AUTOMATIC PURGING UNIT F-BO-AFE70



Overview

The Automatic Purging Unit provides a user-friendly AFE70-2 and AFE70-3 units and compact solution with selectable preventative or event triggered purging programs.

An intelligent and easy to install design ensures the F-BO-AFE70 system is a cost-effective and reliable means of preventing pipe network blockage due to contamination.

Description

ASD systems continuously monitor the air in the protected environment, potentially subjecting the system to contamination over time. In order to prevent the build-up of dust and dirt on sampling holes and pipe network, regular pipe network purging with compressed air is essential.



In contrast to conventional purging systems, the F-BO-AFE70 units features

a single built-in Solenoid valve, which initiates the release of air into the pipe network. This valve also increases the reliability of the system by protecting the unit from any compressed air damage and can be accessed through a control board integrated into the housing.

Installation cost is greatly reduced, thanks to the unit's compact design, which removes the need for additional mechanical and electrical control devices. Further cost savings are realized due to reduced cabling and commissioning requirements.

User-definable purging processes and customizable program features allow the F-BO-AFE70 to deliver continuous and uninterrupted airflow whilst optimizing benchmark preventative maintenance regimes, through automatic purging processes settable at specific times.

Designed with the engineer in mind, the unit offers additional flexibility through the use of an external push-button or central timer as an input to allow the initiation of additional manual or automatic activations of the purging process.

System Configuration



Features

- A user-friendly and compact system, designed for larger pipe networks
- Compatible with VESDA, ICAM and FAAST Aspiration Smoke Detection (ASD) systems
- Patented design without air resistance (as defined by EN 54-20)
- 6 user selectable preventative or event- triggered purging programs short or long purging cycle options
- Internal clock or external clock timer can be connected

- Several systems can be networked in Master-Slave mode
- Manual control via an external push-button
- Automatic initiation if a fault message is received from the ASD system (activating through FACP only)
- Easy commissioning without software tools
- Multicolored LED indicates system condition

AUTOMATIC PURGING UNIT TECHNICAL SPECIFICATIONS



Specifications

Supply voltage	21.6 - 30 VDC
Current consumption at 24 V	8 mA (normal condition)
	300 mA (solenoid valve energised)
Operating temperature	F-BO-AFE70-2 (+5°C to +50°C)
	F-BO-AFE70-3 (-20°C to +40°C)
IP rating	IP20D
Relative humidity	Max. 95% at 40°C
Height	68 mm
Width	204 mm
Depth	160 mm
Housing cover colour	Grey white, RAL 9002
Weight	Approx. 3.2 kg
Patent number	AT 514912
Air delivery	F-BO-AFE70-2 (3500 lit/minute)
performance	
	F-BO-AFE70-3 (5000 lit/minute)
	F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure:
Compressed air	F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar)
Compressed air connection	F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar) Recommended minimum pressure:
Compressed air connection	F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar) Recommended minimum pressure: 0.2 MPa (2.0 bar)
Compressed air connection	F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar) Recommended minimum pressure: 0.2 MPa (2.0 bar) 0.2 MPa: typ. 1,300 l/min
Compressed air connection Flow rate solenoid valve	 F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar) Recommended minimum pressure: 0.2 MPa (2.0 bar) 0.2 MPa: typ. 1,300 l/min 0.4 MPa: typ. 2,300 l/min
Compressed air connection Flow rate solenoid valve	 F-BO-AFE70-3 (5000 lit/minute) Maximum permissible overpressure: 0.7 MPa (7.0 bar) Recommended minimum pressure: 0.2 MPa (2.0 bar) 0.2 MPa: typ. 1,300 l/min 0.4 MPa: typ. 2,300 l/min 0.6 MPa: typ. 3,200 l/min

Ordering Information

Ordering Code	Description
F-BO-AFE70-2	FAAST Purging System AFE70-2 (Low Flow)
F-BO-AFE70-3	FAAST Purging System AFE70- 3 (High Flow & sub-zero temperatures)
PIP-024	Non-return valve for pipework

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