



DYNOPTIC

ASY-181

Compressed Air Purge Kit for DSL Opacity / Dust / Particulate Monitors



Designed specifically for use with DynOptic Systems opacity, dust and particulate monitors, the Compressed Air Purge Kit comprises:

- Regulated filter assembly to control the pressure and clean the compressed air
- In-line air pre-treatment filter with replaceable filters
- Micro mist separator assembly
- Flow restrictor at each air-purge body to control the air flow from the high pressure compressed air
- Wall mounting assembly and associated push-fit connectors
- Suitable for use with the DSL Fail Safe Shutter Kit

The DSL range of stack monitors use optical techniques to make opacity and/or dust measurements. Therefore, each measurement head has an optical surface, which is exposed to the dirty and potentially harmful environment inside the stack. To protect the optical surfaces from contamination by particle depositions and the damaging effects of heat and/or corrosive stack gas, it is necessary to use an air-purge system to prevent the stack gas from coming into contact with the measurement heads.

An air-purge system produces a flow of clean and dry air, which flows away from the measurement head, repelling the stack gas, and then flows into the stack. This continuous flow of air provides a clean air barrier between the optics and the stack gas.

Compressed air can be used as a source of purge air providing there is sufficient pressure (>5 bar) and capacity (>200 litres/min) for the air-purge application. However, industrial compressed air is typically very high pressure and is not usually clean enough to use directly as purge air so it is essential that steps are taken to ensure that the compressed air is well filtered and that the flow of air is controlled and regulated.

Using the DSL Compressed Air Purge Kit ensures that the compressed air is suitably clean and oil free as well as controlling the flow and regulating the pressure of the compressed air to meet the specified requirements.



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Specification:

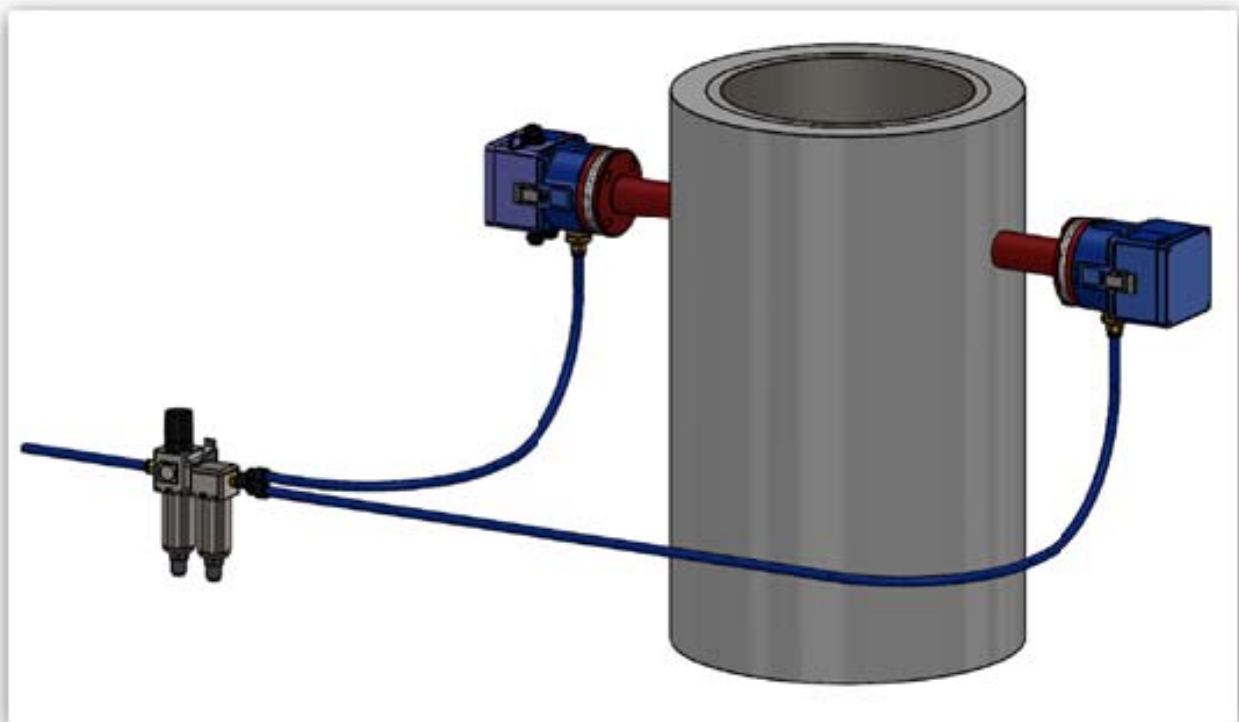
Compressed Air

No.	Parameter	Units	Min	Max	Comment
1	Inlet air pressure	bar psi	5.0 73	10.0 145	
2	Regulated pressure range	MPa bar psi	0.05 0.5 0	0.85 8.5 120	Recommended operating range is 3 to 5 bar
3	Air flow capacity	L/min		240	
4	Particulate filter	µm		5	Nominal filtration rating
5	Micro mist filter	µm		0.01	Nominal filtration rating

Physical

6	Operating Temperature	°C	-20	+55	Air temperature around the equipment
7	Operating Humidity	%		100	Air humidity around the equipment
8	Dimensions	mm	195 x 235 x 71		Regulated filter assembly
9	Weight	kg		1.0	Regulated filter assembly
10	Warranty	months	24		Return to base warranty

Installation Example:



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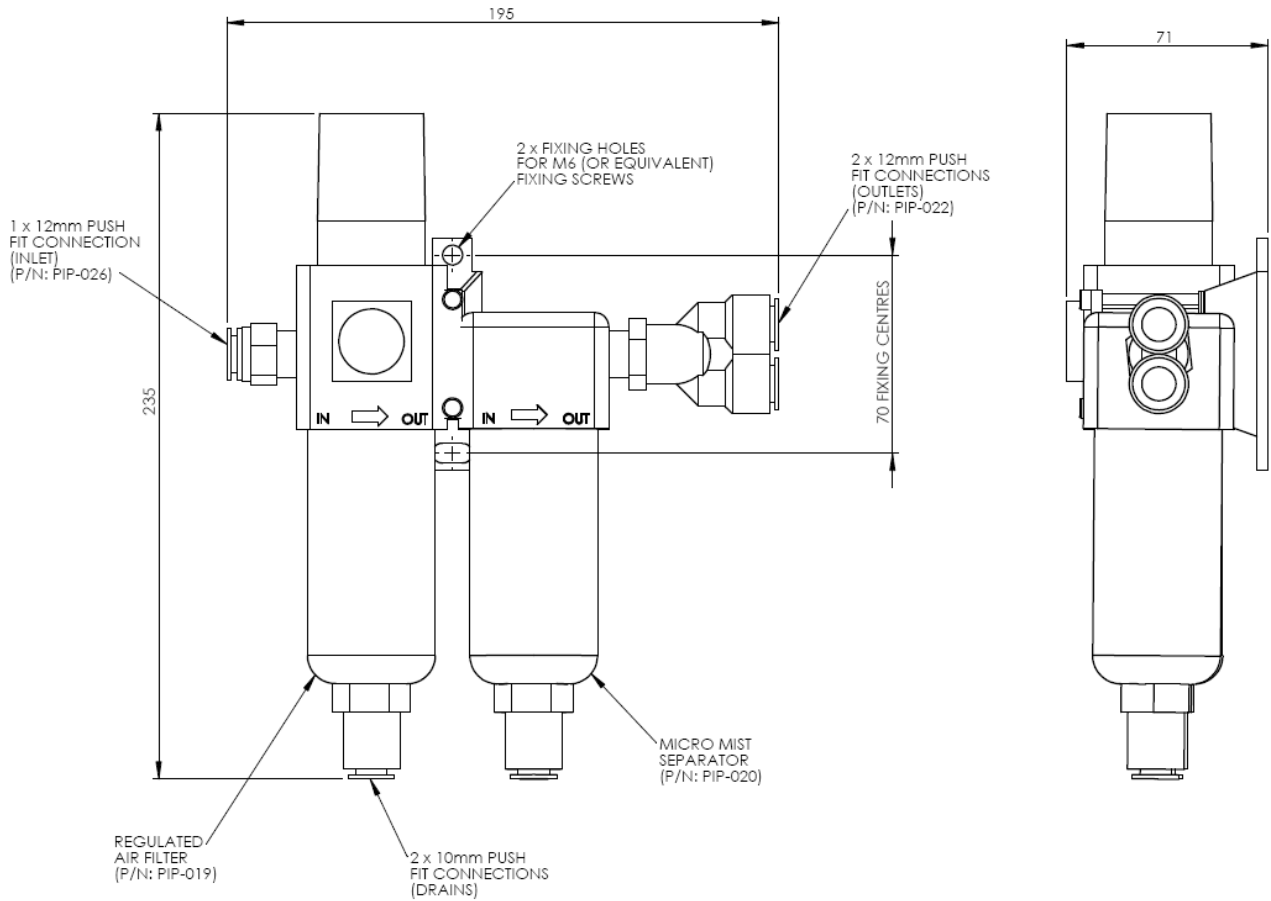


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Dimensions of Regulated Filter Assembly (mm):



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Options & Accessories:

Description	Order Code	Notes
Compressed Air Kit 	ASY-181	Kit contains the following PIP-019: Regulated Air filter. PIP-020: Micro mist separator. PIP-021: Mounting bracket PIP-022: Y-piece (3/8" male to 12mm) PIP-026: Straight fitting (3/8" male to 12mm) PIP-030: Sealing bung (12mm push-fit) MTL-327: 2 off flow restrictors (1" male to 3/8" female)
Replacement Filter Pack	ASY-182	5 off air filter elements 5 off micro mist filter elements
Pneumatic Tubing	PIP-025	12mm OD, nylon tubing (blue), 25m reel.
Tube Cutting Tool 	PIP-033	

Note that the actual part may differ from the above representative pictures.



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