



Microelectronics

## Gaskleen® SP Gas Purifier



### Description

The Pall Gaskleen® SP purifier assembly protects zirconium oxide ( $ZrO_2$ ) sensors used in oxygen analyzers. The purifier removes harmful contaminants, which cause drifts in the oxygen analyzer readings and degradation of the electrode performance. Use of this purifier does not affect oxygen levels in the process stream.

- State-of-the-art 316L stainless steel filter media with proprietary metal catalyst
- Compact size
- 100% helium leak tested
- Cleanroom manufactured and packaged
- Ideally suited for use in RTP, LPCVD and PECVD exhaust gas applications

### Product Benefits

- Extends the time between sensor calibrations, which maximizes tool uptime and ensures accuracy of the instrument's readings.
- In-line configuration allows for easy installation upstream of the oxygen analyzer.
- The integral filter provides particle removal down to 3 nm.
- Flow rates up to 1 slpm.

### Specifications

#### Materials

- Electropolished 316L SS housing
- 316L stainless steel filter medium with proprietary metal catalyst
- $< 10 \mu\text{in} / 0.25 \mu\text{m Ra}$  internal surface finish

#### Removal Rating

- $\geq 3 \text{ nm}$

#### Particle Removal Characteristics

- $10^9$  reduction up to 1 slpm

#### Connections

- $\frac{1}{4}$  in Male gasket seal

#### Operating Conditions

- Maximum operating pressure:  
1.48 MPa @ 400°C / 200 psig @ 752°F
- Maximum differential pressure:  
0.69 MPa @ 38°C / 125 psid @ 100°F

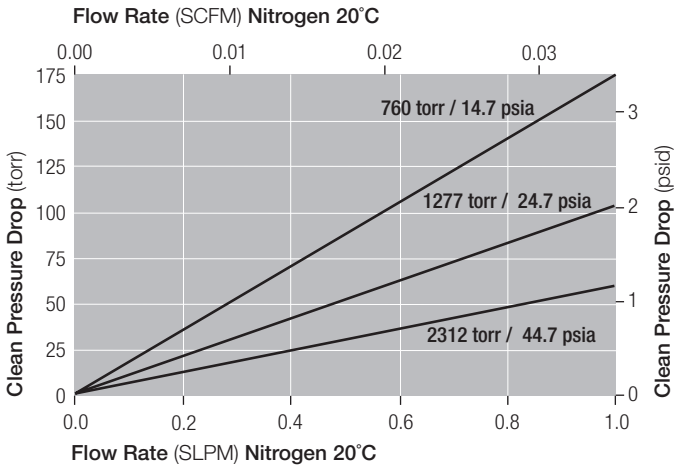
#### Leak Testing

- 100% helium leak tested to  $10^{-9}$  atm-cm<sup>3</sup>/s
- Design validated to  $10^{-11}$  atm-cm<sup>3</sup>/s

#### EU Pressure Equipment Directive:

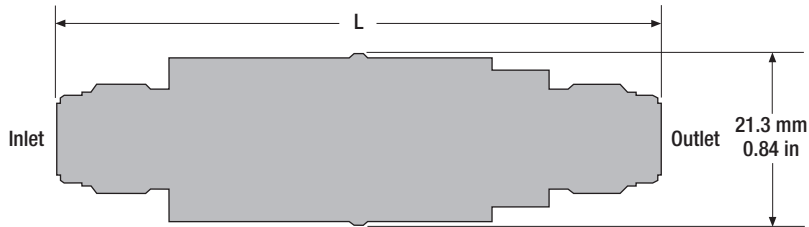
Assembly is designed and manufactured in accordance with sound engineering practices per the European Union's Pressure Equipment Directive 97/23/EC.

Pressure Drop vs. Gas Flow Rate



Unit Conversion: 1 kilopascal = 7.5 torr = 10 millibar

Dimensions



Part Numbers/Ordering Information

Part Number	Description	Length (L) (mm / in)
4HD4886-3181	¼ in male / male gasket seal	88.4 / 3.50