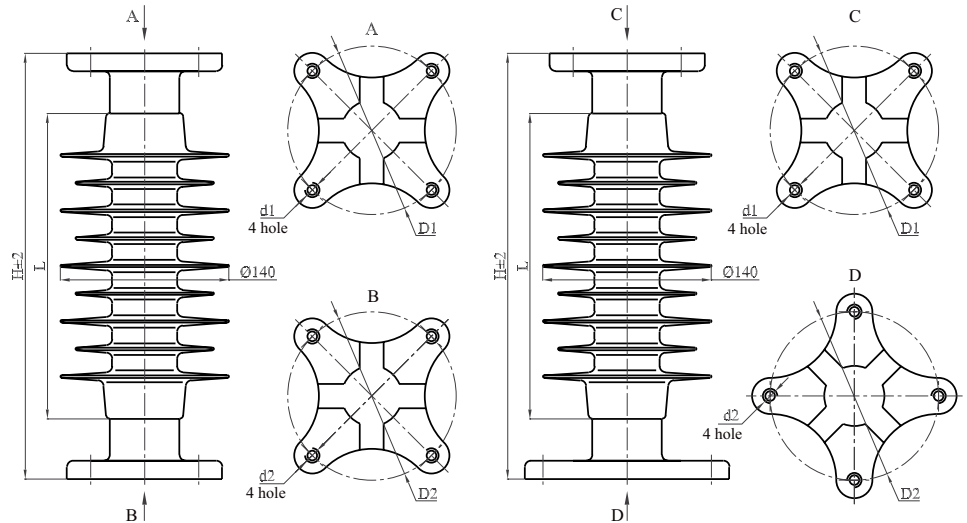
It is available with other connection sizes upon request from Client

Name	Standardized destructive force at bending, kN	Standardized destructive torque, N·m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 16-20-4	16	2,0	355	250	840	130	80	50
OSK 20-20-4	20							

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 20 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 20 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C. Conforms IEC, ANSI.



Name	Standardized destructive force at bending, kN	Standardized destructive torque, N·m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 16-20-A-4	16	2,0	354	255	840	130	80	50

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

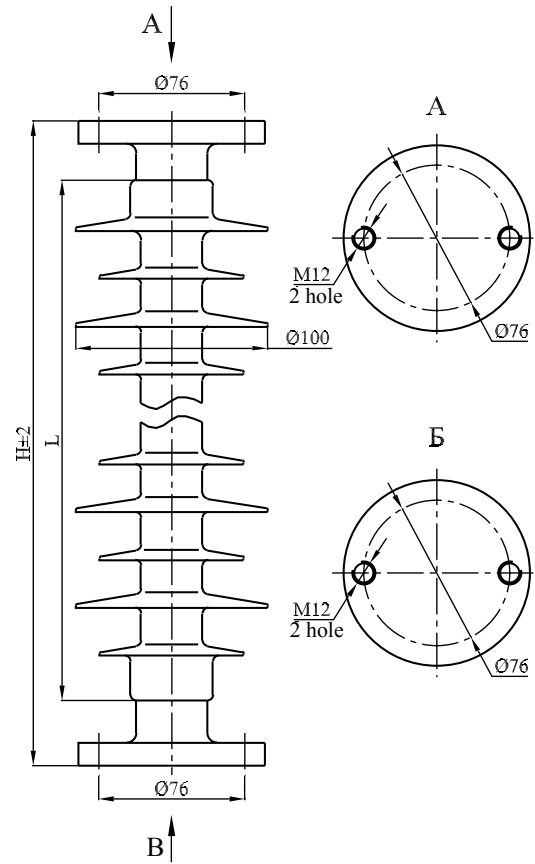
Name	H, mm	Figure No	Upper flange		Lower flange	
			D1, mm	d1, mm	D2, mm	d2, mm
OSK 16-20-A-4	354	1	Ø140	4M12	Ø140	4Ø13
OSK 16-20-A01-4			Ø140	4M12	Ø140	4M12
OSK 16-20-A02-4			Ø140	4Ø13	Ø140	4Ø13
OSK 16-20-A03-4		2	Ø140	4M12	Ø140	4Ø13
OSK 16-20-A04-4			Ø140	4M12	Ø140	4M12
OSK 16-20-A05-4			Ø140	4Ø13	Ø140	4Ø13

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 35 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C., with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



It is available with other connection sizes upon request from Client

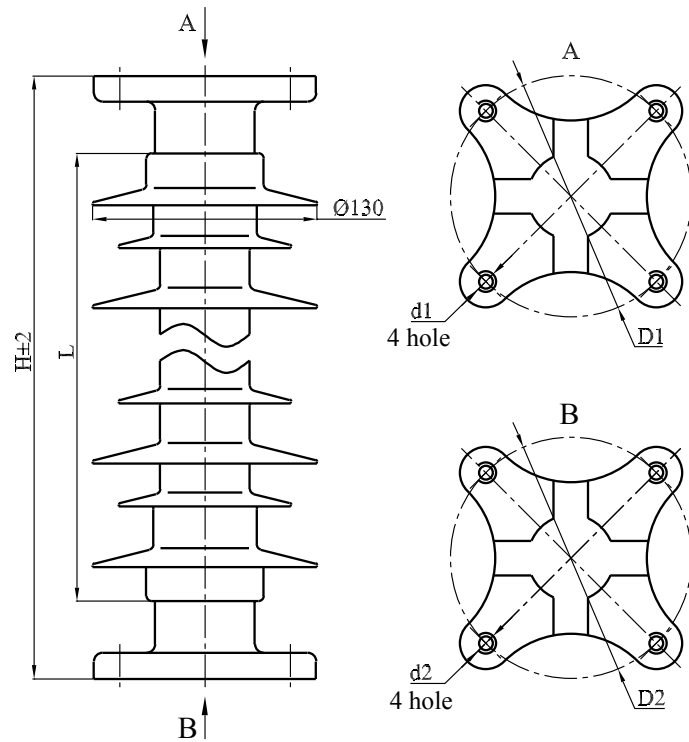
Name	Standardized destructive force at bending, kN	Standardized destructive torque, N·m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV		
						lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 3-35-A-2	3	200	440	375	1050	225	180	135

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 35 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C., with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Standardized destructive force at bending, kN	Standardized destructive torque, N·m	Construction height H, mm	Insulating height L, mm	Leakage current path distance, mm, not less than	Withstanding voltage, kV						
						lightning impulse	50 Hz in dry condition	50 Hz under rain				
OSK 8-35-A-2	8	600	400	350	1050	210	165	120				
OSK 8-35-B-2			440									
OSK 8-35-D-2			420									
OSK 8-35-E-2			423	425					1160	240	190	135
OSK 8-35-V-3			475									
OSK 8-35-G-3			500									
OSK 10-35-A-2	10	600	400	350	1050	210	165	120				
OSK 10-35-B-2			440									
OSK 10-35-D-2			420									
OSK 10-35-E-2			423	425					1160	240	190	135
OSK 10-35-V-3			475									
OSK 10-35-G-3			500									
OSK 12,5-35-A-2	12,5	600	400	350	1050	210	165	120				
OSK 12,5-35-B-2			440									
OSK 12,5-35-D-2			420									
OSK 12,5-35-E-2			423	425					1160	240	190	135
OSK 12,5-35-V-3			475									
OSK 12,5-35-G-3			500									

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

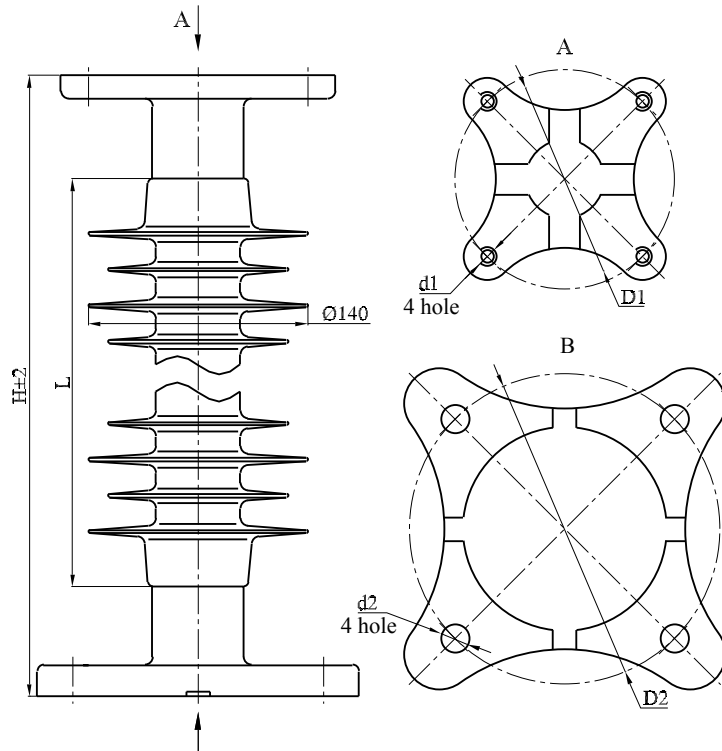
Name	H, mm	Upper flange		Lower flange	
		D1, mm	d1, mm	D2, mm	d2, mm
OSK 8-35-A-2	400	Ø140	4M12	Ø140	4Ø14
OSK 8-35-A01-2		Ø140	4M12	Ø140	4M12
OSK 8-35-A02-2		Ø140	4M12	Ø140	4Ø18
OSK 8-35-A03-2		Ø140	4M16	Ø140	4Ø18
OSK 8-35-B-2		Ø76	4M12	Ø76	4M12
OSK 8-35-B01-2		Ø140	4M12	Ø140	4M12
OSK 8-35-B02-2		Ø127	4M12	Ø127	4M12
OSK 8-35-B03-2		Ø127	4Ø13	Ø127	4Ø13
OSK 8-35-B04-2		Ø140	4M16	Ø140	4Ø18
OSK 8-35-B05-2		Ø127	4M16	Ø127	4M16
OSK 8-35-B06-2	Ø140	4M16	Ø140	4M16	
OSK 8-35-D-2	420	Ø140	4M12	Ø140	4M12
OSK 8-35-E-2	423	Ø140	4M12	Ø140	4M12
OSK 8-35-V02-3	475	Ø127	4M12	Ø127	4M12
OSK 8-35-V03-3		Ø76	4M12	Ø76	4M12
OSK 8-35-G04-3	500	Ø225(□160)	4Ø18	Ø225(□160)	4Ø18
OSK 10-35-A-2	400	Ø140	4M12	Ø140	4Ø14
OSK 10-35-A01-2		Ø140	4M12	Ø140	4M12
OSK 10-35-A02-2		Ø140	4M12	Ø140	4Ø18
OSK 10-35-A03-2		Ø140	4M16	Ø140	4Ø18
OSK 10-35-B-2		Ø76	4M12	Ø76	4M12
OSK 10-35-B01-2		Ø140	4M12	Ø140	4M12
OSK 10-35-B02-2		Ø127	4M12	Ø127	4M12
OSK 10-35-B03-2		Ø127	4Ø13	Ø127	4Ø13
OSK 10-35-B04-2		Ø140	4M16	Ø140	4Ø18
OSK 10-35-B05-2		Ø127	4M16	Ø127	4M16
OSK 10-35-B06-2	Ø140	4M16	Ø140	4M16	
OSK 10-35-D-2	420	Ø140	4M12	Ø140	4M12
OSK 10-35-E-2	423	Ø140	4M12	Ø140	4M12
OSK 10-35-V02-3	475	Ø127	4M12	Ø127	4M12
OSK 10-35-V03-3		Ø76	4M12	Ø76	4M12
OSK 10-35-G04-3	500	Ø225(□160)	4Ø18	Ø225(□160)	4Ø18
OSK 12,5-35-A-2	400	Ø140	4M12	Ø140	4Ø14
OSK 12,5-35-A01-2		Ø140	4M12	Ø140	4M12
OSK 12,5-35-A02-2		Ø140	4M12	Ø140	4Ø18
OSK 12,5-35-A03-2		Ø140	4M16	Ø140	4Ø18
OSK 12,5-35-B-2		Ø76	4M12	Ø76	4M12
OSK 12,5-35-B01-2		Ø140	4M12	Ø140	4M12
OSK 12,5-35-B02-2		Ø127	4M12	Ø127	4M12
OSK 12,5-35-B03-2		Ø127	4Ø13	Ø127	4Ø13
OSK 12,5-35-B04-2		Ø140	4M16	Ø140	4Ø18
OSK 12,5-35-B05-2		Ø127	4M16	Ø127	4M16
OSK 12,5-35-B06-2	Ø140	4M16	Ø140	4M16	
OSK 12,5-35-D-2	420	Ø140	4M12	Ø140	4M12
OSK 12,5-35-E-2	423	Ø140	4M12	Ø140	4M12
OSK 12,5-35-V02-3	475	Ø127	4M12	Ø127	4M12
OSK 12,5-35-V03-3		Ø76	4M12	Ø76	4M12
OSK 12,5-35-G04-3	500	Ø225(□160)	4Ø18	Ø225(□160)	4Ø18

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 35 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C., with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
						full lightning impulse	50 Hz in dry condition	50 Hz under rain	
OSK 8-35-N-4	8	1,0	570	538	1500	250	165	120	10
OSK 8-35-V-4			560						
OSK 10-35-N-4	10		570						
OSK 10-35-V-4			560						

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

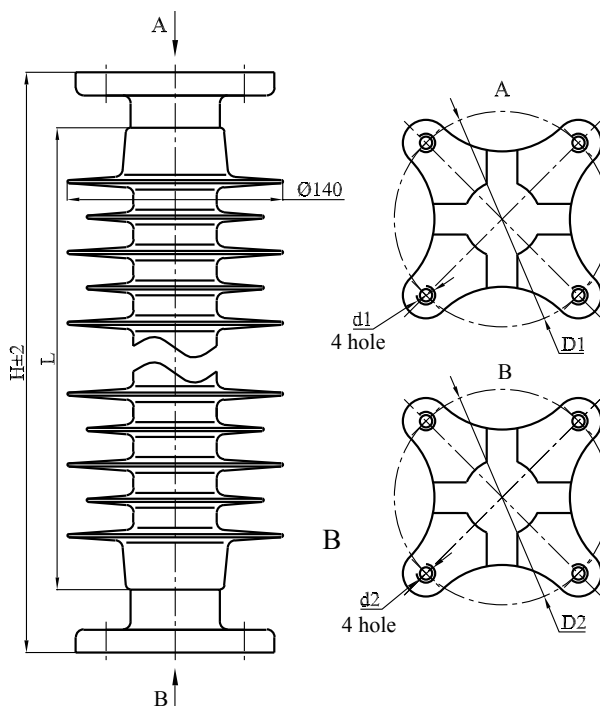
Name	H, mm	Upper flange		Lower flange	
		D1, mm	d1, mm	D2, mm	d2, mm
OSK 8-35-N-4	570	Ø140	4M12	Ø198 (□140)	4Ø18
OSK 8-35-V-4	560	Ø127	4M16	Ø127	4M16
OSK 10-35-N-4	570	Ø140	4M12	Ø198 (□140)	4Ø18
OSK 10-35-V-4	560	Ø127	4M16	Ø127	4M16

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 35 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C., with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
						full lightning impulse	50 Hz in dry condition	50 Hz under rain	
OSK 12,5-35-A-3	12,5	1,0	400	346	1160	200	165	120	6,2
OSK 12,5-35-B-3			440						
OSK 16-35-A-3	16,0		400						
OSK 16-35-B-3			440						

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

Name	H, mm	Upper flange		Lower flange	
		D1, mm	d1, mm	D2, mm	d2, mm
OSK 12,5-35-A-3	400	Ø140	4M12	Ø140	4M12
OSK 12,5-35-A01-3		Ø140	4M16	Ø140	4Ø18
OSK 12,5-35-A02-3		Ø140	4M16	Ø140	4M16
OSK 12,5-35-A03-3		Ø140	4Ø18	Ø140	4Ø18
OSK 12,5-35-B-3		Ø127	4Ø13	Ø127	4Ø13
OSK 12,5-35-B01-3		Ø140	4M12	Ø140	4M12
OSK 12,5-35-B02-3	440	Ø127	4M16	Ø127	4M16
OSK 12,5-35-B03-3		Ø140	4M16	Ø140	4Ø18
OSK 12,5-35-B04-3		Ø127	4M12	Ø127	4M12
OSK 12,5-35-B05-3		Ø140	4M12	Ø140	4Ø13
OSK 12,5-35-B06-3		Ø140	4Ø13	Ø140	4Ø13
OSK 16-35-A-3		400	Ø140	4M12	Ø140
OSK 16-35-A01-3	Ø140		4M16	Ø140	4Ø18
OSK 16-35-A02-3	Ø140		4M16	Ø140	4M16
OSK 16-35-A03-3	Ø140		4Ø18	Ø140	4Ø18
OSK 16-35-B-3	Ø127		4Ø13	Ø127	4Ø13
OSK 16-35-B01-3	Ø140		4M12	Ø140	4M12
OSK 16-35-B02-3	440	Ø127	4M16	Ø127	4M16
OSK 16-35-B03-3		Ø140	4M16	Ø140	4Ø18
OSK 16-35-B04-3		Ø127	4M12	Ø127	4M12
OSK 16-35-B05-3		Ø140	4M12	Ø140	4Ø13
OSK 16-35-B06-3		Ø140	4Ø13	Ø140	4Ø13

**COMPOSITE SUPPORT
INSULATORS FOR THE
VOLTAGE OF 35 kV**

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 35 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C., with frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.

FIG. 1

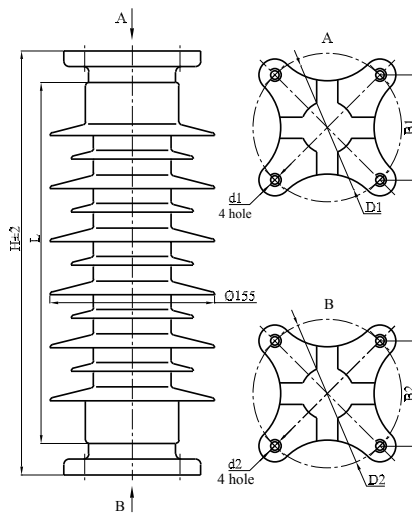
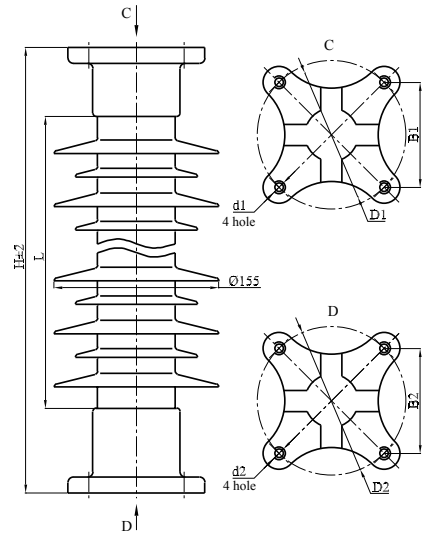


FIG. 2



Name	Figure	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV		
							full lightning impulse	50 Hz in dry condition	50 Hz under rain
OSK 20-35-A-2	1	20	3,5	400	340	1000	200	150	120
OSK 20-35-B-2				500	355	1090			
OSK 20-35-V-3	2	20	4,0	560	405	1250	240	170	140
OSK 20-35-G-3				570					

CONNECTION SIZES OF INSULATORS

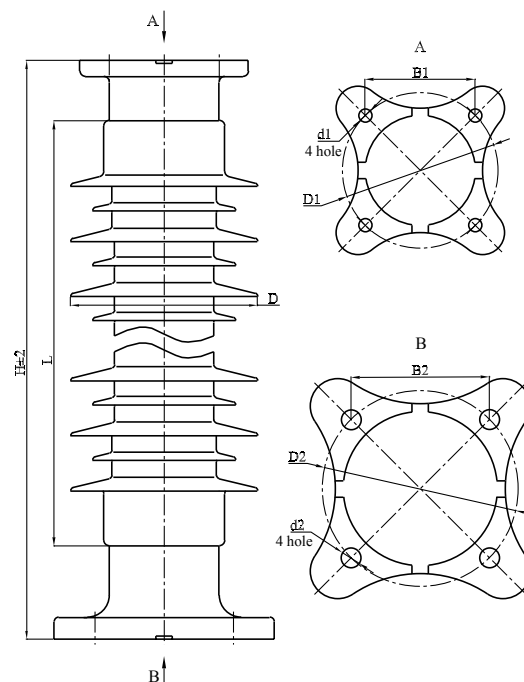
It is available with other connection sizes upon request from Client

Name	H, mm	Upper flange			Lower flange		
		D1, mm	B1, mm	d1, mm	D2, mm	B2, mm	d2, mm
OSK 20-35-A-2	400	Ø140	□99	4M16	Ø140	□99	4Ø18
OSK 20-35-A01-2		Ø140	□99	4M12	Ø140	□99	4Ø14
OSK 20-35-A02-2		Ø140	□99	4M12	Ø140	□99	4M12
OSK 20-35-B-2		Ø225	□160	4Ø18	Ø254	□180	4Ø18
OSK 20-35-B01-2	500	Ø225	□160	4Ø18	Ø225	□160	4Ø18
OSK 20-35-B02-2		Ø140	□99	4M12	Ø254	□180	4Ø18
OSK 20-35-B03-2		Ø170	□120	4Ø18	Ø225	□160	4Ø18
OSK 20-35-B04-2		Ø198	□140	4Ø18	Ø198	□140	4Ø18
OSK 20-35-B05-2		Ø140	□99	4M12	Ø225	□160	4Ø18
OSK 20-35-B06-2		Ø198	□140	4M16	Ø198	□140	4Ø18
OSK 20-35-B06-2	560	Ø254	□180	4Ø18	Ø254	□180	4Ø18
OSK 20-35-V-3		Ø127	□90	4M16	Ø127	□90	4M16
OSK 20-35-V01-3		Ø127	□90	4M16	Ø178	□126	4Ø18
OSK 20-35-V02-3		Ø127	□90	4M12	Ø127	□90	4M12
OSK 20-35-G-3	570	Ø140	□99	4Ø18	Ø198	□140	4Ø18
OSK 20-35-G01-3		Ø140	□99	4M12	Ø198	□140	4Ø18

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 110 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 110 kV voltage and frequency up to 100 Hz, in conditions of air temperature from -60 to +50 °C. Conforms IEC, ANSI.



Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Ribs diameter, D, mm	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
								full lightning impulse	50 Hz in dry condition	50 Hz under rain	
OSK 6-110-A-2	6	2,0	1020	1050	155	910	2800	490	320	260	27
OSK 6-110-B-2											
OSK 6-110-V-2											
OSK 6-110-G-3											
OSK 8-110-A-2											
OSK 8-110-B-2											
OSK 8-110-V-2	8	1100	1020	1050	910	2800	490	320	260		
OSK 8-110-G-3											
OSK 10-110-A-2											
OSK 10-110-B-2	10	1100	1020	1050	910	2800	490	320	260		
OSK 10-110-V-2											
OSK 10-110-G-3											
OSK 12,5-10-A-2											
OSK 12,5-110-B-2	12,5	4,0	1020	1050	170	910	2800	490	320	260	
OSK 12,5-110-V-2											
OSK 12,5-110-G-3											
OSK 12,5-110-G-3											

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

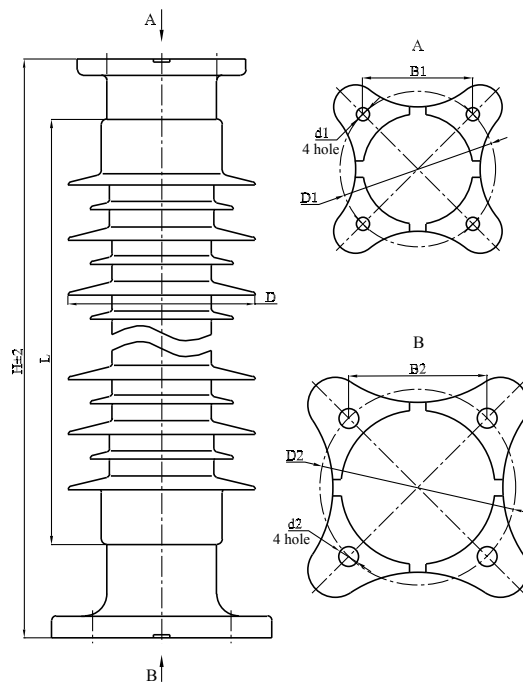
Name	H, mm	Upper flange		Lower flange				
		D1, mm	B1, mm	d1, mm	D2, mm	B2, mm	d2, mm	
OSK 6-110-A-2	1020	Ø178		4Ø18	Ø178		4Ø18	
OSK 6-110-A01-2		Ø127		4M16	Ø127		4M16	
OSK 6-110-A02-2		Ø127		4M16	Ø178		4Ø18	
OSK 6-110-B-2		Ø127		4M16	Ø127		4M16	
OSK 6-110-B01-2		Ø140		4M12		□160	4Ø18	
OSK 6-110-B02-2		Ø127		4M16	Ø178		4Ø18	
OSK 6-110-B03-2	1050		□120	4M12		□160	4Ø18	
OSK 6-110-B04-2			□100	4M12		□160	4Ø18	
OSK 6-110-B05-2			□100	4M10		□160	4Ø18	
OSK 6-110-V-2		1100		□160	4Ø18		□160	4Ø18
OSK 6-110-V01-2				□140	4Ø18		□160	4Ø18
OSK 6-110-G-3	1220	Ø127		4M16	Ø200		4Ø18	
OSK 8-110-A-2	1020	Ø178		4Ø18	Ø178		4Ø18	
OSK 8-110-A01-2		Ø127		4M16	Ø127		4M16	
OSK 8-110-A02-2		Ø127		4M16	Ø178		4Ø18	
OSK 8-110-B-2		Ø127		4M16	Ø127		4M16	
OSK 8-110-B01-2		Ø140		4M12		□160	4Ø18	
OSK 8-110-B02-2		Ø127		4M16	Ø178		4Ø18	
OSK 8-110-B03-2	1050		□120	4M12		□160	4Ø18	
OSK 8-110-B04-2			□100	4M12		□160	4Ø18	
OSK 8-110-B05-2			□100	4M10		□160	4Ø18	
OSK 8-110-V-2		1100		□160	4Ø18		□160	4Ø18
OSK 8-110-V01-2				□140	4Ø18		□160	4Ø18
OSK 8-110-G-3	1220	Ø127		4M16	Ø200		4Ø18	
OSK 10-110-A-2	1020	Ø127		4M16	Ø127		4M16	
OSK 10-110-A01-2		Ø127		4M16	Ø178		4Ø18	
OSK 10-110-B-2			□100	4M12	Ø178		4Ø18	
OSK 10-110-B01-2			□100	4M10		□160	4Ø18	
OSK 10-110-B02-2	1050	Ø127		4M16	Ø178		4Ø18	
OSK 10-110-B03-2				□120	4M12		□160	4Ø18
OSK 10-110-B04-2				□100	4M12		□160	4Ø18
OSK 10-110-V-2				□160	4Ø18		□160	4Ø18
OSK 10-110-V01-2		1100		□160	4Ø18		□180	4Ø18
OSK 10-110-V02-2				□180	4Ø18		□194	4Ø20
OSK 10-110-G-3		Ø127		4M16	Ø200		4Ø18	
OSK 10-110-G01-3	1220	Ø127		4M16		□160	4Ø18	
OSK 10-110-G02-3				□120	4M12		□160	4Ø18
OSK 12,5-110-A-2	1020	Ø127		4M16	Ø127		4M16	
OSK 12,5-110-A01-2		Ø127		4M16	Ø178		4Ø18	
OSK 12,5-110-B-2			□100	4M12	Ø178		4Ø18	
OSK 12,5-110-B01-2			□100	4M10		□160	4Ø18	
OSK 12,5-110-B02-2	1050	Ø127		4M16	Ø178		4Ø18	
OSK 12,5-110-B03-2				□120	4M12		□160	4Ø18
OSK 12,5-110-B04-2				□100	4M12		□160	4Ø18
OSK 12,5-110-V-2				□160	4Ø18		□160	4Ø18
OSK 12,5-110-V01-2		1100		□160	4Ø18		□180	4Ø18
OSK 12,5-110-V02-2				□180	4Ø18		□194	4Ø20
OSK 12,5-110-G-3		Ø127		4M16	Ø200		4Ø18	
OSK 12,5-110-G01-3	1220	Ø127		4M16		□160	4Ø18	
OSK 12,5-110-G02-3				□120	4M12		□160	4Ø18

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 150 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 150 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Ribs diameter, D, mm	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
								full lightning impulse	50 Hz in dry condition	50 Hz under rain	
OSK 8-150-A-2	150	8	2,0	1600	170	1360	650	300	300	80	
OSK 8-150-B-3				1700		4400					
OSK 10-150-A-2	150	10	2,0	1600	170	1360	650	300	300	80	
OSK 10-150-B-3				1700		4400					

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

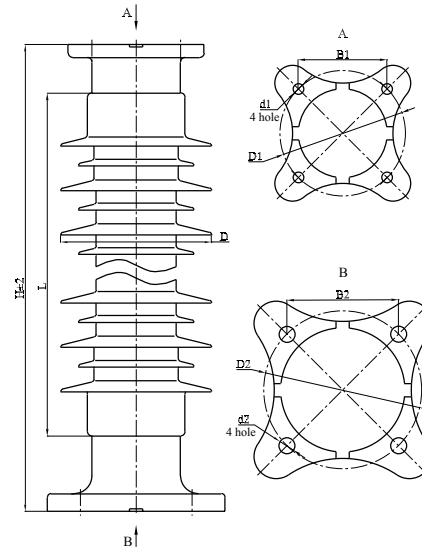
Name	H, mm	Upper flange			Lower flange		
		D1, mm	B1, mm	d1, mm	D2, mm	B2, mm	d2, mm
OSK 8-150-A-2	1600	Ø127		4M16	Ø200	□160	4Ø18
OSK 8-150-A01-2		Ø127		4M16			4Ø18
OSK 8-150-A02-2		Ø127	□160	4Ø18	□180	4Ø18	
OSK 8-150-B-3	1700	Ø127		4M16	Ø200	□160	4Ø18
OSK 8-150-B01-3		Ø127		4M16			4Ø18
OSK 10-150-A-2		Ø127		4M16	Ø200		4Ø18
OSK 10-150-A01-2	1600	Ø127		4M16	Ø200	□160	4Ø18
OSK 10-150-A02-2		Ø127		4M16			4Ø18
OSK 10-150-B-3	1700	Ø127		4M16	Ø200	□160	4Ø18
OSK 10-150-B01-3		Ø127		4M16			4Ø18

COMPOSITE SUPPORT INSULATORS FOR THE VOLTAGE OF 220 kV

OBJECTIVE:

Are intended for fixation and insulation of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 220 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Conforms IEC, ANSI.



Name	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	Standardized destructive torque, kN·m	Construction height H, mm, not more	Ribs diameter, D, mm	Insulating height L, mm, not less	Leakage current path distance, not less than	Withstanding voltage, kV			Weight, kg, not exceeding
								full lightning impulse	50 Hz in dry condition	50 Hz under rain	
OSK 6-220-A-2	220	6	2,0	2100	170	1820	5700	950	440	440	100
OSK 6-220-B-2				2200		1920	5980	1000	500	500	
OSK 6-220-V-3				2300		2020	6300	1050	550	550	
OSK 8-220-A-2		8	2,0	2100		1820	5700	950	440	440	
OSK 8-220-B-2				2200		1920	5980	1000	500	500	
OSK 8-220-V-3				2300		2200	6300	1050	550	550	

CONNECTION SIZES OF INSULATORS

It is available with other connection sizes upon request from Client

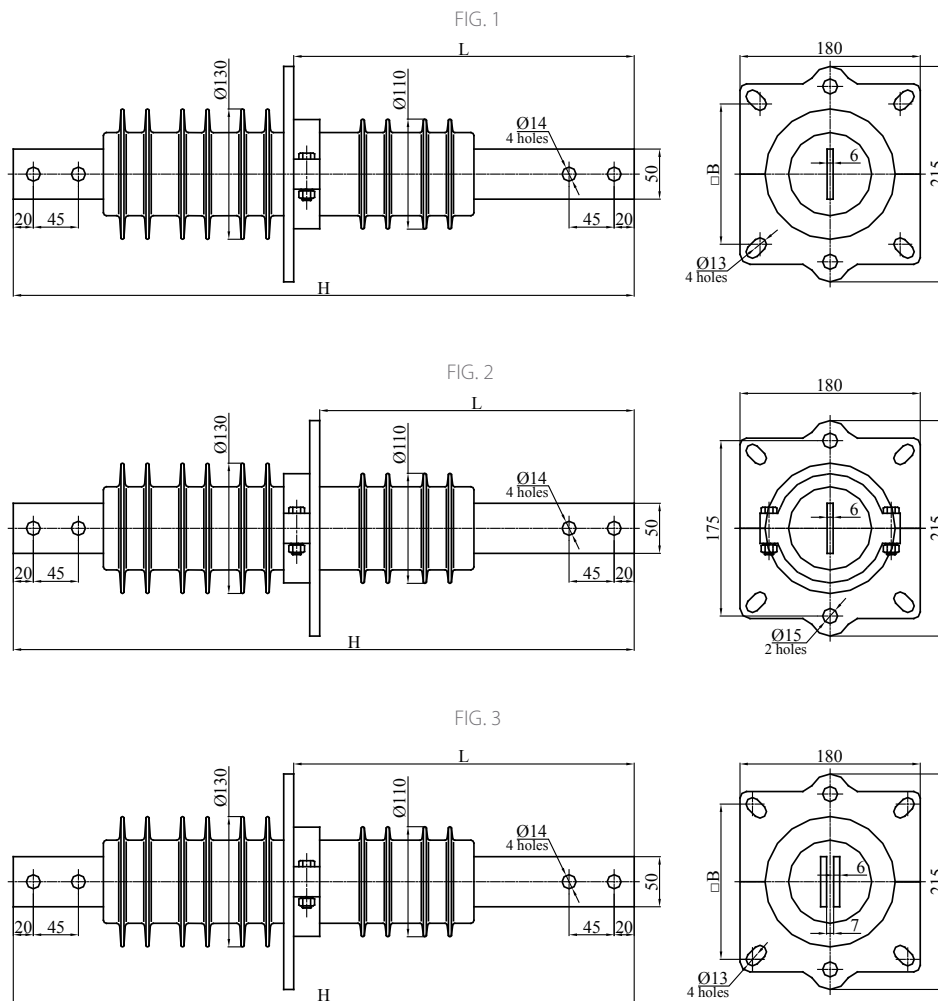
Name	H, mm	Upper flange			Lower flange		
		D1, mm	B1, mm	d1, mm	D2, mm	B2, mm	d2, mm
OSK 6-220-A-2	2100	Ø127		4M16	□160		4Ø18
OSK 6-220-A01-2		Ø127		4M16	□180		4Ø18
OSK 6-220-A02-2				□160	4Ø18	□160	4Ø18
OSK 6-220-A03-2				□160	4Ø18	□194	4Ø18
OSK 6-220-B-2	2200		□160	4Ø18	□180		4Ø18
OSK 6-220-B01-2			□160	4Ø18	□194		4Ø20
OSK 6-220-V-3	2300	Ø127		4M16	□160		4Ø18
OSK 6-220-V01-3		Ø127		4M16	□180		4Ø18
OSK 6-220-V02-3				□160	4Ø18	□180	4Ø18
OSK 8-220-A-2	2100	Ø127		4M16	□160		4Ø18
OSK 8-220-A01-2		Ø127		4M16	□180		4Ø18
OSK 8-220-A02-2				□160	4Ø18	□160	4Ø18
OSK 8-220-A03-2				□160	4Ø18	□194	4Ø18
OSK 8-220-B-2	2200		□160	4Ø18	□180		4Ø18
OSK 8-220-B01-2			□160	4Ø18	□194		4Ø20
OSK 8-220-V-3	2300	Ø127		4M16	□160		4Ø18
OSK 8-220-V01-3		Ø127		4M16	□180		4Ø18
OSK 8-220-V02-3				□160	4Ø18	□180	4Ø18

IPK-10 TYPE COMPOSITE ENTRANCE INSULATORS FOR THE VOLTAGE OF 10 KV

OBJECTIVE:

Are intended for guiding and connection of current carrying parts in electric apparatus and switchboards at power plants and substations of alternate current with 10 kV voltage and frequency up to 100 Hz, in conditions of air temperature from - 60 to + 50 °C.

Climatic category NF, location category: 1 - for the outer end, 2 - for the inner end
Conforms IEC, ANSI.



Name	Figure	Rated voltage, kV	Standardized mechanical destructive force at bending, kN	nominal current, A	Current leakage path distance, mm of Outer/ Inner insulators parts	flange setting size, B, mm	Overall dimension H, mm	Inner part length L, mm	Withstanding voltage, kV			
									полного грозового импульса	50 Гц в сухом состоянии	50 Гц под дождем	Disruptive voltage in insulating medium, kV, not less
IPK-10/630-8	1	10	8	630	440/255	□140	620	340	80	45	30	80
IPK-10/630-8-Б												
IPK-10/630-8 Configuration 1												
IPK-10/630-8-A	2					-	575	269				
IPK-10/630-12,5	1		12,5			□155						
IPK-10/1000-8	3		8	1000		□140	620	340				
IPK-10/1000-12,5												

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