



Technical data

- For system voltages up to	3 kV d.c.	- Long duration current impulse	250 A / 2000 μ s
- Nominal discharge current I_n 8/20 μ s	10 kA pk	- Energy capability, 1 impulse acc. IEC clause 7.4.2	1.5 kJ / kV of U_c d.c.
- High current impulse I_{hc} 4/10 μ s	100 kA pk	- Energy input with I_{hc} acc. IEC clause 7.5.4	3.1 kJ / kV of U_c d.c.
- Short circuit rating (1) I_{sc} 50 Hz	20 kA rms for 0.2s	- Cantilever strength	350 Nm
- Line discharge class according to IEC 60099-4	1	- Torsional strength	50 Nm
- Service conditions: temperature (2)	- 60°C up to + 45°C	- Vertical load	1000 N
- Altitude (3)	up to 1800 m		

(1) Tested value acc. IEC 60099-4.

(2) These values exceed IEC requirements. For installations in higher ambient temperatures, please contact the manufacturer.

(3) This value exceeds IEC requirements. For installations in higher altitudes, please contact the manufacturer.

Application

Protection of DC power networks against both, multiple atmospheric and switching overvoltages as well as Very Fast Transients (VFT). Suitable for the protection of railway applications, rectifiers, etc. For indoor and outdoor installation.

Advantages

- Low residual voltage
- Long protection distance
- High energy input capacity
- Stable U-I characteristics even after multiple strokes
- Proof against ageing
- Explosion and shatter-resistant design
- Pollution resistant and UV-stable
- Housing resistant to rough handling
- Maintenance free
- Stable against shock and vibration
- High mechanical resistance

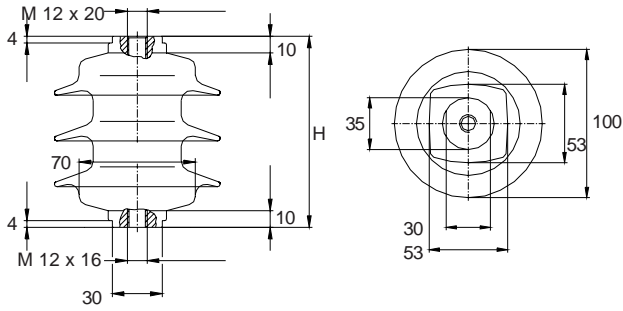
Guaranteed data

Type	U_c (5) Continuous operating voltage (DC) kV	Residual voltage (U_{res}) in kV pk at a specified impulse current																			
		Wave 1/. us		Wave 8/20 us						Wave 30/60 us											
		5 kA pk	10 kA pk	1 kA pk	2.5 kA pk	5 kA pk	10 kA pk	20 kA pk	125 A pk	250 A pk	500 A pk										
POLIM-C.ND																					
1.0	1.0	3.2	3.6	2.6	2.8	2.9	3.1	3.4	2.3	2.4	2.5										
1.5	1.5	4.8	5.4	3.9	4.1	4.3	4.5	5.0	3.4	3.5	3.7										
1.8	1.8	5.8	6.5	4.7	5.0	5.3	5.5	6.1	4.1	4.3	4.5										
2.0	2.0	6.5	7.4	5.3	5.7	5.9	6.2	6.9	4.6	4.9	5.0										
2.5	2.5	8.0	9.0	6.5	6.9	7.2	7.5	8.4	5.7	5.9	6.2										
2.9	2.9	9.0	10.2	7.3	7.8	8.2	8.6	9.6	6.4	6.7	7.0										
3.2	3.2	10.0	11.3	8.1	8.6	9.0	9.5	10.6	7.0	7.4	7.7										
3.5	3.5	10.8	12.2	8.8	9.4	9.8	10.3	11.5	7.6	8.0	8.3										
4.2	4.2	13.0	14.7	10.6	11.3	11.8	12.4	13.8	9.2	9.7	10.0										

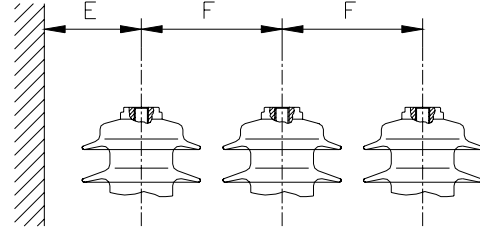
(5) For DC applications, U_c is equal to U_r (see IEC 61643-1).

Note: The manufacturer reserves the right to change technical data or design without prior notice 08/05

Dimensions (in mm)



Clearances



Insulation data, dimensions and weight

Type	Creepage distance mm	Flashover distance mm	Recommended clearances (4)		Height H mm	Weight kg	Insulation withstand voltage of empty housing			
			E min mm	F min mm			BIL 1.2/50 μ s req. values acc. to IEC kV pk		50 Hz 60s wet req. values acc. to IEC kV rms	
1.0	153	107	55	105	87.5	< 1.1	9.0	9.0	4.2	4.2
1.5	153	107	55	105	87.5	< 1.1	9.0	9.0	4.2	4.2
1.8	153	107	55	105	87.5	< 1.1	9.0	9.0	4.2	4.2
2.0	153	107	55	105	87.5	< 1.1	9.0	9.0	4.2	4.2
2.5	219	134	55	105	115	< 1.4	22.4	22.4	10.5	10.5
2.9	219	134	55	105	115	< 1.4	22.4	22.4	10.5	10.5
3.2	219	134	55	105	115	< 1.4	22.4	22.4	10.5	10.5
3.5	219	134	55	105	115	< 1.4	22.4	22.4	10.5	10.5
4.2	219	134	57	105	115	< 1.4	22.4	22.4	10.5	10.5

(4) National and local requirements have priority and may be used.