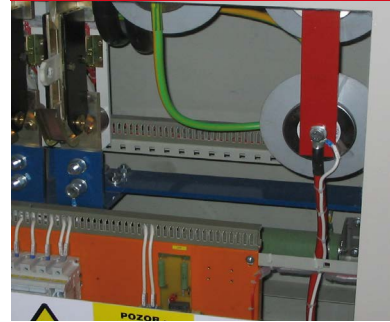


**OVERVOLTAGE LIMITER PSP \*20/IV - LINE DISCHARGE CLASS 4**  
 The limiters are suitable for both outdoor and indoor use

**OVERVOLTAGE LIMITER  
 PSP \*20/IV**  
 LINE DISCHARGE CLASS 4  
 OUTER LIMITER - DC NETWORKS

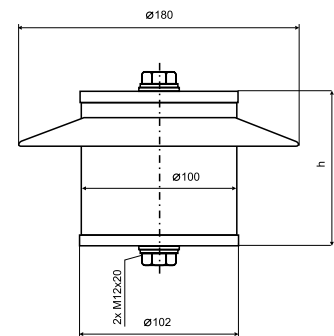


**OVERVOLTAGE LIMITER PSP \*20/IV - LINE DISCHARGE CLASS 4**

PSP \*20/IV is an overvoltage limiter as per EN 60099-4 (line discharge class 4), designed for protecting DC networks and DC stations from atmospheric and switching overvoltage. These limiters are especially suitable for rail vehicles, trolleybuses and overhead lines. They can be used both outdoors and in indoor areas.

The functional part of the limiters consists of a column of varistors sized for continuous operating voltage  $U_c$ , the outer insulating shell is composed of silicon caoutchouk (grey colour). The material of the shell shows high resistance to the effects of surface leakage currents and to electric arc, possesses hydrophobic properties and shows excellent resistance to weather effects, pollution and UV radiation. The cover caps, connecting screws, nuts and terminals are made of stainless steel suitable for the connection of a conductor with a diameter of 6 to 16 mm.

With their design and technical parameters, the overvoltage limiters of the PSP series conform to the standards EN 60099-4, IEC 60099-4 and EN 61643-11, IEC 61643-11.



Technical data		PSP 1/20/IV	PSP 2/20/IV	PSP 3/20/IV	PSP 4/20/IV
Max. continuous operating voltage (DC)	$U_c$	1 kV	2 kV	3 kV	4 kV
Nominal voltage (DC)	$U_n$	1,25 kV	2,5 kV	3,75 kV	5 kV
Nominal discharge current	$I_n$	20 kA	20 kA	20 kA	20 kA
High impulse current (4/10)		2 x 100 kA	2 x 100 kA	2 x 100 kA	2 x 100 kA
Long current impulse (2ms)		1350 A	1350 A	1350 A	1350 A
Discharge class acc. to EN 60099-4		4	4	4	4
Residual voltage at $I_n$	$U_{res}$	$\leq 3,1$ kV	$\leq 6,2$ kV	$\leq 9,3$ kV	$\leq 12,4$ kV
Height	mm	85 mm	102 mm	117 mm	134 mm
Operating temperature range	$\vartheta$	$-35^\circ\text{C} \div + 55^\circ\text{C}$	$-35^\circ\text{C} \div + 55^\circ\text{C}$	$-35^\circ\text{C} \div + 55^\circ\text{C}$	$-35^\circ\text{C} \div + 55^\circ\text{C}$
Weight	m	2 kg	2,5 kg	3,1 kg	3,65 kg
Article number		92005	92006	92007	92008

**Transport and storage**

The overvoltage limiters may not be exposed to strong shocks and impacts during transport. They should be stored in the long term in an indoor store.

**Maintenance**

No testing of the function or maintenance such as cleaning is necessary during the anticipated life of the limiter.

**Advantages**

- Long protective distance
- High absorption capacity
- Stable U-I characteristics even after repeated discharges
- Resistance to ageing
- Design resistant to explosion and bursting
- Resistance to pollution and UV radiation
- Resistance of the shell to rough handling
- Maintenance-free design
- Resistance to shocks and vibrations
- High mechanical resistance

