

## Composite insulator for transmission and distribution lines

### 10KV composite insulator

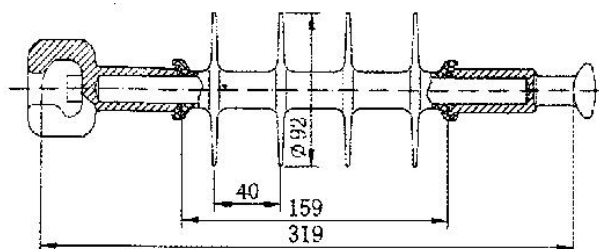


Fig.1 10KV composite insulator (W,T coupling)

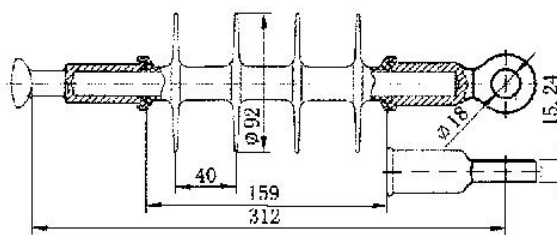


Fig.2 10KV composite insulator (D,T coupling)

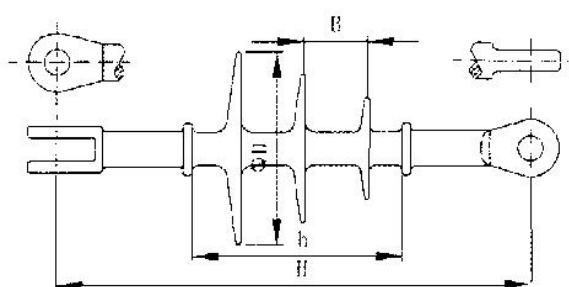


Fig.3 10KV composite insulator (U,D coupling)

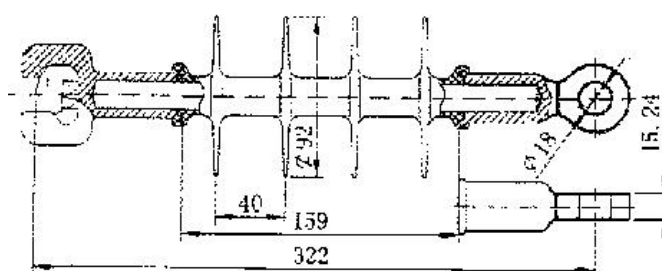


Fig.4 10KV composite insulator (W,D coupling)

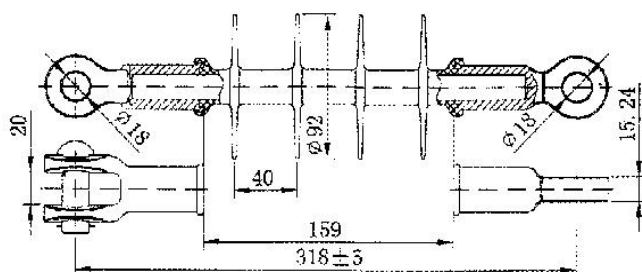


Fig.5 10KV composite insulator (U,D coupling)

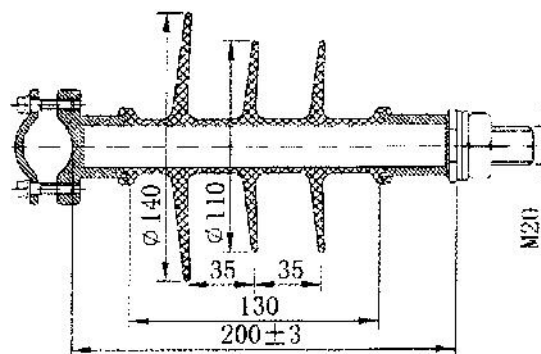


Fig.6 10KV pin composite insulator

### General dimension and characteristics of 10kv suspension composite insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Shed diameter D, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	1	FXBW-10/70-WT	10	70	16	319 $\pm$ 5	159	92	415	95	60	1.6
2	2	FXBW-10/70-DT	10	70	16	312 $\pm$ 5	159	92	415	95	60	1.1
3	3	FXBW-10/70-UD-1	10	70	/	342 $\pm$ 5	155	150	400	95	60	1.6
4	4	FXBW-10/70-WD	10	70	16	322 $\pm$ 5	159	92	415	95	60	1.6
5	5	FXBW-10/70-UD-2	10	70	/	318 $\pm$ 5	159	92	415	95	60	1.5
6	6	FPW-10/3	10	3(Curve)	/	200 $\pm$ 5	130	140	380	95	40	1.6

### 35KV~330KV AC composite insulator

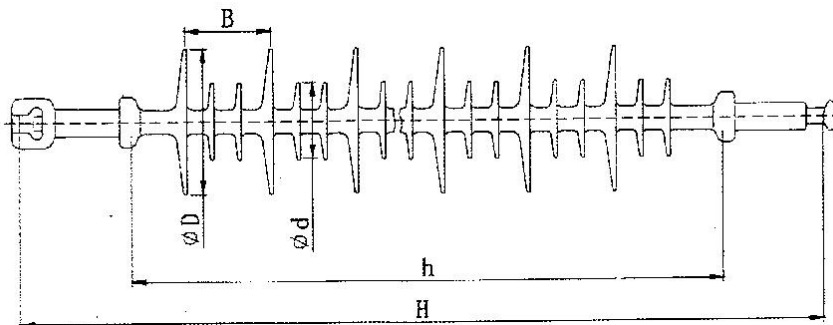


Fig.7 35KV~66KV AC composite insulator

General dimension and characteristics of 35KV~66KV AC composite insulator

No.	Type	Rated voltage KV	Specified mechanical load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	FXBW3-35/70	35	70	16	610±15	430	130	95	45	1050	230	95	2.2
2	FXBW4-35/70	35	70	16	650±15	450	130	95	45	1050	230	95	2.3
3	FXBW3-66/70	66	70	16	870±15	700	128	98	117	1050	410	185	3.5
4	FXBW4-66/70	66	70	16	940±15	760	128	98	117	1050	410	185	3.8

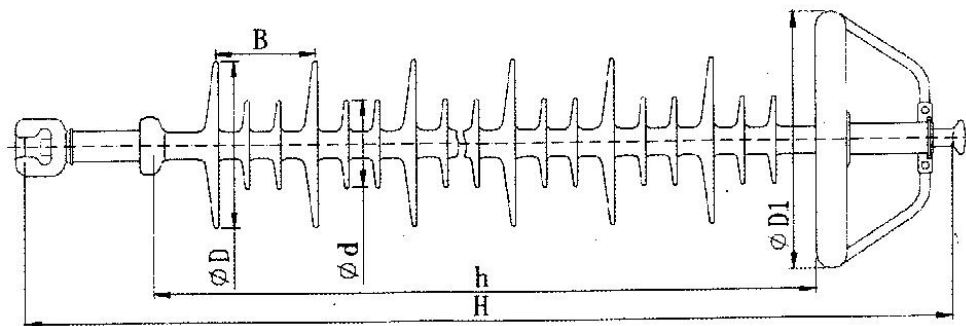


Fig.8 110KV composite insulator

General dimension and characteristics of 110KV AC composite insulator

No.	Type	Rated voltage KV	Specified mechanical load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Large/small shed diameter D/d mm	Shed spacing B, mm	Dia. of corona ring D1, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power freq. Vol. $\geq$	Weight kg
1	FXBW3-110/70	110	70	16	1180±15	1000	162/86	95	250	3150	550	230	5.0
2	FXBW4-110/70	110	70	16	1240±15	1000	162/86	95	250	3150	550	230	5.0
3	FXBW3-110/100	110	100	16	1180±15	1000	162/86	95	250	3150	550	230	5.0
4	FXBW4-110/100	110	100	16	1240±15	1000	162/86	95	250	3150	550	230	5.0

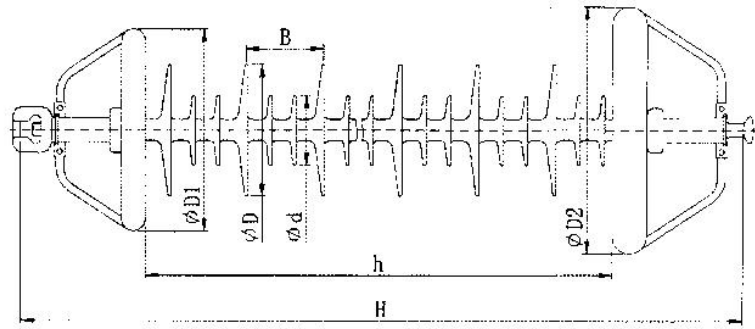


Fig.9 220KV AC composite insulator

General dimension and characteristics of 220KV AC composite insulator

No.	Type	Rated vol. KV	Spe.. mechanical load KN	Socket and ball size	Section height H, mm	Min arc. dis. h, mm	Lar./Sma shed diameter D, mm	Shed spacing B, mm	Dia. of corona ring D1/D2, mm	Min nominal creep. dis. L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	FXBW3-220/100	220	100	16	2150±30	1900	162/86	95	250/305	6300	1000	395	9.5
2	FXBW4-220/100	220	100	16	2240±30	1900	162/86	95	250/305	6300	1000	395	9.5
3	FXBW3-220/160	220	160	20	2150±30	1900	171/85	79	250/305	6300	1000	395	13
4	FXBW4-220/160	220	160	20	2240±30	1900	171/85	79	250/305	6300	1000	395	13

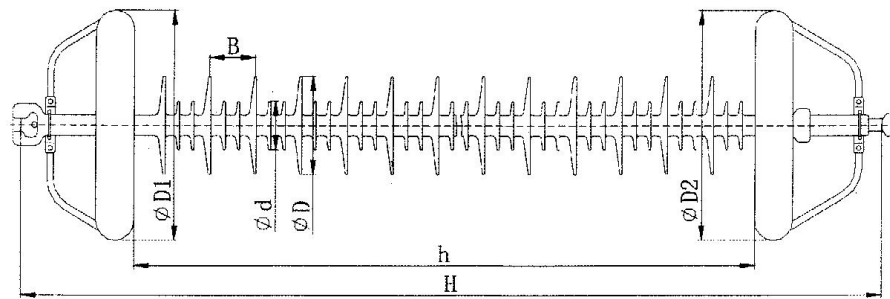


Fig.10 330KV AC composite

No.	Type	Rated Vol. KV	Spec. Mech. load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Lar./Sma shed dia. D/dmm	Shed Spacing B, mm	Dia. of corona ring D1,D2 mm	Min nominal creepage dis. L, mm	Lighting impulse withstand volt. $\geq$	Wet Switch Impulse Volt. $\geq$	Wet power freq. volt. $\geq$	Weight Kg
1	FXBW3-330/100	330	100	16	2930±40	2600	171/85	79	400	9075	1425	950	570	15
2	FXBW4-330/100	330	100	16	2990±40	2600	171/85	79	400	9075	1425	950	570	15
3	FXBW3-330/160	330	160	20	2930±40	2600	171/85	79	400	9075	1425	950	570	18
4	FXBW4-330/160	330	160	20	2990±40	2600	171/85	79	400	9075	1425	950	570	18
5	FXBW3-330/210	330	210	20	2930±40	2600	171/85	79	400	9075	1425	950	570	18
6	FXBW4-330/210	330	210	20	2990±40	2600	171/85	79	400	9075	1425	950	570	18

### 500KV~750Kv AC composite insulator

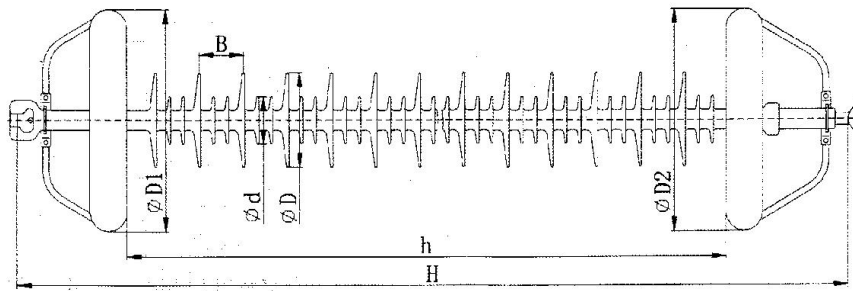


Fig.11

No.	Type	Rated Vol. KV	Spec. Mech. load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Lar/sma shed dia. D/d,mm	Shed Spacing B, mm	Dia. of corona ring D1,D2 mm	Min nominal creepage dis. L, mm	Lighting impulse withstand volt. ≥	Wet Switch Impulse Volt. ≥	Wet power freq. volt. ≥	Weight Kg
1	FXBW1-500/100	500	100	16	4030±50	3600	171/85	79	400	11000	2050	1240	740	22
2	FXBW4-500/100	500	100	16	4450±50	4000	171/85	79	400	13750	2250	1240	740	26
3	FXBW1-500/160	500	160	20	4030±50	3600	171/85	79	400	11000	2050	1240	740	23
4	FXBW4-500/160	500	160	20	4450±50	4000	171/85	79	400	13750	2250	1240	740	26
5	FXBW1-500/180	500	180	20	4030±50	3600	171/85	79	400	11000	2050	1240	740	23
6	FXBW4-500/180	500	180	20	4450±50	4000	171/85	79	400	13750	2250	1240	740	26
7	FXBW1-500/210	500	210	20	4030±50	3600	171/85	79	400	11000	2050	1240	740	23
8	FXBW4-500/210	500	210	20	4450±50	4000	171/85	79	400	13750	2250	1240	740	26
9	FXBW1-500/240	500	240	20	4030±50	3600	174/88	79	400	11000	2050	1240	740	23
10	FXBW4-500/240	500	240	24	4450±50	4000	174/88	79	400	13750	2250	1240	740	26
11	FXBW1-500/300	500	300	24	4030±50	3600	174/88	79	400	11000	2050	1240	740	25
12	FXBW4-500/300	500	300	24	4450±50	4000	174/88	79	400	13750	2250	1240	740	29
13	FXBW1-500/400	500	400	28	4030±50	3600	174/88	79	400	11000	2050	1240	740	30
14	FXBW4-500/400	500	400	28	4450±50	4000	174/88	79	400	13750	2250	1240	740	35

No.	Type	Rated Vol. KV	Spec. Mech. load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Lar/sma shed dia. D/d,mm	Shed Spacing B, mm	Dia. of corona ring D1,D2 mm	Min nominal creepage dis. L, mm	Lighting impulse withstand volt. ≥	Wet Switch impulse Volt. ≥	Wet power freq. volt. ≥	weight kg
1	FXBW-750/100	750	100	20	6550±50	6000	171/85	79	400	22000	2700	1800	1125	32
2	FXBW-750/120	750	120	20	6550±50	6000	171/85	79	400	22000	2700	1800	1125	32
3	FXBW-750/160	750	160	20	6550±50	6000	171/85	79	400	22000	2700	1800	1125	34
4	FXBW-750/180	750	180	20	6550±50	6000	171/85	79	400	22000	2700	1800	1125	34
5	FXBW-750/210	750	210	20	6550±50	6000	174/88	79	400	22000	2700	1800	1125	34
6	FXBW-750/240	750	240	24	6550±50	6000	174/88	79	400	22000	2700	1800	1125	36
7	FXBW-750/300	750	300	24	6550±50	6000	190/110	89	400	22000	2700	1800	1125	50
8	FXBW-750/400	750	400	28	6550±50	4000	190/110	89	400	22000	2700	1800	1125	52

**+/-500KV DC composite insulator**

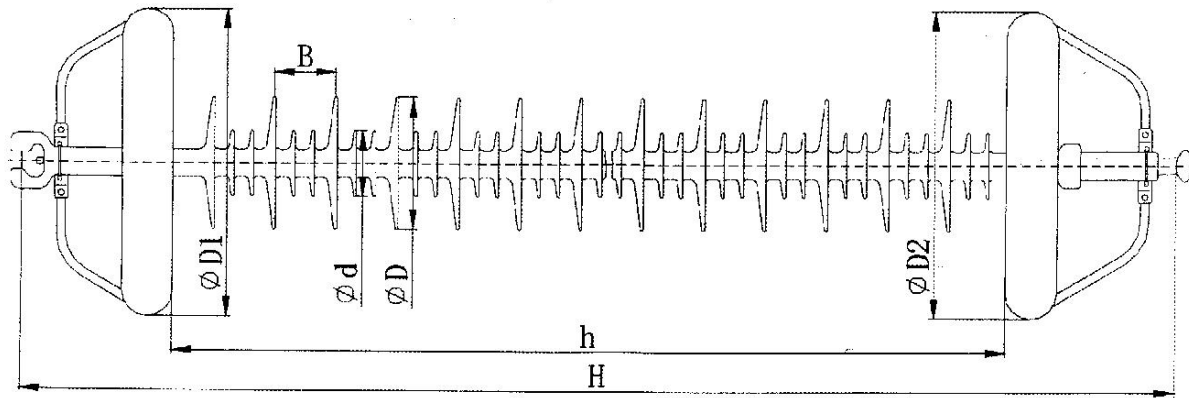


Fig.12 ±500KV DC composite insulator

General dimension and characteristics of ±500KV DC composite insulator

No.	Type	Rated Vol. KV	Spec. Mech. load KN	Socket and ball size	Section height H, mm	Min arcing distance h, mm	Lar/sma shed dia. D/d,mm	Shed Spacing B, mm	Dia.of corona ring D1,D2 mm	Min nominal creepage dis. L, mm	Dry Lighting withstand volt. ≥	Wet Switch Impulse Volt. ≥	Wet power freq. volt. ≥	Weight kg
1	FXBZ-±500/160-1	±500	160	20	5440±50	5000	174/88	79	400	18025	+2550	+1550	+600	33
2	FXBZ-±500/160-2	±500	160	20	6290±50	5600	174/88	79	400	21000	+2750	+1650	+650	38
3	FXBZ-±500/160-3	±500	160	20	6800±50	6200	174/88	79	400	23000	+2950	+1750	+700	45
4	FXBZ-±500/180-1	±500	180	20	5440±50	5000	174/88	79	400	18025	+2550	+1550	+600	33
5	FXBZ-±500/180-2	±500	180	20	6290±50	5600	174/88	79	400	21000	+2750	+1650	+650	38
6	FXBZ-±500/180-3	±500	180	20	6800±50	6200	174/88	79	400	23000	+2950	+1750	+700	45
7	FXBZ-±500/210-1	±500	210	20	5440±50	5000	174/88	79	400	18025	+2550	+1550	+600	33
8	FXBZ-±500/210-2	±500	210	20	6290±50	5600	174/88	79	400	21000	+2750	+1650	+650	38
9	FXBZ-±500/210-3	±500	210	20	6800±50	6200	174/88	79	400	23000	+2950	+1750	+700	45
10	FXBZ-±500/240-1	±500	240	20	5440±50	5000	174/88	79	400	18025	+2550	+1550	+600	33
11	FXBZ-±500/240-2	±500	240	20	6290±50	5600	174/88	79	400	21000	+2750	+1650	+650	38
12	FXBZ-±500/240-3	±500	240	20	6800±50	6200	174/88	79	400	23000	+2950	+1750	+700	45
13	FXBZ-±500/300-1	±500	300	24	5440±50	5000	190/110	89	400	18025	+2550	+1550	+600	34
14	FXBZ-±500/300-2	±500	300	24	6290±50	5600	190/110	89	400	21000	+2750	+1650	+650	40
15	FXBZ-±500/300-3	±500	300	24	6800±50	6200	190/110	89	400	23000	+2950	+1750	+700	47
16	FXBZ-±500/400-1	±500	400	28	5440±50	5000	190/110	89	400	18025	+2550	+1550	+600	35
17	FXBZ-±500/400-2	±500	400	28	6290±50	5600	190/110	89	400	21000	+2750	+1650	+650	41
18	FXBZ-±500/400-3	±500	400	28	6800±50	6200	190/110	89	400	23000	+2950	+1750	+700	47

**Composite post insulator**

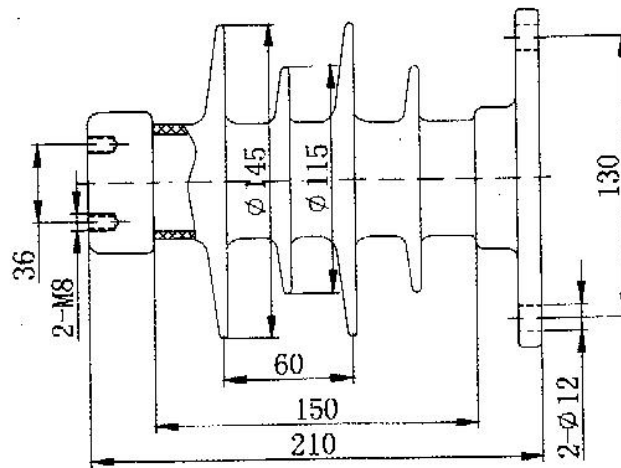


Fig.13 12kv composite post insulator

General dimension and characteristic of 12kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	13	FZ-12/6	12	6	210±5	150	145	115	60	390	95	40	3.7

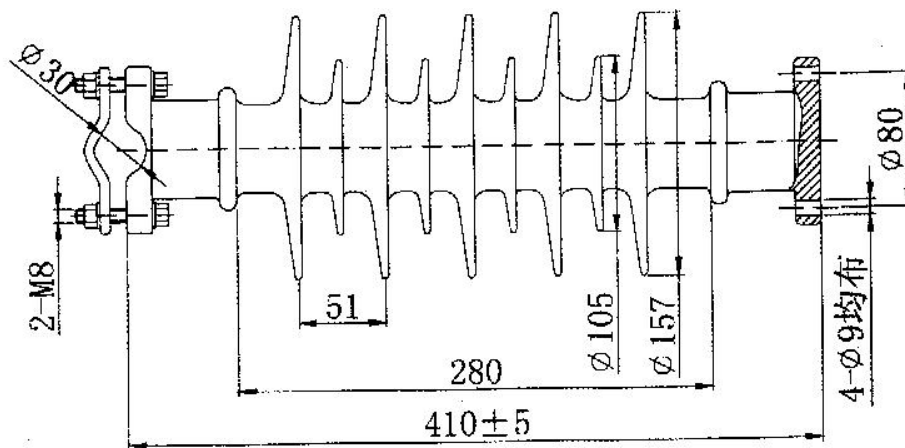


Fig.14 24kv composite post insulator

General dimension and characteristic of 12kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	14	FZ-24/8	24	8	410±5	280	157	105	51	900	150	80	4.2

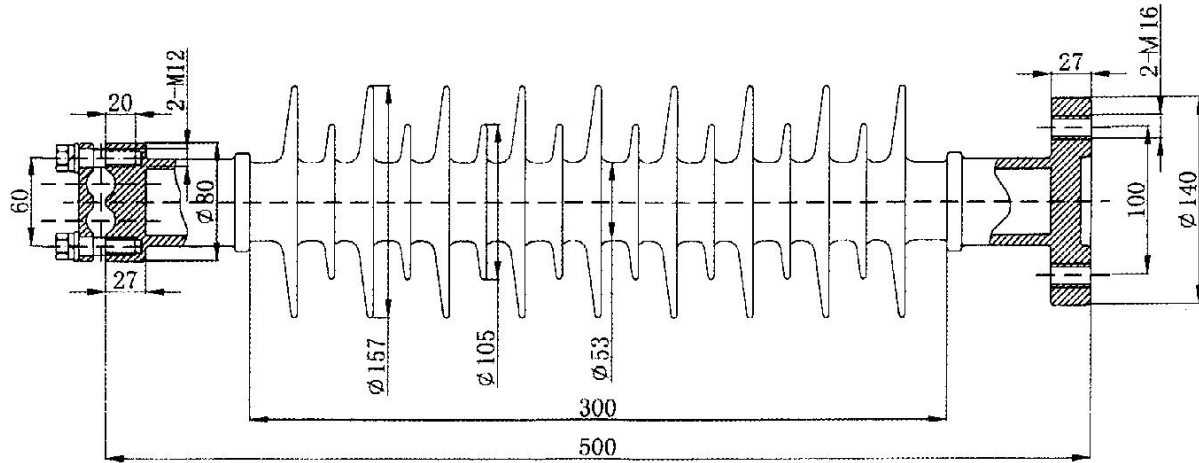


Fig.15 40.5kv composite post insulator

General dimension and characteristic of 40.5kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	15	FZ-40.5/4	40.5	4	500 $\pm$ 5	300	157	105	51	1100	185	80	6.0

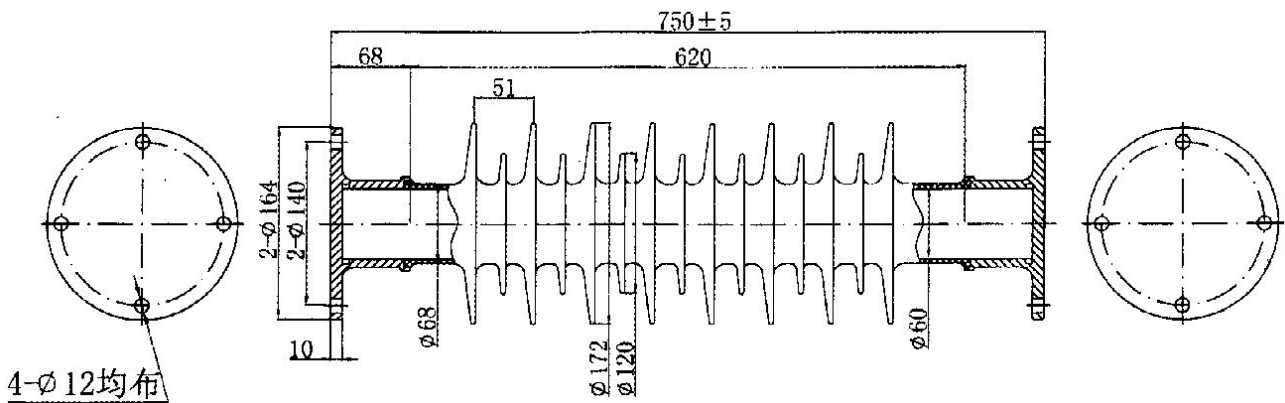


Fig.16 72.5kv composite post insulator

General dimension and characteristic of 72.5kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	16	FZ-72.5/8	72.5	8	750 $\pm$ 5	620	172	120	51	1300	400	130	10.2

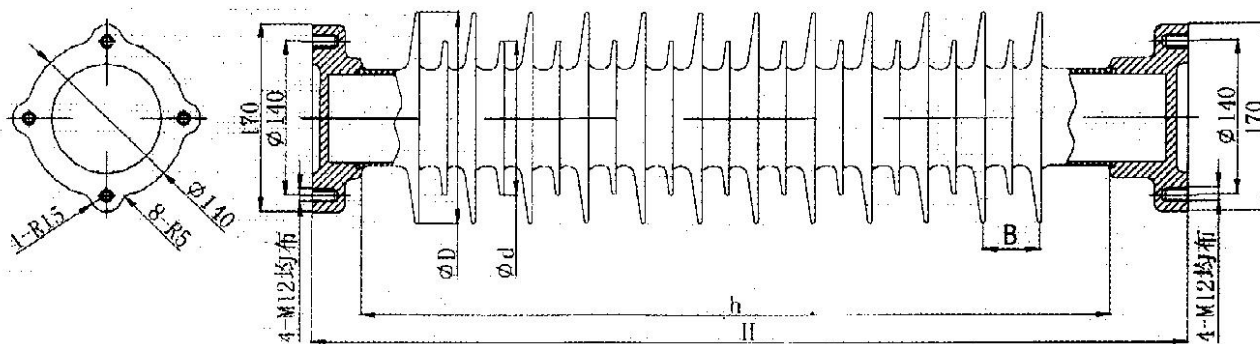


Fig.17 126kv composite post insulator

General dimension and characteristic of 126kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	17	FZ-126/10	126	10	1300±5	1100	192	140	51	3100	550	185	16

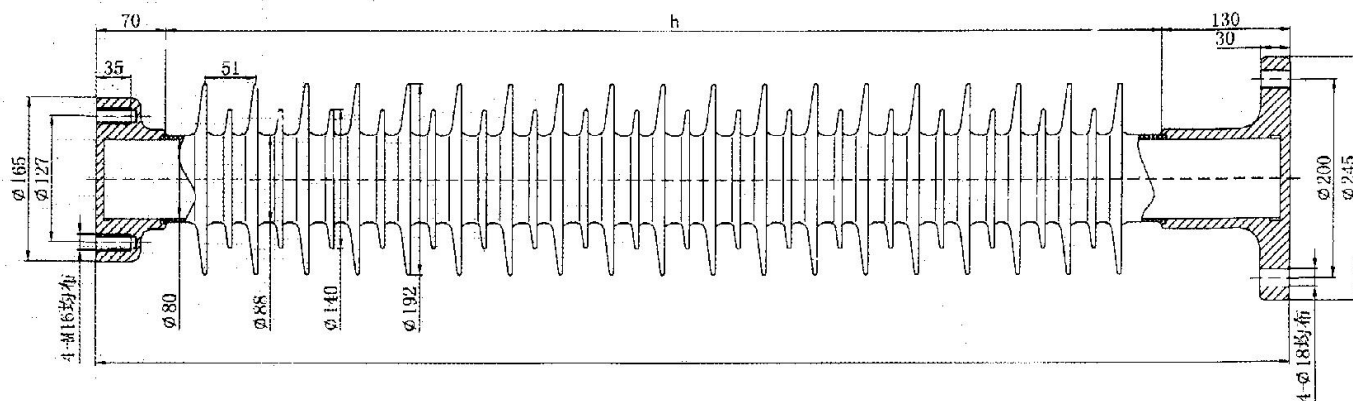


Fig.18 252kv composite post insulator

General dimension and characteristic of 252kv composite post insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical Bending load KN	Section height H, mm	Minimum arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Minimum nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	18	FZ-252/2	252	2	2300±5	2100	192	140	51	6300	1050	395	38



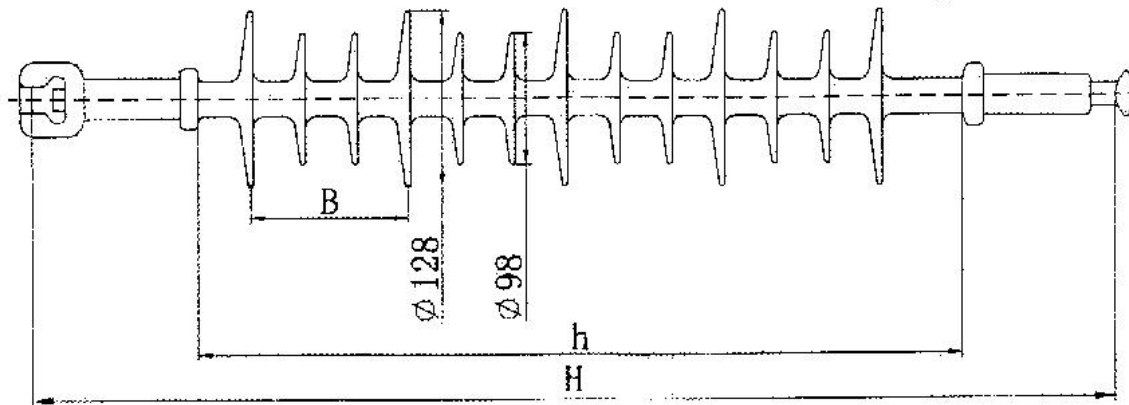


Fig.19 Catenary composite insulator

General dimension and characteristics of 25kv catenary composite insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical load KN	Section height H, mm	Min arcing distance h, mm	Shed diameter D, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	19	FQX-25/120-HT-1	25	120	750±5	525	88	35	1200	330	200	170	2.5
2	19	FQX-25/120-HT-2	25	120	785±5	560	88	35	1300	360	210	180	3.0
3	19	FQX-25/120-HT-3	25	120	925±5	600	88	35	1600	390	230	190	3.5

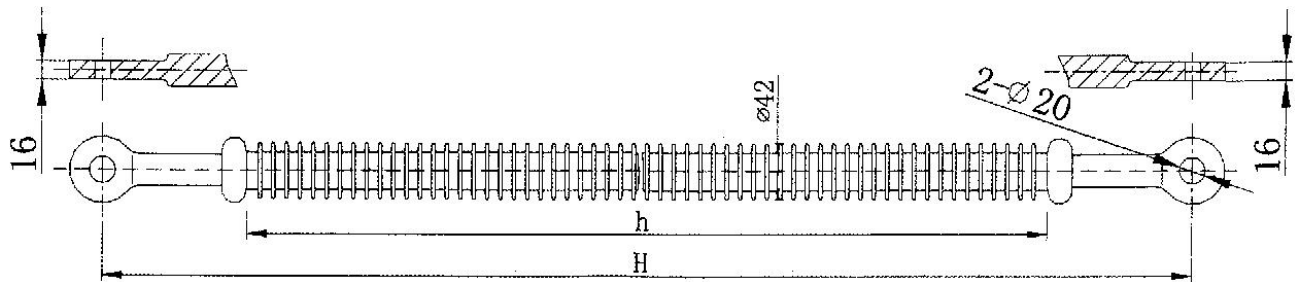


Fig.20 Catenary composite insulator

General dimension and characteristics of 25kv catenary composite insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical load KN	Section height H, mm	Min arcing distance h, mm	Shed diameter D, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $>$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	20	FQX-25/70-HH-1	25	70	730±5	490	42	1200	330	195	165	2.7
2	20	FQX-25/70-HH-2	25	70	910±5	670	42	1600	420	250	220	3.2

## Composite insulators for traction transformer substation

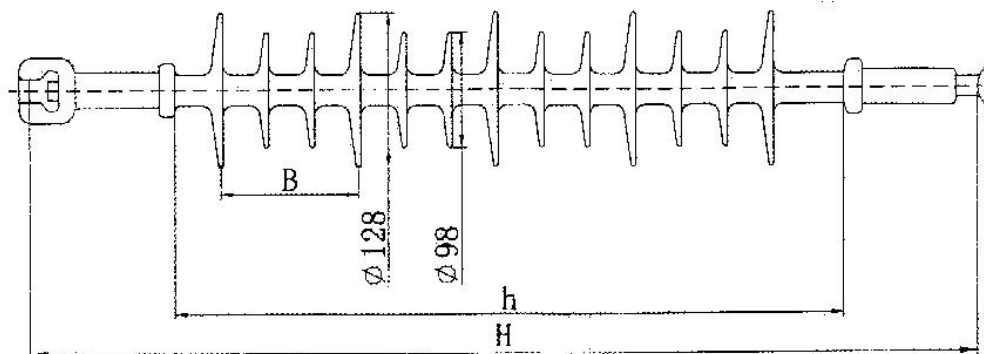


Fig.21 Composite insulator for traction transformer substation

General dimension and characteristics of 25kv composite insulator for traction transformer substation

No.	Fig.	Type	Rated voltage KV	Specified mechanical bending load KN	Section height H, mm	Min arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	21	FQXW-25/70-QT-1	25	120	620±5	450	128	98	117	1200	300	180	150	2.8
2	21	FQXW-25/70-QT-2	25	120	740±5	570	128	98	117	1600	360	210	180	3.2

## Orientating composite insulator for railway tunnel

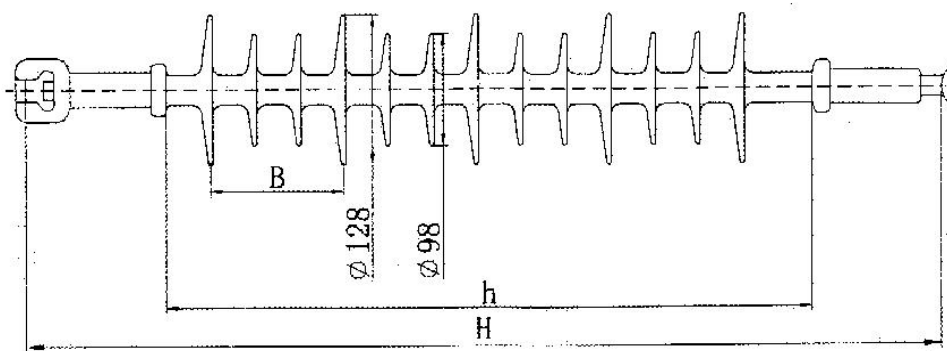


Fig.22 Orientating composite insulator for railway tunnel

General dimension and characteristics of 25kv orientating composite insulator for railway tunnel

No.	Fig.	Type	Rated voltage KV	Specified mechanical bending load KN	Section height H, mm	Min arcing distance h, mm	Shed diameter D, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	22	FQD-25/20-BY-A1	25	20	755±5	490	88	35	1200	330	195	165	2.7
2	22	FQD-25/20-BY-A2	25	20	825±5	560	88	35	1350	360	210	180	3.2
3	22	FQD-25/20-BY-A3	25	20	930±5	665	88	35	1600	420	250	220	3.7

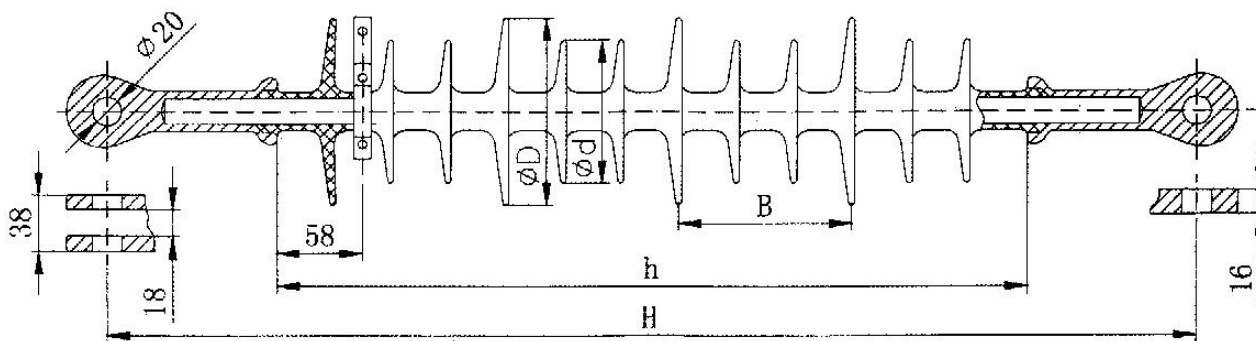


Fig.23 Suspension composite insulator

General dimension and characteristics of 25kv suspension composite insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical bending load KN	Section height H, mm	Min arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	23	FQXS-25/100-UH-1	25	100	738 $\pm$ 5	508	128	98	117	1200	250	150	130	3.8
2	23	FQXS-25/100-UH-2	25	100	840 $\pm$ 5	610	128	98	117	1600	300	180	150	4.3

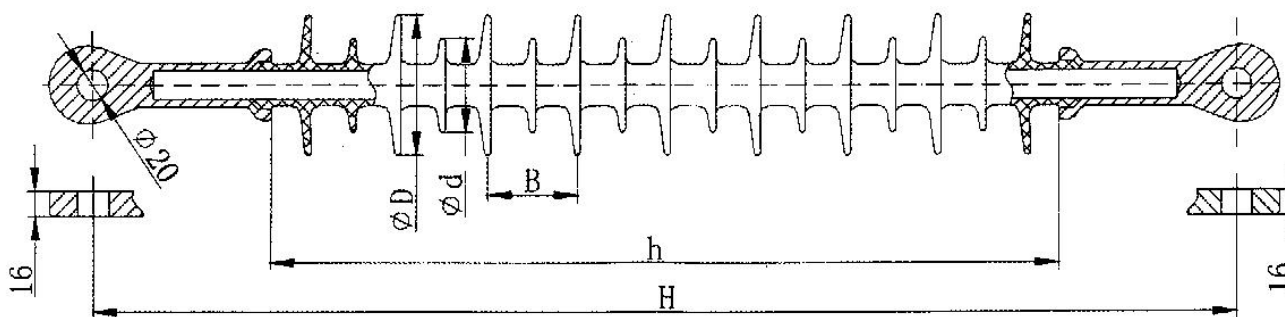


Fig.24 Suspension composite insulator

General dimension and characteristics of 25kv suspension composite insulator

No.	Fig.	Type	Rated voltage KV	Specified mechanical bending load KN	Section height H, mm	Min arcing distance h, mm	Large shed diameter D, mm	Small shed diameter d, mm	Shed spacing B, mm	Min nominal creepage distance L, mm	Lighting impulse withstand voltage $\geq$	Dry power frequency voltage $\geq$	Wet power frequency voltage $\geq$	Weight kg
1	24	FQX-25/100-HH-1	25	100	738 $\pm$ 5	508	90	60	58	1200	250	150	130	3.8
2	24	FQX-25/100-HH-2	25	100	910 $\pm$ 5	680	90	60	58	1600	300	180	150	4.3

