Sheet No.: 306301

Ci-EXTDS8a, Constant flow regulator for extended discharge

Item numbers covered by his datasheet

306301 Ci-EXTDS8a

General

The Ci-EXTDS8a regulator is an option for installations where a considerable loss of INERGEN is expected after discharge shortening the holding time. By adding the Ci-EXTDS8a with ContinuOxy cylinders to the manifold the holding time can be improved even for rooms with large leakages.

Specifications

Temperature -20°C to +70°C

Materials Brass, Stainless steel, Aluminium, Steel

Dimensions ø38x116mm Weight 0.5kg

Pressure [MPa]

Work 40.0 MPa Proof (burst) >120.0 MPa

Flow way

In ø8.0 (50 mm²)
Out Variable ø2.0 to ø8.0

Thread connections

Inlet ISO228/1 - G3/8" w. 60° conical face. Male thread Outlet ISO228/1 - G3/8" w. 60° conical face. Female thread

Backpressure activation Yes, if used as intended on a manifold.

Inlet check valve Yes, the inlet is closed unless a hose is connected

Mounting direction Any

Marking

Fire Eater logo "Ci-EXTDS8a"

"Inert gas, 40 MPa, -20 to +70°C"

"Sn 123456-123" Arrow + "Flow"



| Document: 306301 Ci-EXTDS8a.docx | | | | 1 | Text |
|-------------------------------------|--|---------------|----------|---|------|
| | | | | 2 | |
| Category: | | ld: | HDN | 3 | |
| Control inert | | Rev:202 | 20.10.02 | 4 | |
| 1 | | | | 5 | |
| | | | | 6 | |
| | | Vølundsvej 17 | | 7 | |
| | DK- 3400 Hillerød Tel +45 7022 2769 | | | 8 | |
| FIRE EATER www.fire-eater.com | | | | 9 | |
| | | | | | |

Engineering data sheet

Manifold Chapter:

Page: 2 of 3

Sheet No.: 306301

Installation

Including ContinuOxy in a Fire Eater installation can be achieved by mounting a Ci-EXTDS8a to an extra manifold inlet. One or more cylinders can be connected through the Ci-EXTDS8a depending on the amount of ContinuOxy needed. When the manifold is pressurized by the standard system, the ContinuOxy cylinders will be activated through backpressure. The Ci-EXTDS8a will start adding ContinuOxy to the manifold once the manifold pressure drops below 40Bar. The flow through the Ci-EXTDS is restricted by calibrating the orifice in the outlet. Approximate flow values are listed in Table 1.

The Ci-EXTDS8a is not able to close completely. If valves are installed downstream of the Ci-EXTDS8a the system up to the valve must be rated for cylinder pressure.



INERGEN Discharge

ContinuOxy extended discharge

Standard system

Multiple cylinders can be connected in series using high pressure Tee's

| Document: 306301 Ci-EXTDS8a.docx | | | | Text |
|-------------------------------------|--|----------------|---|------|
| | | | | |
| Category: | | ld: HDN | 3 | |
| Control inert | | Rev:2020.10.02 | 4 | |
|) ==4 | | | 5 | |
| | | | 6 | |
| | | ølundsvej 17 | | |
| | DK- 3400 Hillerød Tel +45 7022 2769 | | 8 | |
| FIRE EATER www.fire-eater.com | | | 9 | |
| | | | | |

Engineering data sheet

Chapter: Manifold
Sheet No.: 306301

Page: 3 of 3

Flow characteristics

| Ci-EXTDS8a Orifice | Flow | Minimum manifold orifice | Number of 80L cylinders in |
|--------------------|--------|------------------------------|---|
| [mm] | [kg/s] | 10 x Ci_EXTDS8a orifice area | series required for 10 minutes of steady flow |
| | | [mm] | |
| Ø2.0 | 0.04 | Ø6.3 | 1 |
| Ø3.0 | 0.10 | Ø9.5 | 2 |
| Ø4.0 | 0.17 | Ø12.7 | 4 |
| Ø5.0 | 0.26 | Ø15.8 | 6 |
| Ø6.0 | 0.38 | Ø19.0 | 9 |

Table 1

Maintenance

None

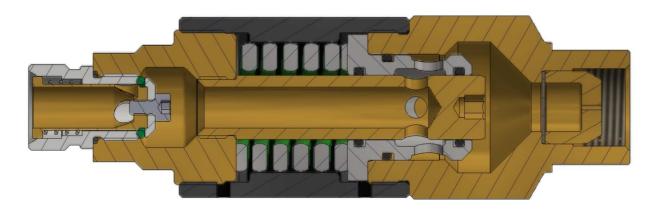
Routine testing

None

Section drawing

Section view in normal non-pressurized position.

There are no serviceable parts in the Ci-EXTDS8a, if the component is dismantled the device will need factory re-calibration.



Replaceable parts

None

Standards & approvals

Compliant with Directive 2014/68/EU (PED)

| Document: 306301 Ci-EXTDS8a.docx | | | | 1 | Text |
|-------------------------------------|--|---------------|----------|---|------|
| | | | | 2 | |
| Category: | | ld: | HDN | 3 | |
| Control inert | | Rev:202 | 20.10.02 | 4 | |
| 1 | | | | 5 | |
| | | | | 6 | |
| | | Vølundsvej 17 | | 7 | |
| | DK- 3400 Hillerød Tel +45 7022 2769 | | | 8 | |
| FIRE EATER www.fire-eater.com | | | | 9 | |
| | | | | | |