

Surge Arrester Series

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1 General

1.1 Ratings: 0.22~500kV (porcelain), 0.22~220kV (composite)

1.2 Application: for protection of power transmission & distribution system from over-voltage.

1.3 Standards: IEC 60099-4: 2006, ANSI, etc.

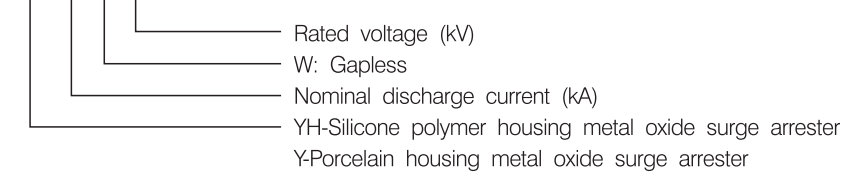
1.4 Features:

- Silicone polymer housing composite metal oxide surge arrester and porcelain housing metal oxide surge arresters are available.
- Easy installation and maintenance.
- Good sealing capability to ensure reliable operation.
- Protection and reliability of the surge arrester have been greatly enhanced.



2 Type Designation

YH 10 W-12



3 Working Condition

3.1 Ambient air temperature: -40°C ~ +40°C;

3.2 Altitude: ≤2000m;

3.3 Frequency: 48Hz~62Hz;

3.4 Power frequency voltage applied between terminals of surge arrester must not exceed continuous operating voltage of surge arrester;

3.5 Earthquake intensity is less than 8 degree;

3.6 Max. wind speed is 35m/s.



4 Main Technical Parameter

4.1 Metal Oxide Polymer Housing (Gapless) type Surge Arrester for A.C. System (5kA series)



Model	Rated voltage (kV _{r.m.s})	Continuous operating voltage (kV _{r.m.s})	Lightening impulse residual voltage under nominal discharge current (≤kV _p)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
YH5W-6	6	5.1	18		320	150	65	1
YH5W-9	9	7.65	27		430	150	65	2
YH5W-12	12	10.2	36		430	150	65	2
YH5W-15	15	12.75	45		530	150	65	3
YH5W-18	18	15.3	54		530	150	65	3
YH5W-21	21	16.8	63		640	150	65	4
YH5W-24	24	19.2	72		640	150	65	4
YH5W-27	27	21.6	81		740	150	65	5
YH5W-30	30	24	90		890	150	65	6
YH5W-33	33	26.4	99		890	150	65	7
YH5W-36	36	28.8	108		1115	150	65	7



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4.2 Metal Oxide Polymer Housing (Gapless) type Surge Arrester for A.C. System (10kA series)

Model	Rated voltage (kV _{r.m.s})	Continuous operating voltage (kV _{r.m.s})	Lightening impulse residual voltage under nominal discharge current ($\leq kV_p$)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
YH10W-6	6	5.1	18	1	320	250	100	8
YH10W-9	9	7.65	27	1	430	250	100	9
YH10W-12	12	10.2	36	1	430	250	100	9
YH10W-15	15	12.75	45	1	530	250	100	10
YH10W-18	18	15.3	54	1	530	250	100	10
YH10W-21	21	16.8	63	1	640	250	100	11
YH10W-24	24	19.2	72	1	740	250	100	12
YH10W-27	27	21.6	81	1	740	250	100	12
YH10W-30	30	24	90	1	890	250	100	13
YH10W-33	33	26.4	99	1	890	250	100	13
YH10W-36	36	28.8	108	1	1115	250	100	14
YH10W-42	42	33.6	126	2	1260	400	100	15
YH10W-48	48	39	139	2	1260	400	100	15
YH10W-54	54	42	160	2	1260	400	100	15
YH10W-60	60	48	178	2	1465	400	100	16
YH10W-66	66	52.8	196	2	1465	400	100	16
YH10W-72	72	57	214	2	2255	400	100	17
YH10W-84	84	67.2	244	2	2255	400	100	17
YH10W-90	90	72.5	249	2	2255	400	100	17
YH10W-96	96	75	265	3	3555	800	100	18
YH10W-108	108	84	281	3	3555	800	100	18
YH10W-120	120	96	300	3	4153	800	100	19
YH10W-150	150	120	416	3	5040	800	100	20
YH10W-200	200	156	520	3	7110	800	100	21

4.3 Metal Oxide Polymer Housing (Gapless) type Surge Arrester for A.C. System (20kA series)

Model	Rated voltage (kV _{r.m.s})	Continuous operating voltage (kV _{r.m.s})	Lightening impulse residual voltage under nominal discharge current ($\leq kV_p$)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
YH20W-108	108	84	281	3	3555	800	100	18
YH20W-120	120	96	300	3	4153	800	100	19
YH20W-150	150	120	416	3	5040	800	100	20
YH20W-200	200	156	520	3	7110	800	100	21

4.4 Metal Oxide Porcelain Housing (Gapless) type Surge Arrester for A.C. System (5kA series)

Model	Rated voltage (kV _{r.m.s})	Continuous operating voltage (kV _{r.m.s})	Lightening impulse residual voltage under nominal discharge current ($\leq kV_p$)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
Y5W-6	6	5.1	18		280	150	65	22
Y5W-9	9	7.65	27		320	150	65	23
Y5W-12	12	10.2	36		320	150	65	23
Y5W-15	15	12.75	45		450	150	65	24
Y5W-18	18	15.3	54		450	150	65	24
Y5W-21	21	16.8	63		450	150	65	24
Y5W-24	24	19.2	72		510	150	65	25
Y5W-27	27	21.6	81		510	150	65	25
Y5W-30	30	24	90		890	150	65	26
Y5W-33	33	26.4	99		890	150	65	26
Y5W-36	36	28.8	108		890	150	65	26

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4.5 Metal Oxide Porcelain Housing (Gapless) type Surge Arrester for A.C. System (10kA series)



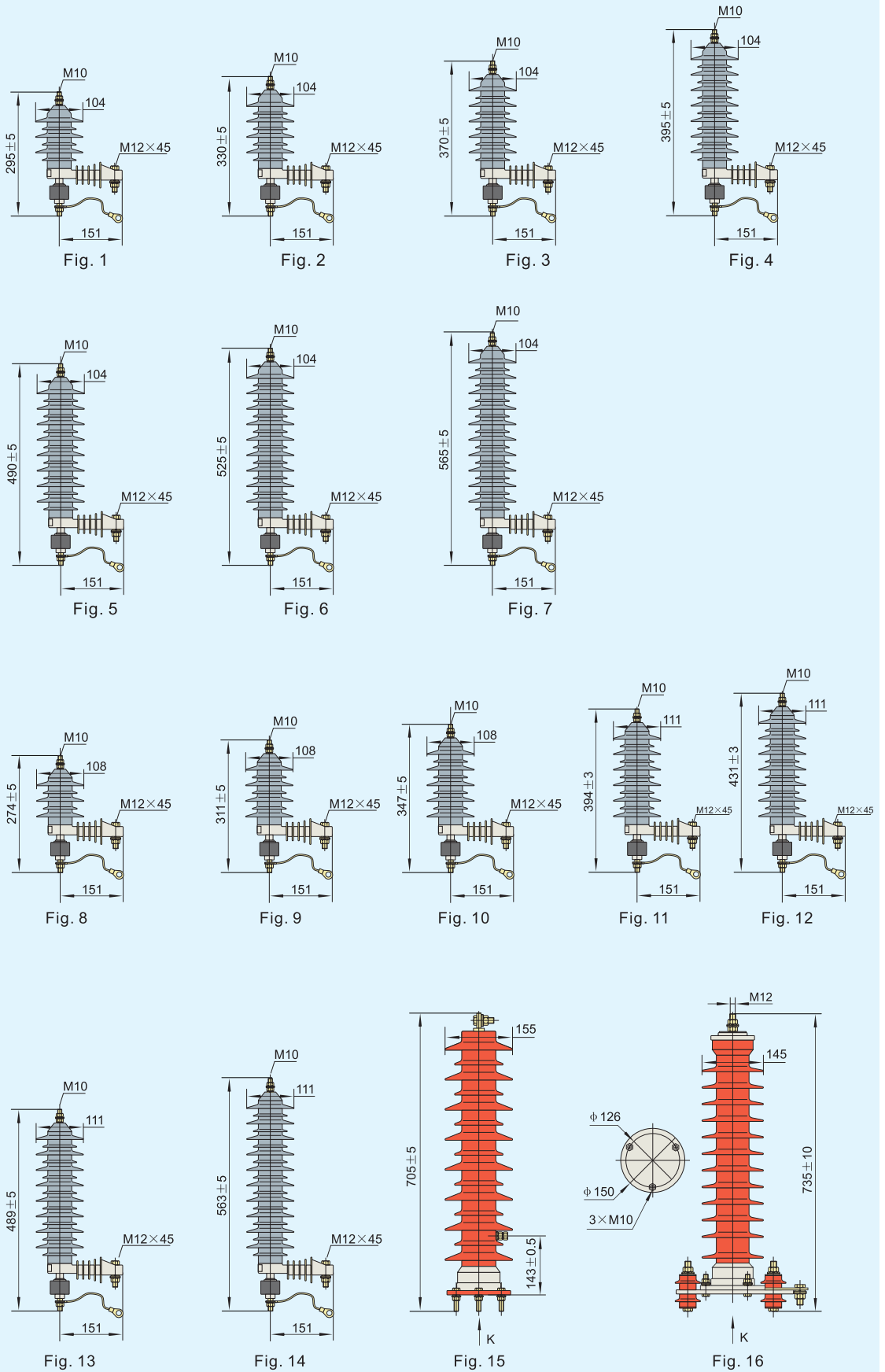
Model	Rated voltage (kV _{rms})	Continuous operating voltage (kV _{rms})	Lightening impulse residual voltage under nominal discharge current (\leq kV _p)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
Y10W-6	6	5.1	18	1	280		100	27
Y10W-9	9	7.65	27	1	320		100	28
Y10W-12	12	10.2	36	1	320		100	28
Y10W-15	15	12.75	45	1	450		100	29
Y10W-18	18	15.3	54	1	450		100	29
Y10W-21	21	16.8	63	1	450		100	29
Y10W-24	24	19.2	72	1	510		100	30
Y10W-27	27	21.6	81	1	510		100	30
Y10W-30	30	24	90	1	890		100	31
Y10W-33	33	26.4	99	1	890		100	31
Y10W-36	36	28.8	108	1	890		100	31
Y10W-42	42	33.6	126	2	1256	400	100	32
Y10W-48	48	39	139	2	1256	400	100	32
Y10W-54	54	42	160	2	1256	400	100	32
Y10W-60	60	48	178	2	1440	400	100	33
Y10W-66	66	52.8	196	2	1440	400	100	33
Y10W-72	72	57	214	2	1440	400	100	33
Y10W-84	84	67.2	244	2	2200	400	100	34
Y10W-90	90	72.5	249	2	2200	400	100	34
Y10W-96	96	75	265	3	3350	800	100	35
Y10W-108	108	84	281	3	3350	800	100	35
Y10W-120	120	96	300	3	3948	800	100	36
Y10W-150	150	120	416	3	4400	800	100	37
Y10W-200	200	156	520	3	6700	800	100	38

4.6 Metal Oxide Porcelain Housing (Gapless) type Surge Arrester for A.C. System (20kA series)

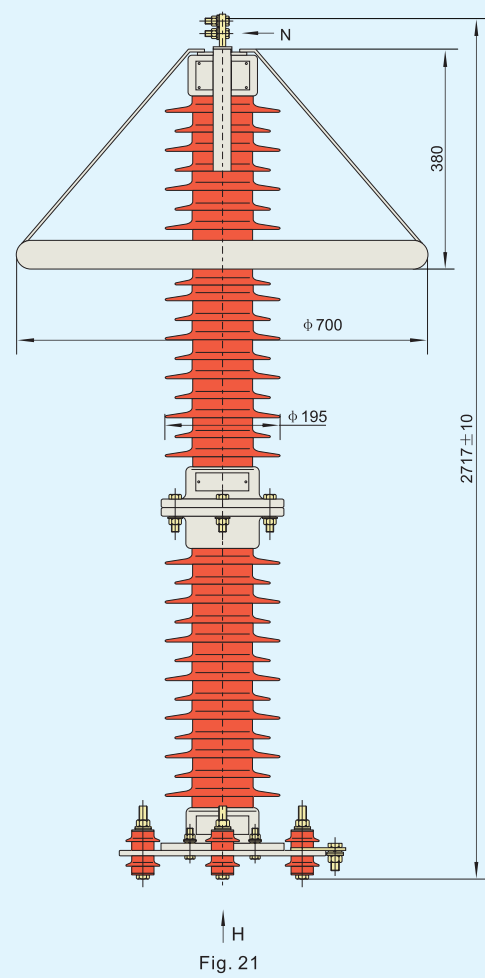
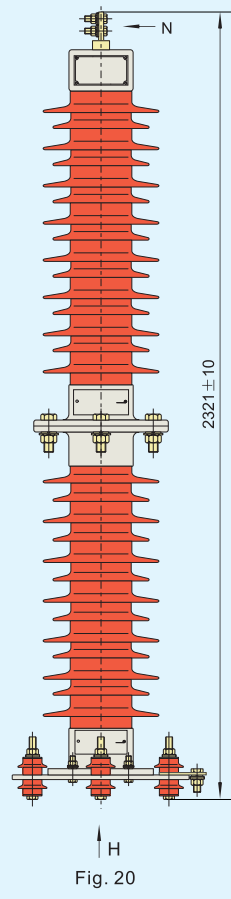
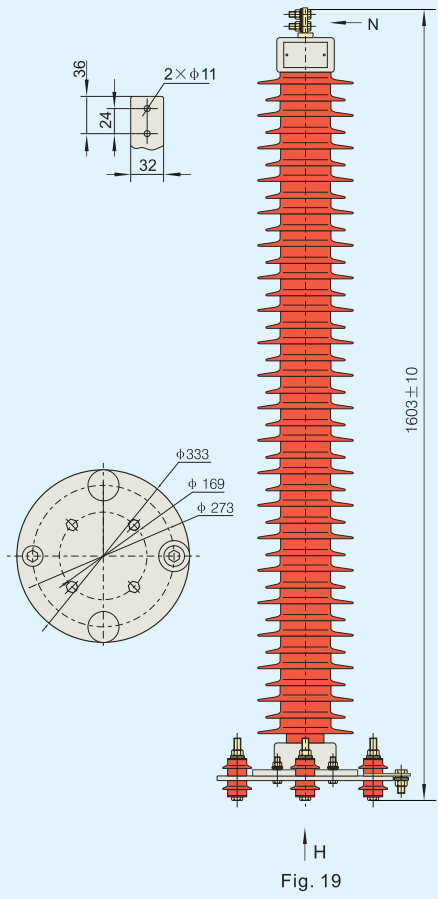
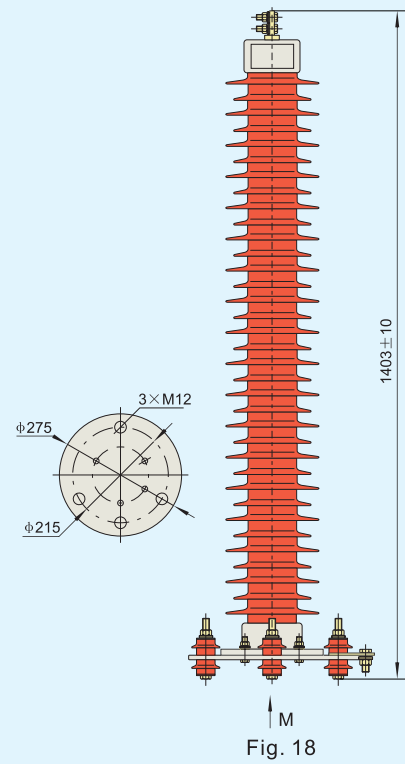
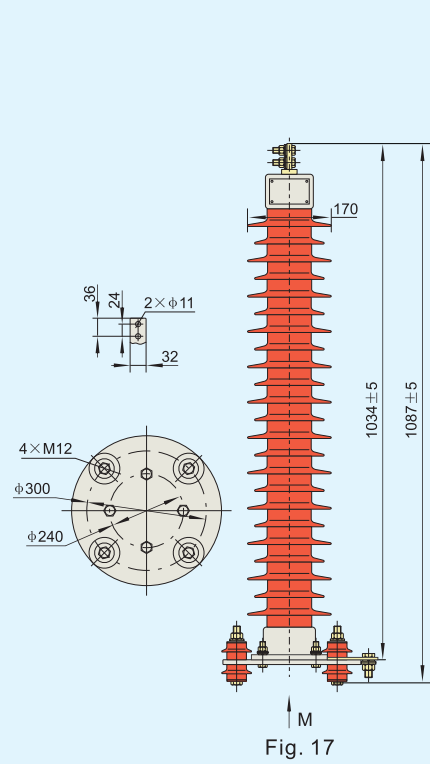
Model	Rated voltage (kV _{rms})	Continuous operating voltage (kV _{rms})	Lightening impulse residual voltage under nominal discharge current (\leq kV _p)	Line discharge class	Creepage distance (mm)	2ms square wave impulse current withstands (A)	4/10 μ high current impulse withstands (kA _p)	Fig. No.
Y20W-108	108	84	281	3	3350	800	100	35
Y20W-120	120	96	300	3	4106	800	100	36
Y20W-150	150	120	416	3	4400	800	100	37
Y20W-200	200	156	520	3	6700	800	100	38
Y20W-444	444	324	1106	4	17052	2000	100	39

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5 Overall and Installation Dimension



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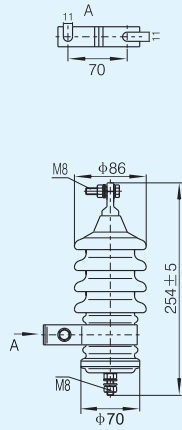


Fig. 22

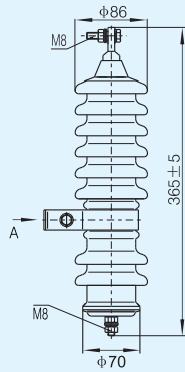


Fig. 23

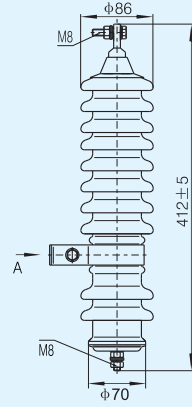


Fig. 24

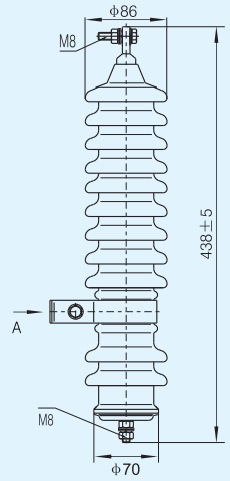


Fig. 25

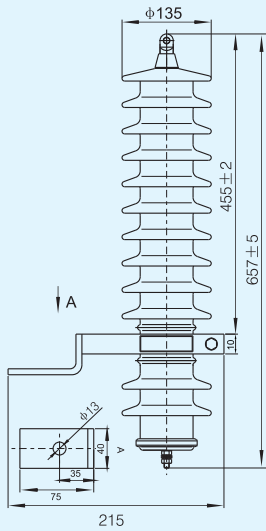


Fig. 26

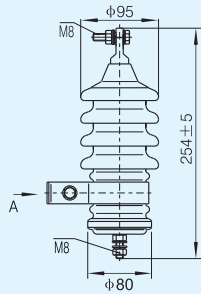


Fig. 27

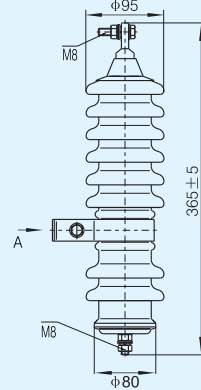


Fig. 28

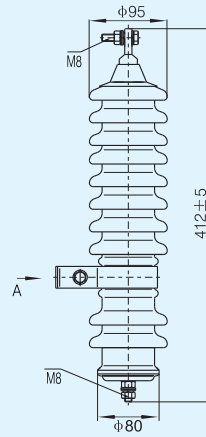


Fig. 29

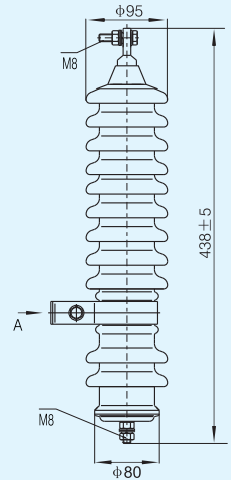


Fig. 30

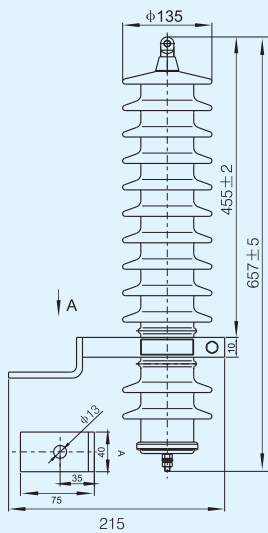


Fig. 31

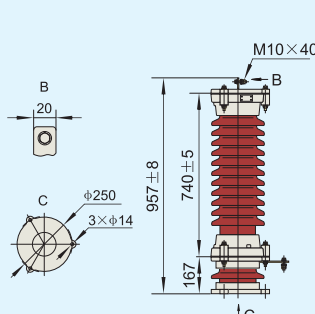


Fig. 32

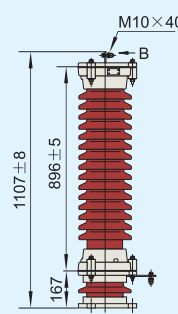


Fig. 33

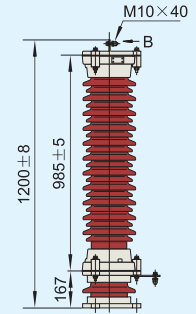
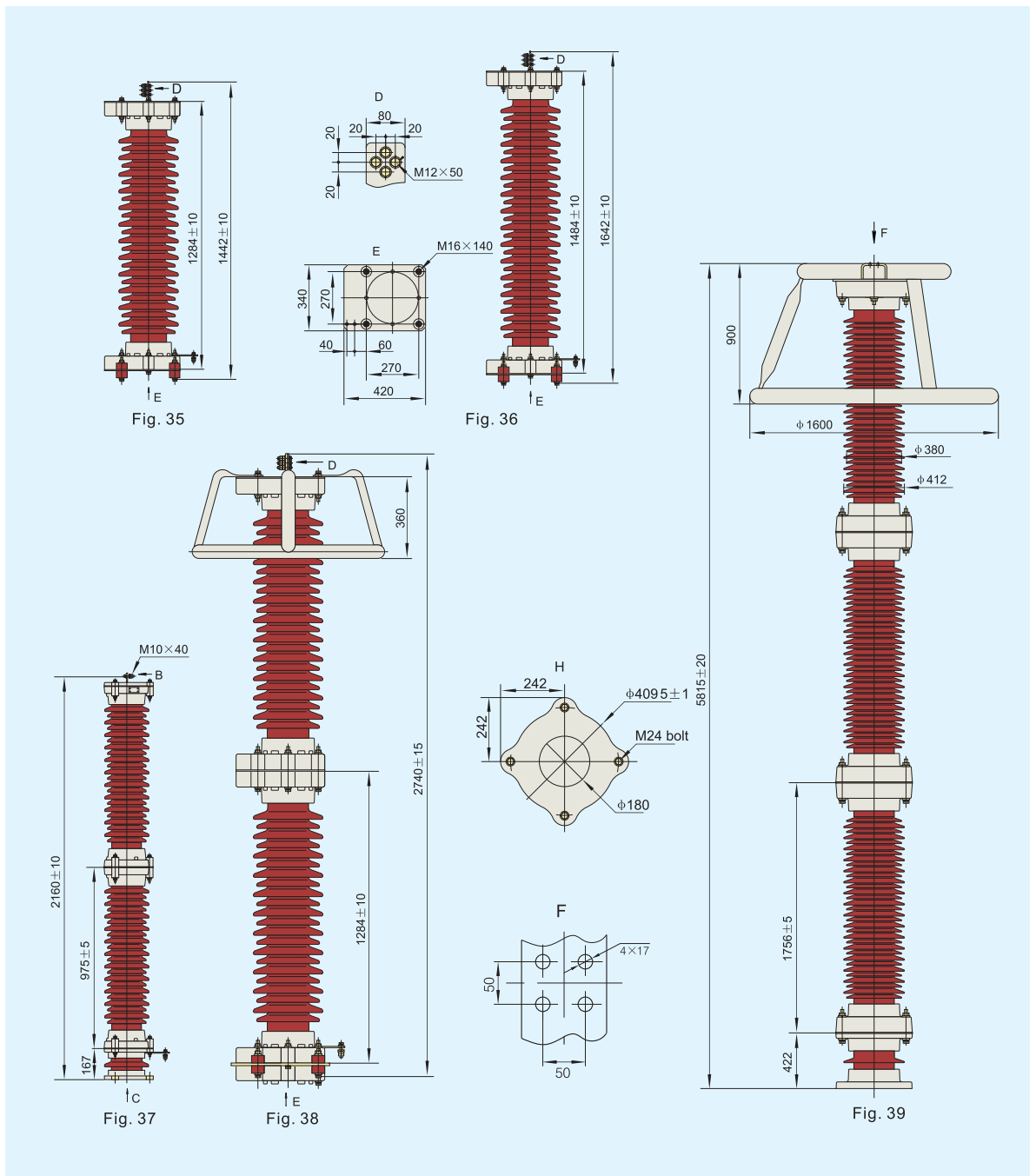


Fig. 34

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6 Ordering Information

- 6.1 Max. system voltage;
- 6.2 System neutral connection;
- 6.3 Rated voltage or Max. continuous operating voltage;
- 6.4 Nominal discharge current;
- 6.5 Type of housing;
- 6.6 Anti-contamination degree and creepage distance;
- 6.7 Any special requirement;
- 6.8 Accessories.