

### ISOLATEUR POUR LIGNE AERIENNE

Type de l'isolateur		Caractéristique de l'isolateur										
Isolateur en verre suspendus												
	IEC 60 305/1995	Charge de rupture mécanique (kN)	Charge de rupture mécanique du reste de l'isolateur	Diamètre (D) mm	Pas (P) mm	Ligne de fuite (mm)	Assemblage capot et tige (ball and socket) IEC 60 120 /1984 (mm)	Perforation en huile (kV)	Tension de tenue au choc de foudre à sec positive (kV)	Tenue à Fréq. Indust. (50Hz) à Sec (kV)	Niveau maximum de perturbation radioélectrique (kV)	Poids (Kg)
PS40	U40B	40	32	175	110	185	11	100	70	30	25	1,7/0,95
PS70	U70BS/BL	70	56	255	127/146	320	16	130	100	40	25	3,4/2,25
PS120	U120B	120	96	255	127/146/170	320	16	130	100	40	30	3,9/2,55
PS160	U160BS/BL	160	128	280	146/170	370	20	130	110	45	40	6,2/3,8
PS210	U210B	210	168	300	170	370	20	130	110	45	40	7/4,2
PS300	U300B	300	240	320	195	385	24	130	130	50	40	10,0/5,45
PS400	U400B	400	320	390	205	475	28	130	130	55	40	15,0/8,3
PSD70E	-	70	56	270	127	411	16	130	110	45	25	4,4/3,27
PSV120B	-	120	96	290	146	442	16	130	125	50	30	5,72/4,3
PSS120B	-	120	96	330	146/127	330	16	130	75	45	30	5,0/3,5
PSS210B	-	210	168	410	156	410	20	130	90	55	40	9
PSK300A	-	300	240	450	180	460	24	130	90	52	40	12,4/7,8

#### Lock glass insulators

FSD70/27,5-1,2	70	45	270	455	1200	-	-	200	100	-	14,5
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#### Isolateur rigide haute tension

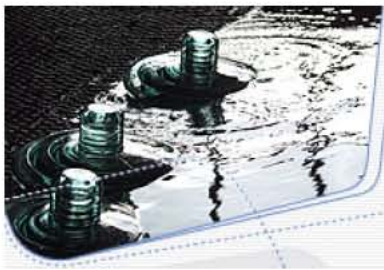
SS10D	13	-	160	145	280	-	140	100	-	40	1,9
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#### Isolateur rigide basse tension

NS 18A	8	-	75	97	-	-	-	-	-	6	0,44
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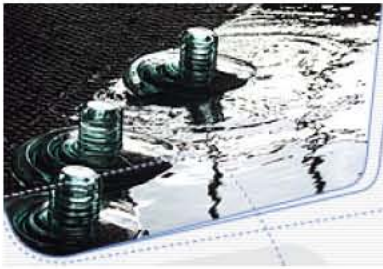
#### Isolateur polymérique

LK 70/110-3	70	-	90	1248	2640	-	-	570	-	-	3,65
FSK 70/27,5-A4	70	-	120	540	870	-	-	210	120	-	3,8



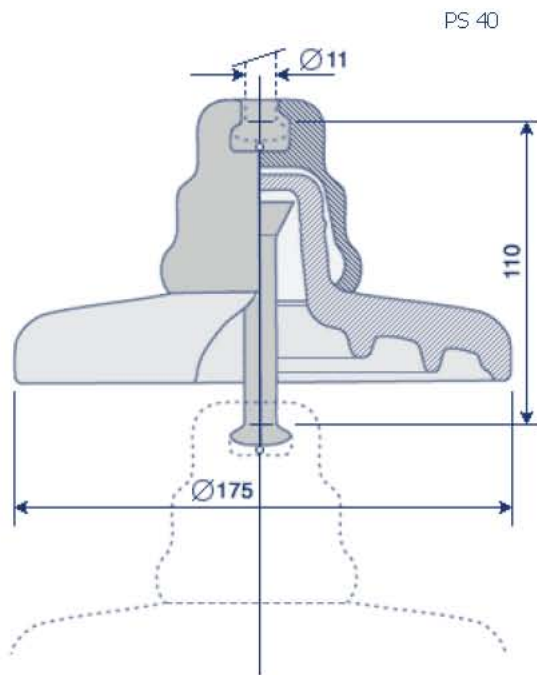
## OVERHEAD INSULATORS

INSULATOR TYPE		INSULATOR PARAMETERS					
DSTU (GOST)	IEC 60 305/1995	Ultimate Mechanical Strength, kN	Disc diameter, Mm	Spacing, mm	Lickage distance, mm	Metal fitting dimensions, IEC 60 120/1984	Weight Kg
<b>Suspended Glass Insulators</b>							
PS 40	U40B	40	175	100/110	185	11	1,7
PS 70	U70BS/BL	70	255	127/146	303	16	3,4
PS 120	U120B	120	255	146/170	320	16	3,9
PS 160	U160BS/BL	160	280	146/170	370	20	6,2
PS 210	U210B	210	300	170/195	370	20	7,1
PS 300	U300B	300	320	195	385	24	10,0
PS 400	U400B	400	390	205/220	475	28	15,0
PSD 70E		70	270	127	411	16	4,4
PSV 120B		120	290	146	442	16	5,7
PSS 120B		120	330	146/127	330	16	5,0
PSS 210B		210	410	156	410	20	9,0
PSK 300A		300	450	180	460	24	12,4
<b>Lock Insulators</b>							
FSD 70/27,5 - 1,2		70	270	455	1200	-	14,5
<b>Pin High-Voltage Insulators</b>							
SS 10D	-	13	160	145	280	-	1,9
<b>Pin Low-Voltage Insulators</b>							
NS 18A	-	8	75	97	-	-	0,44
<b>Polymeric Insulators</b>							
			Shed diameter, mm	Spacing, mm			
LK0/110 - 3	-	70	90	1248	2640	-	3,65
FSK 70/27,5 - A4	-	70	120	540	870	-	

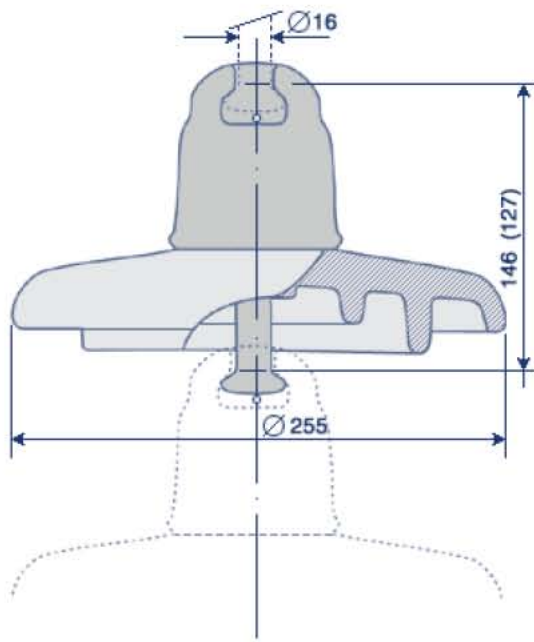


**Insulators for Overhead Lines**  
Glass insulators for normal duty

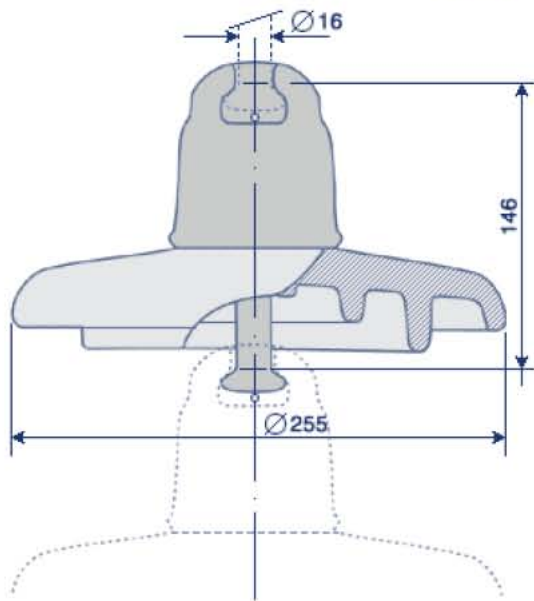
Type of insulator	Ultimate Mechanical Strength of insulators, KN, not less	Diametr of glass shed (D), mm	Spacing, mm	Lickage distance, mm	Weight, kg	Voltage withstand, kV, not less			
						impulse	frequency 50 Hz, wet	radio interference level	
<b>Glass</b>									
PS 40	40	175	100 ; 110	185	1,7	70	30	25	
PS 70E	70	255	127 ; 146	303	3,4	100	40	25	
PS 120B	120	255	146 ; 170	320	3,9	100	40	30	

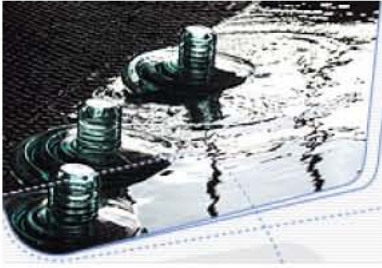


PS 70E



PS 120B



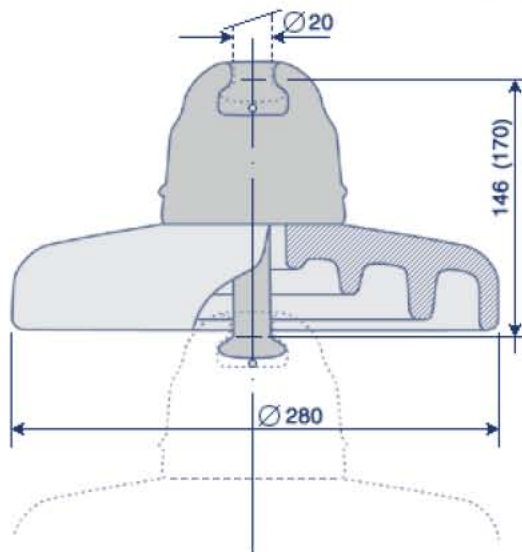


## Insulators for Overhead Lines

Glass insulators for normal duty

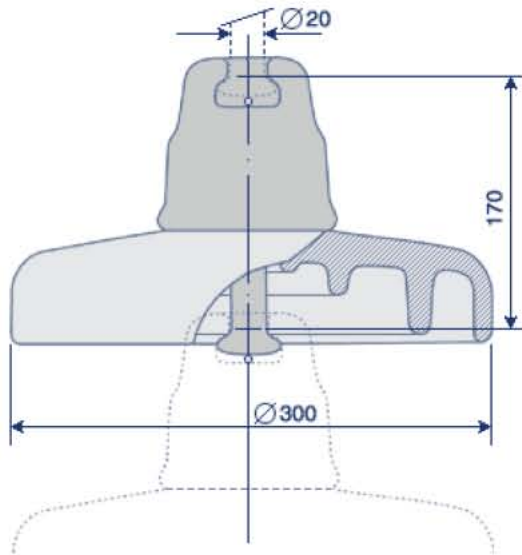
Type of insulator	Ultimate Mechanical Strength of insulators, KN, not less	Diameter of glass shed (D), mm	Spacing, mm	Lickage distance, mm	Weight, kg	Voltage withstand, kV, not less		
						impulse	frequency 50 Hz, wet	radio interference level
Glass								
PS160D	160	280	146;170	370	6,2	110	45	35
PS210V	210	300	170/195	370	7,1	110	45	40
PS300B	300	320	195	385	10,0	130	50	40
PS400B	400	390	205/220	475	15,0	130	55	40

PS160D

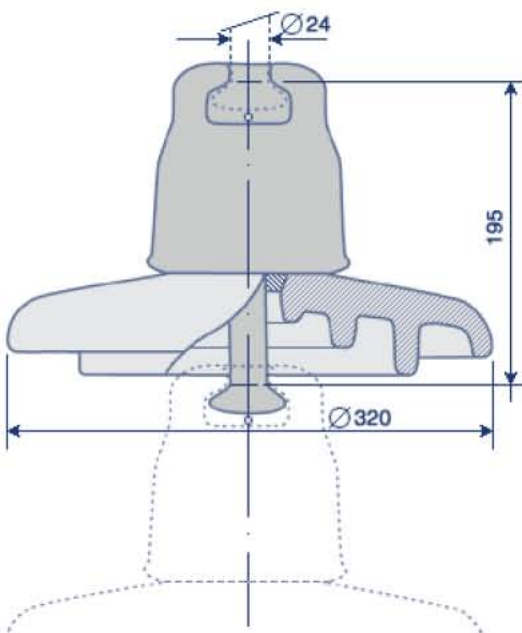


PS210V

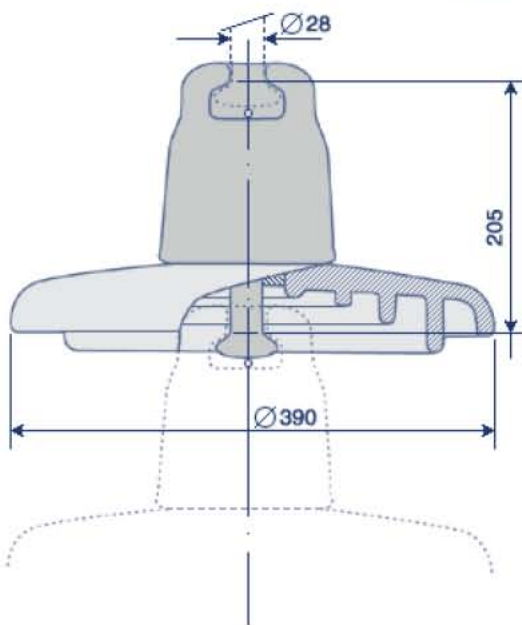


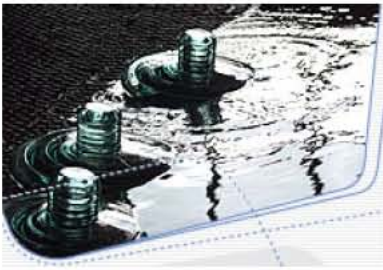


PS300B



PS400B



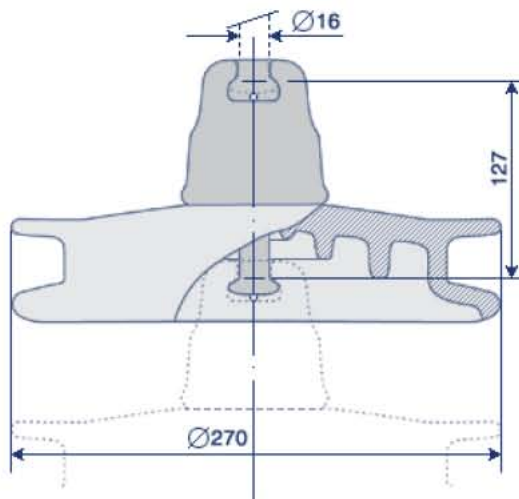


## Insulators for Overhead Lines

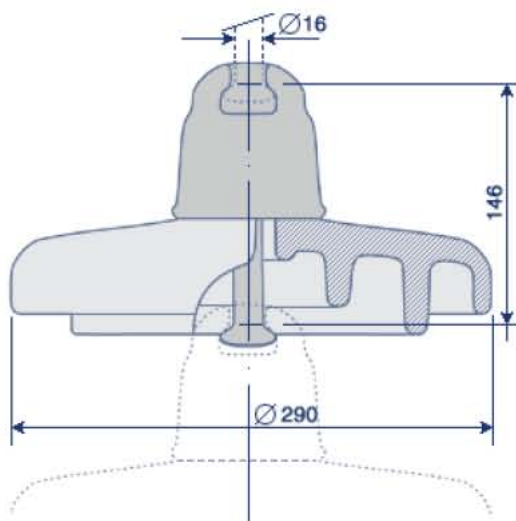
Insulators for regions with polluted atmosphere

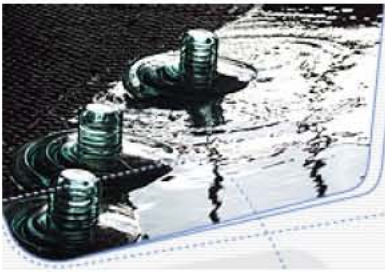
Type of insulator	Ultimate Mechanical Strength of insulators, KN, not less	Diameter of glass shed (D), mm	Spacing, mm	Lickage distance, mm	Weight, kg	Voltage withstand, kV, not less		
						impulse	frequency 50 Hz, wet	radio interference level
Glass								
PSD 70E	70	270	127	411	4,6	110	45	25
PSV 120B	120	290	146	442	5,7	125	50	30
PSV 160	160	320	146; 170	545	8,5	140	55	20

PSD 70E



PSV 120B





## Insulators for Overhead Lines

Insulators for special use

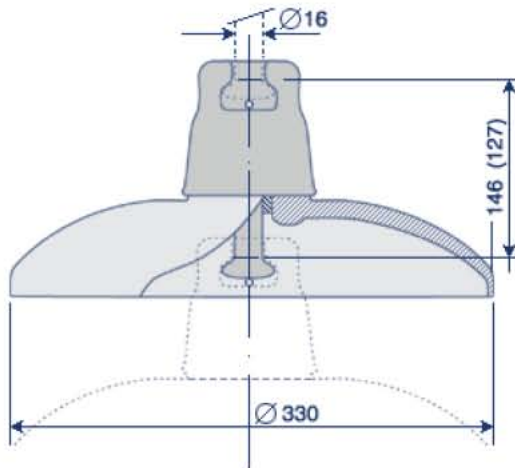
Type of insulator	Ultimate Mechanical Strength of insulators, KN, not less	Diameter of glass shed (D), mm	Spacing, mm	Lickage distance, mm	Weight, kg	Voltage withstand, kV, not less		
						impulse	frequency 50 Hz, wet	radio interference level
Glass								
PSS 120B	120	330	127; 146	330	5,0	75	45	30
PSS 210B	210	410	156	410	9,0	90	55	40
PSK 300A	300	450	180	460	12,4	90	52	40

Symbols: Insulator shed form:

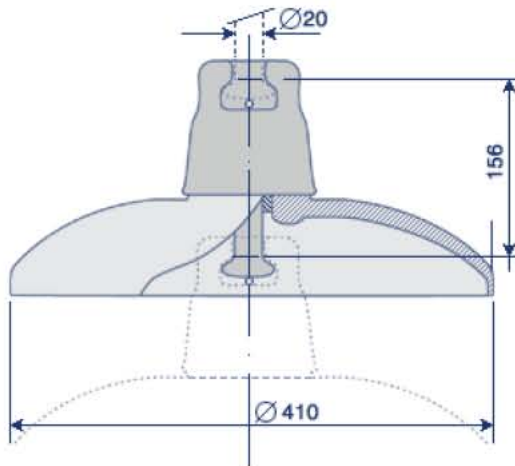
S - spherical

K - conical

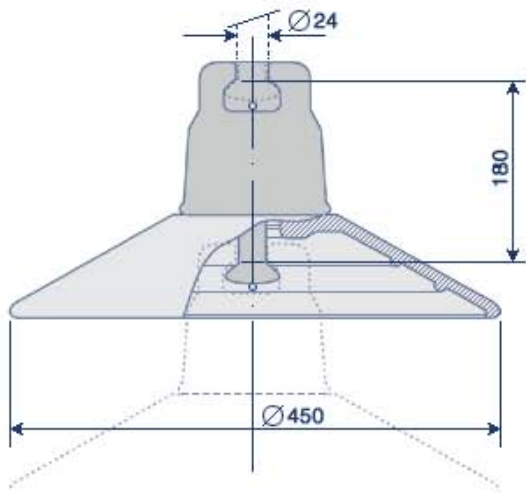
PSS 120B



PSS 210B



PSK 300A

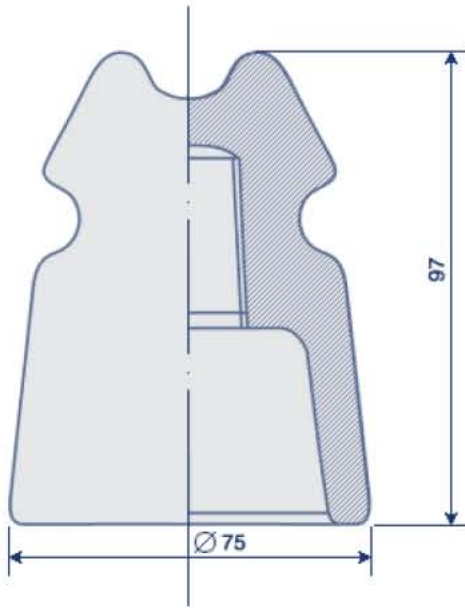


## Insulators for Overhead Lines

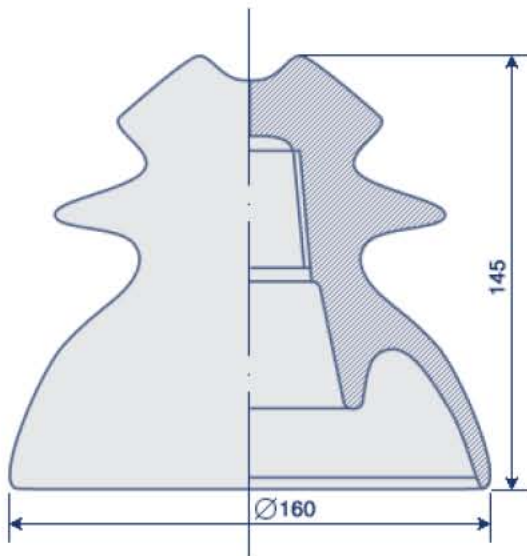
### Pin High-Voltage and Low-Voltage Insulators

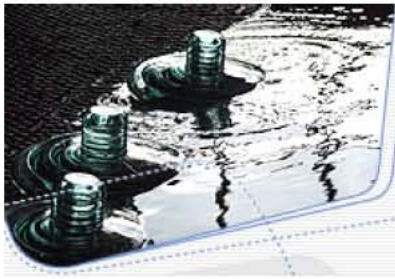
Type of insulator	Ultimate Mechanical Strength of insulators, KN, not less	Diameter of glass shed (D), mm	Spacing, mm	Lickage distance, mm	Weight, kg	Voltage withstand, kV, not less		
						impulse	frequency 50 Hz, wet	radio interference
<b>Glass</b>								
SS 10D	13	160	145	280	1,9	100	40	40
NS 18A	8	75	97	-	0,44	-	-	6

NS 18 A  
Low-voltage insulator



SS 10 D  
High-voltage insulator





### Polymeric Insulators for Overhead Lines

Organosilicon-dad polymeric insulators for 35-500 kV overhead lines.

Symbols:

Л - line;

K - organosilicon;

70; 160; 300; 600 - normalised ultimate strenght, kN;

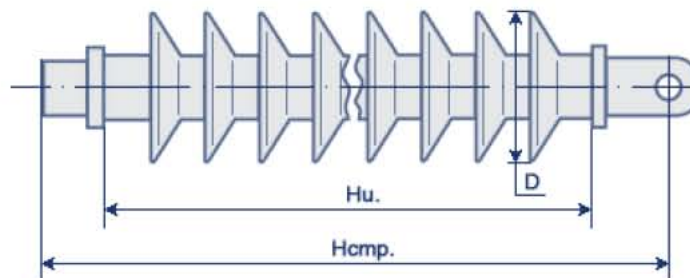
35-500 - rated voltage, kV;

3, 6, 7, - atmosphere pollution degree

Lock insulators

Type of insulator	Spacing, mm	Edge Diameter (D), mm	Lickage distance, mm	Weight, kg	Voltage, kV		
					frequency 50 Hz, wet	dry-state	lightning impulse (wave shape 1,2/50 ms)
FSK 70/27,5-3	540	120	870	3,8	150	120	210
FSK 70/27,5-A3	540	150/120	1000	4,0	150	125	230
FSK 70/27,5-B3	540	120	1000	4,3	150	120	230

FSK 70  
Lock insulator

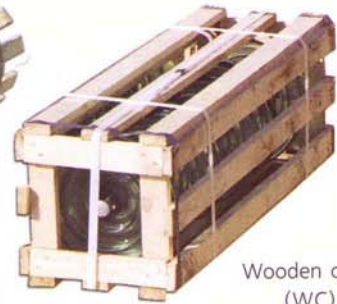


## PACKING

For transportation and storages Lviv Insulator Company offers the following types of packing:

- universal package (UP)
- sea package (SP)
- package with boxes (PB)
- wooden crate (WC)
- wooden cylindrical crate (WCC)
- package from expanded polystyrene

Wooden cylindrical  
crate (WCC)



Wooden crate  
(WC)



Universal  
package (UP)



Sea package  
(SP)

**NEW!**

Package from expanded polystyrene (EPP)



Advantages:

- Low weight
- Compactness
- No broken insulators
- Low transport costs



Package with  
boxes (PB)

## LOADING STANDARDS FOR DIFFERENT TYPES OF PACKING

Type of insulator IEC 60305	Disk diameter mm	Spacing mm	Weight of insulator kg	Loading standards for insulators, pcs			
				Truck 20-ton	20-foot container	40-foot container	Railway Car
U 40B	175	110	1,7	<b>9408</b> 32 UP with 294 pcs Gross 19 520 kg	<b>8232</b> 14 UP with 588 pcs Gross 15946 kg		<b>9408</b> 32 UP with 294 pcs Gross 19520 kg
U70BS	255	127	3,6	<b>3840</b> 32 PB with 120 pcs Gross 18944 kg <b>4600</b> 23 UP with 200 pcs Gross 19964 kg	<b>3360</b> 14 SP with 240 pcs Gross 12894	<b>6024</b> 1004 WCC with 6 pcs Gross 25501 kg <b>6300</b> 28 SP with 225 pcs Gross 25704 kg	<b>6400</b> 32 UP with 200 pcs Gross 27776 kg
U70 BL	255	146	3,6	<b>4600</b> 23 UP with 200 pcs Gross 19964 kg <b>3360</b> 28 PB with 120 pcs Gross 18144 kg	<b>3150</b> 14 SP with 225 pcs Gross 12852 kg	<b>5580</b> 930 WCC with 6 pcs Gross 24086 kg <b>6300</b> 28 SP with 225 pcs Gross 25704 kg	<b>6400</b> 32 UP with 200 pcs Gross 27776 kg
-	270	127	4,4	<b>3780</b> 27 UP with 140 pcs Gross 20007 kg	<b>2240</b> 448 WCC with 5 pcs Gross 11603 kg	<b>4760</b> 952 WCC with 5 pcs Gross 24057 kg	<b>4480</b> 32 UP with 140 pcs Gross 24672 kg
U 120B	255	146	3,9	<b>4200</b> 21 UP with 200 pcs Gross 19488 kg <b>3480</b> 29 PB with 120 pcs Gross 19836 kg	<b>3150</b> 14 SP with 225 pcs Gross 13706 kg	<b>5600</b> 28 SP with 200 pcs Gross 24696 kg <b>5580</b> 930 WCC with 6 pcs Gross 25296 kg	<b>6400</b> 32 UP with 200 pcs Gross 29692 kg
U 120B	255	170	3,9	<b>4160</b> 26 UP with 160 pcs Gross 20072 kg	<b>2280</b> 456 WCC with 5 pcs Gross 11149 kg <b>2256</b> 367 WCC with 6 pcs Gross 10904 kg	<b>4680</b> 936 WCC with 5 pcs Gross 22885 kg <b>4752</b> 792 WCC with 6 pcs Gross 23126 kg	<b>5120</b> 32 UP with 160 pcs Gross 24704 kg
U 120BP	290	146	5,62	<b>2940</b> 21 UP with 140 pcs Gross 19446 kg	<b>1800</b> 360 WCC with 5 pcs Gross 11520 kg	<b>3600</b> 720 UP with 5 pcs Gross 23040 kg	<b>4480</b> 32 UP with 140 pcs Gross 29632 kg
U 160BS	280	146	6,2	<b>2800</b> 20 UP with 140 pcs Gross 20150 kg <b>2310</b> 22 PB with 105 pcs Gross 20086 kg	<b>1656</b> 414 WCC with 4 pcs Gross 11592 kg	<b>3500</b> 875 WCC with 4 pcs Gross 24500 kg	<b>4480</b> 32 UP with 140 pcs Gross 32240 kg
U 160BL	280	170	6,2	<b>2800</b> 20 UP with 140 pcs Gross 20150 kg <b>2210</b> 26 PB with 85 pcs Gross 19448 kg	<b>1472</b> 368 WCC with 4 pcs Gross 10561 kg	<b>3136</b> 784 WCC with 4 pcs Gross 22500 kg	
U 210B	300	170	7,1	<b>1980</b> 22 PB with 90 pcs Gross 19492 kg <b>2400</b> 20 UP with 120 pcs Gross 19640 kg	<b>1372</b> 343 WCC with 4 pcs Gross 11147 kg	<b>2944</b> 736 WCC with 4 pcs Gross 23920 kg	<b>3840</b> 32 WCC with 120 pcs Gross 31424 kg
U 300B	320	195	10,0	<b>1760</b> 22 UP with 80 pcs Gross 19778 kg		<b>1728</b> 432 WCC with 4 pcs Gross 21600 kg	<b>2560</b> 32 UP with 80 pcs Gross 28768 kg
	160	145	1,9	<b>8800</b> 22 UP with 400 pcs Gross 19360 kg	<b>4400</b> 11 UP with 400 pcs Gross 9680 kg	9200 23 UP with 400 pcs Gross 20240 kg	<b>12800</b> 32 UP with 400 pcs Gross 28160 kg