Dielectric Window Set

Oil Barrier for Window-Type Partial Discharge (PD) Sensors.

Dielectric Window Set

- Oil barrier for window-type PD sensor
- For oil-filled transformers
- Made from PEEK:
  High performance polymer with excellent mechanical and chemical resistance up to high temperatures
- Design according to Cigré TB 662
- Designed to be mounted in transformer tank wall with our **Welding Ring**
- Suitable for our **UHF-PS1** PD sensor

Technical Data

Oil pressure*	5 bar (max.)		
Oil temperature*	120°C (max.)		
Vacuum tightness*	< 0,15 mbar, leakage rate < 0,001 mbar/sec		
	Dielectric Window	**O-Ring**	**Screws**
Material	PEEK	FKM/FPM 75	DIN7991, A2-70
Dimensions (W x H)	99 mm x 84.5 mm		
Insertion depth of dielectric window	50 mm		
Diameter of dielectric window	62 mm		
Weight	270 g		
Operation temperature	-40°C … +120°C		
Storage temperature	-40°C … +120°C		

*When installed at a transformer using BSS welding ring set.

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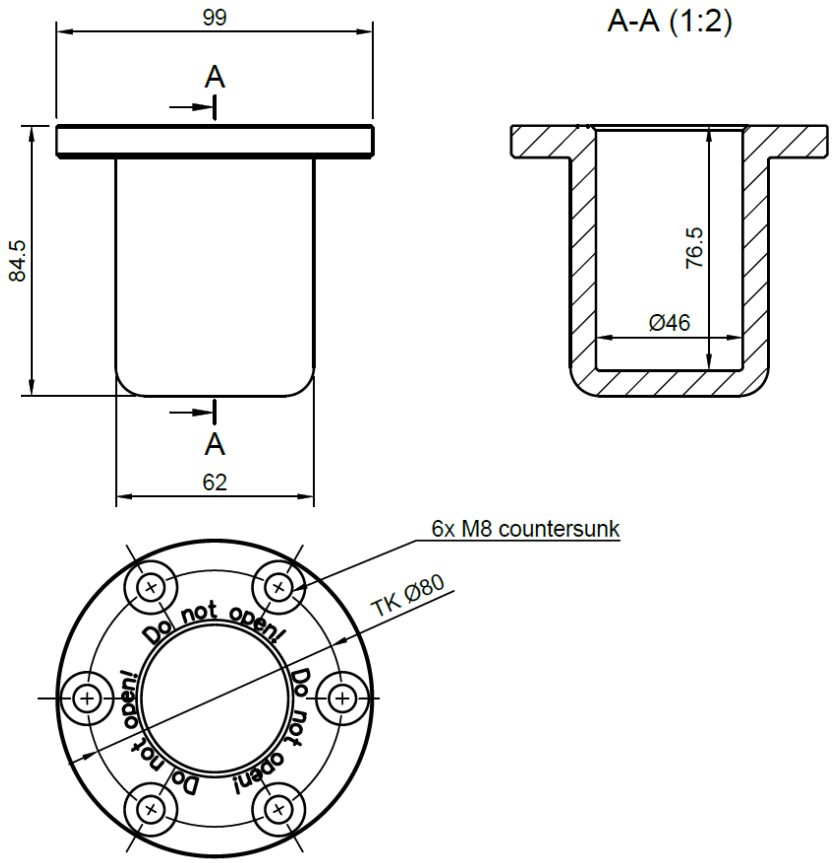
Type Tests

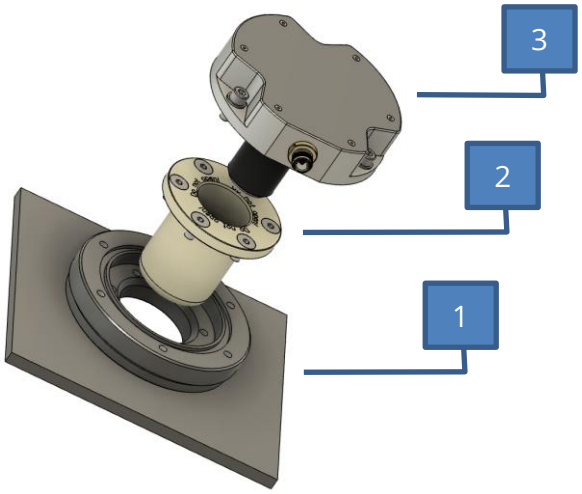
CE conformity	RoHS
Environmental	EN IEC 60068 EN IEC 60068-2-1 / EN IEC 60068-2-2

Dimensions (mm)



All dimensions in mm

Application Scenario



Sensor installation:

1) The stainless steel ring is welded onto a hole in the tank wall
2) Dielectric window acts as oil-barrier
3) UHF sensor is mounted on the ring with antenna inside the dielectric window and therefore inside the transformer

Scope of Delivery

Dielectric Window Set Product No: BSSA000403

- Dielectric Window
- O-Ring sealing
- Screws for mounting on Welding Ring
- Quick reference guide

Available Accessories

Description	Order No.
PD sensor UHF-PS1 standard aluminium version	BSSA000406
PD sensor UHF-PS1-V4A stainless steel version	BSSA001506
Welding Ring standard V2A version	BSSA000527
Welding Ring V4A version	BSSA001505

Important Installation Notes

For safety reasons dielectric windows must be placed in regions with low electrical field strength. In areas with high electrical field strength the air inside the pocket of the dielectric window could lead to PD. We recommend positioning according to Cigré technical brochure 861.

Cigré technical brochure TB 343 recommends installing DN50 valves or dielectric windows for later fitting of UHF probes. (TB 343: Recommendations for condition monitoring and condition assessment facilities for transformers).

The dielectric window of the sensor is designed according to Cigré technical brochure TB 662 (Guidelines for partial discharge detection using conventional and unconventional methods).

Legal Information

A copy of the Declaration of Conformity, manual and other relevant documents are available by request from BSS Hochspannungstechnik GmbH: support@bss-hs.de

All information can be subject to error and change without notice.

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