Engineering data sheet

Chapter: Control Inert Page: 1 of 5

Sheet No: 305442

305442 Ci-IM8 Manual Actuator

General

The actuator is used with the Ci-IV8 valve for manual hand actuation of the valve.

The actuator works as a spring loaded force amplifier.

By pushing with a maximum force of 150N on the button a spring is released creating a force of 700N for actuation of the Ci-IV8 valve.

Specifications

Actuation

Method: Hand

Force: 150N (maximum)

Materials:

Brass

Stainless steel

Viton Silicone Aluminium

Dimensions

D \times L: \emptyset 40 \times 75 (length installed 67 mm)

Weight: 0.4 kg

Markings

Fire Eater Logo, Ci-IM8A, Serial number, CE1116, YY,



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Engineering data sheet

Chapter: Control Inert Page: 2 of 5

Sheet No: 305442

Installation

The Ci-IM8 is screwed into the Ci-IV8 valve mechanical connection and tightened by hand (10Nm). Before fitting the Ci-IM8 it must be inspected that it has not been activated (plunger must be below end surface of the actuator), if it has been activated see "maintenance" for resetting.

The two set screws are loosened and the knob is rotated so the pin is in a convenient position. Only <u>loosen</u> the set screws! The two set screws must be tightened again, do not use excessive torque!

Operating

The seal is broken, the pin is pulled out and the button is pushed by hand to activate the system.

Maintenance

After discharge the Ci-IM8 has to be reset manually.

The procedure for resetting the actuator is:

- 1. Remove the Ci-IM8 from the Ci-IV8 valve.
- 2. Screw the Ci-IM8 into FE tool 305495.
 Tighten slowly until a low "click" is heard and tighten ½ turn more.
 (STOP if a tightening torque of 10Nm is exceeded)
- 3. The safety pin has to be put back and new seal applied (it may be necessary to rotate the button).
- 4. Turn back the knob. Remove the Ci-IM8 from the tool.
- 5. Check that the plunger does not protrude from the actuator.
- 6. Refit the Ci-IM8 to the valve as described under Installation.

Routine testing

To verify correct operation the actuator may be activated annually. To verify sufficient force of the Ci-IM8 a scale may be used to measure the plunger force. A force of 400N must be required to start pushing back the plunger.

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Engineering data sheet

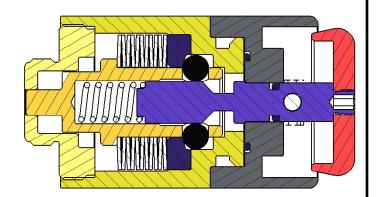
Chapter: Control Inert Page: 3 of 5

Sheet No: 305442

Section Drawings

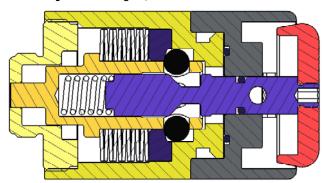
Ci-IM8 in normal "Non activated" position

In the normal position the activation knob is kept in place by the safety pin, so that the activation plunger can not move.



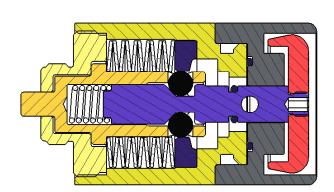
Ci-IM8 in initial activated position (button is pushed in, balls just moving in)

When the pin is removed and the button pushed in, the balls are forced inwards, releasing the springs which deliver the force required to activate the discharge valve.



Ci-IM8 in activated position

With the balls moved in, the plunger is forced out by the springs, it will remain in this position until the plunger is forced back by using the reset tool.



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Chapter: Control Inert Page: 4 of 5 Engineering data sheet Sheet No: 305442 Exploded view 6) 7) (13)(12)(11) 5) 4) Pos. Item no. Item name 212221 Screw M5x6 O-ring 19.1 x 1.6 O-ring 5.1 x 1.6 SIL 70 shore IMWS8 Body 2 302223 302228 305050 305051 IMWS8 Seat Ring IMWS8 Connector 305052 305054 **IMWS8 Piston** 8 305055 IM8 Rod 305056 305059 IM8 Guard 10 IM8 Button Spring 0.63×8.0×24.5 SS Spring Plate Block 31.5x16x0.8 11 305329 12 305332 305346 Ball SS Ø6.0 mm 13 305351 305352 Pin Ø4 IM8 14 15 Ring for IM8 pin

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Sheet No: 305442

Declaration of conformity & CE certificate



Manufacturer:

Fire Eater A/S Vølundsvej 14 DK-3400 Hillerød Denmark

EN12094-4

Container valve assembly

Control Inert IM8 Manual Actuator

Manuel actuator for Control Inert valve family

Testing is possible by removing it from the Ci valve. Special tools are required for resetting the actuator.

Based upon attached Certificate of conformity, we declare that the Container valve assembly designated above meets the provision of Annex ZA of the EN12094-4 standard.

The manual actuator is to be used in combination with Fire Eater Discharge valves with the Ci designation.

Certification body for this product is CNPP, B.P. 2265, F-27950 Saint Marcel, www.cnpp.com CNPP certificate: 1116-CPD-017

Signature: _____

2007-01-25 Date:

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Chapter: DOP Page: 1 of 1

Sheet No.: Ci IM8

Declaration of Performance

Nr. Ci IM8 2014-11

1. Product type identification:

Ci IM8

2. Type identification:

"Ci IM8" and serial number, Logo

CE mark

3. Intended use:

Inert gas Fire suppression system

4. Manufacturer:

Fire Eater A/S

Vølundsvej 14, DK-3400 Hillerød

Denmark

5. NA

6. Assessment system:

System 1

7. Certification body for this product is

CNPP Cert

CNPP certificate:

1116-CPR-017

Test report:

CNPP GH 07 0002

8. NA

9. Performance

Product type

Manual actuator for Discharge

valve

Operating temp

-20 to +70 °C

Type of system

Inert gas system < 150N

Activation force
Actuator force

app 700N

Mounting

Any

10. On behalf of Fire Eater

Signature: ///ul/

Michael Kroneder, CTO

Hillerød

2014-11-24

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