

### FEATURES

- **Fixed between-flange installation**
- **Flow rate up to 720 lpm**
- **High back pressure**
- **High suction height**
- **Suited ARC foams**

### Description

The Fomtec BFZ (Between Flange) inductor series represents an extension of the existing line of Z-inductors for fixed use. The BFZ 2'' can be used at flow rates up to 720 lpm.

### Application

The BFZ inductor can be installed in all fixed systems, especially in areas where sprinklers are used such as storage facilities and aircraft hangars.

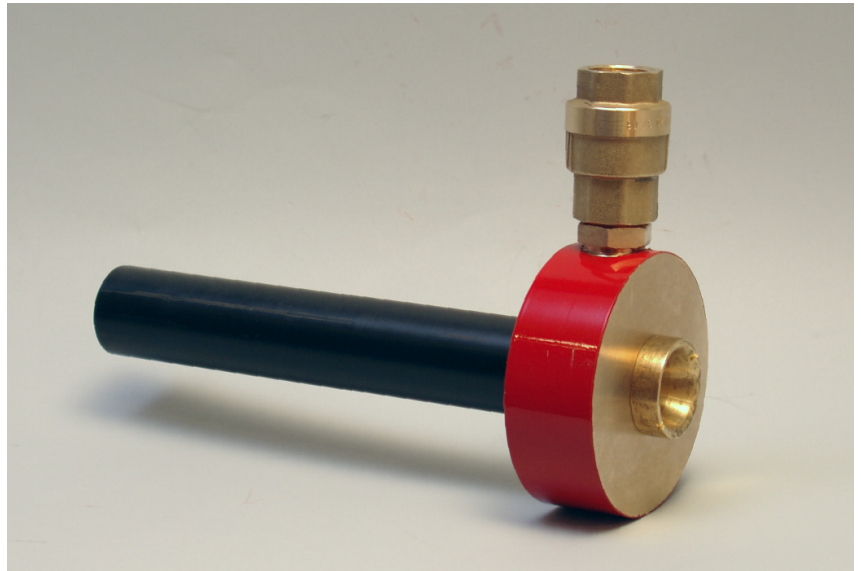
### Operation

The BFZ is installed inside the pipe work between two DN flanges. The BFZ works using the injector principle, i.e. foam concentrate is sucked into the inductor without using a foam pump. Both low and high viscosity concentrates can be used in conjunction with the BFZ.

Depending on the requested flow, pressure, foam concentrate type and proportioning ratio the inductor will be equipped with the exact orifice at the entry of the foam pipe. Induction performance and suction height can be adjusted up to a physical limit of approximately 8 meters.

### Optional

The Fomtec BFZ inductor can be customized to handle a variety of flow rates as well as high viscous alcohol resistant concentrates.



### Technical data

Model	BFZ 2''
Size	DN 50
Foam inlet	3/4''
Flow Rate (max)	720 lpm
Flow rate (min)	120 lpm
Inlet pressure (max)	16 bar
Inlet pressure (min)	4 bar
Pressure drop	35%
K Factor	60-180
Proportioning rate	1, 3 or 6%
Pipe length upstream	5 x Ø
Pipe length downstream	6 x Ø
Suction height (max)	3 m
Flange type	DN 50 / PN16
Between flange proportions	38 mm
Weight	4 kg
Length	275 mm
Material	Bronze

**Inductors without balancing valve**

To get 34% pressure drop over the inductor and get the inductors proper function, the system after the inductor shall have a k-factor that is 27% larger than the k-factor of the inductor when using 3% foam and 30,5 % higher when using 6% foam. If the k-factor on the system after the inductor is less than 22% larger than the k-factor of the inductor the suction ceases completely. If the k-factor on the system after the inductor is more than 27% (3% foam) or 30,5% (6% foam) larger than the k-factor of the inductor the pressure drop over the inductor increases but the flow is constant when you have the same inlet pressure on the inductor.

Calculations:

$$\frac{(Q_v + Q_s) \sqrt{H}}{Q_v \sqrt{0,66 H}} = 1,27$$

Qs = 3%

Qv = Water Flow

Qs = Foam Concentrate Flow

H = Water pressure before the inductor

$$\frac{(Q_v + Q_s) \sqrt{H}}{Q_v \sqrt{0,66 H}} = 1,305$$

Qs = 6%

Qv = Water Flow

Qs = Foam Concentrate Flow

H = Water pressure before the inductor

**Working range BFZ 2''**

Inlet pressure (bar)

