

OXOPOR Oxygen gas filtration

Oxygen gas is a combustive agent par excellence and, under specific operating conditions, the strong and rapid oxydation phenomena can originate spontaneous combustion of internal and external materials. High gas pressures and velocities, commonly used for gas transfer applications in petrochemical and steel plants, increase the risk of disastrous events with serious personal injuries and explosions.

Bea Technologies has developed OXOPOR filter elements and FO housings specifically designed for the use of gaseous oxygen. The filter element consists of a sintered bronze filter media wound around a stainless steel core suitable to support high differential pressures. The circumferential and longitudinal welds are made by electrowelding process. The OXOPOR filter elements are 100% controlled to ensure integrity and cleanliness.



APPLICATIONS

- Steel plants
- Petrochemical plants
- Oxygen pipe line
- Air separation plants

Materials	
Filter media:	sintered bronze
Core:	AISI 316 L
End caps:	copper alloy

Finishing

The product is completely degreased for Oxygen use

Models	Performance
OXOPOR 9500	20 μm @ 99.9% - 5 μm @ 98%
OXOPOR 4750	Max differential pressure : 60bar

HOUSINGS

The FO housings are designed to fit OXOPOR filter elements and are built with specific materials for oxygen use; the zone subject to impact are made with anti-spark materials. Special construction features ensure electrical continuity and meet high cleanliness standards.

Pressure vessel is designed to comply a manufactures codes; additional no destructive tests are foreseen by Bea Technologies to increase safety of use. All housings undergo degreasing process to eliminate any residual combustible substances and are filled with nitrogen to maintain cleanliness until installation.

SELECTION TABLE Nominal dimension Connections Flow rate Models А В m³/h* DN Fig. mm. mm. mm. FO-61-1-4750 FO-62-1-4750 FO-62-1-9500 FO-103-3-4750 FO-103-4-4750 FO-104-4-9500 FO-124-5-9500 FO-124-6-9500 FO-186-11-4750 FO-186-11-9500 FO-186-14-9500 FO-208-18-4750 FO-188-15-9500 FO-208-18-9500 FO-2010-19-9500 FO-2410-24-9500 FO-2612-40-9500 FO-3214-60-9500

* Compressed at 40 bar and 20 °C; pressure drop lower than 0.1 bar





The data are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.



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