



Mini-Z-Purge Continuous flow Zones 2/22

Protection mode:

Type of protection:	Ex pz Zone 2 (22) IECEx & INMETRO Category 3 G D ATEX
Ambient Temp:	-20/+55°C
Zones:	2-22



MiniPurge
CF panel mount

Description:

For purged enclosures in Class 1 Division 2 Gp A-D or Zone 2 IIC Ex [pz] or Ex [py] and Zone 22 Ex pD.

The initial purge flow removes the gasses, which may be present in the area when the enclosure is closed. After the purge cycle has been completed it continues to maintain pressurization. For enclosures with an internal source of flammable gas or vapor release, the continuous flow can be set to reduce the concentration below 25% of the LFL (LEL).



MiniPurge
CF back plate

Features:

- One Model number: includes the Control Unit (CU), Spark Arrestor Unit and the Relief Valve (RLV).
- Simple integrated mounting with little or no piping needed.
- IECEx, ATEX, FM and cULus approvals covering IEC/EN 60079-2 and NFPA 496.
- INMETRO approval to ABNT NBR IEC 60079-2
- Clear visual status indication
- Remote Alarm contacts

Components:

The system has three components. The Control Unit controls air flow and monitors flow and pressure. The Spark Arrestor Unit (SfU) provides a protected fixed measuring orifice to measure flow through the enclosure.

The Relief Valve (RLV) provides over-pressure protection for the enclosure. Preferred options are Panel Mount and Back Plate option. Panel Mount fits directly on the enclosure with minimum external space. Back Plate mounts either directly onto the outside of or remote from the enclosure.



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Common specification:

The control unit

Purge medium: Compressed air or inert gas, clean, dry & free of flammable gasses.
 Supply pressure: 4-8 bars (60-115psi)
 Supply inlet: ¼" NPT (F), connected with ½" (12mm) O/D [Min. 3/8" (10mm) I/D] pipe. 33ft (10 meter). Max length

Relief Valve RLV 25 (Full 1" bore)

Magnetic operation (patented) with integral spark arrestor. Opening Pressure: 1kPa, 4" WC, 10 mbar.

Spark Arrestor Unit - SAU25

User selectable: supplied with 8 orifice plates for Purge
 Flow of: **0.4, 0.9, 1.4, 2.3, 3.2, 4.8, 6.4 or 8.0 scfm**
 (NI/min: 10, 25, 40, 65, 90, 135, 180 or 225)

Alann Indicators: "Alarm" Red Indicates Low Pressure.
 "Pressurized" Green Indicates Pressure OK

Low Pressure Sensor "Alarm" Setting: 1" WC (2.5 mbar).

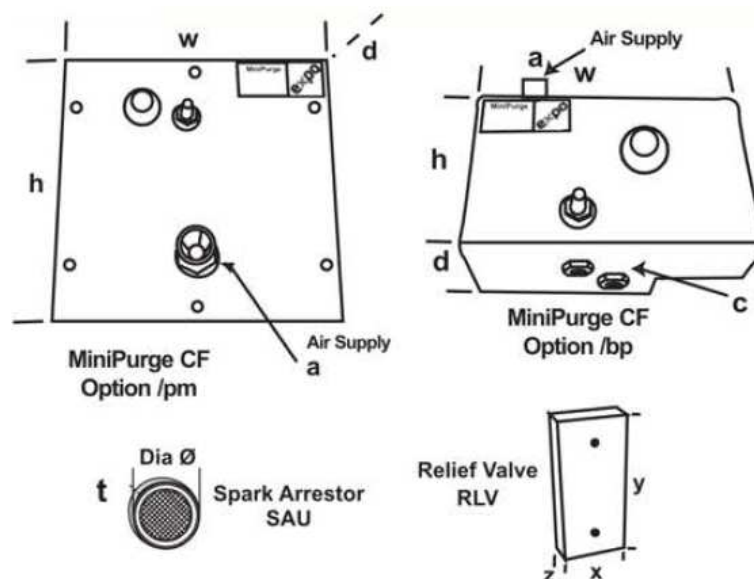
Permissible Enclosure Leakage: 2scfm (60 NI/min)

Material of construction

Control Unit : 316L stainless steel mounting plate
 Spark Arrestor : 316L stainless steel
 Relief valve: 316L stainless steel

Weight: 2.4kg. approx.

Drawing:





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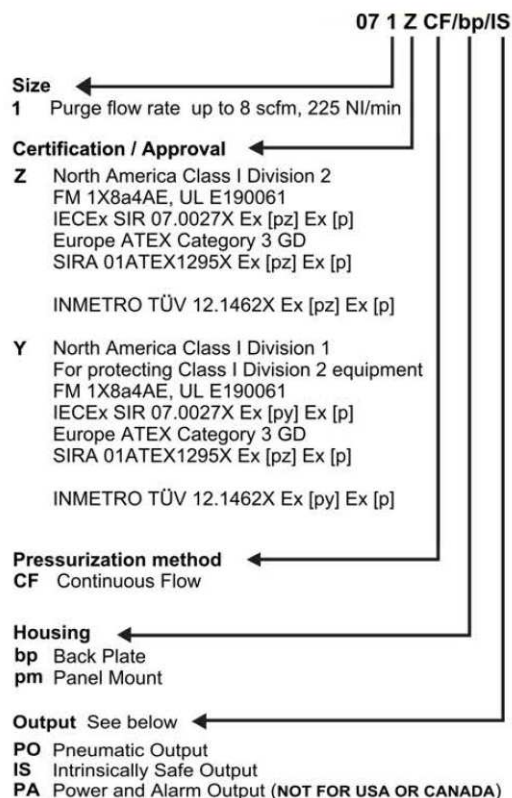
Technical data:

Dimensions/Spec.	07 1ZCF/pm/___		07 1ZCF/bp/___	
	07 1YCF/pm/___		07 1YCF/bp/___	
Width w	7.9"	200mm	7.8"	197mm
Height h	7.9"	200mm	5.0"	127mm
Depth d	2.4"	62mm	3.1"	79mm
RLV Width x	2.4"	62mm	2.4"	62mm
RLV Height y	5.2"	133mm	5.2"	133mm
RLV Depth z	1.3"	33mm	1.3"	33mm
Fitting Length a	1.0"	25mm	0.4"	11mm
Fitting NPT a	1/4"		1/4"	
Signals NPT c	1/8"		1/8"	
SAU Diameter Ø	2.2"	55mm	2.2"	55mm
SAU Depth t	1.4"	35mm	1.4"	35mm

Selection of Orifice Plate				
Orifice Plate	Purge Flow		Enclosure Volume	
	scfm	NI/min	ft ³ (4VC*)	m ³ (5VC*)
1	0.4	10	2.6	0.3
2	0.9	25	6.6	0.07
3	1.4	40	10.5	0.12
4	2.3	65	17.2	0.19
5	3.2	90	24	0.27
6	4.8	135	36	0.40
7	6.4	180	48	0.54
8	8.0	225	60	0.64

*VC = Volume Changes (based on 30 minute purge time)

Reference : (example)



Panel mount

Model N° 07 1ZCF/pm/IS or /PO

Model N° 07 1YCF/pm/IS or /PO

Control unit location: Side or front of
purge enclosure

Back plate

Model N° 07 1ZCF/bp/IS or /PO

Model N° 07 1YCF/bp/IS or /PO

Control unit location: Side or bottom of
purge enclosure

Warning label (loose) for user's calibration details,
for mountings to purged enclosure.

"Alarm" remote output options

/PO "Pneumatic Output"

"Alarm output" Main supply 60 psi / 4 bar
Pressure Output "Pressure OK". No output
"Alarm"

IS Dry contacts for switching non-incendive or
Intrinsically safe circuits. "Alarm" open on loss pressure.