# SF Technical manual Injector MP 10-50

Medium Pressure





DESCRIPTION: INJECTOR

Dev. Step Added 2006/42/EC

TYPE: MP 10-50 I

ORDER REF.: 88000

ISSUE: 2020-01A

The manual also covers special versions of this Injector 10-50 1P. Eg 88910

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Technical Publication

Made by:

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## Precautions when using a Pressurized Hose



### **WARNING!**

If you slide the ball valve handle out of your hands when the flow and pressure is high, run away from it quickly.

It is to avoid the ball valve handle to bang against you and cause damage.

**NOTE!** Learn where the main shut off valve is positioned before starting up using the equipment.

**NOTE!** Use Non-Slip gloves when working with pressurized hoses. Use eye protection.

## Other precautions:

Alternatively, use a gun handle witch shuts of automatically when it slips out of your hands.



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## Safety precautions

## Systems containing chemicals



### **WARNING!**

Take care when repairing equipment or hoses/ piping systems containing concentrated chemicals. Always flush all the system before starting any repair

Before any repair, the equipment must be flushed with plain water. Let the unit run until all chemical are flushed out of the system.

#### **Hazardous Substances**



#### **WARNING!**

Contact with chemicals can cause death, serious injury, or illness.

Always read and follow the instructions in the safety data sheet supplied by the manufacturer or local supplier, when handling chemicals.

Make sure that

- the safety data sheet is available
- > the showers work
- an eyewash device, movable or wall-mounted, is available and operational
- additional washing facilities are nearby

**Note!** Learn the locations of all washing facilities in order to act immediately in case of an accident





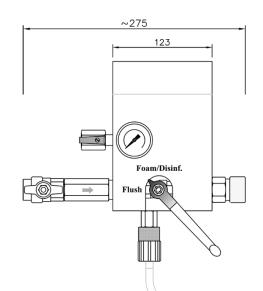
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## **Specifications**

Dimensioning data



Water inlet:

Connection:

Limitation: Min. feed pressure

Max. feed pressure

Max. temperature

Water consumption at 25 bar & 10 m 1/2" hose:

Flushing max. Flushing nom. Foaming

Air inlet:

Connection:

Limitation: Min. feed pressure Max. feed pressure

Air consumption at 6 bar:

**Product inlet:** 

Connection: Dosing range

**Outlet:** 

Flushing and foaming 1/2" quick coupling

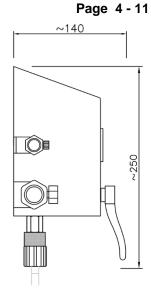
Max. discharge pipe 1/2": 50 meter or 1/2" hose 25 meter

Weight:

Nett 4,6 kg

Option:

Two product chemical inlet incl restrict set and suction tube 88101 Hose Inlet for water. Easy fitt. L= 0,30 meter. Item no: 86883



1/2" BSP (Female)

10 bar 50 bar 70 °C

60 l/min 30 l/min 7-8 I/min

1/4" BSP Female

6 bar 10 bar 150 l/min

Suction tube 1-6%

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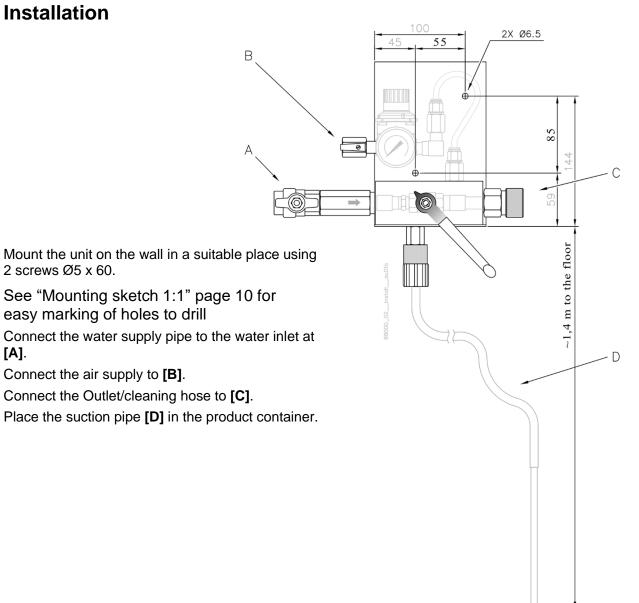
## Installation

2 screws Ø5 x 60.

[A].

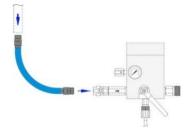
easy marking of holes to drill

Connect the air supply to [B].



## **Optional accessory**

Hose Water Inlet, Easy fit, 1/2" M-M, 0,30m Item No 86883



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## Operating the unit

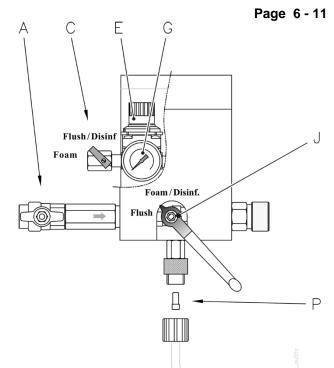
Start the unit by opening the water supply valve **[A]**.

The density of the foam can be adjusted at the regulating valve **[E]**. The air pressure is indicated at the pressure gauge **[G]**.

The chemical concentration / consumption can be adjusted by changing the restriction at **[P]**.

Changing between Flush and Foam/Disinfection is done by the valve [J].

Change between Foam and Disinfection is done by the valve [C].



### **Chemical concentration**

The following figure illustrates the chemical concentration achievable by changing the colour coded orifice nozzles.

Restrictor [colour]	Item no	Chemical concentration [Pct]	Custom Calibrated values [Pct]
White	83008	1%	
Red	81767	2%	
Blue	83007	3%	
Black	81768	4%	
Orange	83006	5%	
Grey	81769	6%	

NOTE! The exact percentage depends on the viscosity of the chemistry used and the suction height. Calibration is necessary if very accurate figures are required.

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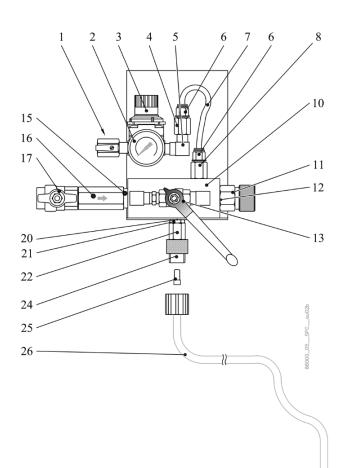
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## **Spare Parts List**

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Pos.	Item no.	Description
1	80079	Ball valve Brass
2	82544	Pressure gauge ø40 10 bar. Incl back conn.
3	80029	Air regulating valve
4	80480	Non return valve StSt
5	82380	Elbow muff
6	85199	Push in fitting Elbow
1-6	88158	Air inlet complete
7	85645	Hose for air
8	86469	Non return valve 1/4"
10	88344	Body complete. Standard.
11	84915	Quick coupling complete
12	80907	O-Ring
13	81850	Bypass valve complete
15	80907	O-Ring
16a	83718	Non-Return valve. Standard
16b	82401	Non-Return valve. PN 40. "C"
17	81949	Ball valve StSt
20	82673	O-Ring
21	80424	Nipple
22	80080	Non return valve SS ¼"
24	85040	Holder for restrictor
25	84051	Restriction set. 1-6%
25.1	83008	1% White
25.2	81767	2% Red
25.3	83007	3% Blue
25.4	81768	4% Black
25.5	83006	5% Orange
25.6	81769	6% Grey
26	85041	Suction tube complete



## Injector body complete

Pos.	Item no.	Description	
1	88279	Body for injector	
2	80930	Locking ring SS	
3	82673	O-ring	
4a	83036	Nozzle inlet.	8,0L
4b	88234	Nozzle inlet (Special) d	6,0L
4c	82995	Nozzle inlet (Special)	11,0L
5	83047	Nozzle outlet	
6	85140	O-ring	
7	83003	Air nozzle	
8	81760	Tool for locking ring	

Use a long standard screw with M6 thread to pull out the nozzles.

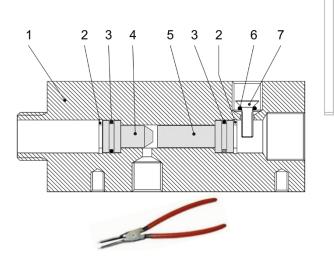


Figure 1 Pos. 8 Tool for locking ring

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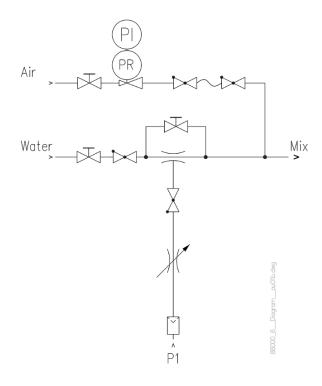
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## Flow diagram



## Symbol List

lack	Caution	)	Injector
<b>→</b> >>	Non return valve	+	Restriction
- <del></del>	Hand valve	->-	Pump
<u>-X-</u>	Solenoid valve	PI	Pressure gauge
— <u> </u>	Filter	-(FS)-	Flow switch
PI PR	Pressure regulator and pressure gauge		

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## **Fault Finding Guide**

### Nothing happens when the Satellite is operated.

- Is the water supply set on?
- Are the application gun /valve defective?

### Pulsating water during flushing.

- Is the water temp. over 70°C?
- Too much water being used elsewhere?
- Make sure that the right lance is used!

### Foam application is weak and powerless, and the foam quality is wet.

• Check that the air supply is sufficient / switched on!

### The Nozzle sputters.

- Is the chemistry container empty?
- Is the suction tube placed in the chemistry container?
- Is the filter in the suction tube clean?
- Is the application nozzle blocked?

#### The foam is to dry.

- Adjust the air pressure down.
- Adjust the chemical concentration down by changing the colour coded orifice nozzle.

#### The foam is to wet.

- Adjust the air pressure up.
- Adjust the chemical concentration up by changing the colour coded orifice nozzle.
- Is the colour coded orifice nozzle blocked?

### The water consumption is too high.

- Check that the right lance is used.
- · Check that the nozzle is not damaged or been removed

#### The foam quality is poor.

• Check that the right lance is used.

### Manual updates

Updates 2015-05b Added the "Precautions when using a Pressurized Hose"	Page 2
Updates 2016-07a  Added the SPC "85199 Push in fittings". Updated Flow Diagram  Added the Options 88101 and 86883  Added mounting sketch scale 1:1	Page 7/8 Page 4 Page 10
Updates 2017-07a Added the SPC "81760 Tool for locking ring	Page 7
Updates 2017-08a Added the SPC "for each separate "Meetering orifices"	Page 7
Updates 2019-03a Added "Custom Calibrated Values [Pct]"	Page 6

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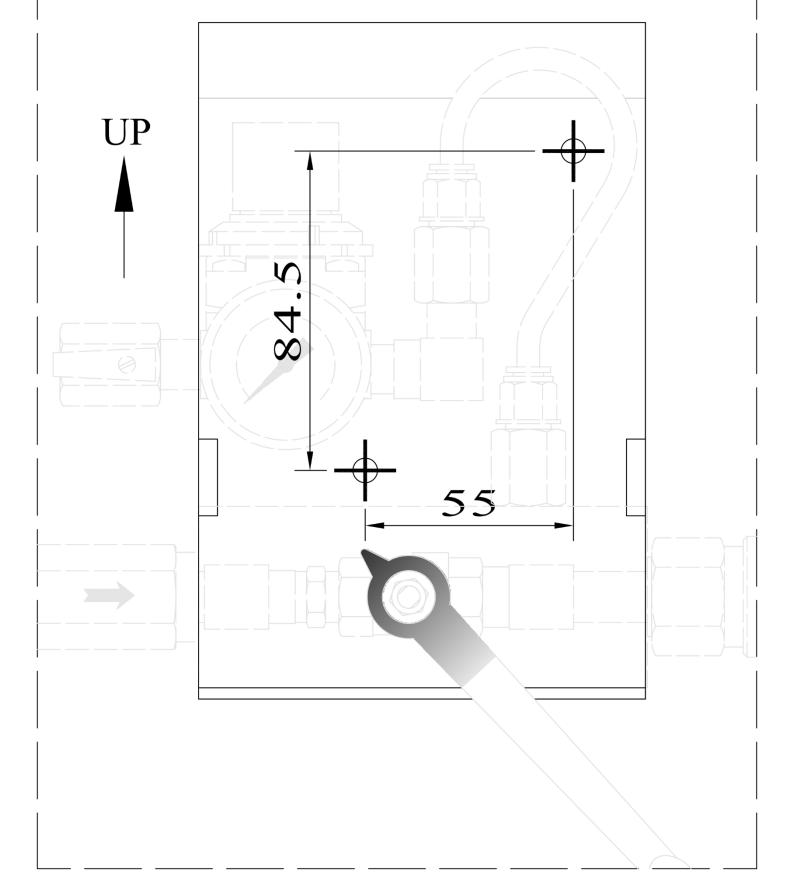
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## Mounting sketch 1:1

Drawing for mounting the Injector unit. Print this page in scale 1:1

Scale

0 mm 50 100



# Declaration of conformity

ScanFoam® Cleaning Equipment, declare that the Injector 88000 & 88910, are in conformity with the following harmonized standards:

- EN ISO 12100-1:2003 + A1:2009
- EN ISO 12100-2:2003 + A1:2009
- EN 1672-2:2005 + A1:2009

and is in conformity with the provisions of the Directive(s) – including amendments:

- 98/37/EC Machinery
- 2006/42/EC Machinery

on the approximation of the laws of the EEC Member States relating.