# **CYCLONE SEPARATOR**

for GAS ANALYSIS SYSTEMS

## MerlinGas

The MERLINGas cyclone separator is an innovative and patented separation technology that protects on-line analyzers from liquids, solid particulates and oily mists in the sample.

The MERLINGas design offers optimal separation even at a very low gas flow rate (from 30 l/h).

Without using any filter element (sintered stainless steel, micro-fibre or fabric), the MERLINGas effectively separates liquid and solid particulates (up to 10 microns) from the gas stream by a vortex effect and centrifugal force. Indeed, the difference of density between gas and solid particulates / liquids provides separation.

These separated particulates flow axially downwards out of the separator. The dry and clean gas sample exits from the top side of the separator to the analyzer.

#### **Applications**

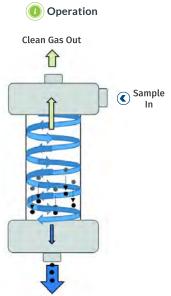
- Measurement in Syngas.
- Measurement after scrubbing.
- Sample pre-conditioning with fast loop.
- Mass balance with condensate recovery pots.
- Separation of fine particulates such as powder.
- Measurement in corrosive environments.







- Keeps sample integrity.
- Operates from an inlet flow of 30 l/h.
- Removes particulates up to 7750 kg/m3 and greater than 10 microns.
- Eliminates oily mists to protect measurement devices.
- No filter element means no risk of clogging or early fouling.
- No maintenance.
- Use in pressure on fast loop and in vacuum with condensate collector.
- Can be used in series for very dirty samples.
- Stress testing carried out by TUV.







## Technical specifications

Maximum service pressure	100 barg
Maximum temperature	200°C
Recommended flow rate	30-350 NI/h
Maximum flow rate	2000 NI/h
Differential pressure	0,5 bar
Body material	316 Stainless steel (other on request)
Sealing material	Viton, Kalrez or Teflon
Internal volume	160 cc
Sample in connection	1/4" FNPT
Fast loop bypass connection	1/2" FNPT
Sample out connection	1/2" tube
Dimensions	H 267 mm x ø 65 mm

### To order

