



Technical data

- For system voltages up to	3 kV d.c.	- Long duration current impulse	1350 A / 2000 μ s
- Nominal discharge current I_n 8/20 μ s	20 kA pk	- Energy capability, 2 impulses acc. IEC clause 7.5.5	10.5 kJ / kV of U_c d.c.
- High current impulse I_{hc} 4/10 μ s	100 kA pk	- Energy input with I_{hc}	2.7 kJ / kV of U_c d.c.
- Short circuit rating (1) I_s 50 Hz	65 kA rms for 0.2s	- Cantilever strength	6000 Nm
- Line discharge class according to IEC 60099-4	4	- Torsional strength	100 Nm
- Classification according to IEEE (ANSI) C62.11	station class	- Vertical load	4000 N
- Service conditions: temperature (2)	- 60°C up to + 45°C		
- 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 in railway applications. Can be used mechanically as support insulator or as suspension insulator in case of application as line arrester. 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

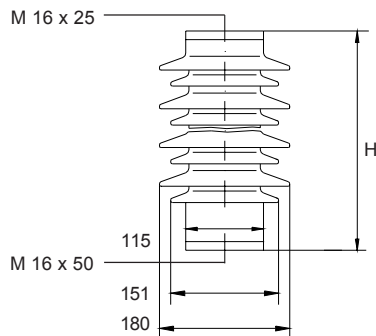
Guaranteed data

Type	U _c (5) Continuous operating voltage (DC) kV rms	Residual voltage (U _{res}) in kV pk at a specified impulse current													
		Wave 1/...µs		Wave 8/20 µs								Wave 30/60 µs			
POLIM-H..ND		10 kA pk	20 kA pk	1kA pk	1.5 kA pk	3 kA pk	5 kA pk	10 kA pk	20 kA pk	40 kA pk	250 A pk	500 A pk	1 kA pk	2 kA pk	
1	1	2.67	3.00	2.10	2.16	2.26	2.31	2.40	2.64	2.91	1.96	2.01	2.06	2.13	
1.5	1.5	4.04	4.47	3.15	3.22	3.33	3.46	3.60	3.96	4.41	2.92	2.99	3.06	3.19	
2	2	5.38	5.96	4.20	4.29	4.44	4.61	4.80	5.28	5.88	3.89	3.99	4.08	4.25	
2.5	2.5	6.84	7.57	5.34	5.45	5.65	5.86	6.10	6.71	7.48	4.95	5.07	5.19	5.41	
3	3	8.07	8.93	6.30	6.43	6.66	6.92	7.20	7.92	8.82	5.84	5.98	6.12	6.38	
4.2	4.2	11.2	12.4	8.75	8.92	9.25	9.60	10.0	11.0	12.25	8.10	8.30	8.50	8.85	

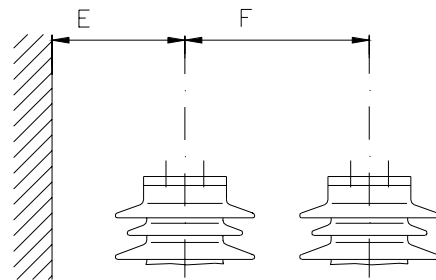
(5) For DC applications U_c is equal to U_r (see IEC 61643).

The manufacturer reserves the right to change technical data or design without prior notice 10/00

Dimensions (in mm)



Clearances



Insulation data, dimensions and weight

Type	Creepage distance	Flashover distance	Recommended clearances (4)		Height H	Weight	Insulation withstand voltage on Empty housing			
			E min	F min			BIL 1.2/50 μ s		50 Hz 60 s wet	
	mm	mm	mm	mm	mm	kg	req. values acc. to IEC	tested values	req. values acc. to IEC	tested values
1	327	176	110	200	210	< 6.1	17	131	8	10
1.5	327	176	110	200	210	< 6.2	17	131	8	10
2	327	176	110	200	210	< 6.3	17	131	8	10
2.5	327	176	110	200	210	< 6.4	17	131	8	10
3	327	176	110	200	210	< 6.6	17	131	8	10
4.2	327	176	110	200	210	< 6.8	17	131	8	10

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



WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
 TEL 0044 191 490 1547 FAX 0044 477 5371
 TEL 0044 117 977 4647 FAX 0044 977 5582
 WWW.THORNEANDDERRICK.CO.UK