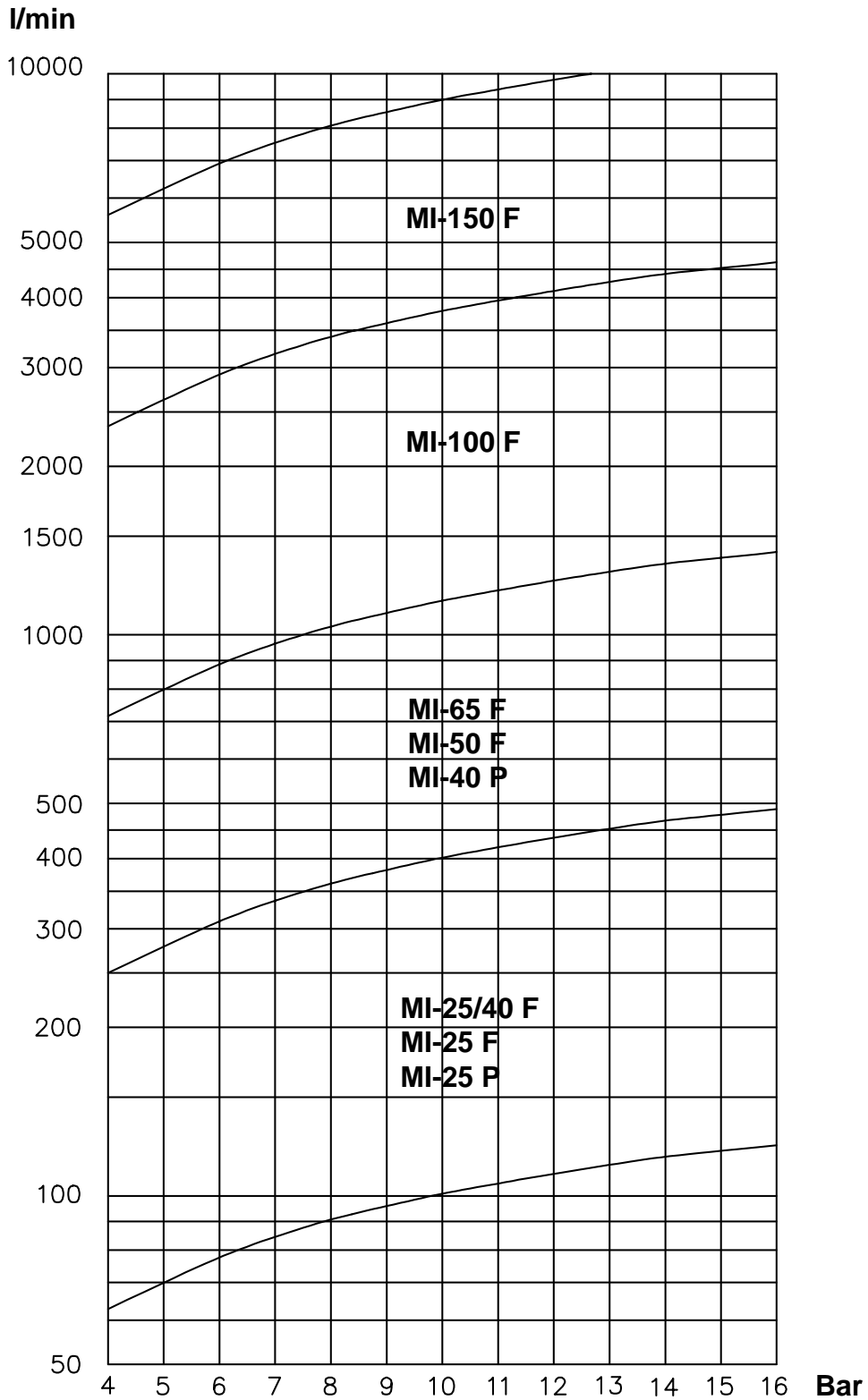
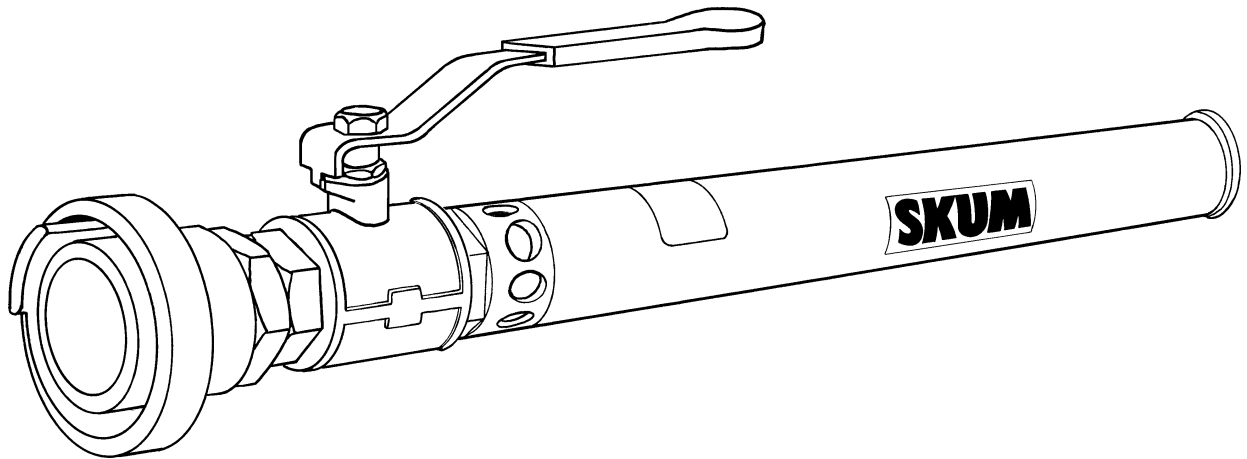


CAPACITY AREAS FOR INLINE INDUCTORS (MAX. INDUCTION 6%)



MLR-40 A
MLR-40 SA



MLR-40 A
(Hose coupling optional)

Description

The low expansion foam branchpipe MLR-40 A and MLR-40 SA is a portable lightweight, stainless steel branchpipe, designed for an optimum combination of foaming and jet range.

Type MLR-40 SA has a built-in foam concentrate inductor.



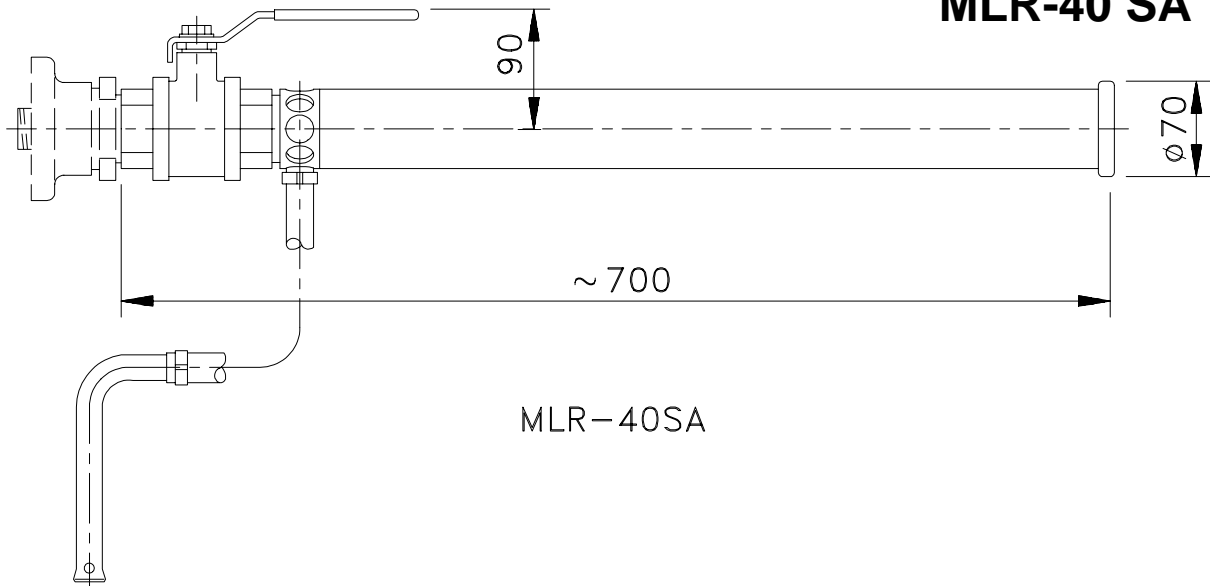
LOW EXPANSION FOAM BRANCHPIPE

FEB 1996

1001/7

Dimensions

MLR-40 A
MLR-40 SA



Performance data

1 bar = 0,1 MPa = 14,5 psi

Foam expansion ratio:

Up to 1:15

Two standard capacities are available:

With nozzle A 200 l/min at 5 bar

With nozzle B 400 l/min at 5 bar

Nozzle	Inlet pressure, bar	Water capacity, l/min	Reaction force, N	Approx range of jet, m
A	3	155	63	20
A	5	200	104	23
A	7	235	145	27
A	9	265	185	29
B	3	320	129	23
B	5	400	208	26
B	7	490	302	29
B	9	555	388	31
Foam concentrate induction max 6 % (MLR-40 SA)				
Material:	Pipe	Stainless steel		
	Casing	Brass		
	Valve	Nickel-plated brass		
Connection:	1 1/2" BSP female thread			
Weight	MLR-40 A: 3,2 kg/7 lbs MLR-40 SA: 4 kg/9 lbs			



Technical changes reserved without notice

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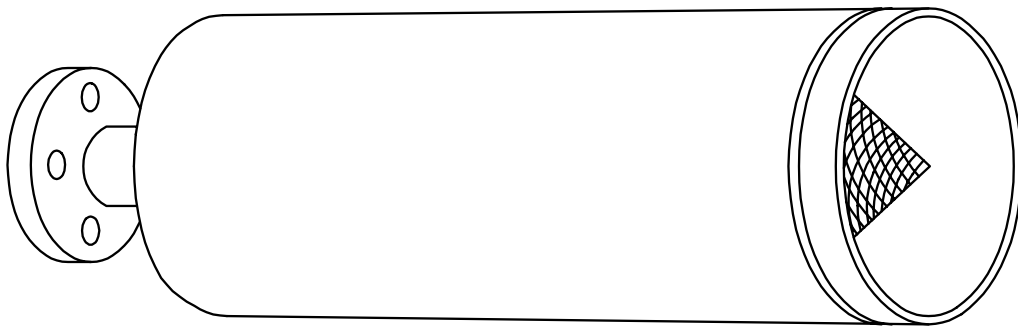
Svenska Skum B.V Tel: +31 71 5419415
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The Netherlands Internet: www.skum.com

STATIONARY MEDIUM EXPANSION FOAM GENERATOR

99/10

1002/15

MRM-50 F
MRM-65 F
MRM-80 F



Description

The MRM is a medium expansion foam generator, intended for stationary installation.

The body is made of stainless steel, which makes the unit suitable for use outdoors in rough climate as well as indoors. It produces a high quality foam,

for covering and filling up, e. g. in bounded and diked areas, basins, under process equipment and in loading areas.

Due to its low weight, MRM is easy to install.



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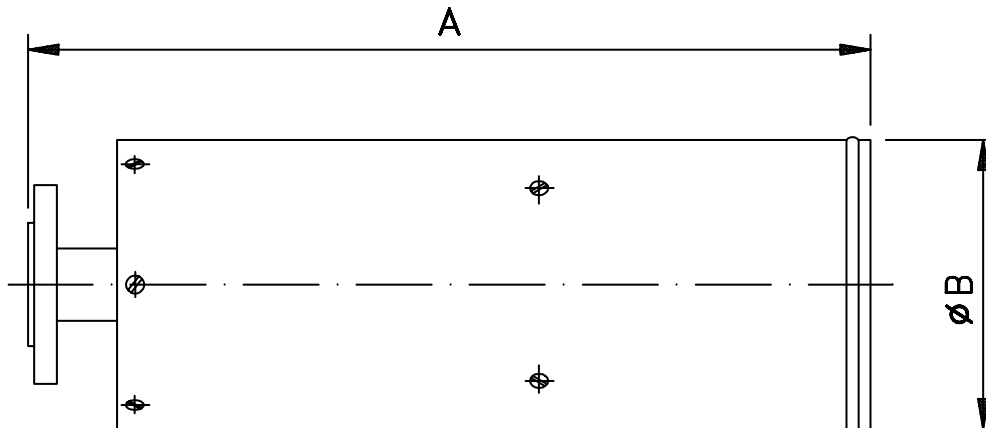
STATIONARY MEDIUM EXPANSION FOAM GENERATOR

99/10

1002/15

Dimensions

MRM-50 F
MRM-65 F
MRM-80 F



Performance data

1 bar = 0,1 MPa = 14,5 psi

MRM	50 F		65 F		80 F	
Inlet pressure, bar	3	5	3	5	3	5
Water capacity, l/min	310	400	620	800	1550	2000
Foam expansion ratio approx.*	1:40		1:40		1:40	
Dimension, mm	A		1035		1035	
	B		380		380	
Connection	50 DIN PN 16 or 2"ANSI 150 lbs		65 DIN PN 16 or 2 1/2"ANSI 150 lbs		80 DIN PN 16 or 3"ANSI 150 lbs	
Weight	12 kg/27 lbs		23 kg/51 lbs		25 kg/55 lbs	

* Depending on foam concentrate type.

Range of jet:		3 - 5 meter
Material:	Body	Stainless steel
	Nozzle	Brass
	Flange	Steel/ galvanized

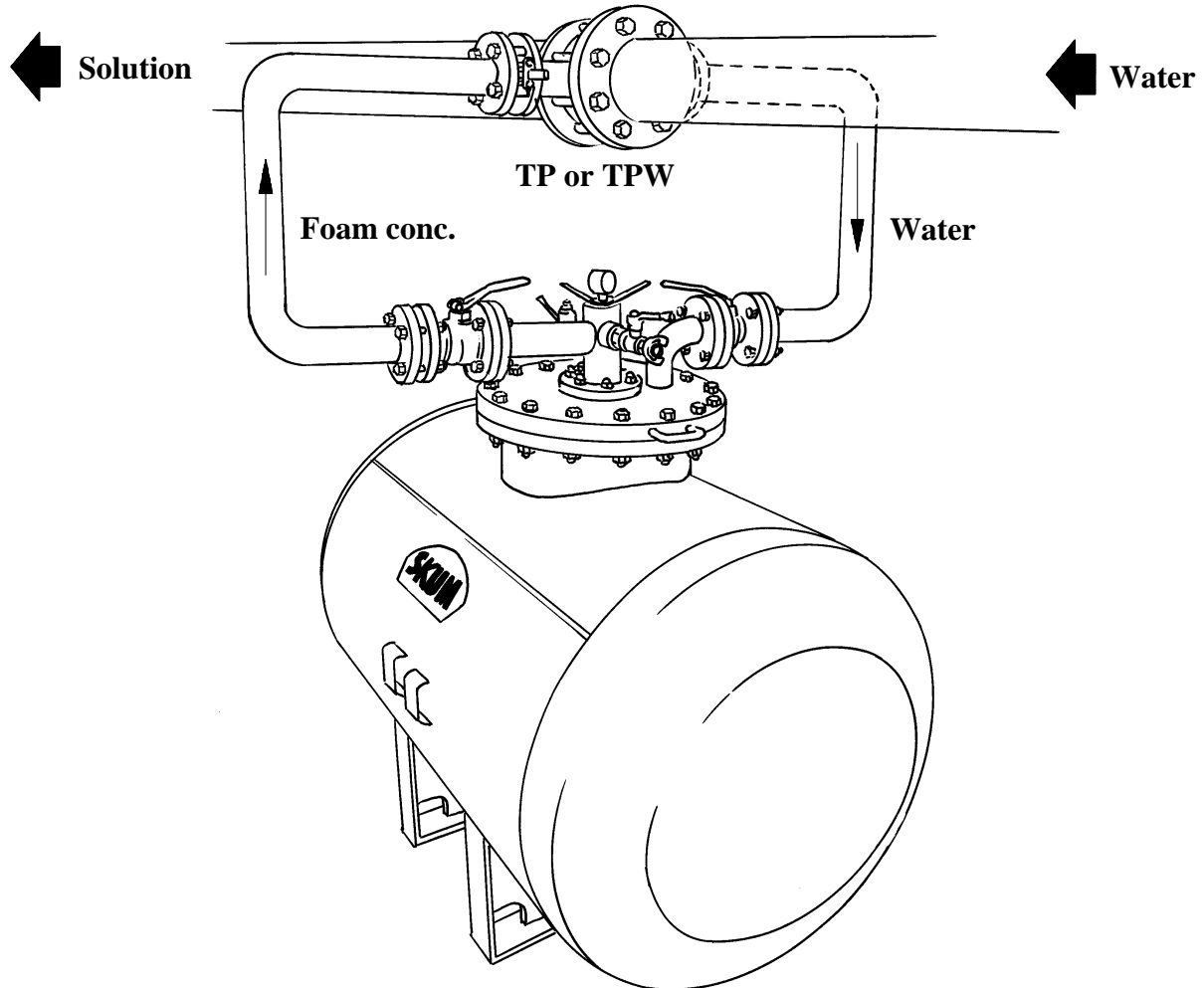


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Description

The bladder tank foam proportioning system is intended for inducing foam concentrate into water systems with variable flows and/or pressures. It comprises two major items, the bladder tank MTB and the measuring part TP (or TPW). The MTB is a steel vessel containing a rubber bladder which in turn contains the foam concentrate.

The MTB unit does not have any moving parts and requires a minimum of maintenance.

This system is ideal for upgrading a water sprinkler system to a foam sprinkler system. Constant proportioning, irrespective of flow, is achieved by the pressure balance of the foam concentrate inside the bladder and the water outside.

The bladder can be refilled during operation. The proportioning rate is determined by the TP (or TPW) measuring part and can be adjusted from 1 to 6 percent.



Technical data**MTB****Bladder tank****Design pressure:** 15 bar/220 psi

Approvals, Standard: Swedish Plant Inspectorate (SA)
Optional: American Bureau of Shipping
 Det Norske Veritas
 Lloyd's Register of Shipping
 Germanischer Lloyd
 Register of Shipping

Volume, litres	400	600	800	1000	1300	1700	2200	2900	3700	4900	6300
Length, mm	1100	1450	1205	1330	1670	2120	2610	2270	2800	3660	4630
Weight, kg	450	500	620	650	750	850	980	1350	1540	1900	2300
Height, mm	1400		1700				2000				
Diameter, mm	800		1100				1400				
Connection	50 DIN PN 16 or 2" ANSI 150 lbs						80 DIN PN 16 or 3" ANSI 150 lbs				

Material: Pressure vessel steel
 Bladder butyl rubber
 Internals stainless steel

Measuring part	TP-50	TP-80	TP-100 TPW-100	TP-150 TPW-150	TP-200 TPW-200	TP-250 TPW-250	MPJ-300	MPJ-350
Connection	50 DIN	80 DIN	100 DIN	150 DIN	200 DIN	250 DIN	300 DIN	350 DIN
Water mains	PN 16 or 2"ANSI 150 lbs	PN 16 or 3"ANSI 150 lbs	PN 16 or 4"ANSI 150 lbs	PN 16 or 6"ANSI 150 lbs	PN 16 or 8"ANSI 150 lbs	PN 16 or 10"ANSI 150 lbs	PN 16 or 12"ANSI 150 lbs	PN 16 or 14" ANSI 150 lbs
Connection Pilot water/ Foam conc.	Male 3/4"		50 DIN PN 16 or 2" ANSI 150 lbs		80 DIN PN 16 or 3" ANSI 150 lbs			

See also separate data sheets for TP- 50 to 80 1010/24, TP-100 to 250 1010/21, TPW 1010/22 and MPJ 1010/17 respectively.



Technical changes reserved without notice

MTBH



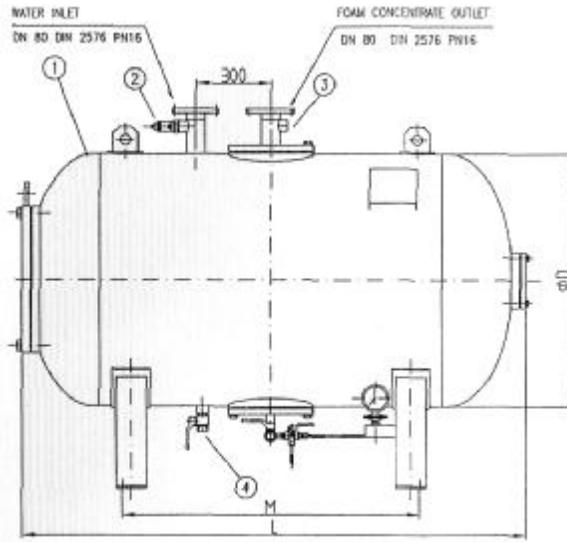
Description

The bladder tank foam proportioning system is intended for inducing foam concentrate into water systems with variable flows and/or pressures. It comprises two major items, the bladder tank MTBH and the proportioner TP(W). The MTBH is a steel vessel containing a rubber bag that in turn contains the foam concentrate.

The MTBH unit does not have any moving parts and requires a minimum of maintenance. This system is ideal for upgrading a water sprinkler system to a foam sprinkler system.

Constant proportioning irrespective of flow, is achieved by the pressure balance of the foam concentrate inside the bladder and the water outside.

Special about this bladder tank are the internals which are made of stainless steel to prevent corrosion from aggressive foam concentrate types. The working pressure is set at 12 bar. The proportioning rate is determined by the TP or TPW proportioner and can be adjusted from 1% up to 6%.

Technical Data**MTBH**

1. Tank
2. Safety valve
3. Vent valve
4. Water drain – ball valve 1"

TECHNICAL DATA

Model:	MTBH-0000
Working pressure:	Standard 12 bar (higher pressures at request)
Material:	
Bladder:	Hapylon Neoprene
Pressure vessel:	Carbon steel
Internals:	Stainless steel
Connections:	3" ANSI 150 lbs or 80 DIN PN 16
Approvals:	In accordance with Pressure Equipment Directive 97/23/EG

Dimensions available upto 20.000 dm³.

Prices excl. pressure gauges, piping and proportioner (as indicated on picture)

Capacity (liters)	ØD [mm]	L [mm]	M [mm]	P [mm]	H [mm]	Weight [kg]
1000	1000	1640	820	600	1575	550
1250	1000	1940	1070	600	1575	585
1500	1000	2290	1370	600	1575	630
1750	1100	2195	1220	700	1675	705
2000	1100	2495	1520	700	1675	755
2500	1200	2640	1560	800	1775	880
3000	1300	2820	1680	800	1875	1030
3500	1400	2875	1680	850	1975	1155
4000	1450	3025	1680	850	2025	1205
4500	1500	3025	1780	850	2075	1360
5000	1600	2985	1680	950	2175	1480
5500	1600	3235	1910	950	2175	1585
6000	1750	3070	1680	1050	2325	1805
6500	1800	3100	1680	1050	2375	1865
7000	2000	2810	1250	1350	2575	2150
7500	2000	2960	1400	1350	2575	2225
8000	2000	3160	1600	1350	2575	2325
8500	2000	3310	1750	1350	2575	2405
9000	2000	3460	1900	1350	2575	2480
10000	2000	3810	2250	1350	2575	2660
11000	2000	4110	2550	1350	2575	2820
12000	2000	4460	2900	1350	2575	3000

MTBV



Description

The bladder tank foam proportioning system is intended for inducing foam concentrate into water systems with variable flows and/or pressures. It comprises two major items, the bladder tank MTBV and the proportioner TP(W). The MTB is a steel vessel containing a rubber bag which in turn contains the foam concentrate.

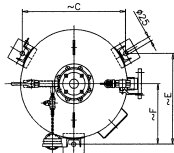
The MTBV unit does not have any moving parts and requires a minimum of maintenance. This system is ideal for upgrading a water sprinkler system to a foam sprinkler system.

Constant proportioning irrespective of flow, is achieved by the pressure balance of the foam concentrate inside the bladder and the water outside.

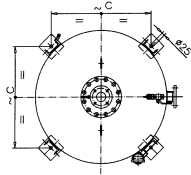
Special about this bladder tank are the internals which are made of stainless steel to prevent corrosion from aggressive foam concentrate types. The working pressure is set at 12 bar. The proportioning rate is determined by the TP or TPW proportioner and can be adjusted from 1% up to 6%.

Technical Data

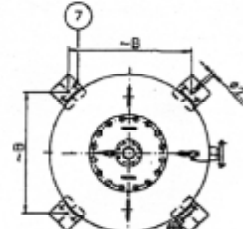
MTBV



MTBV-200 / 600

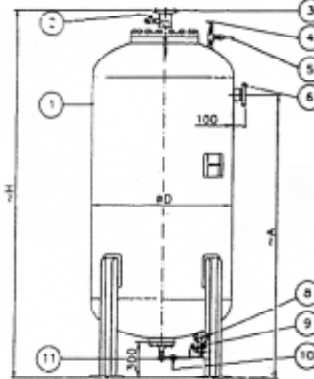
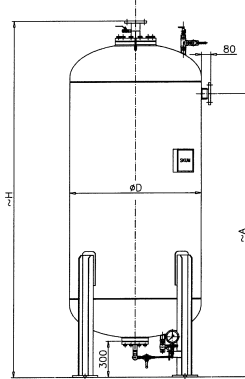
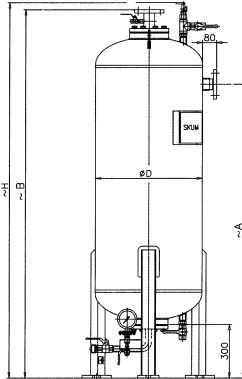


MTBV-1000 / 2000



MTBV-2000 / 12000

1. Tank
2. Concentrate vent valve
3. Outlet foam concentrate
4. Safety valve
5. Water vent valve
6. Water inlet
7. Ground connection
8. Concentrate level indicator
9. Water drain valve
10. Concentrate level indicator / drain
11. Concentrate filling / drain valve



TECHNICAL DATA

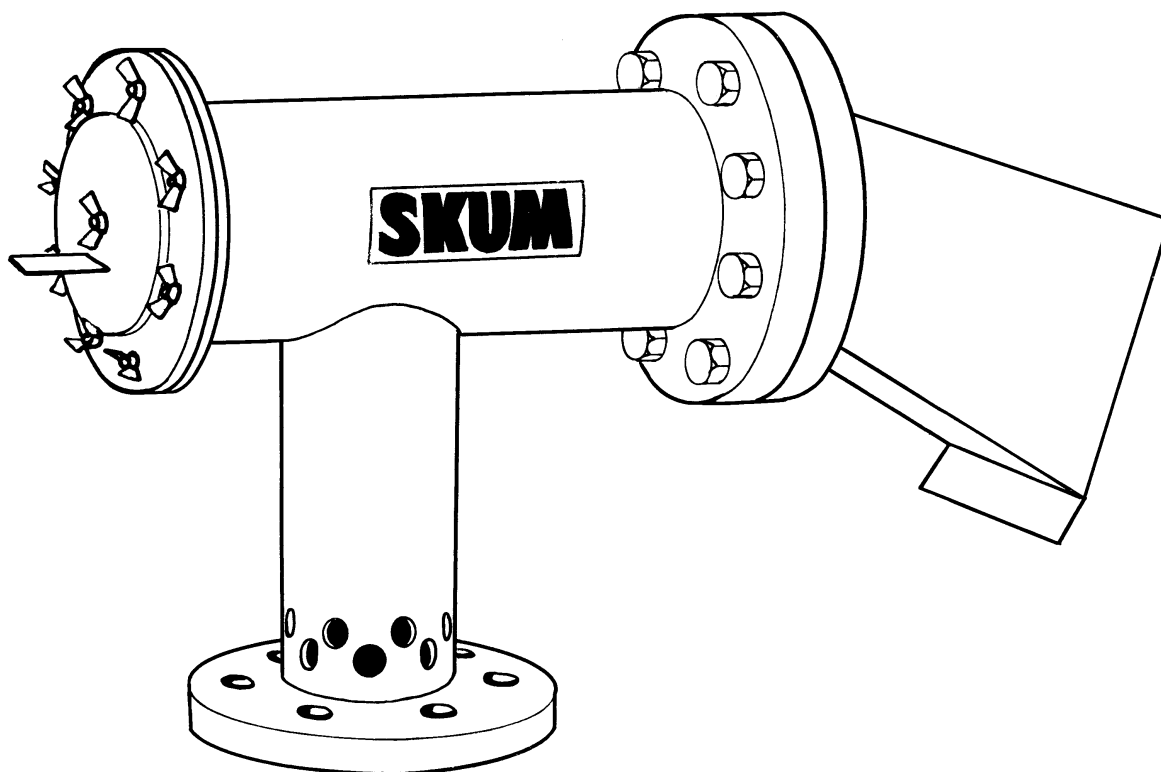
Design pressure:	12 bar
Test pressure:	1,43 x design pressure
Material:	
Bladder:	Hapylon Neoprene
Pressure vessel:	Carbon steel
Internals:	Stainless steel
Connections:	DN50 for MTBV-200 up to 600 DN65 for MTBV-1000 up to 2000 DN80 for MTBV-2500 up to MTBV-12000
Approvals:	In accordance with Pressure Equipment Directive 97/23/EG
Color:	RAL 3000

Type:	Volume liters	Tot. Height mm [-H]	Diameter mm [ØD]	Weight kg
MTBV-200	200	1550	600	150
MTBV-400	400	2100	600	170
MTBV-600	600	2000	800	200
MTBV-1000	1000	2075	1000	310
MTBV-1500	1500	2725	1000	370
MTBV-2000	2000	2875	1100	520
MTBV-2500	2500	3100	1200	800
MTBV-3000	3000	3250	1300	950
MTBV-3500	3500	3287	1400	1080
MTBV-4000	4000	3415	1450	1115
MTBV-4500	4500	3445	1500	1260
MTBV-5000	5000	3400	1600	1365
MTBV-5500	5500	3650	1600	1445
MTBV-6000	6000	3500	1750	1655

For sizes up to 12.000 liter dimensions on request

Prices excl. pressure gauge (as indicated on picture).

OFG-50
OFG-100



Description

The over-the-top foam generator (OFG) is designed to produce and inject foam into flammable liquid storage tanks above the liquid surface. It is welded from the outside into the tank wall at the top of the tank.

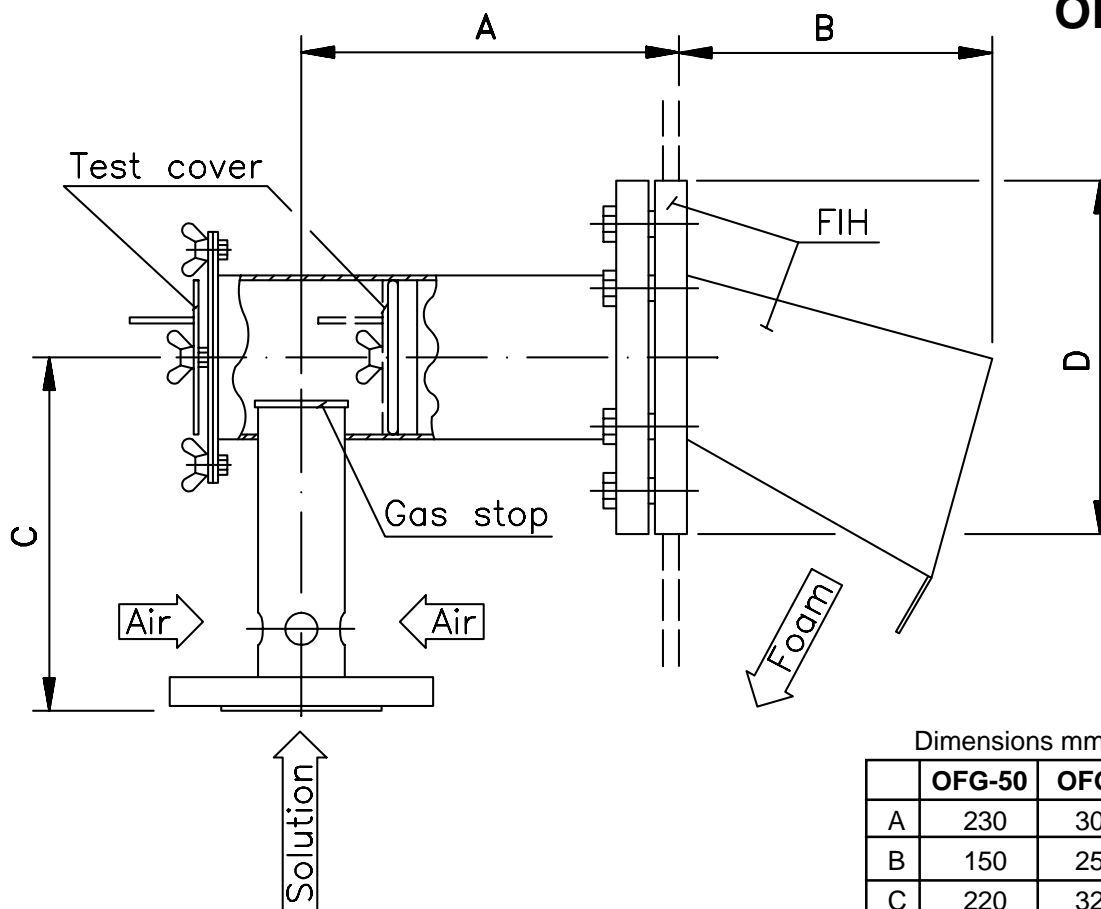
The OFG is connected to a foam solution supply system and equipped with a test outlet, that makes it possible, by simply moving a test cover (see drawing overleaf), to test the unit without putting foam into the tank.

The OFG can be used both for tanks with fixed and/or floating roof.

When it is used in a tank with fixed roof, a gas stop valve is mounted in the OFG to prevent gas from leaking out in the air. To choose numbers and capacities of OFG's for a specific tank, please refer to National Fire Protection Association: National Fire Codes NFPA 11, and/or local regulations.

The OFG is calibrated to customers flow and pressure requirements within its minimum and maximum limits.



Dimensions**OFG-50**
OFG-100

Dimensions mm

	OFG-50	OFG-100
A	230	300
B	150	250
C	220	320
D	220	286

Performance data**1 bar = 0,1 MPa = 14,5 psi**

	OFG-50	OFG-100
Solution capacity:	Up to 700 l/min Up to 185 USGPM	700-3000 l/min 185-792 USGPM
Weight:	20 kg/44 lbs	32 kg/71 lbs
Connection: OFG	50 Din PN 16 or 2" ANSI 150 lbs	100 Din PN 16 or 4" ANSI 150 lbs
FIH	100 DIN PN 16	150 DIN PN 16 To fit 6" ANSI 150 lbs
Expansion ratio:	Up to 1:4*	
Material: OFG	Body: Stainless steel Internals: Bronze/Stainless steel	
FIH	Flange: Steel/galv.	
Working pressure range:	4-16 bar/58-232 psi	

* Depending on foam concentrate type.



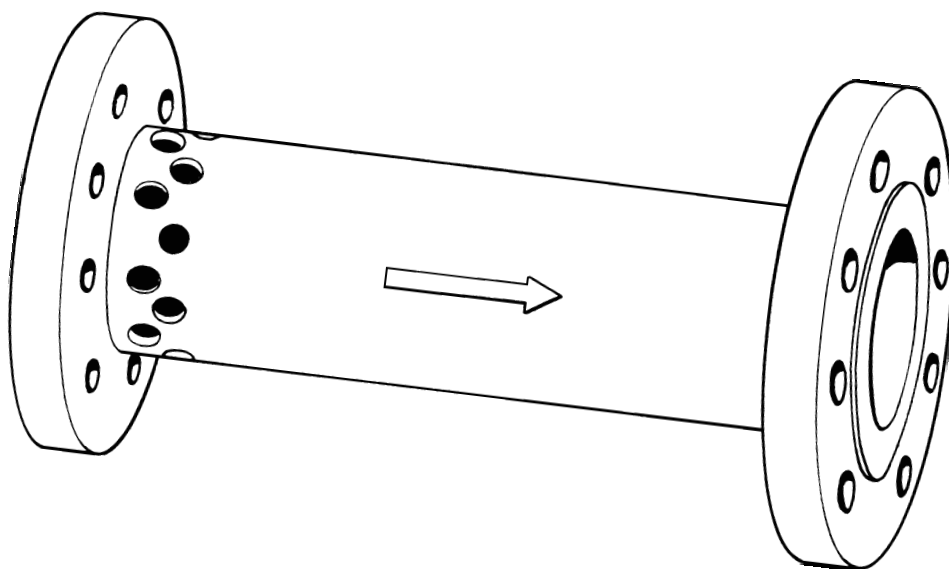
Technical changes reserved without notice

HIGH BACK PRESSURE FOAM GENERATOR

99/10

1006/5

PFG-50/80, PFG-50/80 S
PFG-80/100, PFG-80/100 S
PFG-100/150, PFG-100/150 S



Description

The high back pressure foam generator PFG and PFG-S is a foam producing unit, which can handle a counter pressure of up to 40 % of its inlet pressure.

Type PFG-S has an integrated foam concentrate ejector.

The unit is primarily intended for supplying foam to subsurface or semi subsurface tank protection systems, but also to foam inlet heads

and pourers at tank tops, and to other installations where agitated foam has to be distributed through a pipe line.

The PFG and PFG-S is to be installed in a pipe line, which is fed with foam solution either from a stationary supply or a fire truck.

It is calibrated, within its minimum and maximum limits, to customers flow and pressure specifications.



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HIGH BACK PRESSURE FOAM GENERATOR

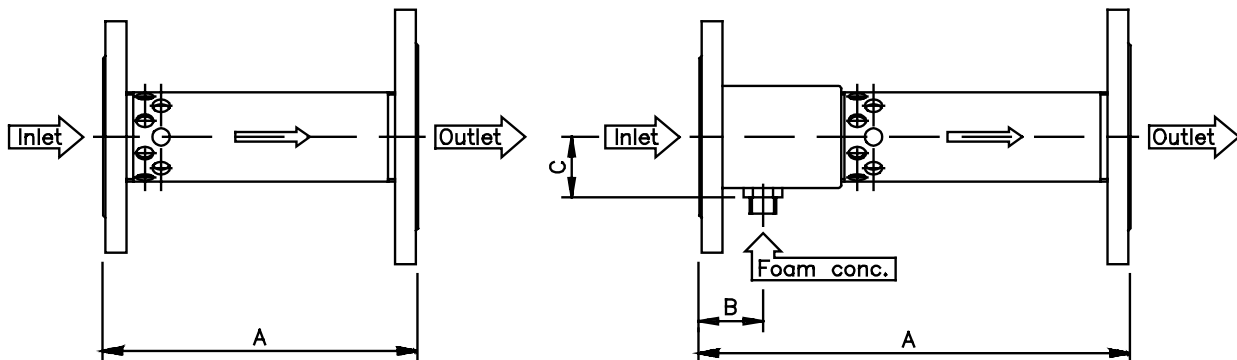
99/10

1006/5

Dimensions

PFG-50/80
PFG-80/100
PFG-100/150

PFG-50/80 S
PFG-80/100 S
PFG-100/150 S



Performance data

1 bar = 0,1 MPa = 14,5 psi

PFG	50/80	50/80 S	80/100	80/100 S	100/150	100/150 S	
Solution capacity	100-750 l/min. 27-198 USGPM		750-1400 l/min. 198-370 USGPM		1400-2400 l/min. 370-634 USGPM		
Dimensions, mm	A	208	275	278	355	352	475
	B		40		60		69
	C		42		52		63
Connection, inlet	50 DIN PN 16 or 2"ANSI 150 lbs		80 DIN PN 16 or 3"ANSI 150 lbs		100 DIN PN 16 or 4"ANSI 150 lbs		
Connection, outlet	80 DIN PN 16 or 3"ANSI 150 lbs		100 DIN PN 16 or 4"ANSI 150 lbs		150 DIN PN 16 or 6"ANSI 150 lbs		
Connection foam conc.		M 3/4" BSP		M 1" BSP		M 1" BSP	
Induction foam conc.		Max. 6%		Max. 6%		Max. 6%	
Foam expansion ratio	Approx. 1:3 *						
Max. counter pressure	40 % of inlet pressure						
Working pressure range	6 bar/87 psi to 16 bar/232 psi						
Material, Body	Bronze						
Nozzle/diffusor	Polypropylene						
Flange	Primer and red 2-component paint steel						
Weight kg/lbs	10/22	11/24	14/31	16/35	22/49	25/55	

* Depending on foam concentrate type.

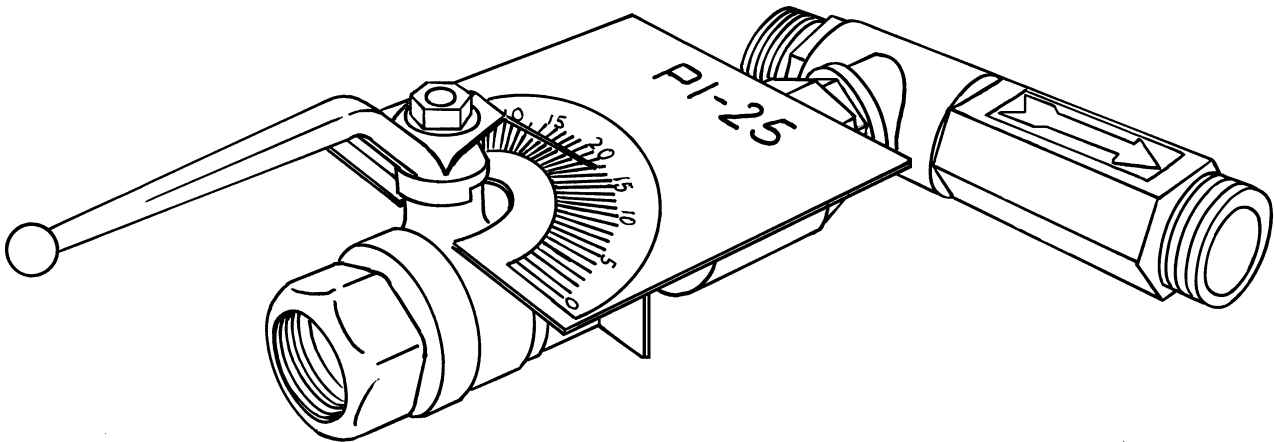


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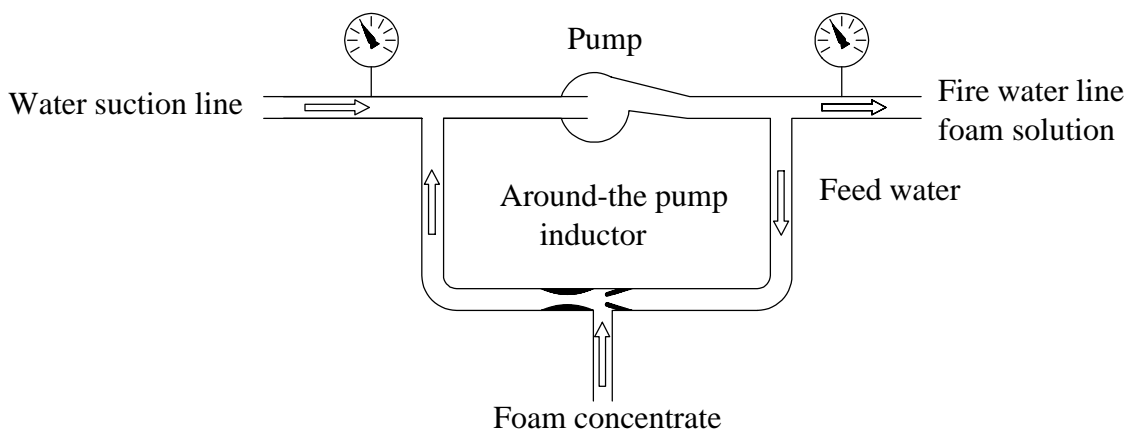
Description

The around-the-pump inductor is a foam concentrate proportioning unit, designed to be connected in a by-pass between the pressure and suction side of the fire water pump. This system enables just a small part of the total water flow, the feed water, to pass through the around-the-pump inductor without causing

any pressure drop in the water line.

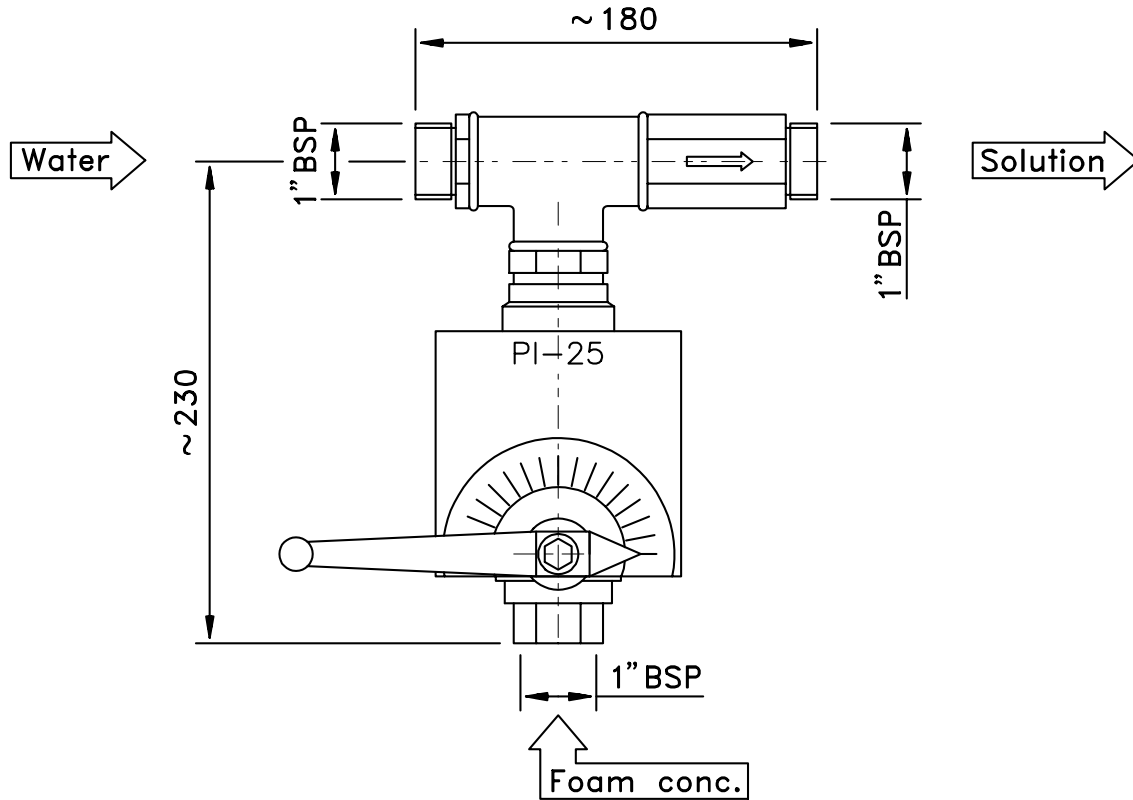
The PI-25 has an adjustable foam concentrate suction capacity of up to 65 l/min corresponding to 3 % at a water flow of 2160 l/min or 6 % at a water flow of 1080 l/min. Other applications with the around-the-pump inductor are possible.

Principle flow diagram



Dimensions

PI-25



Performance data

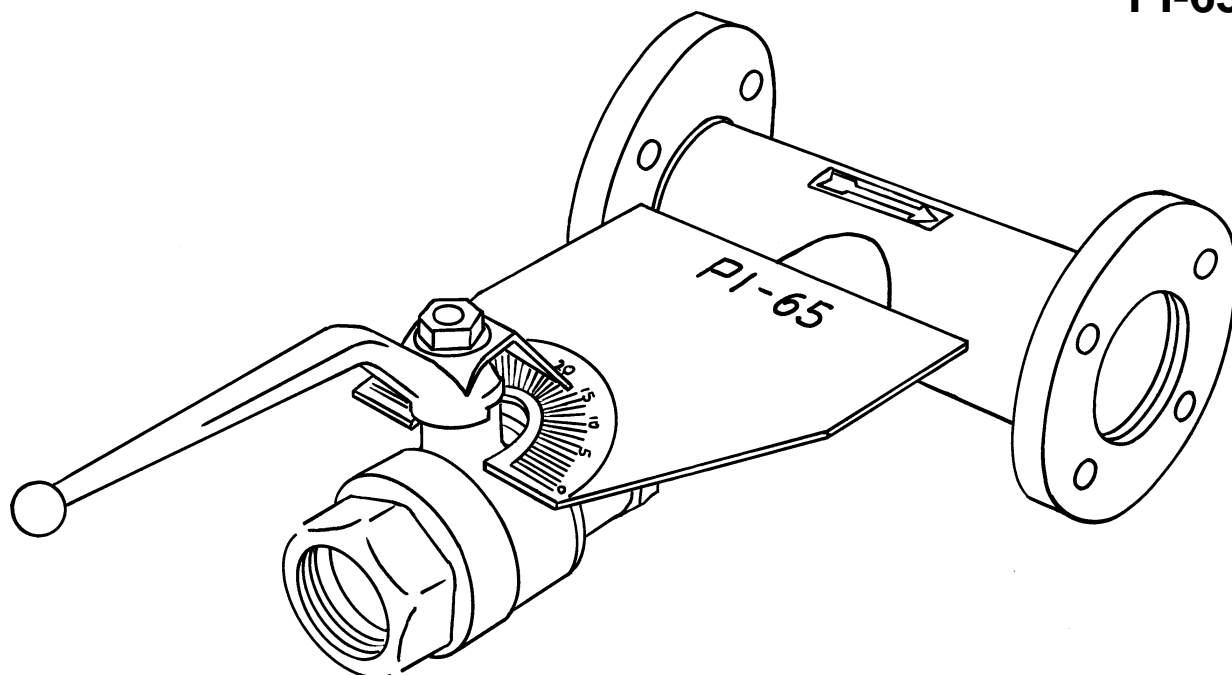
1 bar = 0,1 MPa = 14,5 psi

Feed water capacity				Max. induction capacity	
Bar	psi	l/min	USGPM	l/min	USGPM
6	87	76	20	65	17
8	116	88	23	65	17
10	145	98	26	65	17
12	174	107	28	65	17

Max. counter pressure: 0,5 bar/7,2 psi
 Max. working pressure: 16 bar/232 psi
 Material Inductor: Brass
 Foam concentrate valve: Brass
 Connection: Water: Male 1" BSP
 Foam concentrate: Female 1" BSP
 Weight: 3 kg/6,6 lbs



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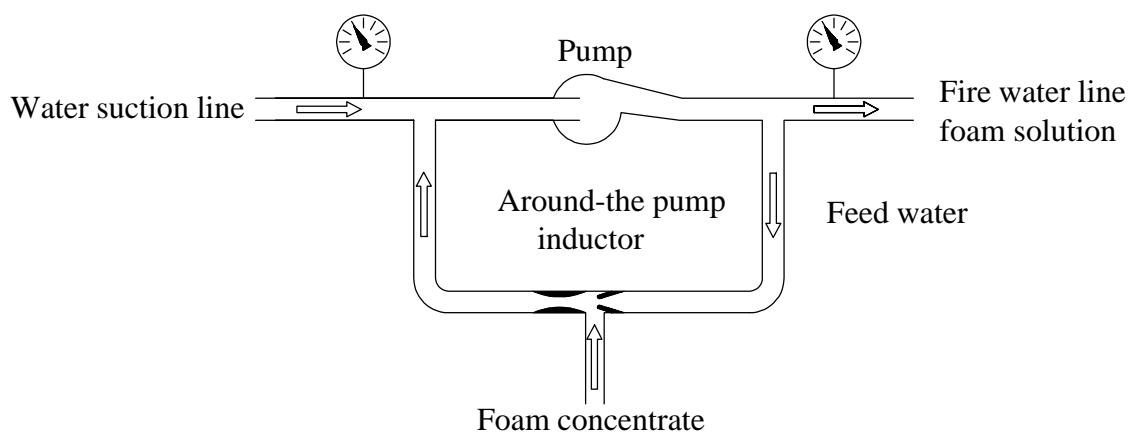
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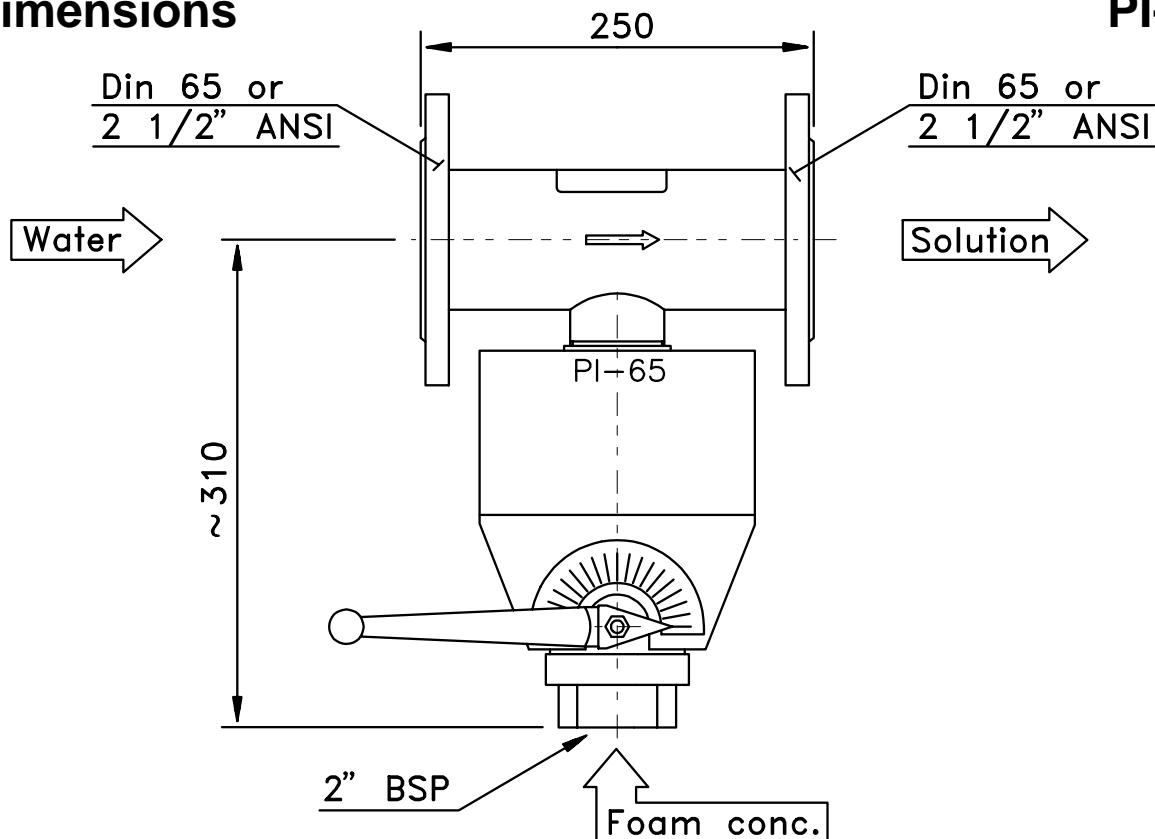
The around-the-pump inductor is a foam concentrate proportioning unit, designed to be connected in a by-pass between the pressure and suction side of the fire water pump. This system enables just a small part of the total water flow, the feed water, to pass through the around-the-pump inductor without causing

any pressure drop in the water line.

The PI-65 has an adjustable foam concentrate suction capacity of up to 255 l/min corresponding to 3 % at a water flow of 8500 l/min or 6 % at a water flow of 4250 l/min. Other applications with the around-the-pump inductor are possible.

Principle flow diagram



Dimensions**PI-65****Performance data**

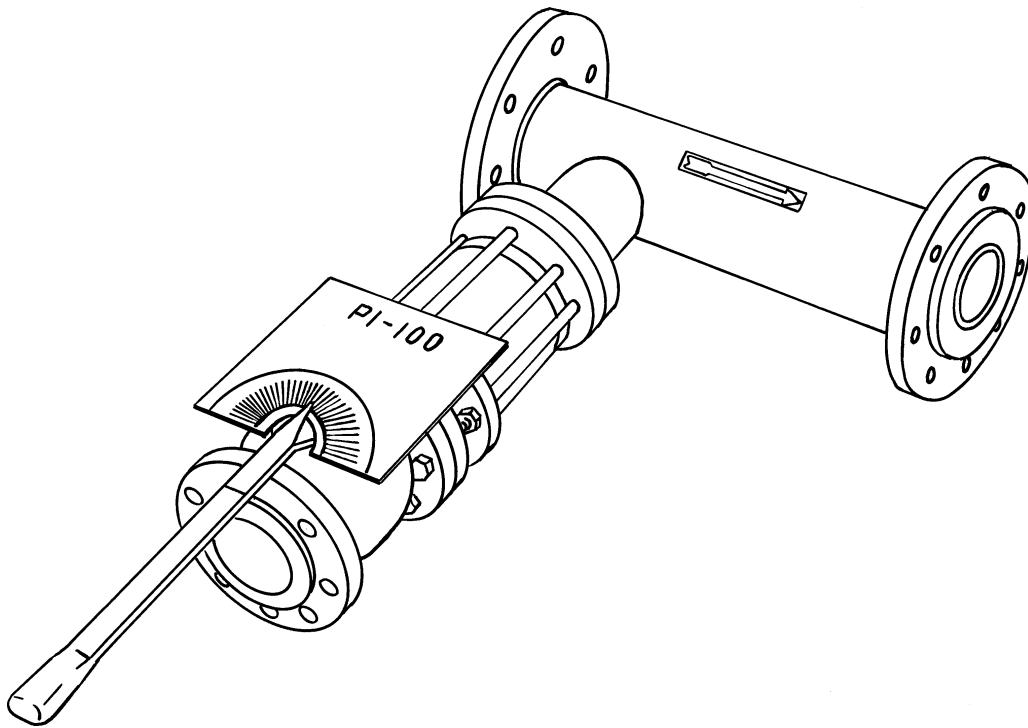
1 bar = 0,1 MPa = 14,5 psi

Feed water capacity				Max. induction capacity	
Bar	psi	l/min	USGPM	l/min	USGPM
6	87	230	61	255	67
8	116	267	71	255	67
10	145	300	79	255	67
12	174	327	86	255	67

Max. counter pressure:	0,5 bar/7,2 psi
Max. working pressure:	16 bar/232 psi
Material:	Body: Stainless steel Nozzle, diffuser: Polypropylene Valve, check valve: Brass
Connection:	Water: 65 Din PN 16 or 2 1/2" ANSI 150 lbs Foam concentrate: Female 2" BSP or Male 2"NPT
Weight:	14 kg/31 lbs



Technical changes reserved without notice

PI-100

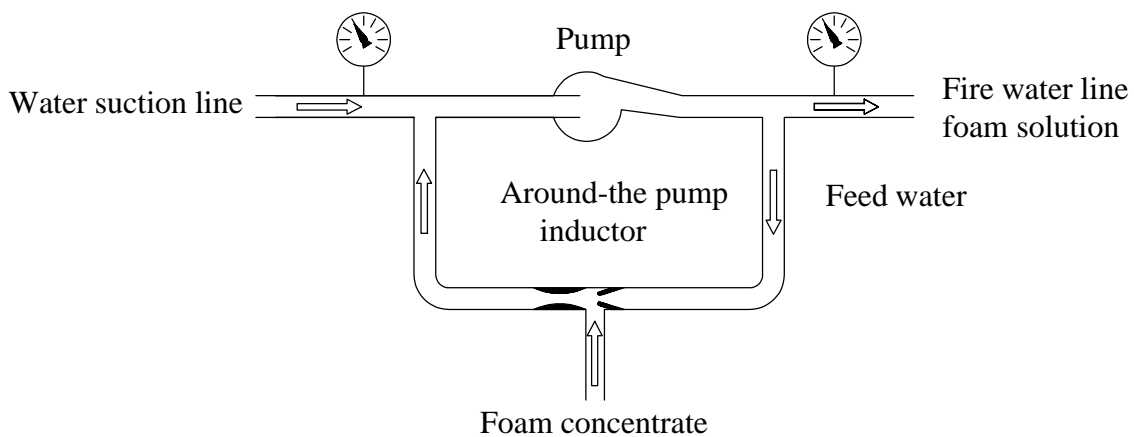
Description

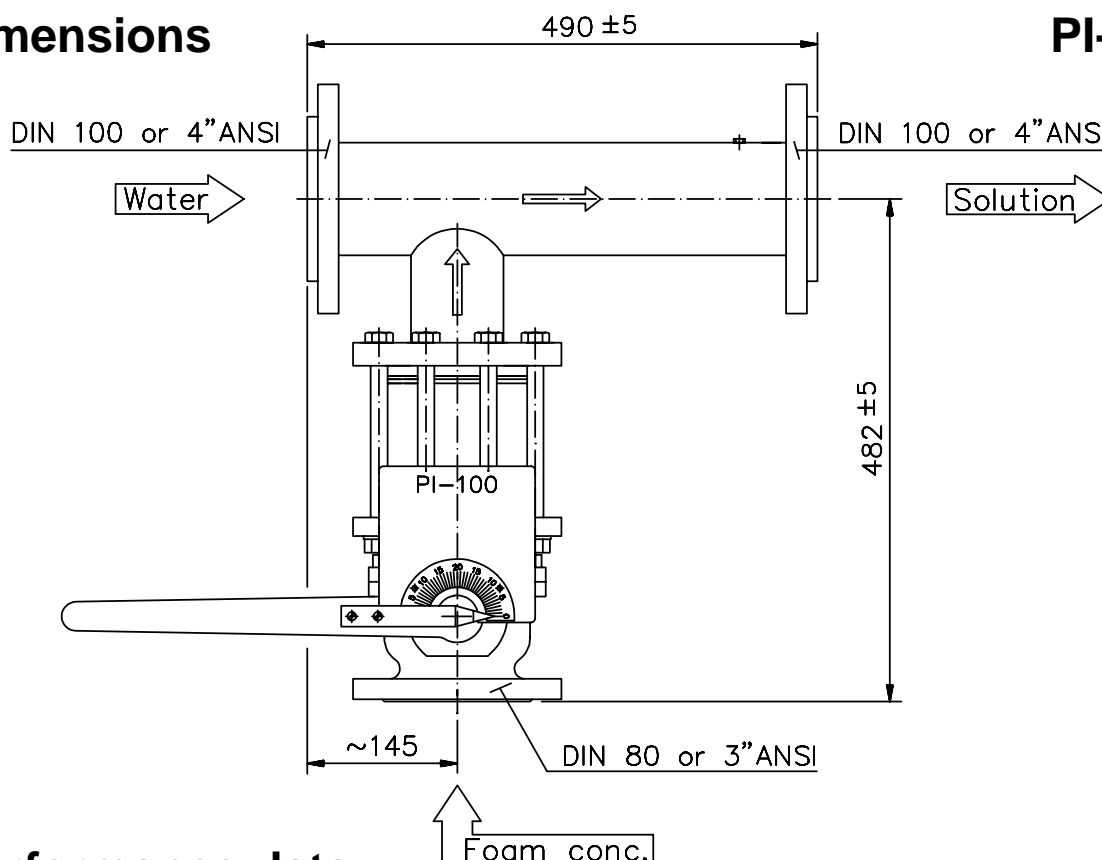
The around-the-pump inductor is a foam concentrate proportioning unit, designed to be connected in a by-pass between the pressure and suction side of the fire water pump. This system enables just a small part of the total water flow, the feed water, to pass through the around-the-pump inductor without causing any

pressure drop in the water line.

The PI-100 has an adjustable foam concentrate suction capacity of up to 770 l/min corresponding to 3 % at a water flow of 25600 l/min or 6 % at a water flow of 12800 l/min. Other applications with the around-the-pump inductor are possible.

Principle flow diagram



Dimensions**PI-100****Performance data****1 bar = 0,1 MPa = 14,5 psi**

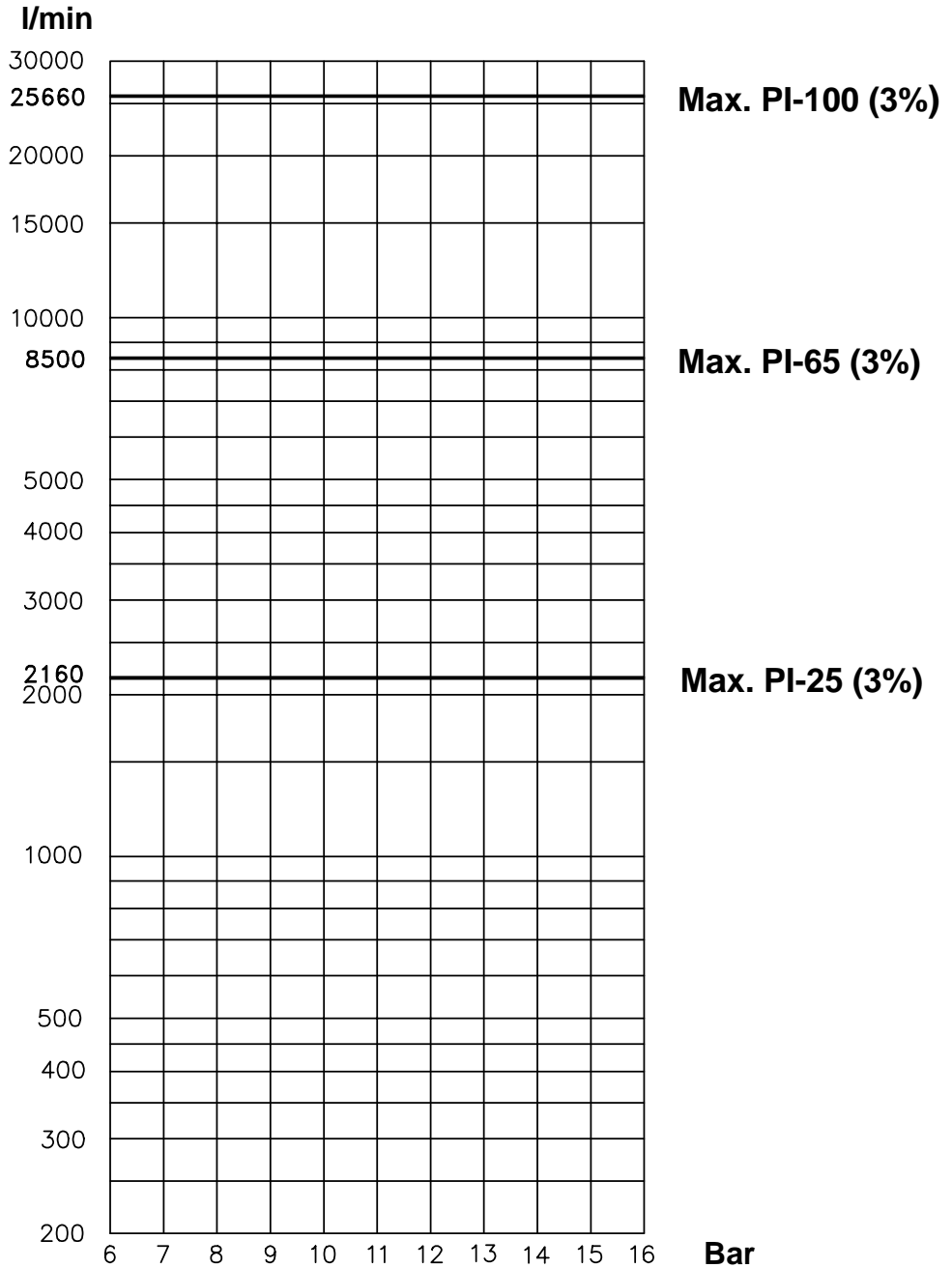
Feed water capacity				Max. induction capacity	
Bar	psi	l/min	USGPM	l/min	USGPM
6	87	620	164	770	204
8	116	720	190	770	204
10	145	800	212	770	204
12	174	880	233	770	204

Max. counter pressure	0,5 bar/7,2 psi
Max. working pressure:	16 bar/232 psi
Material:	Body: Stainless steel
	Nozzle, diffusor: Polypropylene
	Check valve: Stainless steel
	Valve: Stainless steel
	Flange: Galvanized steel
Connection:	Water: 100 Din PN 16 or 4" ANSI 150 lbs
	Foam concentrate: 80 Din PN 16 or 3" ANSI 150 lbs
Weight	45 kg/99 lbs

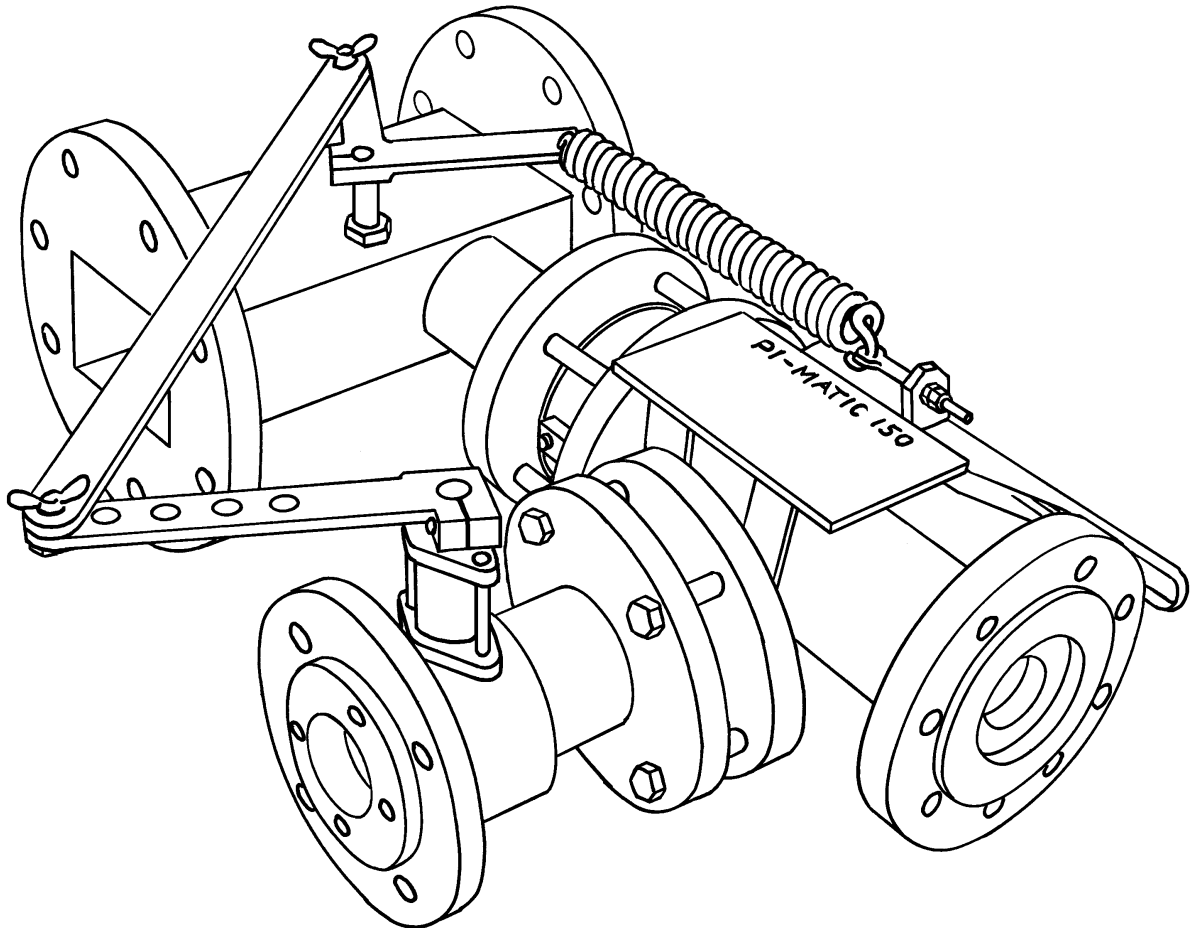


Technical changes reserved without notice

CAPACITY RANGES FOR AROUND-THE-PUMP INDUCTOR (MAX. INDUCTION 3%)



PI-MATIC 150



Description

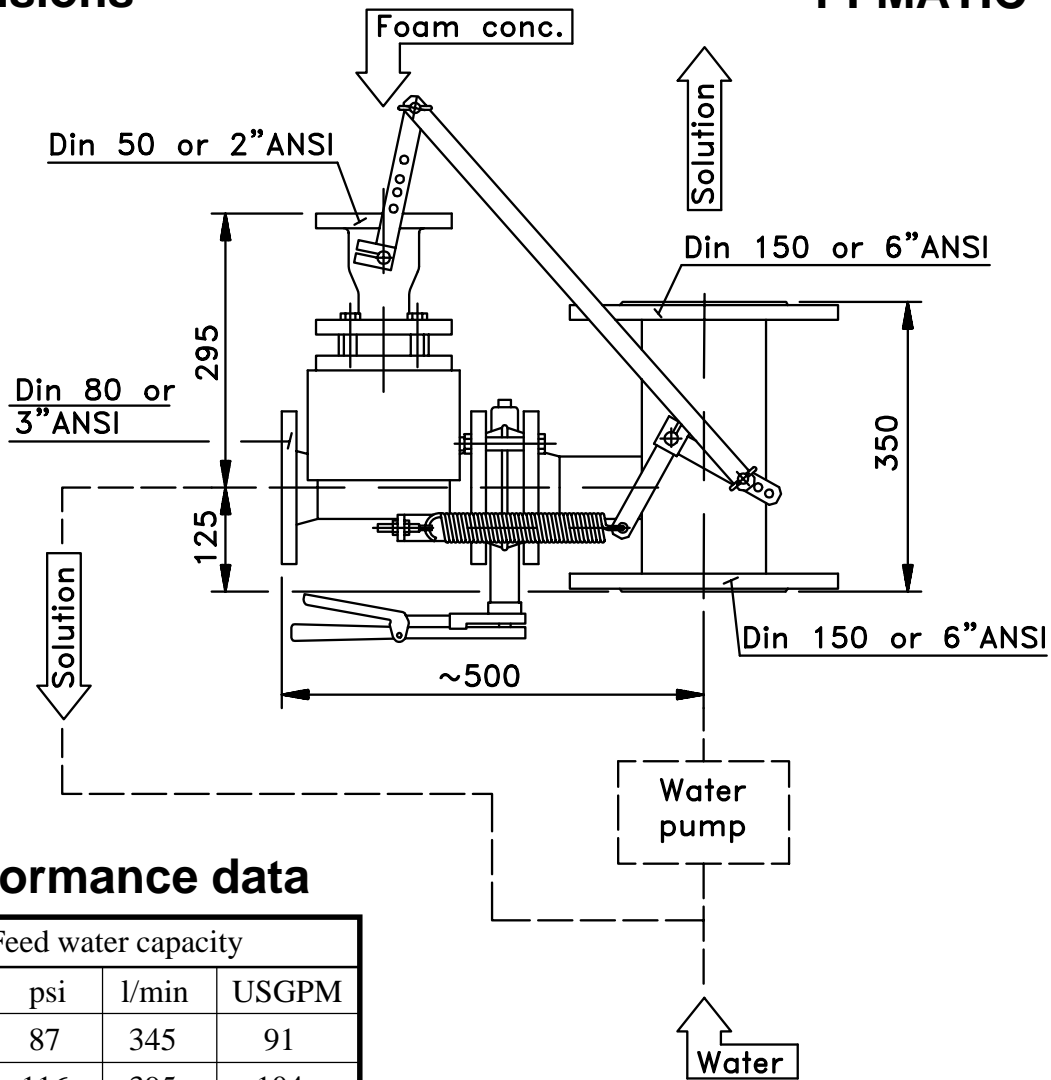
The PI-MATIC 150 is a self-adjusting around-the-pump foam concentrate inductor which works automatically within the range 400 l/min - 4000

l/min. The induction can easily be changed on site to the standard settings 3, 4, 6, or 8 % across the entire flow range to suit the actual requirements.



Dimensions

PI-MATIC 150



Performance data

Feed water capacity			
Bar	psi	l/min	USGPM
6	87	345	91
8	116	395	104
10	145	435	115
12	174	460	121

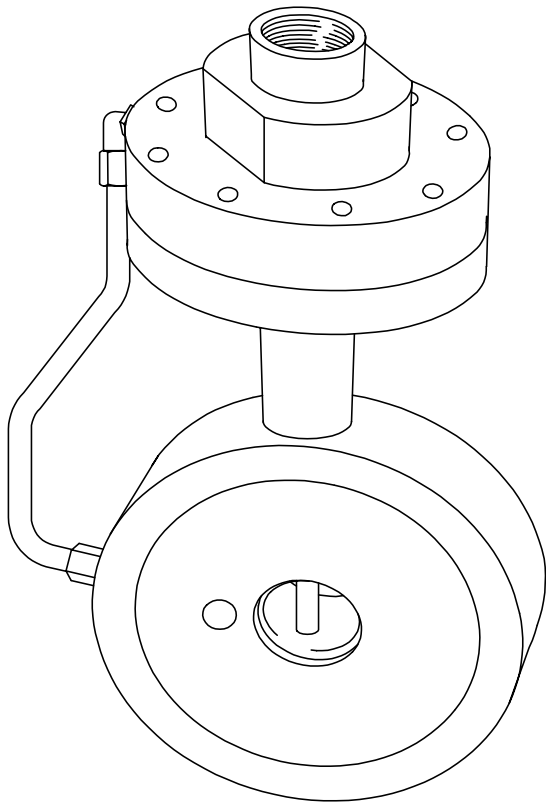
1 bar = 0,1 MPa = 14,5 psi

- Max. counter pressure: 0,5 bar/7,25 psi
- Max. working pressure: 16 bar/232 psi
- Water capacity: 400 l/min - 4000 l/min, 106 USGPM - 1057 USGPM
- Material:
 - Body: Epoxy coated steel
 - Nozzle, diffusor: Polypropylene
 - Valves: Steel/Stainless steel
- Weight: 56 kg/25,5 lbs



Technical changes reserved without notice

PP-50/20
PP-80/20



Description

The balanced pressure proportioner PP induces foam concentrate into the water feed line.

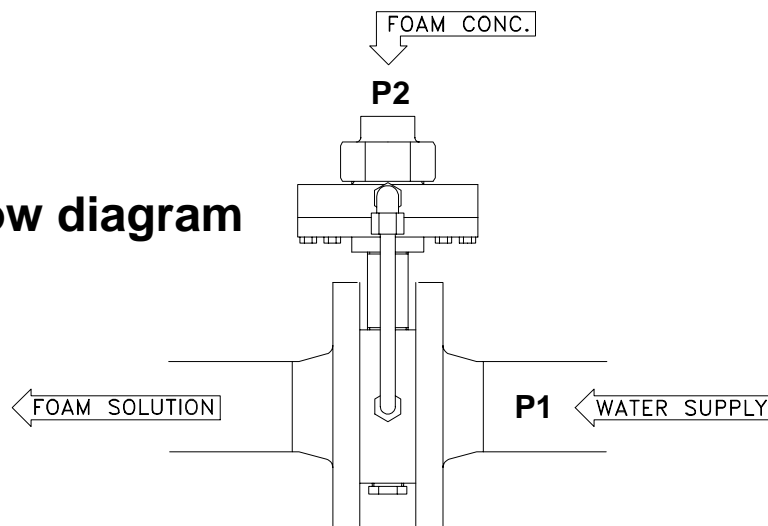
The proportioning rate can be adjusted on site.

The main part of this advanced and compact proportioner is made of high quality bronze as standard.

The PP is mounted between ANSI or DIN flanges in the water line and with a 3/4" female connection on the foam concentrate feed pipe.

The foam concentrate is supplied to the proportioner by a foam concentrate pump. The proportioning accuracy is maintained during variations in the water flow and pressure. The water flow range is related to the system pressure drop, caused by the proportioner (see table).

Principle flow diagram

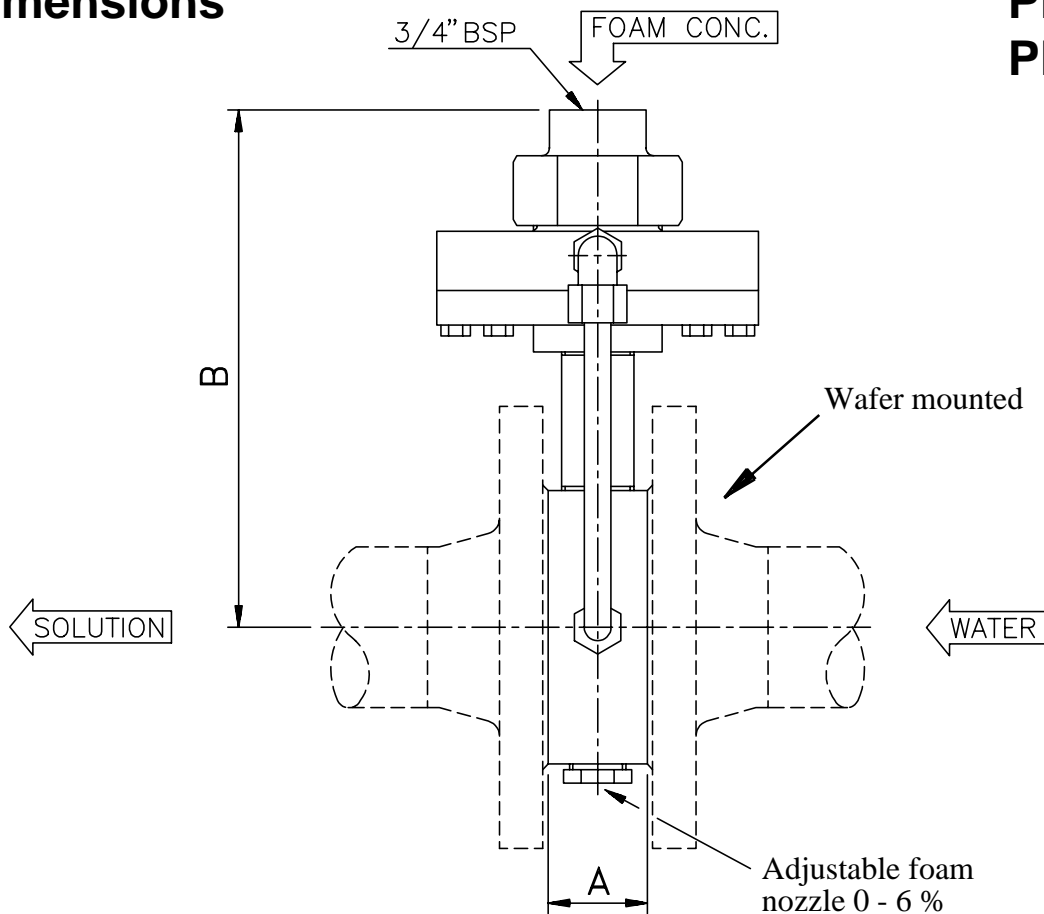


The foam concentrate pressure P2 must exceed the water pressure P1 by at least 1 bar



Dimensions

PP-50/20
PP-80/20



Size	A mm	B mm	Weight kg
PP-50/20	37	200	6
PP-80/20	37	220	10

Performance data

1 bar = 0,1 MPa = 14,5 psi

Type	Connection mm/inch		Capacity				Proportioner k-factor
			Min		Max*		
	Foam	Water	l/min	USGPM	l/min	USGPM	
PP-50/20	3/4" BSP	50/2"	125	33	800	211	645
PP-80/20	3/4" BSP	80/3"	300	80	2000	528	1615

* At proportioner system pressure drop 1,5 bar

Max. working pressure: 16 bar/235 psi

Materials: Bronze and stainless steel

Other materials upon request

$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = k\text{-factor}$$



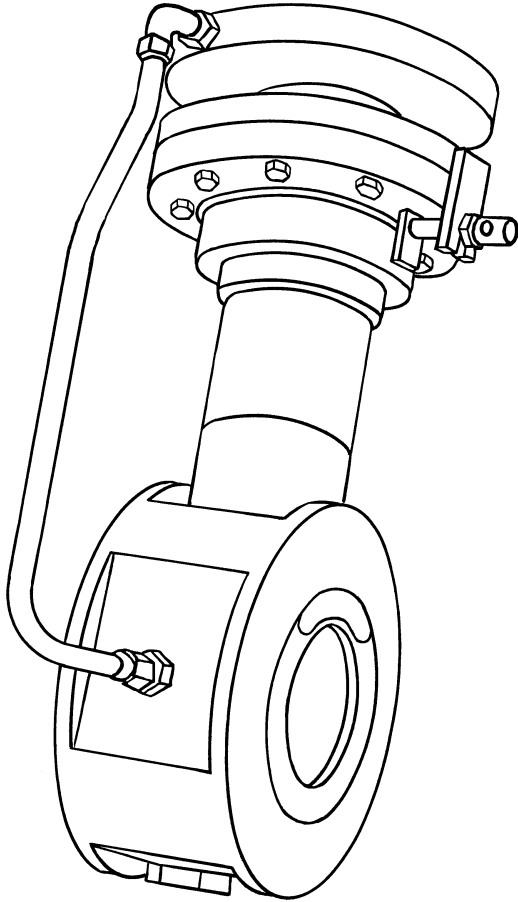
Technical changes reserved without notice

PP-100/50

PP-150/50

PP-200/80

PP-250/80



Description

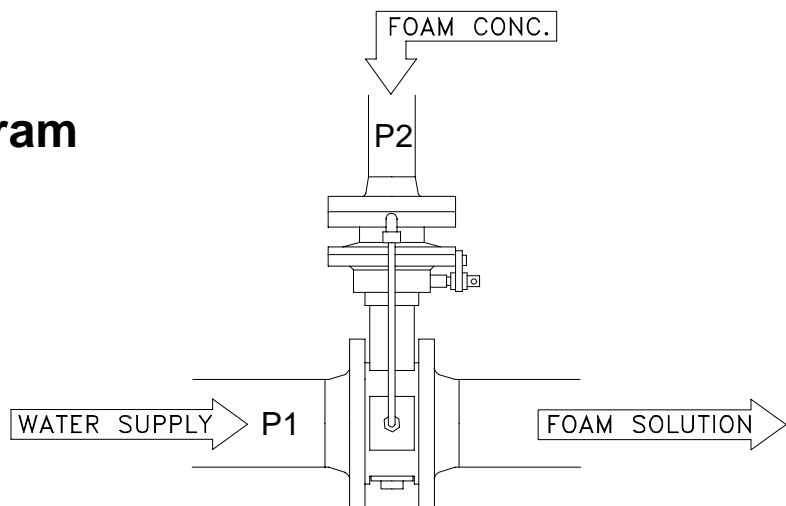
The balanced pressure proportioner PP induces foam concentrate into the water feed line.

The proportioning rate can be adjusted on site. The main part of this advanced and compact proportioner is made of high quality bronze as standard.

The PP is mounted between ANSI or DIN flanges in the water line and connected by flanges to an ANSI or DIN counter flange on the foam concentrate feed pipe.

The foam concentrate is supplied to the proportioner by a foam concentrate pump. The proportioning accuracy is maintained during variations in the water flow and pressure. The water flow range is related to the system pressure drop, caused by the proportioner. (see table).

Principle flow diagram



The foam concentrate pressure P2 must exceed the water pressure P1 by at least 1 bar.



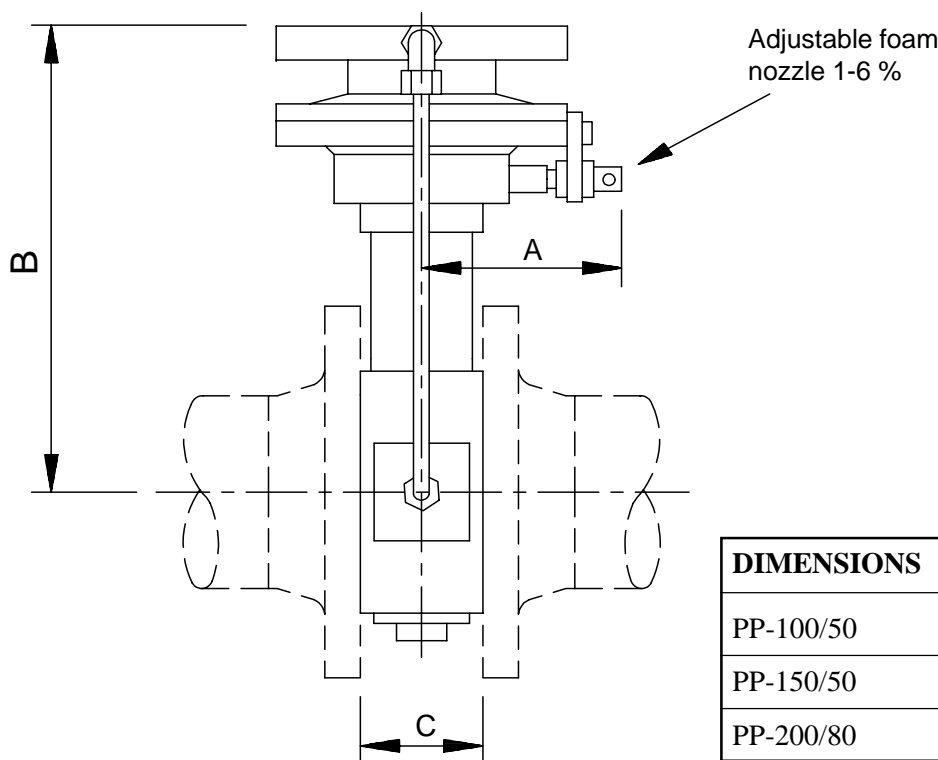
BALANCED PRESSURE PROPORTIONER

98/05

1010/19

Dimensions

PP-100/50
PP-150/50
PP-200/80
PP-250/80



DIMENSIONS	A mm	B mm	C mm
PP-100/50	115	271	70
PP-150/50	115	297	70
PP-200/80	140	361	82
PP-250/80	140	390	82

Performance data

1 bar = 0,1 MPa = 14,5 psi

TYPE	Connection		Capacity				Weight		Proportioner k-factor
	mm/inch		Min.		Max.*		kg	lbs	
	Foam	Water	l/min	USGPM	l/min	USGPM			
PP-100/50	50/2"	100/4"	770	203	4900	1295	20	44	4040
PP-150/50	50/2"	150/6"	1500	396	9800	2589	25	55	7970
PP-200/80	80/3"	200/8"	2875	760	21100	5575	44	97	17255
PP-250/80	80/3"	250/10"	5100	1347	33100	8745	54	119	27060

* At proportioner system pressure drop 1,5 bar

$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = \text{k-factor}$$

Max. working pressure 16 bar/235 psi

Materials: Bronze, stainless steel



Technical changes reserved without notice

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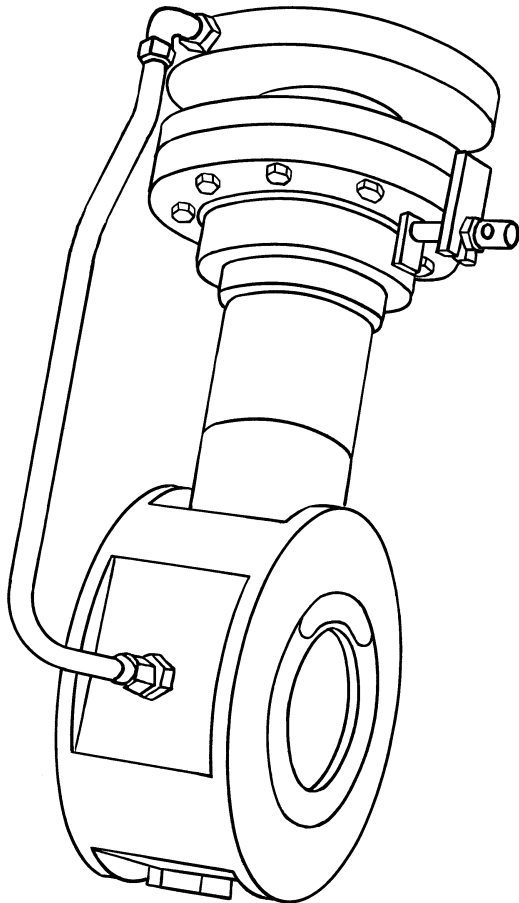
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The Netherlands Internet: www.skum.com

PPW-100/50

PPW-150/50

PPW-200/80

PPW-250/80



Description

Accurate proportioning of foam concentrate, preferably irrespective of flow and pressure variations, is vital for the correct performance of a foam system.

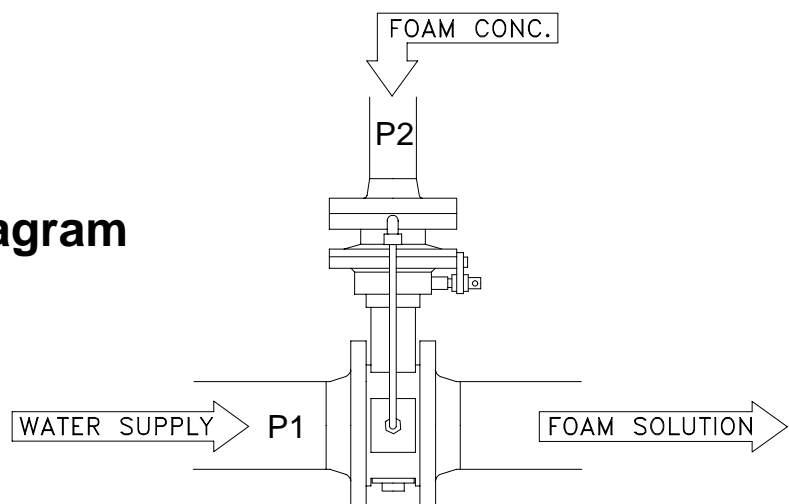
The PPW proportioner has an orifice of which the area changes in relation to the flow. This system secures correct proportioning within a wide range of flow. For example, a sprinkler system will become more effective by adding foam and by using the PPW proportioner. The proportioning will even be correct for large variations in number of sprinkler heads activated.

The PPW proportioner is a maintenance-free construction made of high quality bronze and stainless steel.

The foam concentrate is supplied to the proportioner by a foam concentrate pump.

The proportioning can easily be changed by adjusting the integrated regulating nozzle.

Principle flow diagram

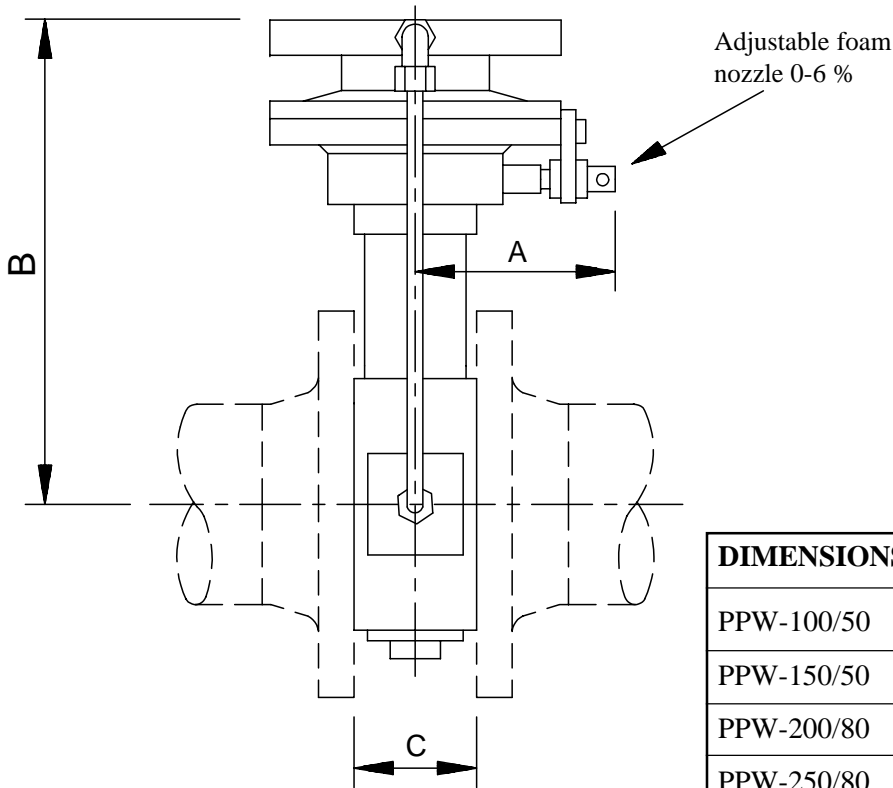


The foam conc. pressure P2 must exceed water pressure P1 by at least 1 bar



Dimensions

PPW-100/50
PPW-150/50
PPW-200/80
PPW-250/80



DIMENSIONS	A mm	B mm	C mm
PPW-100/50	115	271	70
PPW-150/50	115	297	70
PPW-200/80	140	361	82
PPW-250/80	140	390	82

Performance data

1 bar = 0,1 MPa = 14,5 psi

TYPE	Connection		Capacity				Weight		Proportioner k-factor
	mm/inch		Min.		Max.*		kg	lbs	
	Foam	Water	l/min	USGPM	l/min	USGPM			
PPW-100/50	50/2"	100/4"	75	19,8	2500	661	20	44	2040
PPW-150/50	50/2"	150/6"	100	26,4	5600	1480	26	57	4585
PPW-200/80	80/3"	200/8"	125	33	10600	2800	45	99	8660
PPW-250/80	80/3"	250/10"	150	39,6	16100	4254	55	121	13115

* At proportioner system pressure drop 1,5 bar, Min. 0,3 bar

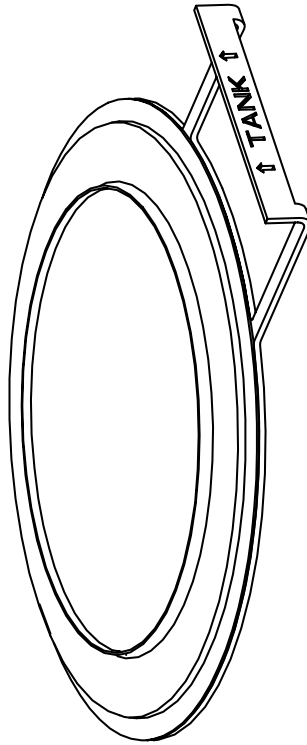
$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = \text{k-factor}$$

Max. working pressure: 16 bar/235 psi

Materials: Bronze and stainless steel



Technical changes reserved without notice

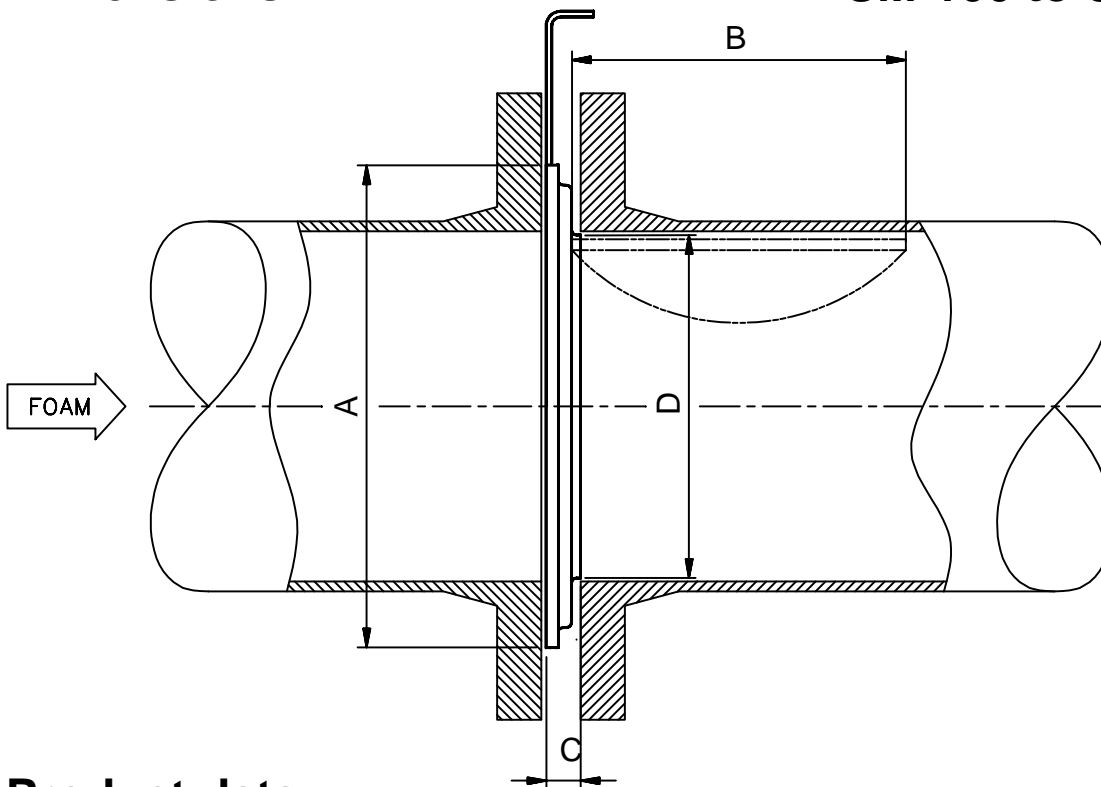
SM-100 to SM-300**Description**

The SM valve is designed to be used as a check valve sealing off the tank product from the foam line in a “subsurface system” or as a gas-proof check valve in an “over-the-top” foam system.

A PTFE membrane is covering a stainless steel mechanism, preventing product or gas to enter

the foam supply line. At system activation the foam pipe is pressurized, the PTFE membrane will burst (see table overleaf), and the mechanism will open, thus leaving free passage for the foam to enter the tank. The SM membrane is to be mounted between flanges (see table).



Dimensions**SM-100 to SM-300****Product data**

SM		100	150	200	250	300
Max back pressure, (bar)		6	6	4	3	3
Min required opening pressure, (bar) (add static tank pressure for minimum required foam supply pressure)		0,4	0,25	0,2	0,2	0,4
Fitting flanges	DIN PN 16	100	150	200	250	300
	ANSI 150 lbs	4"	6"	8"	10"	12"
Dimensions, mm	A (outside diam.)	162	220	275	328	376
	B (min. free length inside pipe)	100	150	200	250	300
	C (excl. gaskets)	13	14	15,5	19	20
	D (min. allowed pipe diam.)	101	152	201	252	300
Weight, (kg)		1,0	2,0	3,7	6,3	9,6
Material	Body	Stainless steel				
	Gate	Stainless steel				
	Membrane	PTFE				

1 bar = 0,1 MPa = 14,5 psi

Check: MHE Appr. prod: HEJ Date: 990510

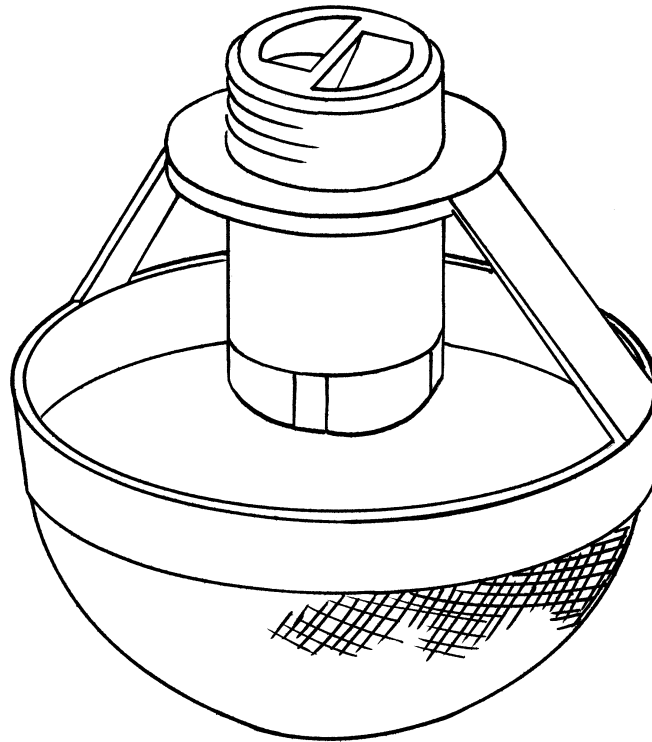


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Description

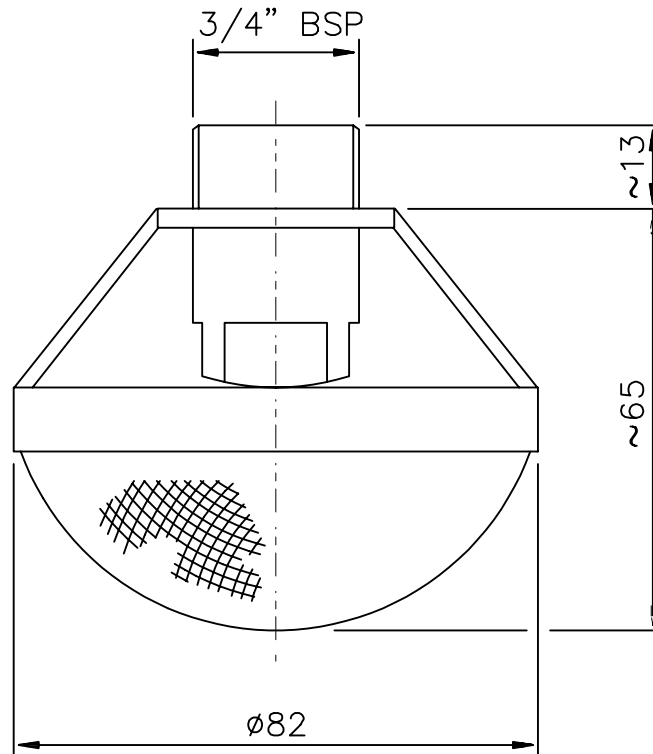
The low expansion foam sprinkler SPR-6 is designed for use in a deluge type foam sprinkler system. It is primarily intended for film forming foam type AFFF, but other types can also be used. The sprinkler has a

compact and rigid construction and can be used indoors as well as outdoors mounted vertically or horizontally. It is to be fed with foam solution from a separate foam proportioner.



Dimensions

SPR-6

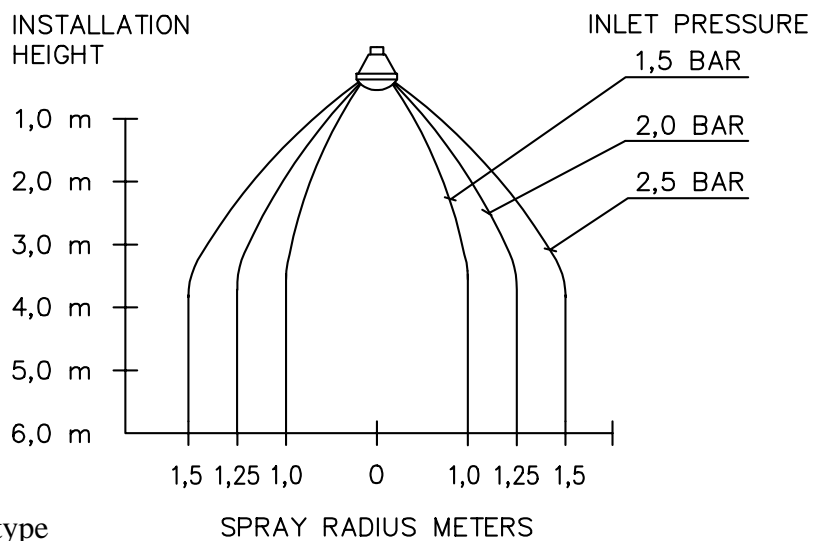


Performance data

1 bar = 0,1 MPa = 14,5 psi

Flow at inlet pressure 2,5 bar:	60 l/min
Flow can be calculated as follows	$Q = \sqrt{P} \times 38$
Foam expansion factor, approx:	12*
Connection:	Male 3/4" BSP
Material:	Basket Stainless steel
	Nozzle Bronze
Weight:	0,15 kg/0,33 lbs

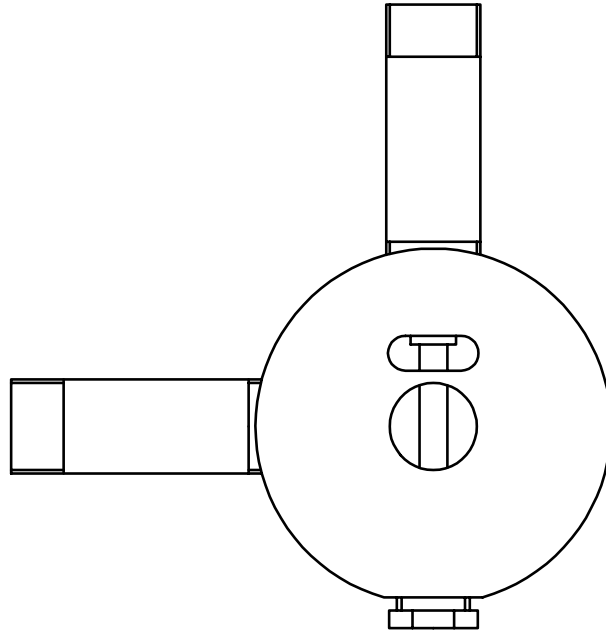
Spray pattern



* Depending on foam concentrate type



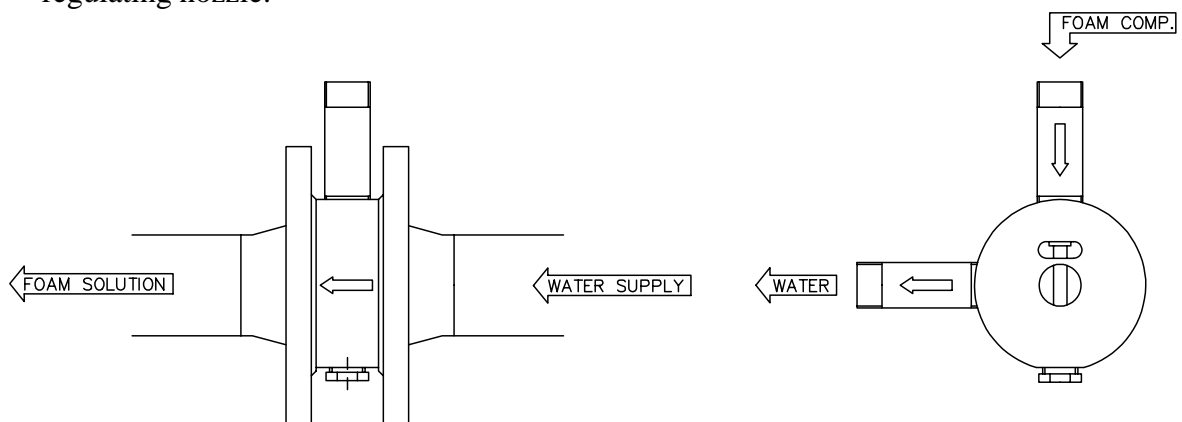
Technical changes reserved without notice

TP-50/20
TP-80/20

Description

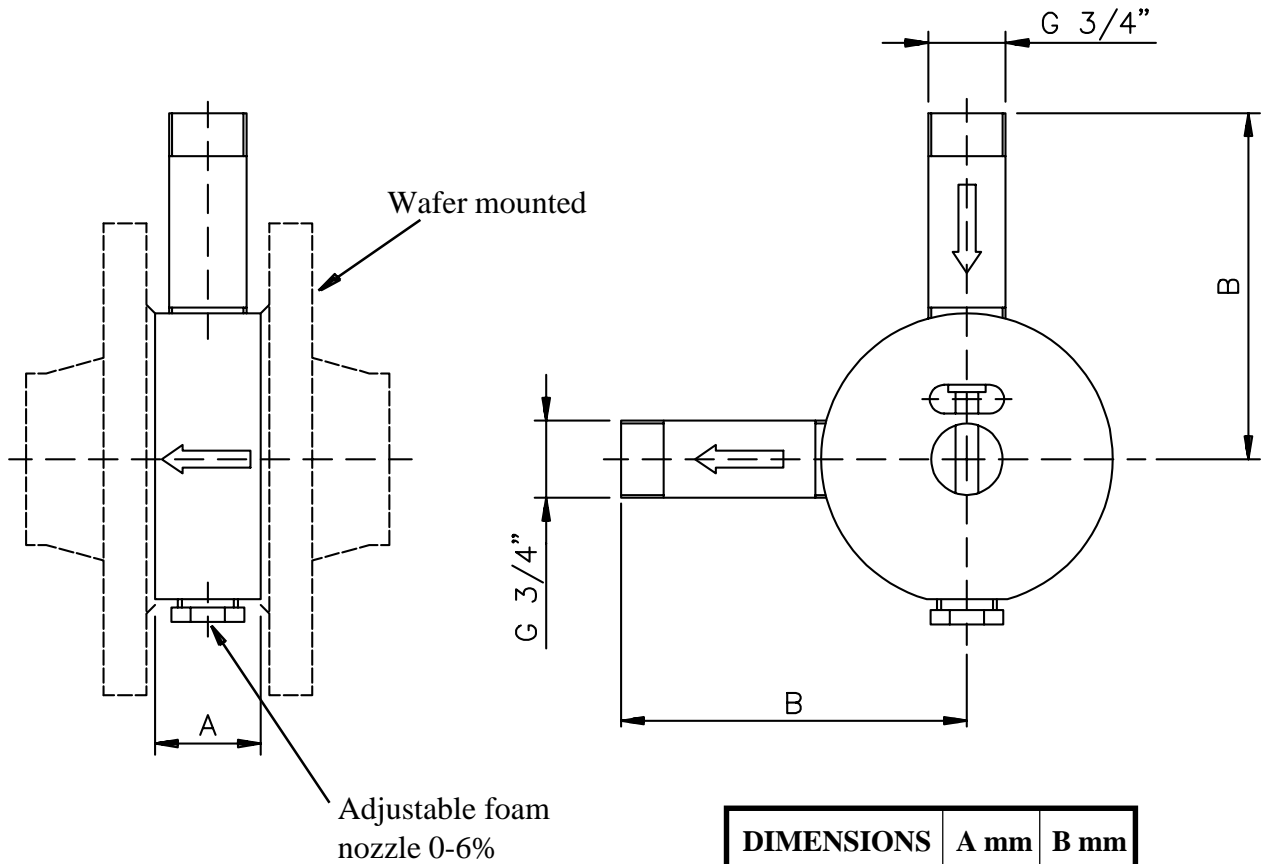
The measuring part TP is the basic foam concentrate proportioning unit in the Skum bladder tank foam proportioning system.

The TP shall be mounted between flanges in the fire water supply line, and is a maintenance-free construction with body in high quality bronze as standard. The foam concentrate proportioning can easily be set to desired percentage, normally between 1 and 6 %, by adjusting the integrated foam concentrate regulating nozzle.



Dimensions

TP-50/20
TP-80/20



DIMENSIONS	A mm	B mm
TP - 50/20	37	125
TP - 80/20	37	140

Performance data

1 bar = 0,1 MPa = 14,5 psi

	Connection mm/inch		Capacity				Weight		Proportioner k-factor
			Min		Max*		kg	lbs	
	Foam	Water	l/min	USGPM	l/min	USGPM			
TP-50/20	3/4"	50/2"	125	33	800	211	5	11	645
TP-80/20	3/4"	80/3"	300	80	2000	528	9	20	1615

* At proportioner system pressure drop 1,5 bar

Max. working pressure

16 bar/235 psi

$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = k\text{-factor}$$

Materials:

Bronze and stainless steel



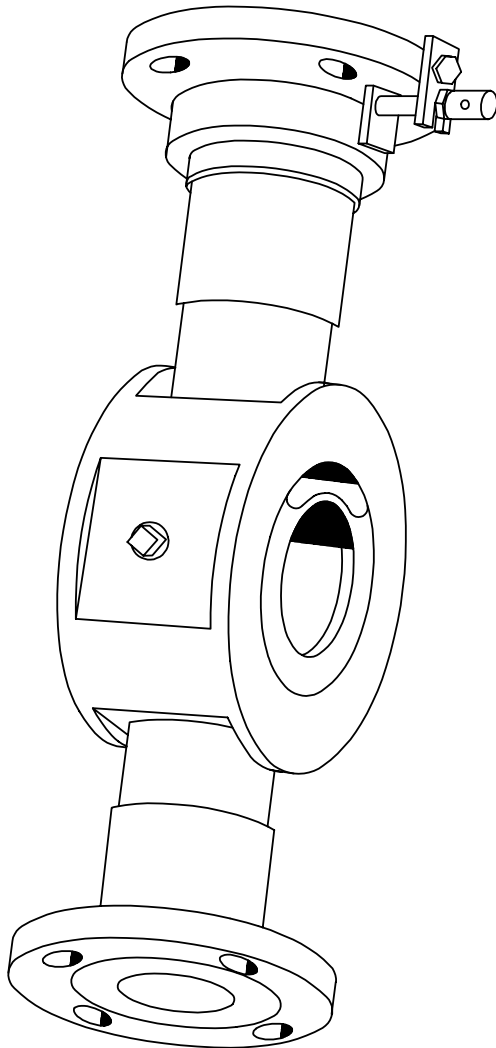
Technical changes reserved without notice

TP-100/50

TP-150/50

TP-200/80

TP-250/80



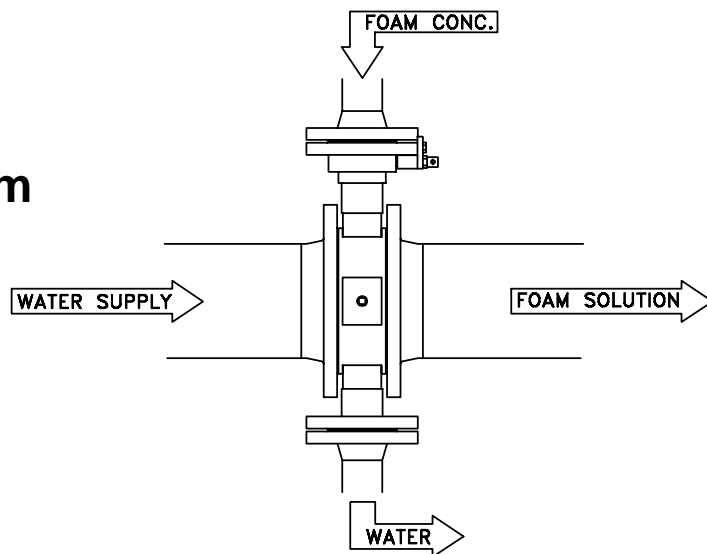
Description

The measuring part TP is the basic foam concentrate proportioning unit in the Skum bladder tank foam proportioning system.

The TP shall be mounted between flanges in the fire water supply line, and is a maintenance-free construction with body in high quality bronze as standard.

The foam concentrate proportioning can easily be set to desired percentage, normally between 1 and 6 %, by adjusting the integrated foam concentrate regulating nozzle.

Principle flow diagram



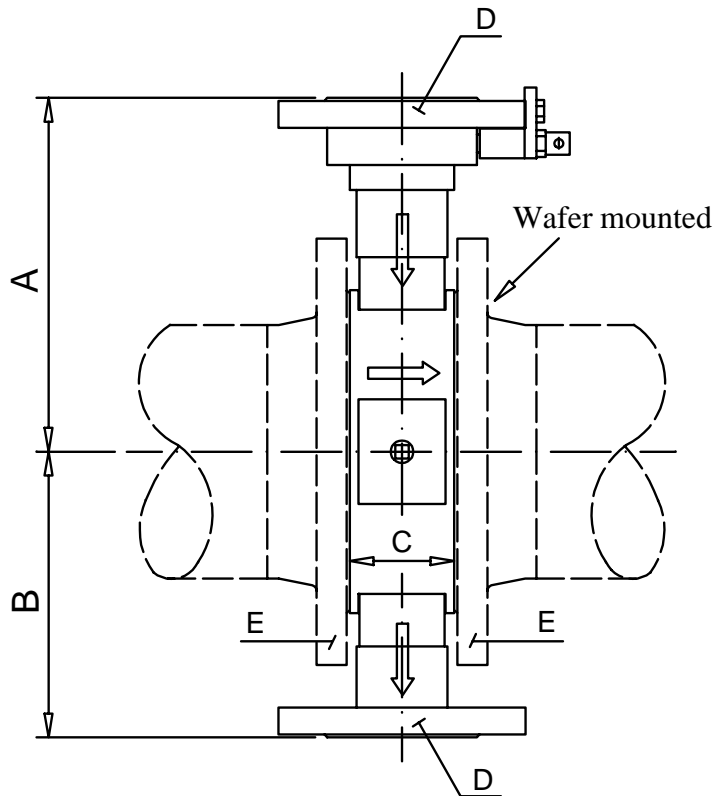
Dimensions

TP-100/50

TP-150/50

TP-200/80

TP-250/80



DIMENSIONS	A mm	B mm	C mm
TP-100/50	209	173	70
TP-150/50	241	198	70
TP-200/80	291	243	82
TP-250/80	323	276	82

Performance data

1 bar = 0,1 MPa = 14,5 psi

TYPE	Connection		Capacity				Weight		Proportioner k-factor
	mm/inch		Min.		Max.*		kg	lbs	
	D	E	l/min	USGPM	l/min	USGPM			
TP-100/50	50/2"	100/4"	770	203	4900	1295	20	44	4040
TP-150/50	50/2"	150/6"	1500	396	9800	2589	25	55	7970
TP-200/80	80/3"	200/8"	2875	760	21100	5575	43	95	17255
TP-250/80	80/3"	250/10"	5100	1345	33100	8745	51	113	27060

* At proportioner system pressure drop 1,5 bar

$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = \text{k-factor}$$

Max. working pressure

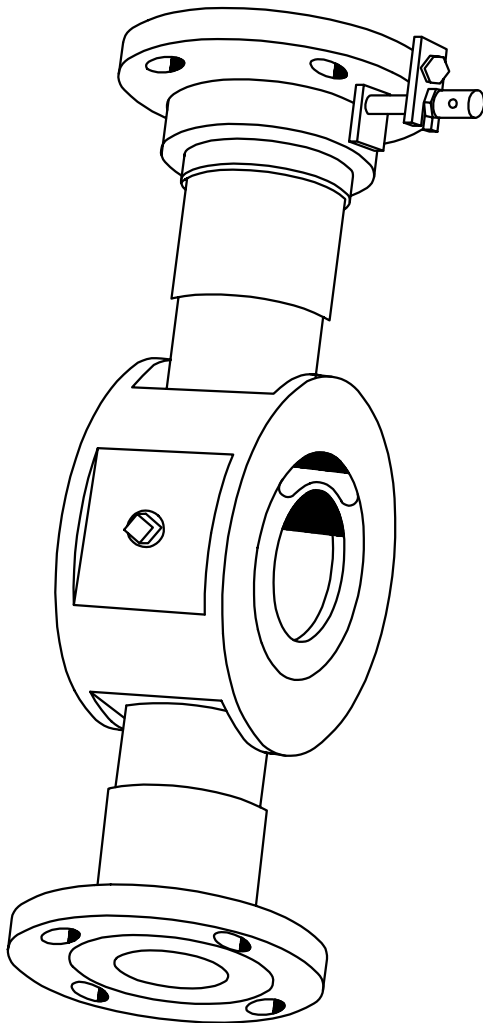
16 bar/235 psi

Materials:

Bronze, stainless steel



Technical changes reserved without notice

TPW-100/50**TPW-150/50****TPW-200/80****TPW-250/80**

Description

Accurate proportioning of foam concentrate, preferably irrespective of flow and pressure variations, is vital for the correct performance of a foam system.

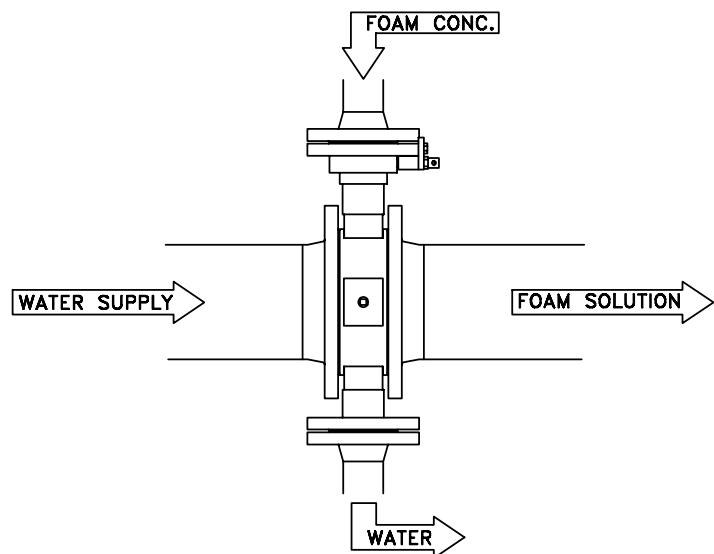
The TPW proportioner has an orifice of which the area changes in relation to the flow. This system secures correct proportioning within a wide range of flow. For example, a sprinkler system will become more effective by adding foam and by using the TPW proportioner. The proportioning will even be correct for large variations in number of sprinkler heads activated.

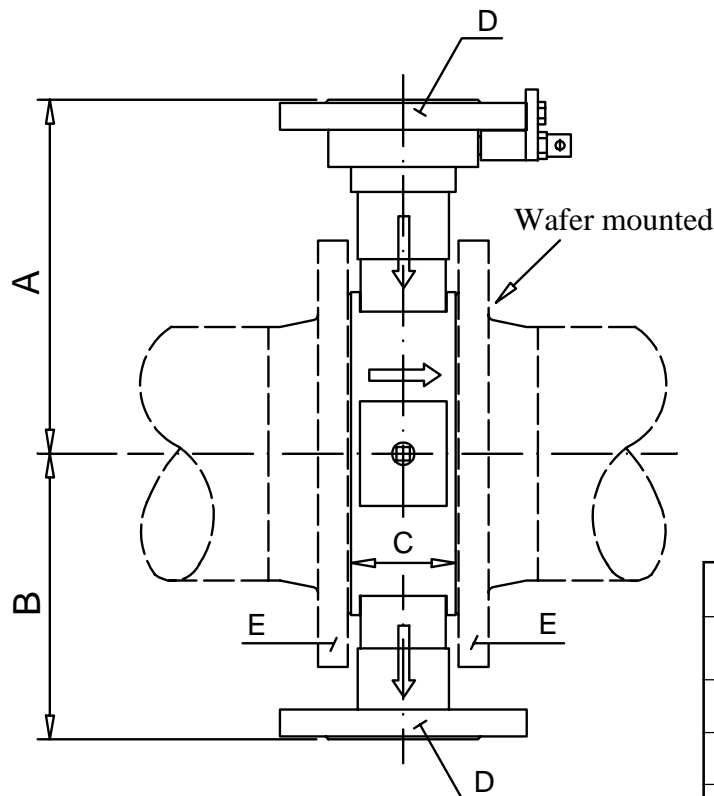
The TPW proportioner is a maintenance-free construction made of high quality bronze and stainless steel.

The TPW is used in combination with the SKUM bladder tank MTB.

The proportioning can easily be changed by adjusting the integrated regulating nozzle.

Principle flow diagram



Dimensions**TPW-100/50****TPW-150/50****TPW-200/80****TPW-250/80**

DIMENSIONS	A mm	B mm	C mm
TPW-100/50	209	173	70
TPW-150/50	241	198	70
TPW-200/80	291	243	82
TPW-250/80	323	276	82

Performance data**1 bar = 0,1 MPa = 14,5 psi**

TYPE	Connection mm/inch		Capacity				Weight		Proportioner k-factor
			Min.		Max.*		kg	lbs	
	D	E	l/min	USGPM	l/min	USGPM			
TPW-100/50	50/2"	100/4"	75	19,8	2500	661	20	44	2040
TPW-150/50	50/2"	150/6"	100	26,4	5600	1480	26	57	4585
TPW-200/80	80/3"	200/8"	125	33	10600	2800	44	97	8660
TPW-250/80	80/3"	250/10"	150	39,6	16100	4254	52	115	13115

* At proportioner system pressure drop 1,5 bar, Min. 0,3 bar

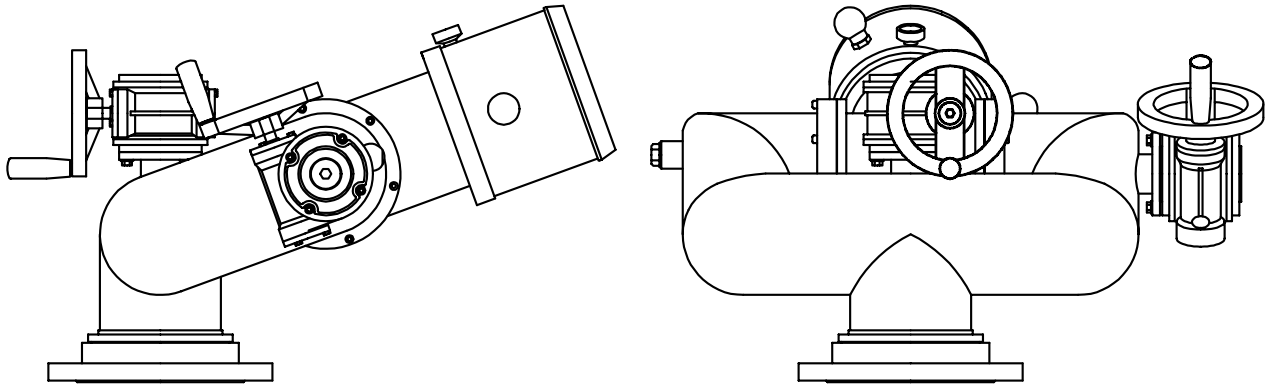
$$\frac{Q \text{ lit./min.}}{\sqrt{P \text{ bar}}} = \text{k-factor}$$

Max. working pressure 16 bar/235 psi

Materials: Bronze and stainless steel



Technical changes reserved without notice

FJM-150/K G
FJM-150/K S G

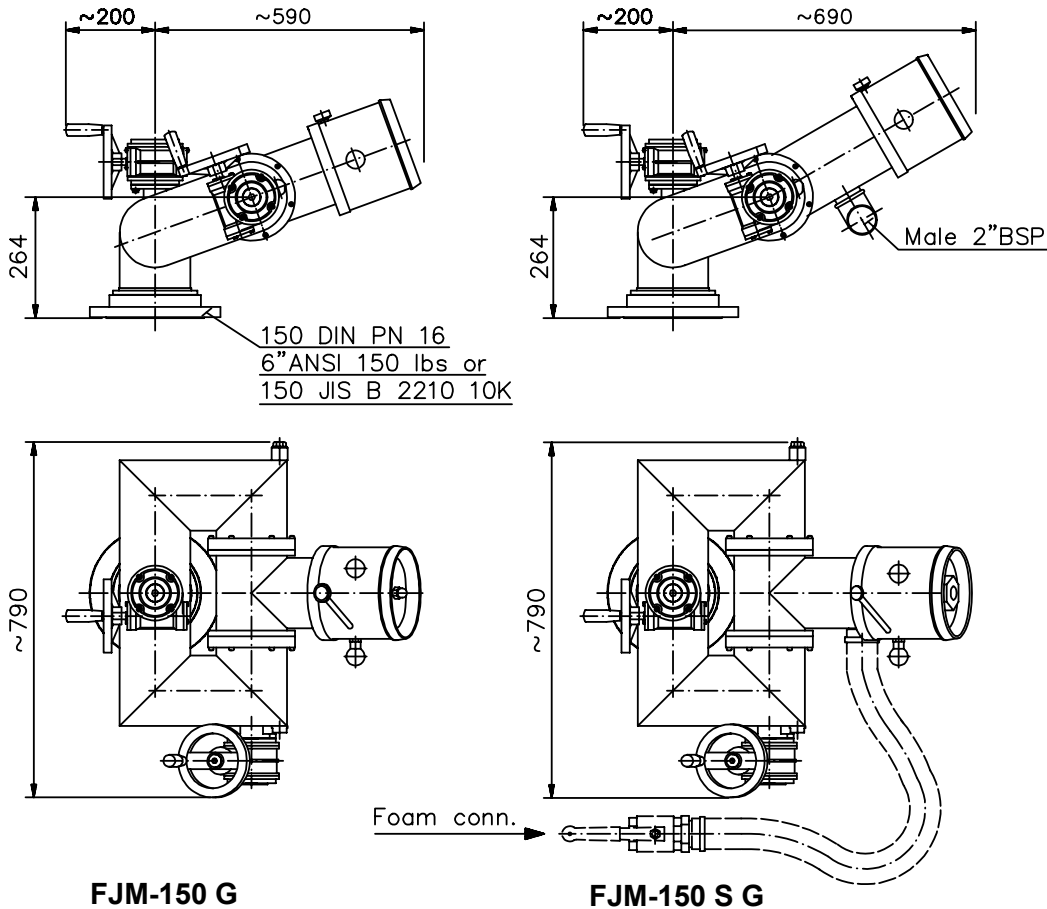
Description

The fog/jet fire monitor FJM-150/K G and FJM-150/K S G are powerful units with exceptional good throw characteristics. They are designed for an optimized delivery of water or foam in a solid jet as well as in a spray pattern. The monitors are of low weight due to the welded stainless steel construction. FJM-150/K G and FJM-150/K S G are intended for fixed mounting.

They have a wide capacity range, which can easily be adjusted on site, to suit the local conditions. The FJM-150/K S G has an integrated foam concentrate inductor, eliminating the need for a separate proportioning system.

When running with foam the FJM-150/K S G shall be adjusted to nominal capacity for accurate proportioning.



Dimensions**FJM-150/K G
FJM-150/K S G****FJM-150 G****FJM-150 S G****Performance data****1 bar = 0,1 MPa = 14,5 psi**

Water capacity:	up to 11700 lit./min. at 10 bar
Max. working pressure:	16 bar/235 psi
Rotation:	360 degrees
Elevation:	FJM-150/K G -70 to +70 degrees FJM-150/K S G -50 to +70 degrees
Inlet connection water:	150 DIN PN 16 or 6"ANSI 150 lbs or 150 JIS B 2210 10 K
Material:	Stainless steel and bronz
Surface treatment:	Primer and red 2-component paint
Net weight approx:	FJM-150/K G 57 kg/126 lbs, FJM-150/K S G 60 kg/132 lbs
Nozzle manually adjustable:	From jet to fog

FJM-150 S G

Foam concentrate induction:	Max. 600 lit.
Inlet connection foam:	Male 2" BSP
Suction hose and valve:	Optional



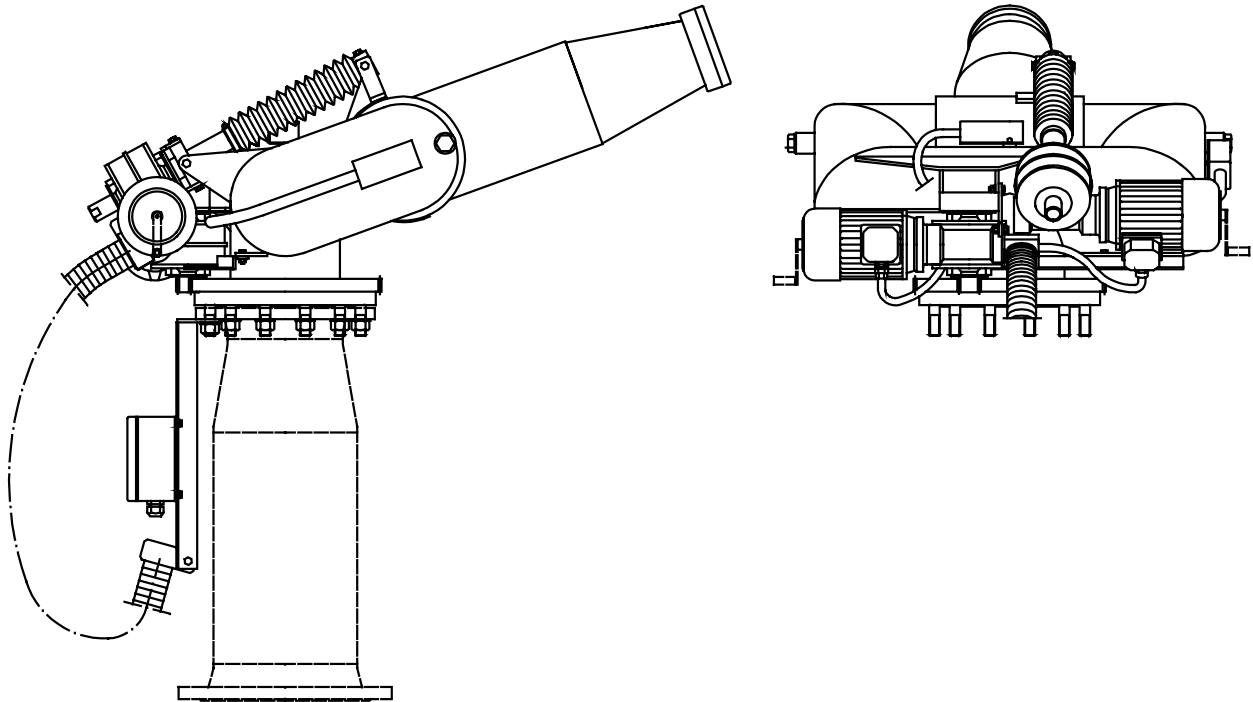
Technical changes reserved without notice

REMOTE-CONTROLLED MONITOR

99/10

1011/115

FJM-200 EL/VR



Description

The electric remote controlled fire monitor FJM-200 EL/VR is a powerful unit with exceptional good throw characteristics. It is designed for an optimized delivery of water or foam in a solid jet.

The monitor has individual motors, with a small power consumption, for each movement, and is of low weight due to its welded stainless steel construction.

Installation of the unit is easily performed, by mounting the monitor to a pipe flange, and connecting two cables.

The required force for the vertical and horizontal movements is minimized due to the water pressure balanced slide bearings.

The Skum monitors demand a minimum of maintenance since high class materials are used throughout the whole construction.



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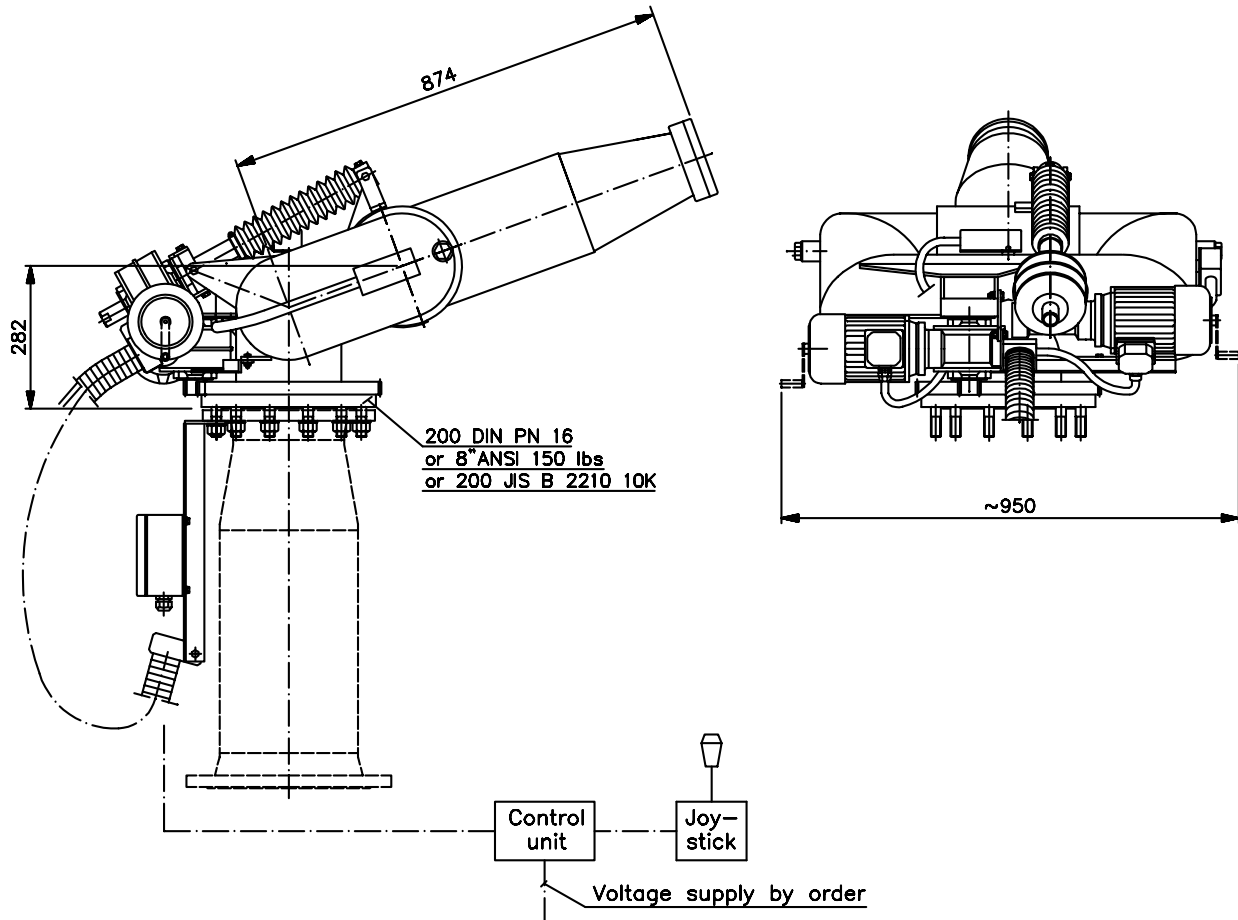
REMOTE-CONTROLLED MONITOR

99/10

1011/115

Dimensions

FJM-200 EL/VR



Performance data

Operation:	Remote controlled and manual override
Water capacity:	20000 l/min (nominal) (FiFi I requirements = 20000 l/min.)
Max working pressure:	16 bar/232 psi
Rotation:	± 165 degrees
Elevation:	-35 to +60 degrees
Inlet connection:	200 DIN PN 16 or 8" ANSI 150 lbs or 200 JIS B 2210 10 K
Material:	Stainless steel and bronze
Surface treatment:	Primer and red 2-component paint
Weight, approx:	118 kg/260 lbs
Nozzle:	Fixed

Water balanced slide bearings for rotation and elevation.

El. gear motors, limit switches, terminal box, control unit and joy-stick included.* Standpipe optional.

*As standard, unless otherwise specified. Option: Manual override, EEx(e) or EEx(d) equipment.



Technical changes reserved without notice

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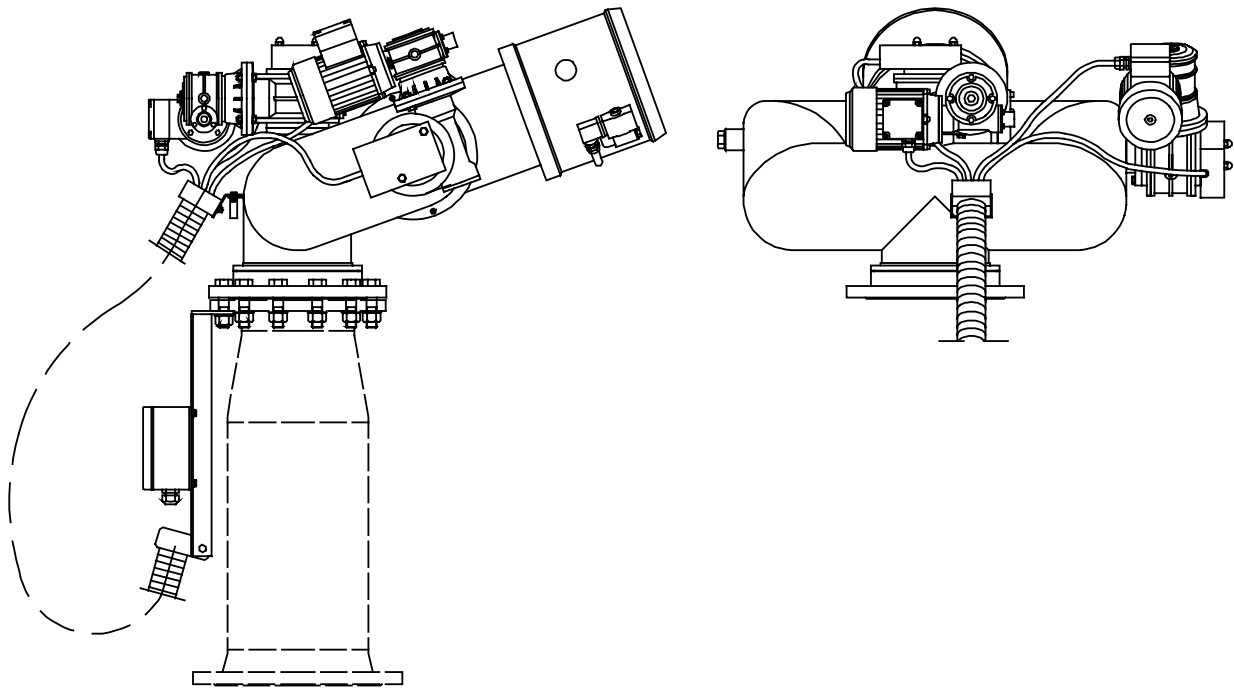
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REMOTE-CONTROLLED FOG/JET MONITOR

01/08

1011/141

FJM-200/K EL/MV



Description

The electric remote controlled fog/jet fire monitor FJM-200/K EL/MV is a powerful unit with exceptional good throw characteristics. It is designed for an optimized delivery of water or foam in a solid jet as well as in a spray pattern.

The monitor has individual motors, with a small power consumption, for each movement, and is of low weight due to its welded stainless steel construction.

Installation of the unit is easily performed, by mounting the monitor to a pipe flange, and connecting two cables.

The required force for the vertical and horizontal movements is minimized due to the ball bearings.

The Skum monitors demand a minimum of maintenance since high class materials are used throughout the whole construction.



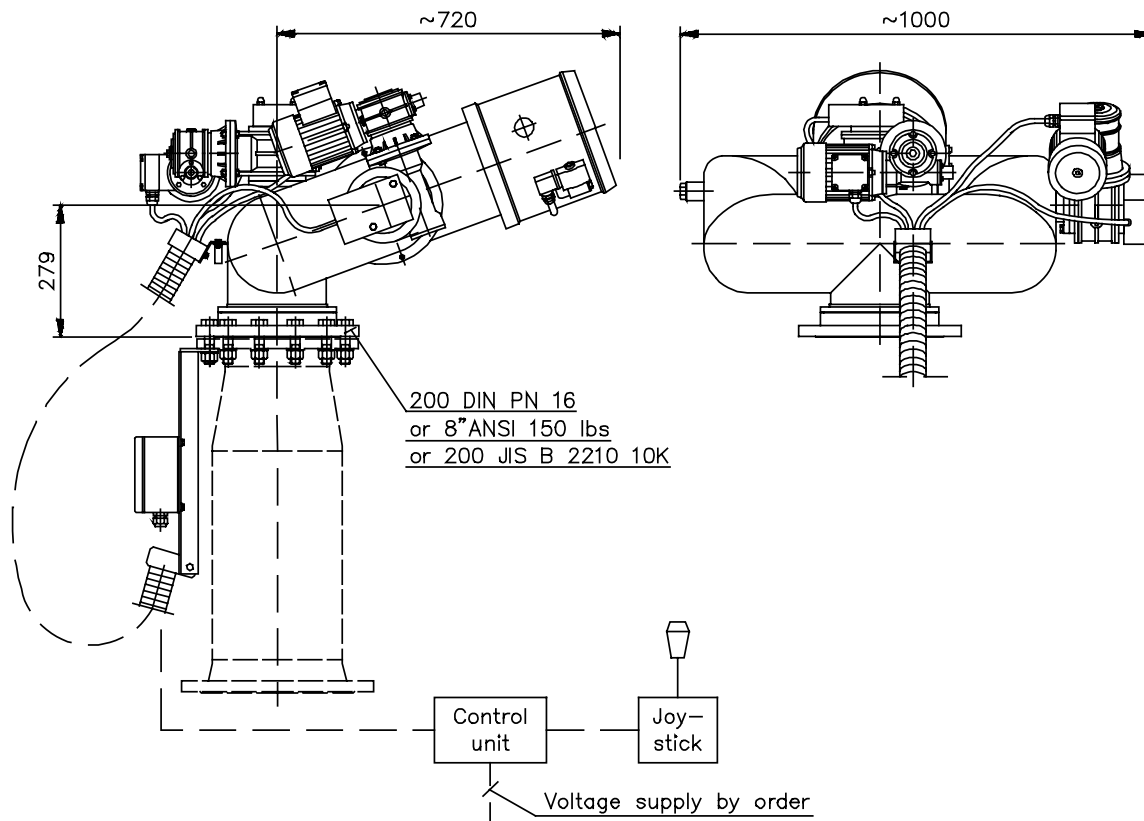
REMOTE-CONTROLLED FOG/JET MONITOR

01/08

1011/141

Dimensions

FJM-200/K EL/MV



Performance data

1 bar = 0,1 MPa = 14,5 psi

The nozzle can easily be adjusted for any specified capacity and pressure within its working range, according to separate adjustment table.

Operation:	Remote controlled and manual override
Water capacity:	20000 l/min (nominal) (FiFi I requirements = 20000 l/min.)
Max working pressure:	16 bar/232 psi
Rotation:	± 165 degrees
Elevation:	-60 to +70 degrees
Inlet connection:	200 DIN PN 16 or 8" ANSI 150 lbs or 200 JIS B 2210 10 K
Material:	Stainless steel and bronze
Surface treatment:	Primer and red 2-component paint
Weight, approx:	125 kg/276 lbs
Nozzle adjustable:	From jet to fog

Ball bearings for rotation and elevation.

El. gear motors, limit switches, terminal box, control unit and joy-stick included.* Standpipe optional.

*As standard, unless otherwise specified. Option: Manual override, EEx(e) or EEx(d) equipment.



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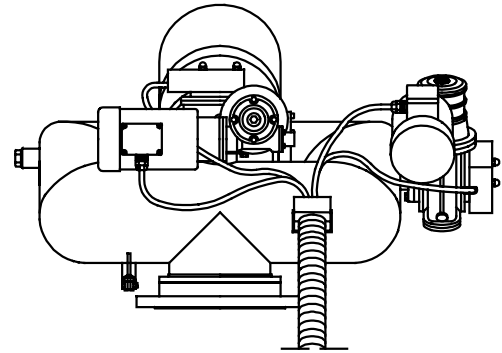
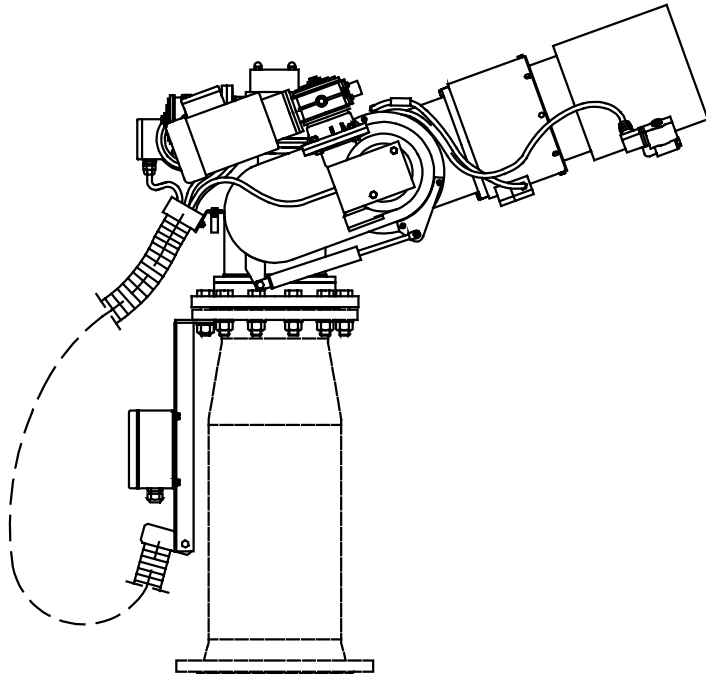
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REMOTE-CONTROLLED FOG/JET MONITOR

01/01

1011/138

FJM-200/K EL/FJF-200



Description

The electric remote controlled fog / jet fire monitor FJM-200/K EL/FJF-200 is a powerful unit with exceptional good throw characteristics. It is designed for an optimized delivery of water or foam in a solid jet as well as in a spray pattern.

The flow is adjustable from 5000 l/min.-20000 l/min.

The monitor has individual motors, with a small power consumption, for each movement,

and is of low weight due to its welded stainless steel construction.

Installation of the unit is easily performed, by mounting the monitor to a pipe flange, and connecting two cables.

Ball bearings for the vertical and horizontal movements.

The Skum monitors demand a minimum of maintenance since high class materials are used throughout the whole construction.



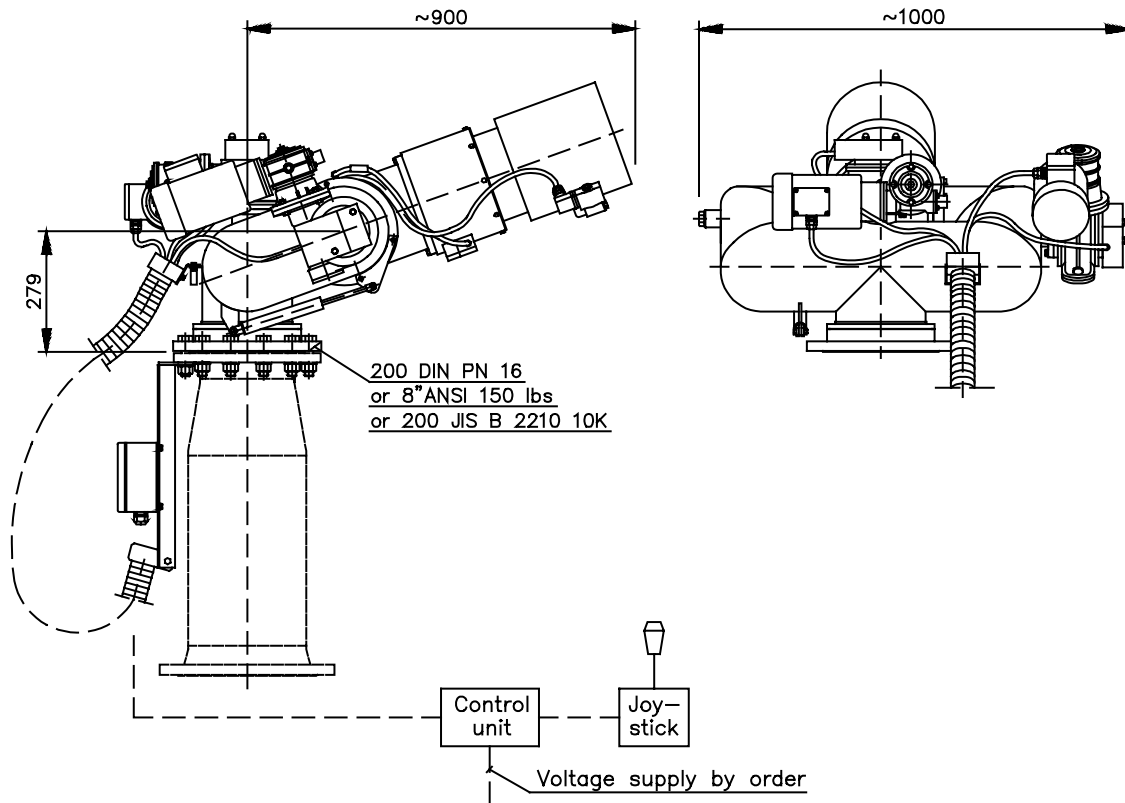
REMOTE-CONTROLLED FOG/JET MONITOR

01/01

1011/138

Dimensions

FJM-200/K EL/FJF-200



Performance data

1 bar = 0,1 MPa = 14,5 psi

The nozzle can easily be adjusted for any specified capacity and pressure within its working range, according to separate adjustment table.

Operation:	Remote controlled and manual override
Water capacity:	From 5000 l/min. to 20000 l/min.
Max working pressure:	16 bar/232 psi
Rotation:	± 165 degrees
Elevation:	-10 to +70 degrees
Inlet connection:	200 DIN PN 16 or 8" ANSI 150 lbs or 200 JIS B 2210 10 K
Material:	Stainless steel and bronze
Surface treatment:	Primer and red 2-component paint
Weight, approx:	150 kg/331 lbs
Nozzle adjustable:	From jet to fog

Ball bearings for rotation and elevation.

El. gear motors, limit switches, terminal box, control unit and joy-stick included.* Standpipe optional.

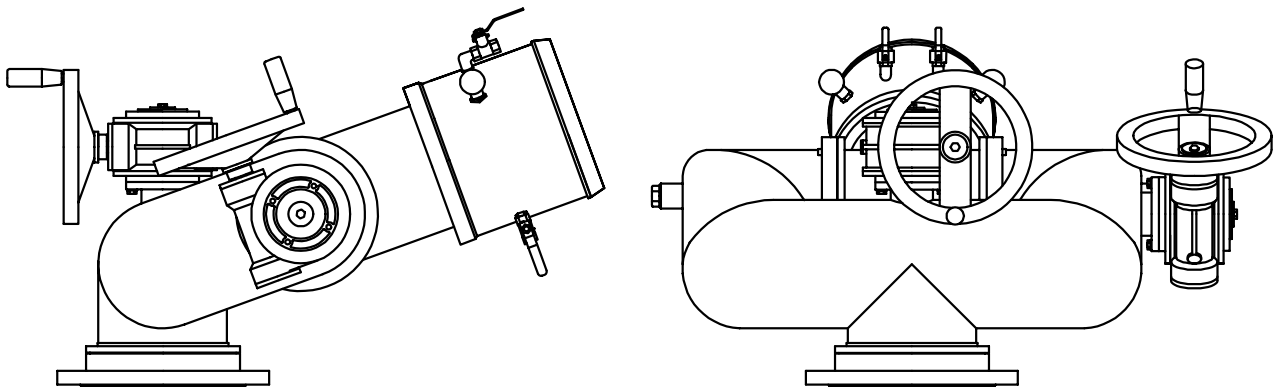
*As standard, unless otherwise specified. Option: Manual override, EEx(e) or EEx(d) equipment.



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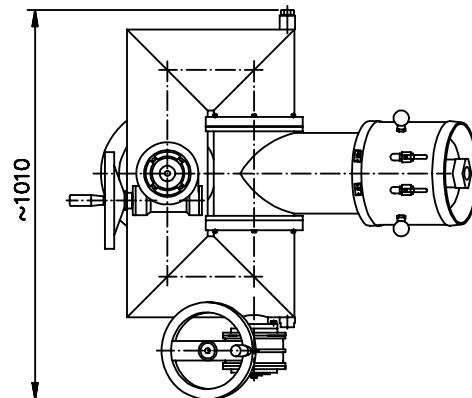
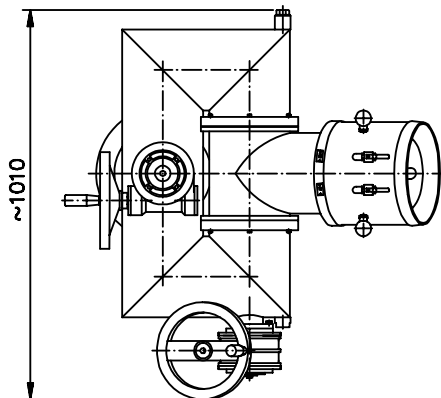
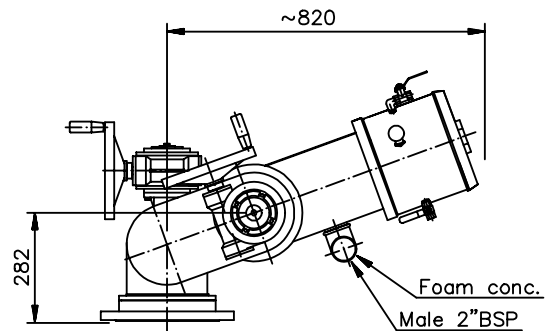
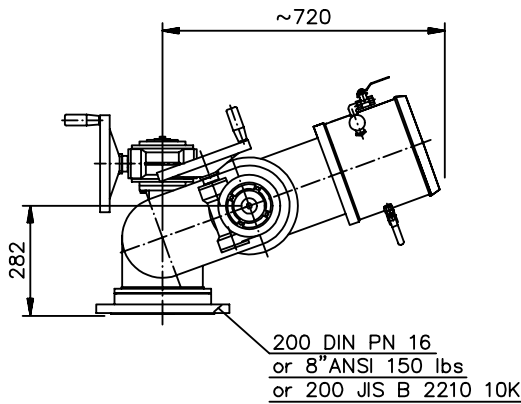
FJM-200/K G
FJM-200/K S G

Description

The fog/jet fire monitor FJM-200/K and FJM-200/K S G are powerful units with exceptional good throw characteristics. They are designed for an optimized delivery of water or foam in a solid jet as well as in a spray pattern. The monitors are of low weight due to the welded stainless steel construction. FJM-200/K G and FJM-200/K S G are intended for fixed mounting. They have a wide

capacity range, which can easily be adjusted on site, to suit the local conditions. The FJM-200/K S G has an integrated foam concentrate inductor, eliminating the need for a separate proportioning system.

When running with foam the FJM-200/K S G shall be adjusted to nominal capacity for accurate proportioning.

Dimensions**FJM-200/K G
FJM-200/K S G****FJM-200/K G****FJM-200/K S G****Performance data****1 bar = 0,1 MPa = 14,5 psi**

Water capacity:	up to 20000 lit./min.
Max. working pressure:	16 bar/235 psi
Rotation:	360 degrees
Elevation:	FJM-200/K G -60 to +70 degrees FJM-200/K S G -45 to +70 degrees
Inlet connection water:	200 DIN PN 16 or 8"ANSI 150 lbs or 200 JIS B 2210 10 K
Material:	Stainless steel and bronze
Surface treatment:	Primer and red 2-component paint
Net weight approx:	FJM-200K G 90 kg/199 lbs, FJM-200/K S G 93 kg/205 lbs
Nozzle manually adjustable:	From jet to fog

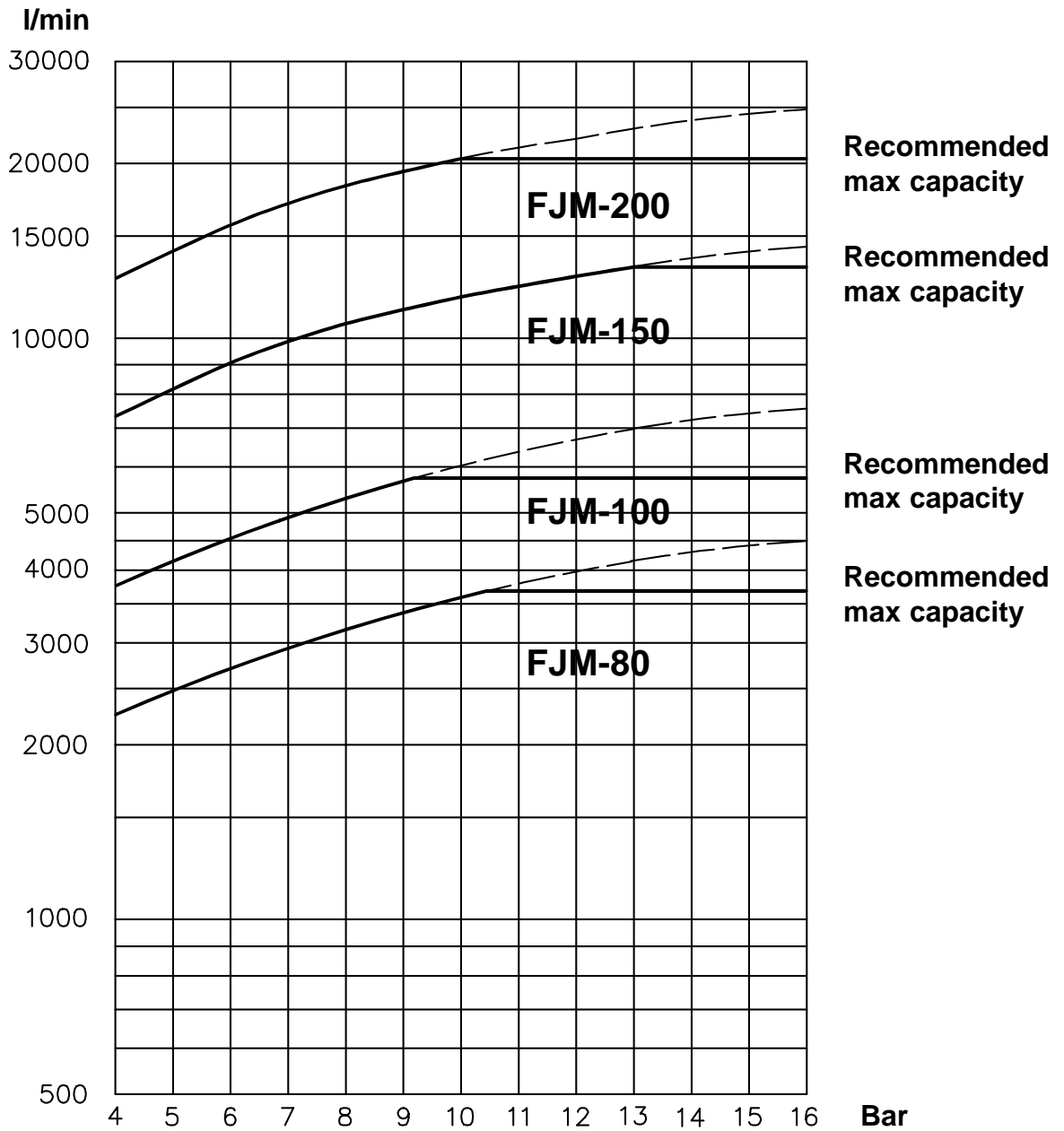
FJM-200 S

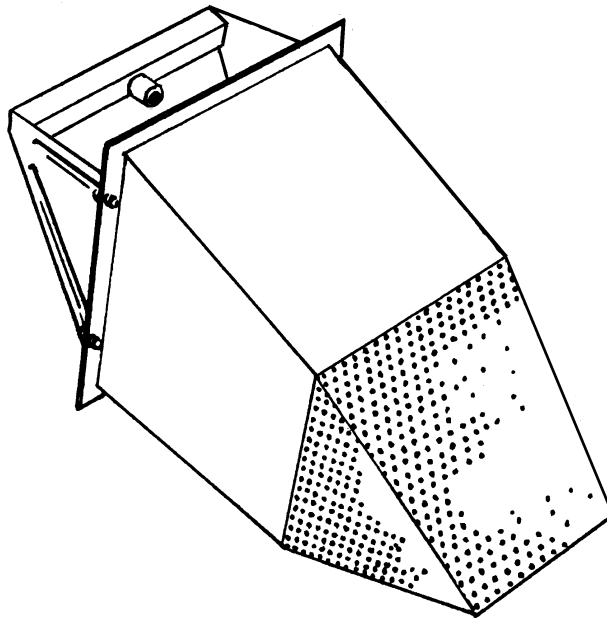
Foam concentrate induction:	Max. 600 lit.
Inlet connection foam:	Male 2" BSP
Suction hose and valve:	Optional



Technical changes reserved without notice

CAPACITY RANGES FOR FJM MONITORS





Description

The high expansion foam generator HG-15 is primarily designed as an integrated part of the SKUM HOT-FOAM system, where air from the protected volume is used for the foam production, also under the presence of smoke and combustion gases.

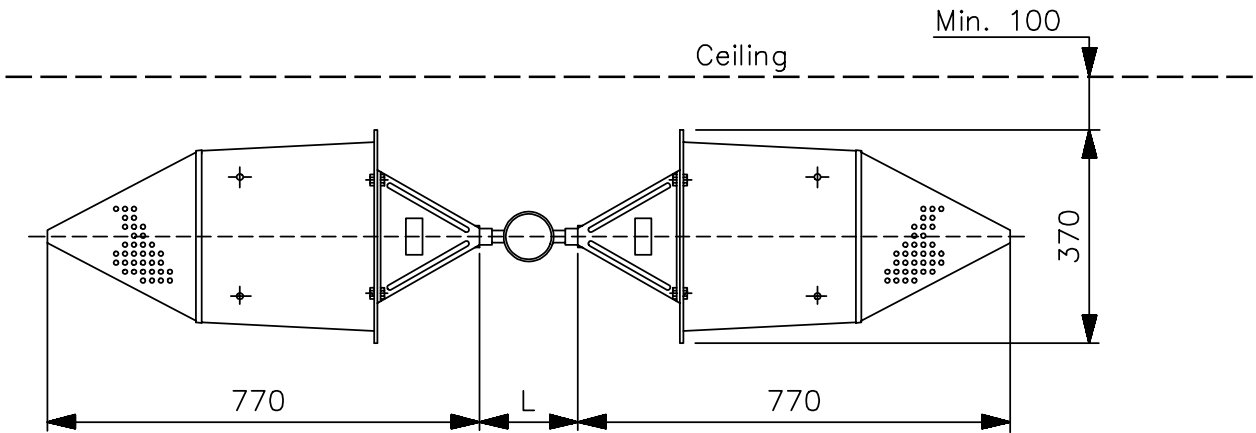
HG-15 advantages

- Low weight = easy to install
- No moving parts = minimized maintenance
- Stainless steel housing and net
- Modular system concept giving flexibility at installation
- High capacity, up to 18 m³ foam/min

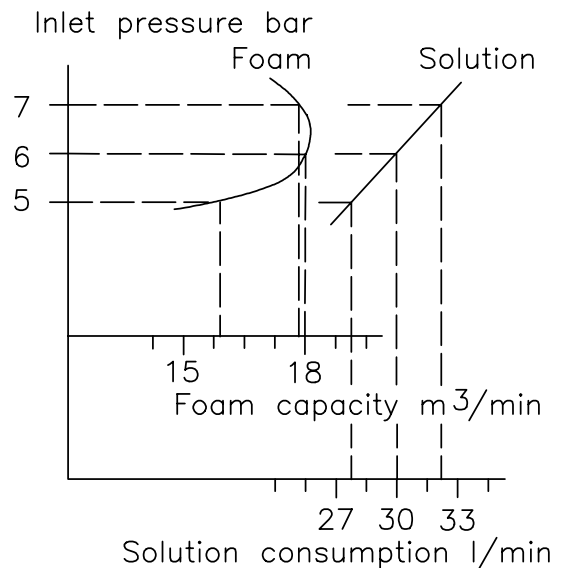
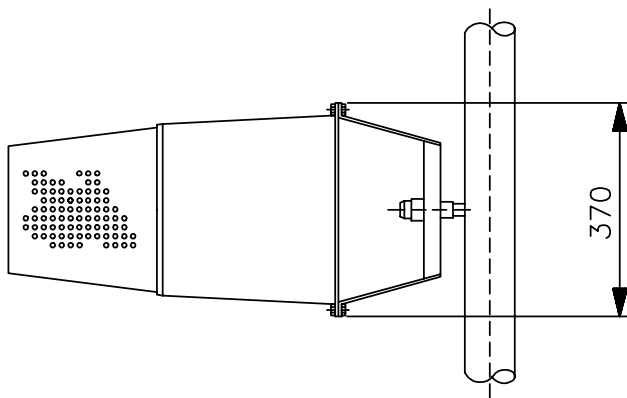


Dimensions

HG-15



L=Min. 800 or mounted crosswise



Performance data

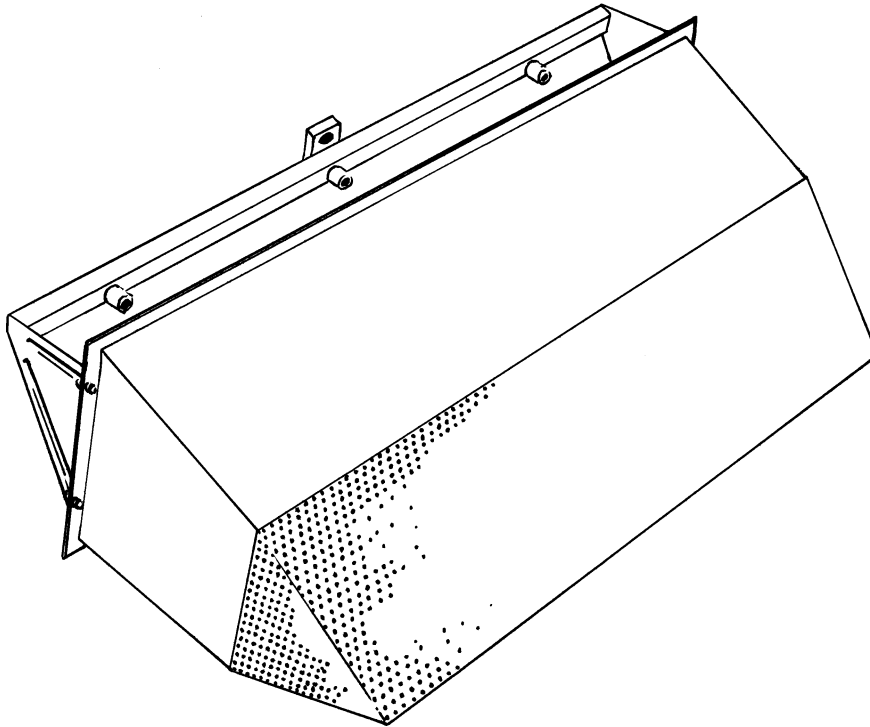
1 bar = 0,1 MPa = 14,5 psi

Nominal rating: At inlet pressure 6 bar the solution consumption is 30 l/min. and the foam capacity is 18 m³ /min.

Connection: Female 1/2" BSP
 Material: Stainless steel
 Weight: 5 kg/11 lbs



Technical changes reserved without notice



Description

The high expansion foam generator HG-25 is primarily designed as an integrated part of the SKUM HOT-FOAM system, where air from the protected volume is used for the foam production, also under the presence of smoke and combustion gases.

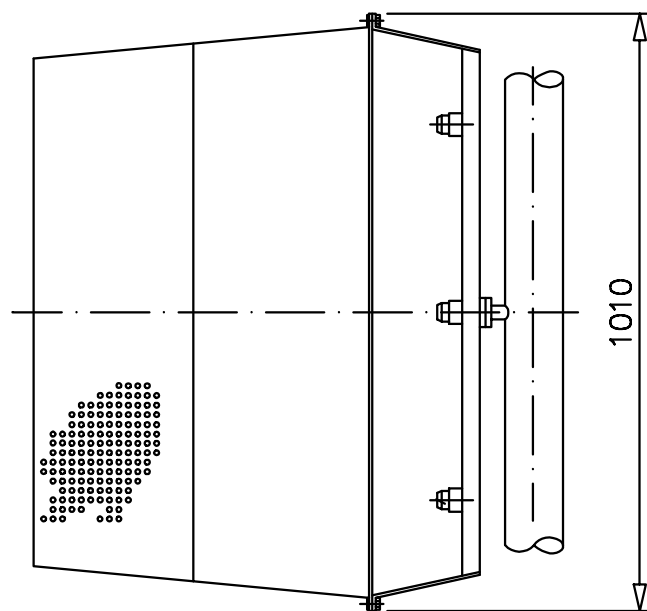
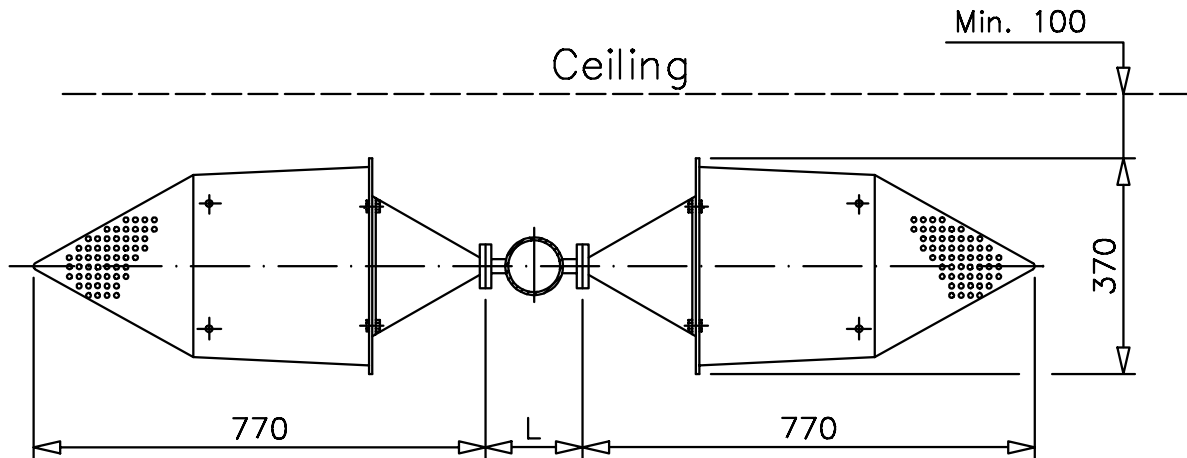
HG-25 advantages

- Low weight = easy to install
- No moving parts = minimized maintenance
- Stainless steel housing and net
- Modular system concept giving flexibility at installation
- High capacity, up to 60 m³ foam/min

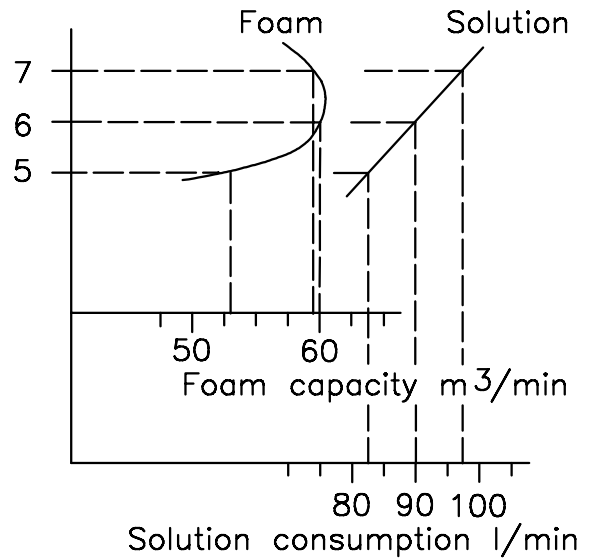


Dimensions

HG-25



L=Min. 800 or mounted crosswise
Inlet pressure bar



Performance data

1 bar = 0,1 MPa = 14,5 psi

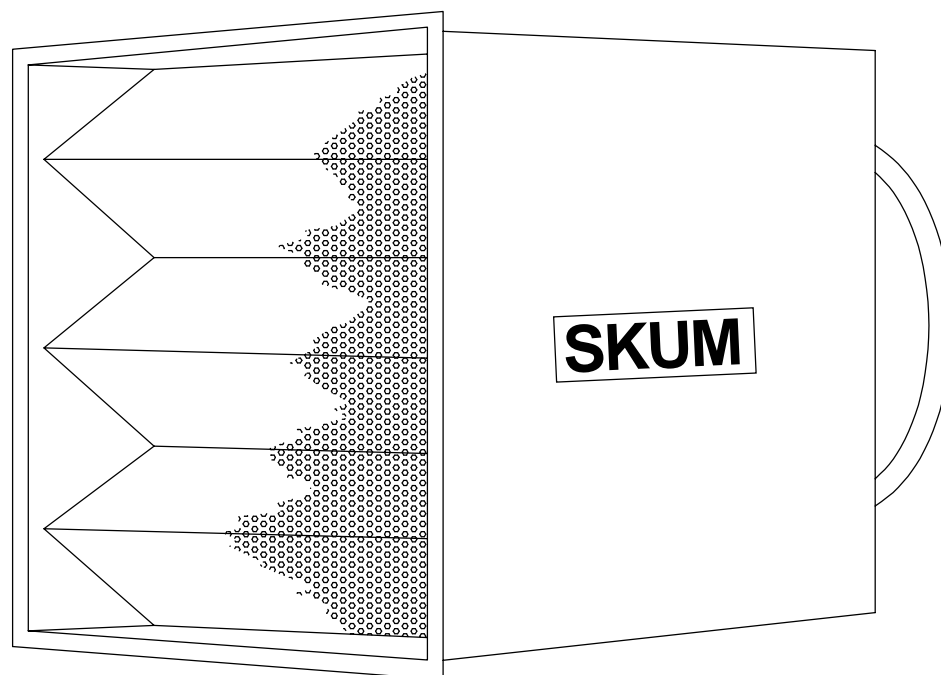
Nominal rating: At inlet pressure 6 bar the solution consumption is 90 l/min. and the foam capacity is 60 m³ /min.

Material: Stainless steel

Weight: 10 kg/22 lbs



Technical changes reserved without notice



Description

The water-driven foam generator HiEx-250 WD is designed to produce high expansion foam up to 190 m³/min. A fan is driven by reaction force from three water nozzles mounted on the fan shaft. The unit is to be connected to a foam solution line.



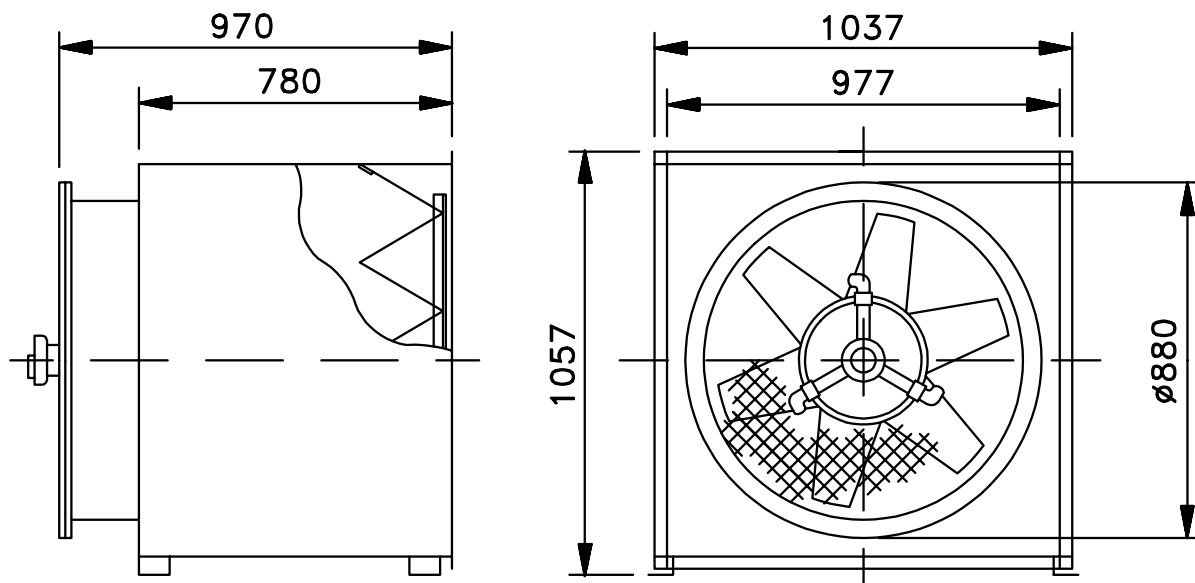
HIGH EXPANSION FOAM GENERATOR

00/01

1022/34

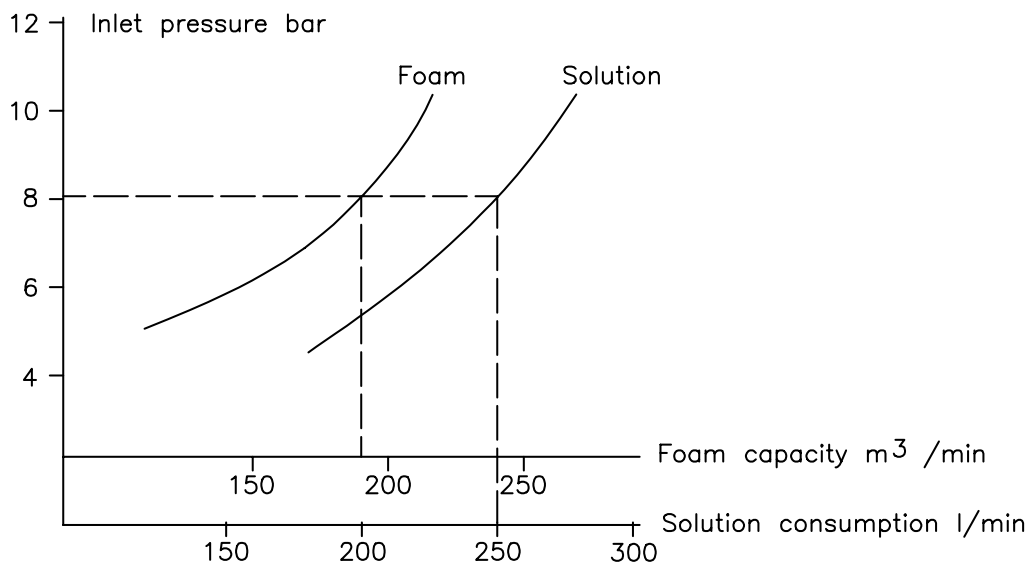
Dimensions

HiEx-250 WD



Performance data

1 bar = 0,1 MPa = 14,5 psi



Example: At inlet pressure 8 bar, the solution consumption is 250 l/min and the foam capacity is 190 m³ /min.

Material: Stainless steel or mild steel
Surface treatment mild steel: Zink primer and red 2-component paint
Connection: Female 2" BSP
Weight: 98 kg/216 lbs



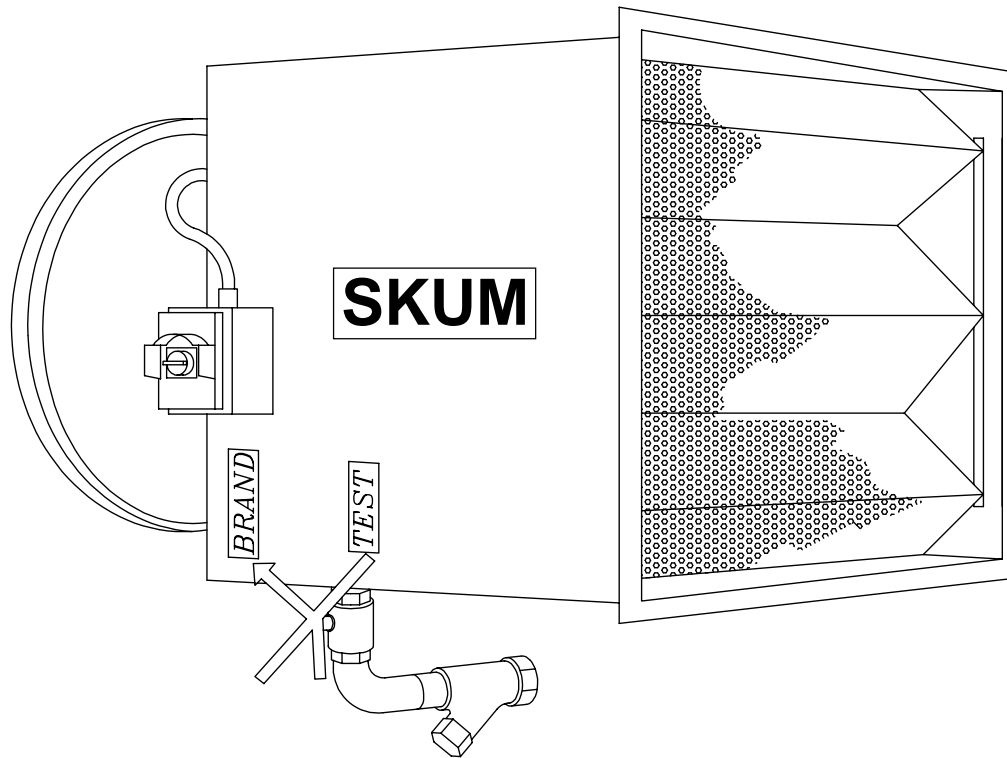
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HiEx-300 EL



Description

The electric-driven foam generator HiEx-300 EL is designed to produce high expansion foam up to 300 m³/min.

The unit is primarily intended for wall mounting and permanent connection to a foam solution line. When not in use, the air intake is protected by a

cylinder-operated cover that automatically opens when the unit is pressurized. A test valve and strainer are included.

By moving a lever it is possible to test the function of the unit without producing foam.



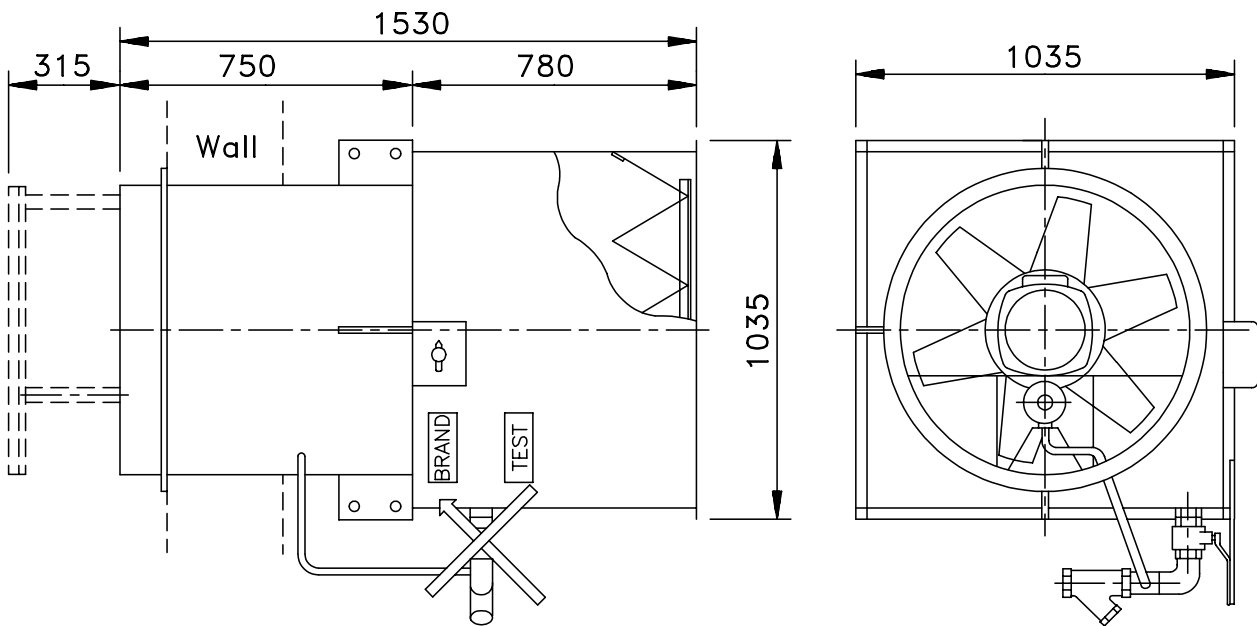
HIGH EXPANSION FOAM GENERATOR

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1022/33

Dimensions

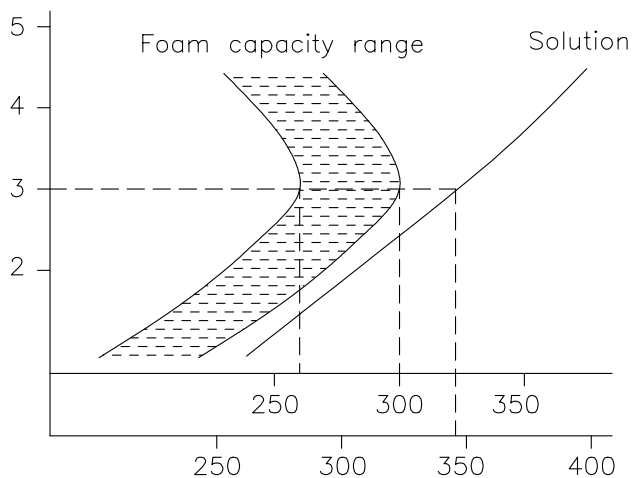
HiEx-300 EL



Performance data

1 bar = 0,1 MPa = 14,5 psi

Inlet pressure bar



Foam capacity m³ /min

Solution consumption l/min

Example: At inlet pressure 3 bar, the solution consumption is 345 l/min and the foam capacity is 260 - 300 m³/min depending on the installation conditions.

Material: Casing	Mild steel
Screen	Stainless steel
Surface treatment:	Zink primer and red 2-component paint
Electric motor:	3-phase, 3,7 kw
Connection:	Female 2" BSP
Weight:	220 kg/485 lbs



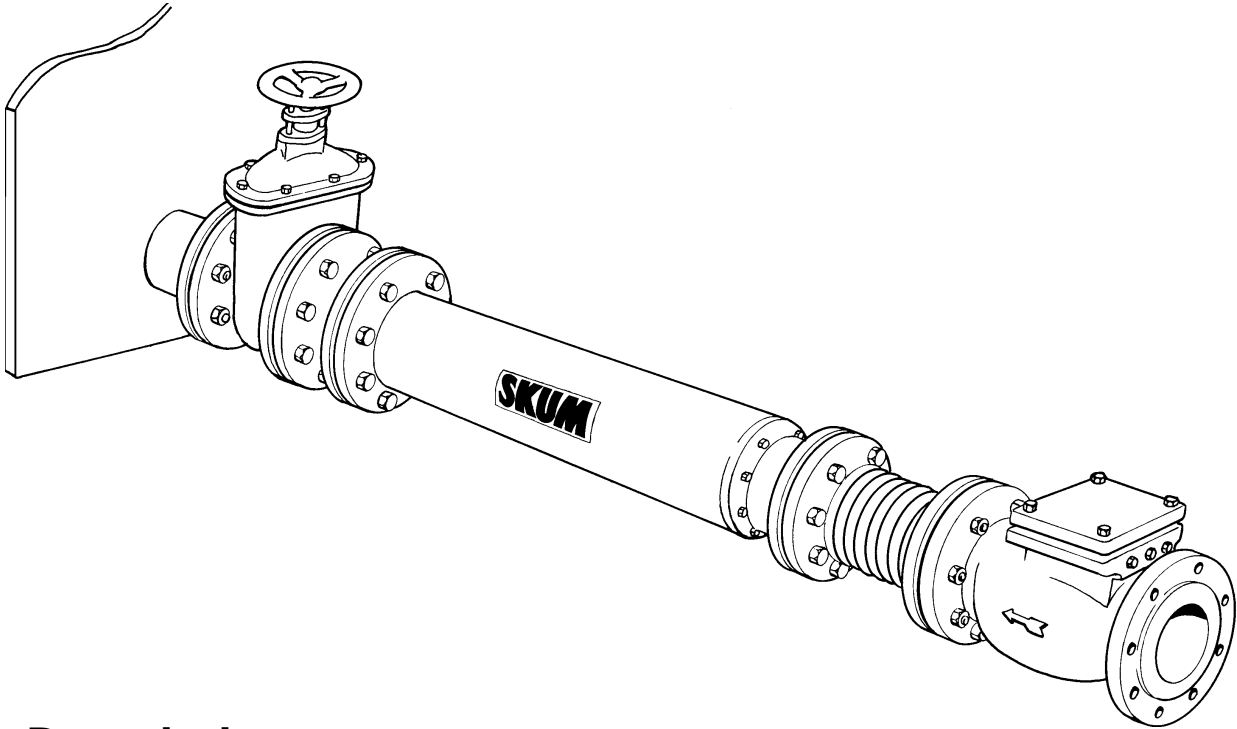
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HSSS-80/100
HSSS-100/150
HSSS-150/200

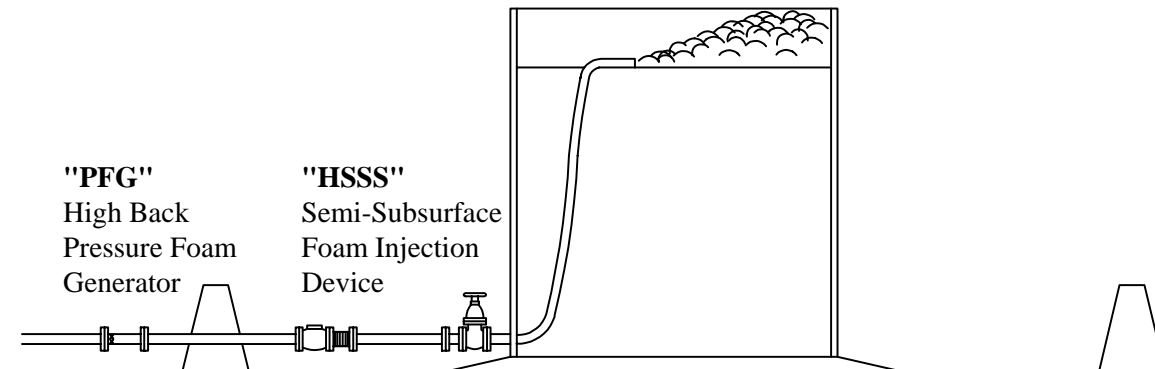


Description

The HSSS is a foam application device intended for delivery of expanded foam through a hose to the liquid surface of a tank. It consists of a special woven hose folded into a container mounted on the outside of the tank. The hose is separated from the liquid in the tank by a

sealing membrane.

The unit is supplied with foam under pressure from a high back pressure foam generator via a supply line. As the foam enters the unit, the hose is pressed through the membrane into the tank and floats up to the liquid surface.



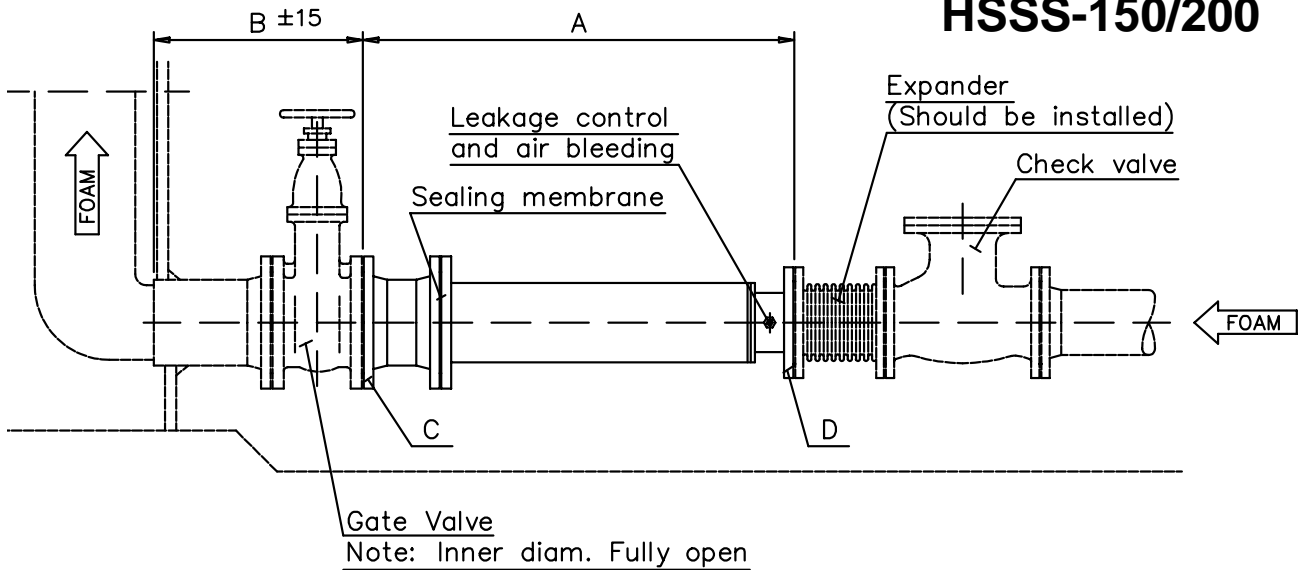
SEMI-SUBSURFACE FOAM INJECTION DEVICE

97/09

1008/5

Dimensions

HSSS-80/100
HSSS-100/150
HSSS-150/200



Performance data

1 bar = 0,1 MPa = 14,5 psi

HSSS	80/100	100/150	150/200
Water capacity, max.	750 l/min 198 USGPM	1400 l/min 370 USGPM	2500 l/min 660 USGPM
Height of tank max.	13 m	20 m	28 m
Bursting pressure	0,4 bar 5,8 psi	0,2 bar 2,9 psi	0,2 bar 2,9 psi
Dimensions, mm	A B	805 490	960 510
Connection inlet	D	80 Din PN 10/16 or 3" ANSI 150 lbs	100 Din PN 10/16 or 4" ANSI 150 lbs
Connection outlet	C	100 Din PN 10/16 or 4" ANSI 150 lbs	150 Din PN 10/16 or 6" ANSI 150 lbs
Max. working pressure	6 bar 87 psi	6 bar 87 psi	6 bar 87 psi
Weight	28 kg 62 lbs	47 kg 104 lbs	70 kg 154 lbs
Material			
Hose container		Stainless steel	
Hose		Terylene	
Foam sealing membrane		Stainless steel/teflon	
Distance part (C)		Steel, galvanized	
Flanges		Steel, galvanized	

The shut-off valve between tank and the hose container shall be a gate valve, approved by us to ensure proper function.



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PRODUCT DESCRIPTION**General information**

The ”Meteor P+” foam concentrate is based on synthetic surface active components. It is specially developed to meet the requirements of the ”HotFoam” system but is also suitable for other applications where a high quality foam concentrate is required.

”Meteor P+” can be used with fresh, sea or brackish water. Stored in original container or suitable tank the foam concentrate shows no degeneration. Temporary freezing and thawing does not affect the product.

The ”Meteor P+” foam concentrate is available in 20lit can and 200lit barrel as standard packages.

Technical Data

Density	1.03± 0,01 kg/l
Acidity at 20°C	6,5-8,5
Cloud point	-2°C
Pour point	below -10°C
Sediments	None
Viscosity at 20°C	>40 mm ² /sec.
0°C	>80 mm ² /sec.
Induction rate	2 - 3 %

Recommended use

Storage temp	max. +45°C min -5°C
Usage temp	min -5°C
Storage containers	original container coated carbon steel tanks GRP or other plastic tanks stainless steel tanks bladder tanks (rubber bladders)

Controlled tank ventilation is recommended. Storage of premix is not recommended. Consult Svenska Skum for advice.



Safety

”Meteor P+” foam concentrate include no hazardous components. The concentrate may however be irritant to eye or skin when exposed. If exposed wash with copious amounts of water. If swallowed, do not induce vomiting, seek medical attention.

Contaminated clothing should be laundered before use. Rubber gloves and safety glasses are recommended.

Contain and collect spill. Dispose according to local regulations (see also environment part of this information).

Areas on which a spill has occurred may be slippery.

Flash point: >100°C.

Environment

Information on elimination

The product is bio-degradable
After 5 days approx. 68%

COD (Chemical Oxygen Demand)

APPR. 22.000 mg/liter (2 % solution)

BOD₅ (Biochemical Oxygen Demand)

APPR. 15.000 mg/liter (2 % solution)

TOC (Total Organic Carbon)

APPR. 5.200 mg/liter (2 % solution)

Restoring of frozen concentrate

If for any reason the ”Meteor P+” foam concentrate has become frozen (solid or semisolid) for instance during transportation etc. It can easily be restored from it’s solid / semisolid phase by heating (max. +45°C). The concentrate will recover completely and all properties will remain according to specifications.

Composition (major ingredients)

Alkyl Ether Sulphates

Lauryl Alcohols

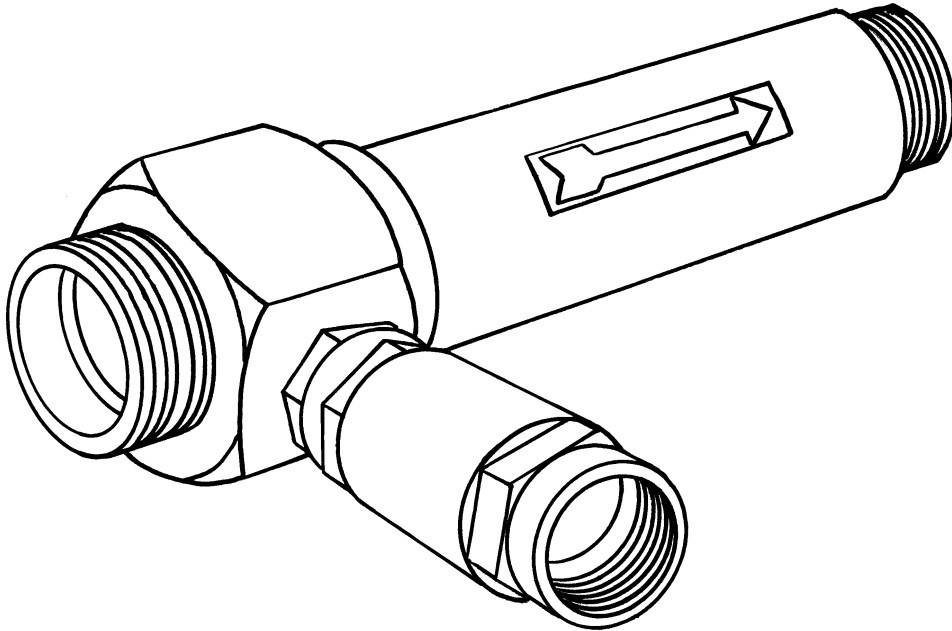
Ethanol

Alkyl Sulphate

Water



Technical changes reserved without notice

MI-25 F

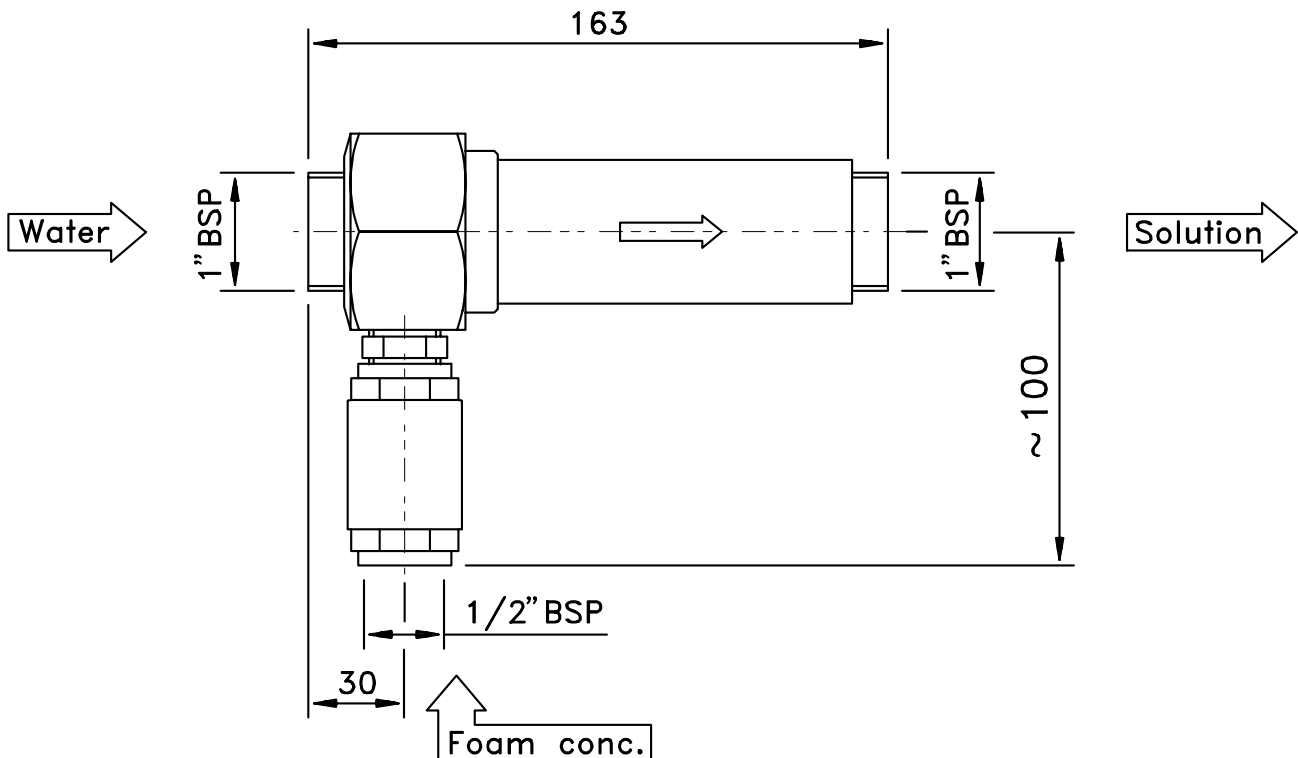
Description

The basic function of this stationary inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance

between inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be mounted anywhere in the main water line between the pressure water source and the foam generator(s).



Dimensions**MI-25 F****Performance****1 bar = 0,1 MPa = 14,5 psi**

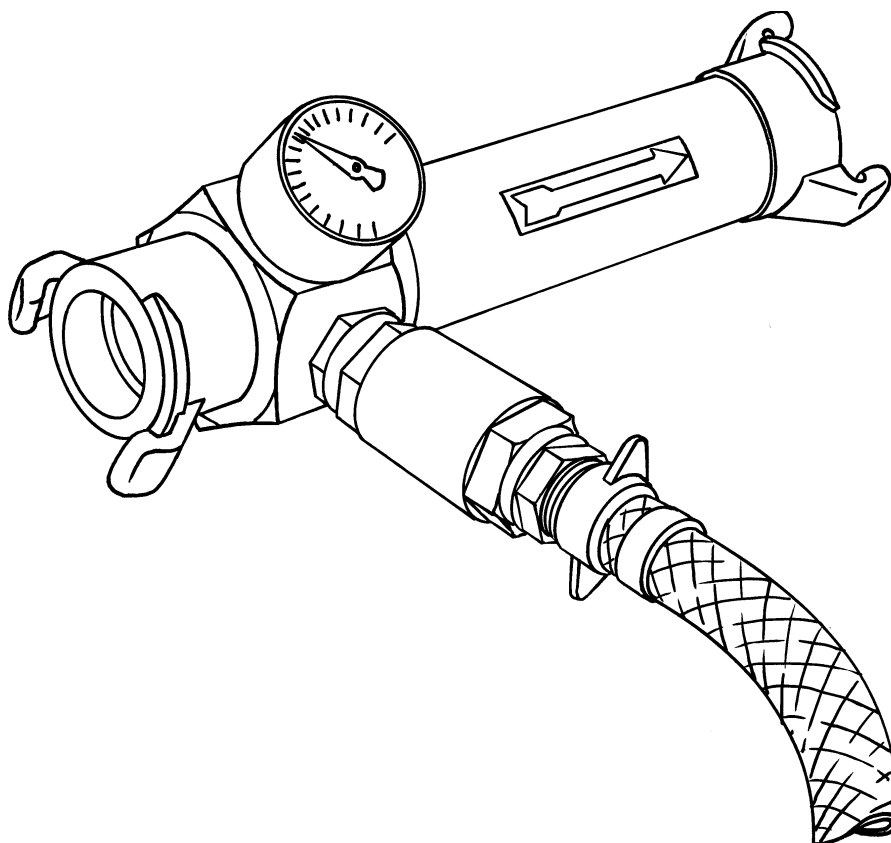
Working pressure:	Max 16 bar/232 psi
Water capacity at 16 bar:	Max 400 l/min - 105 USGPM
Proportioning:	Max 6%
Pressure drop:	Approx. 35% of inlet pressure
Material:	Brass
Connection: Water	Male 1" BSP
Foam concentrate	Female 1/2" BSP
Weight:	2,6 kg/5,7 lbs

Foam concentrate check valve included.

Optional: Foam conc. suction hose.



Technical changes reserved without notice



Description

The basic function of this portable inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance between

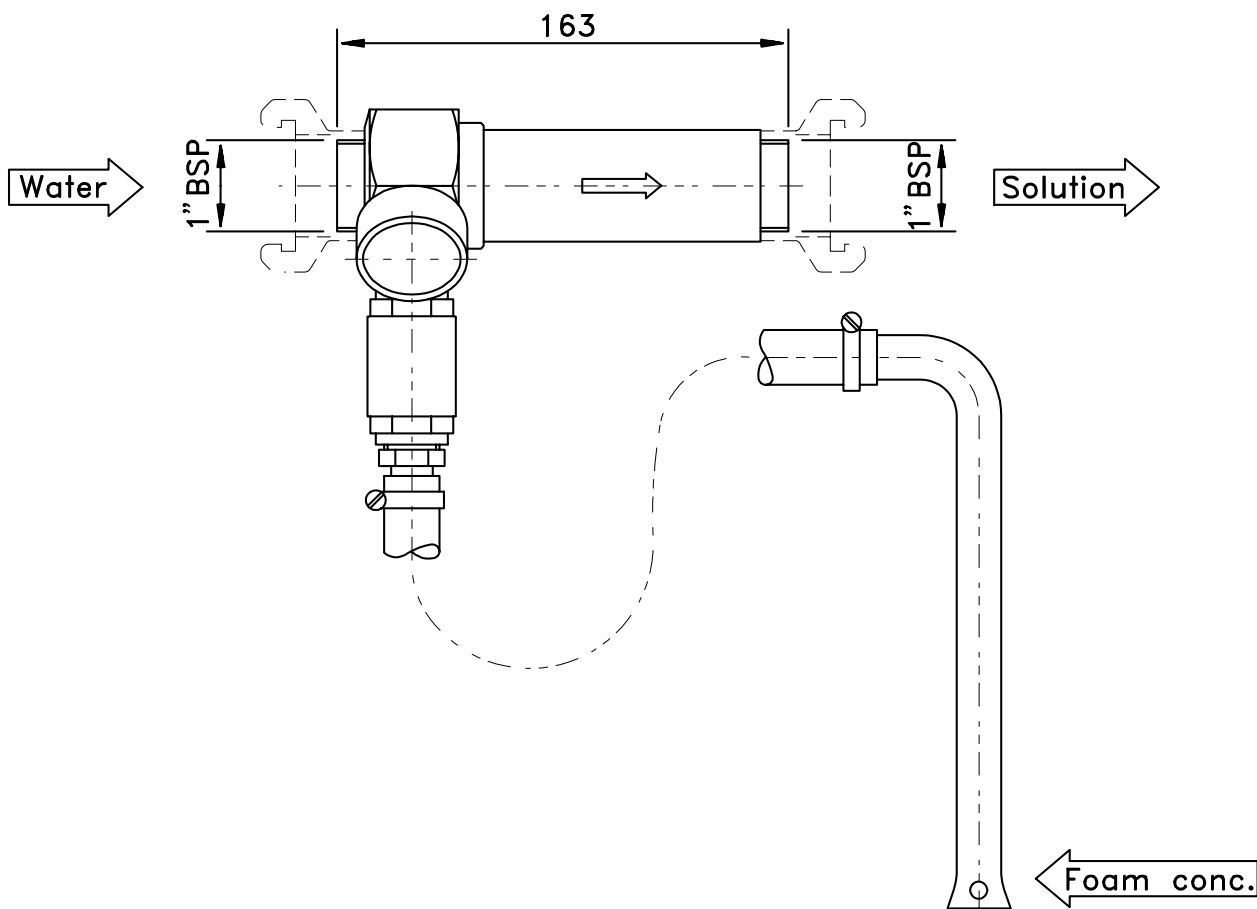
inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be connected anywhere in the main water line between the pressure water source and the foam generato(s).



Dimensions

MI-25 P



Performance data

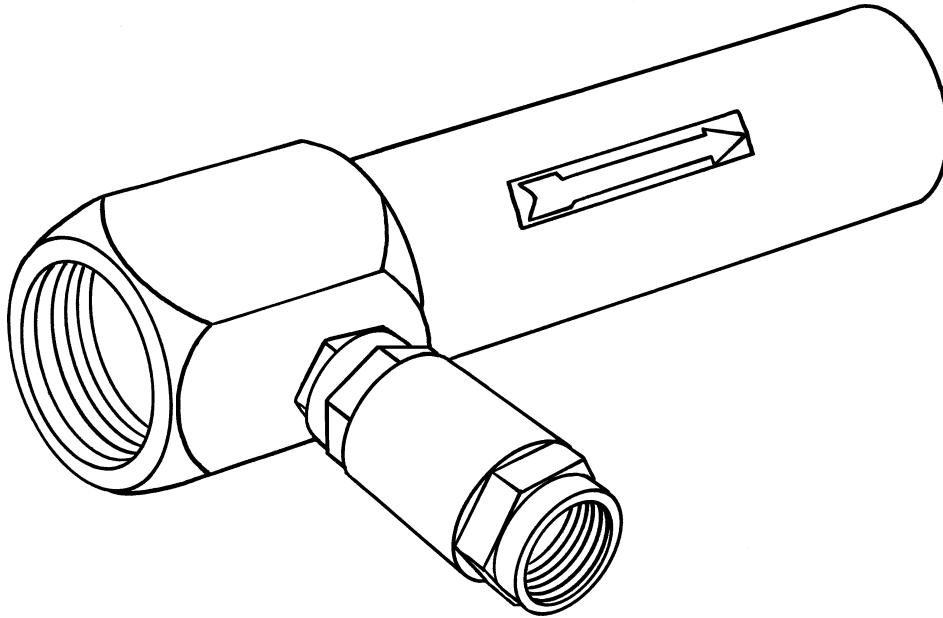
1 bar = 0,1 MPa = 14,5 psi

Working pressure:	Max 16 bar/232 psi
Water capacity at 16 bar:	Max 400 l/min - 105 USGPM
Proportioning:	Max 6%
Pressure drop:	Approx. 35% of inlet pressure
Material:	Brass
Connection:	Male 1" BSP or specified coupling
Weight:	2,6 kg/5,7 lbs

Foam concentrate hose 1/2" L=1,5 m, pick-up tube, pressure gauge and check valve included.



Technical changes reserved without notice



Description

The basic function of this inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance between

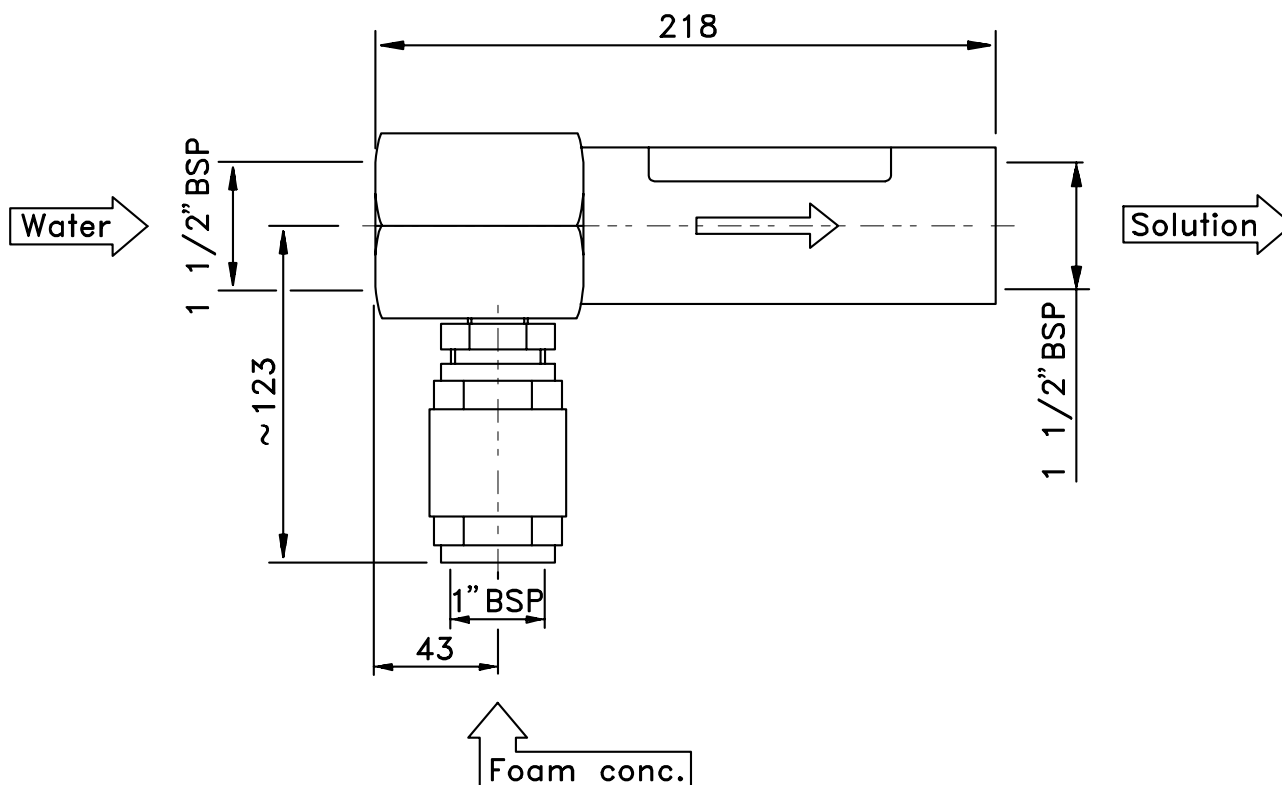
inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be connected anywhere in the main water line between the pressure water source and the foam generator(s).



Dimensions

MI-40



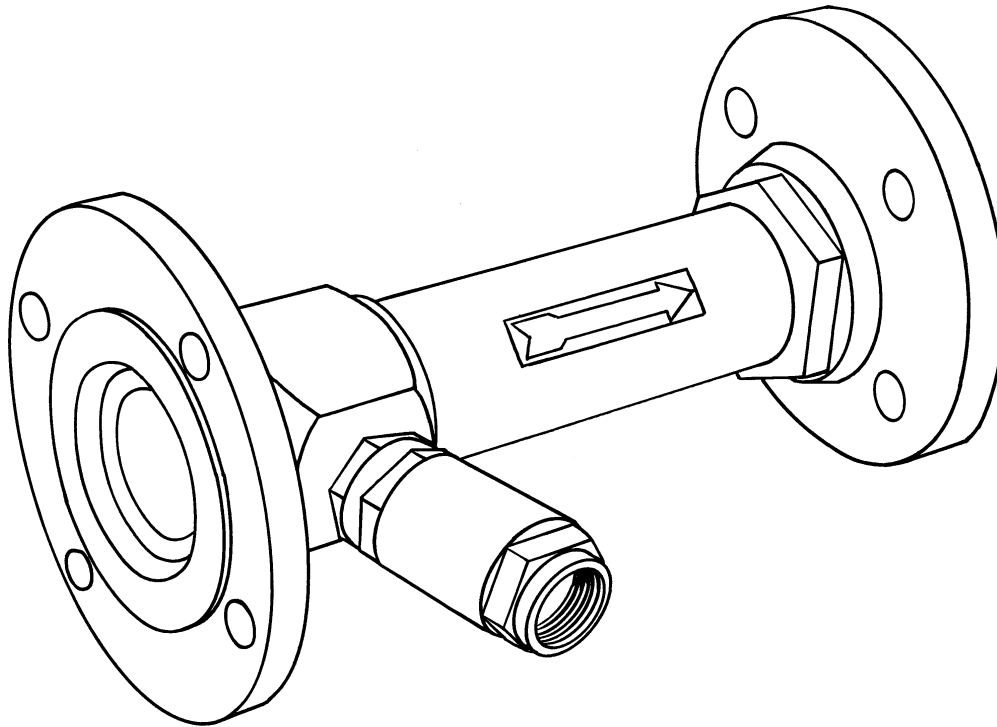
Performance data

1 bar = 0,1 MPa = 14,5 psi

Working pressure:	Max 16 bar/232 psi
Water capacity at 16 bar	Max 1450 l/min - 382 USGPM
Proportioning	Max 6 %:
Pressure drop:	Approx. 35 % of inlet pressure
Material:	Brass
Connection:	
Water	Female 1 1/2" BSP
Foam concentrate	Female 1" BSP
Weight	5,5 kg/12 lbs
Foam concentrate check valve included.	
Optional: Foam conc. suction hose.	



Technical changes reserved without notice

MI-50 F
MI-65 F
MI-80 F

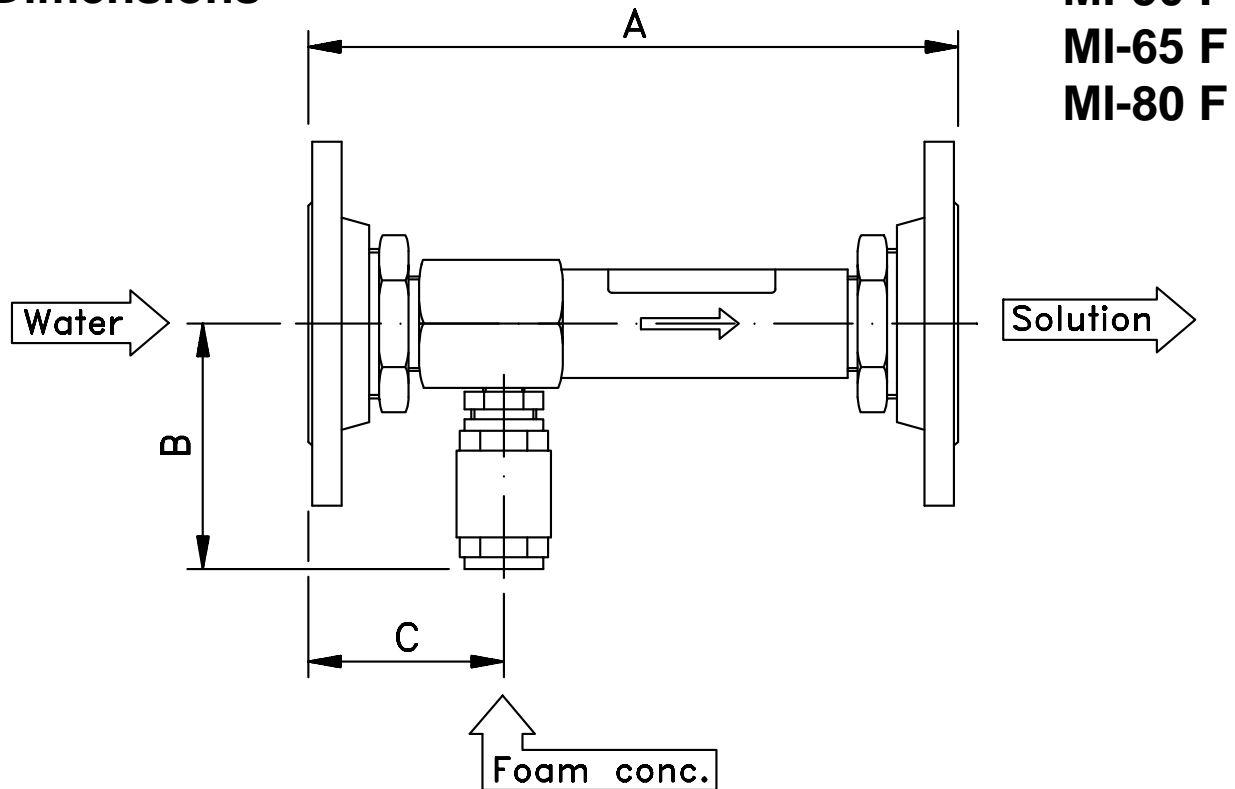
Description

The basic function of this stationary inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance

between inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be mounted anywhere in the main water line between the pressure water source and the foam generator(s).



Dimensions**Performance data****1 bar = 0,1 MPa = 14,5 psi**

Water capacity at 16 bar:	Max. 1450 l/min - 382 USGPM
Working pressure:	Max. 16 bar/232 psi
Proportioning:	Max. 6 %
Pressure drop:	Approx. 35 % of inlet pressure
Material:	
Body	Brass
Flange	Galvanized steel
Check valve	Brass

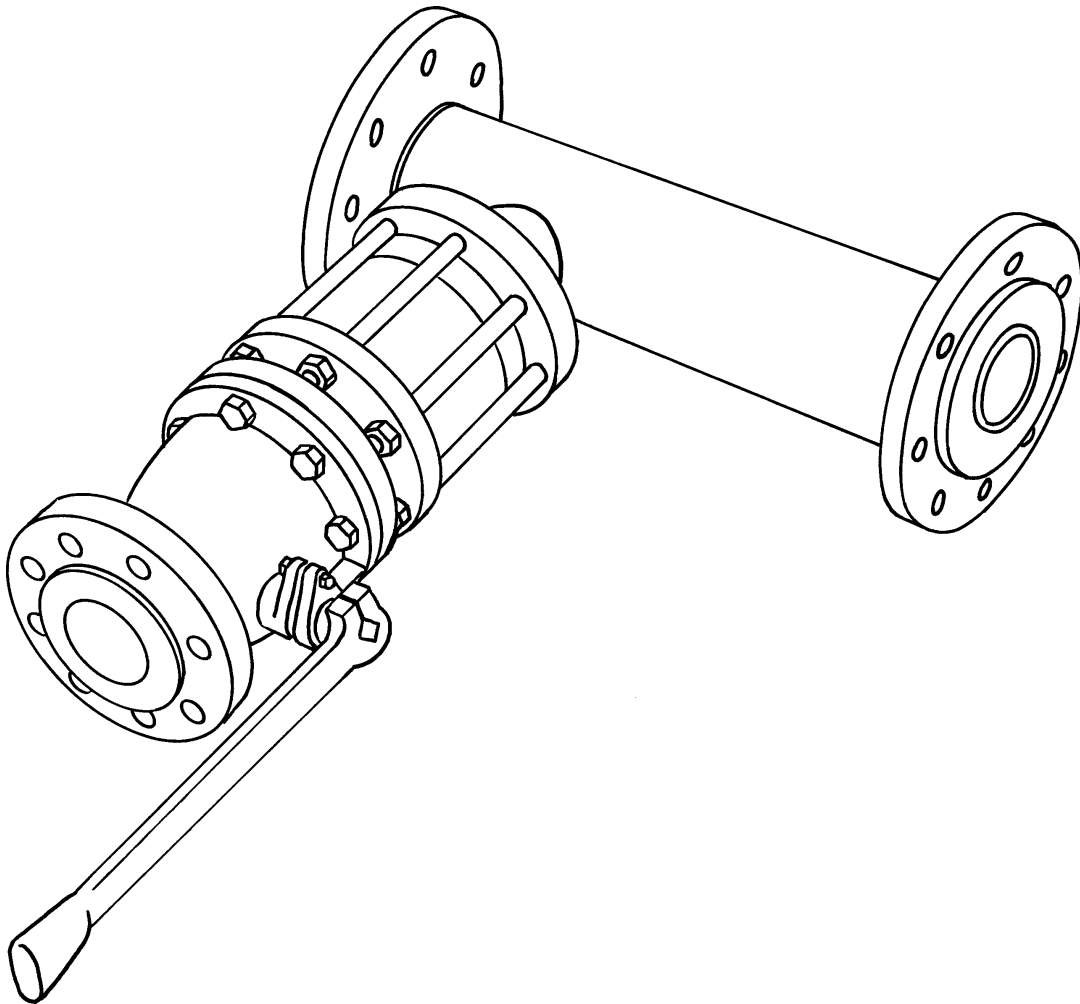
MI		50 F	65 F	80 F
Connection: Water		50 DIN PN 16 or 2"ANSI 150 lbs	65 DIN PN 16 or 2 1/2"ANSI 150 lbs	80 DIN PN 16 or 3"ANSI 150 lbs
Foam conc.		Female 1" BSP	Female 1" BSP	Female 1" BSP
Dimension, mm approx.	A	330	330	350
	B	123	123	123
	C	100	100	110
Weight		10,5 kg/23 lbs	13 kg/28,5 lbs	15,5 kg/34 lbs

Foam concentrate check valve included.

Optional: Foam conc. suction hose.



Technical changes reserved without notice

MI-100 F
MI-150 F

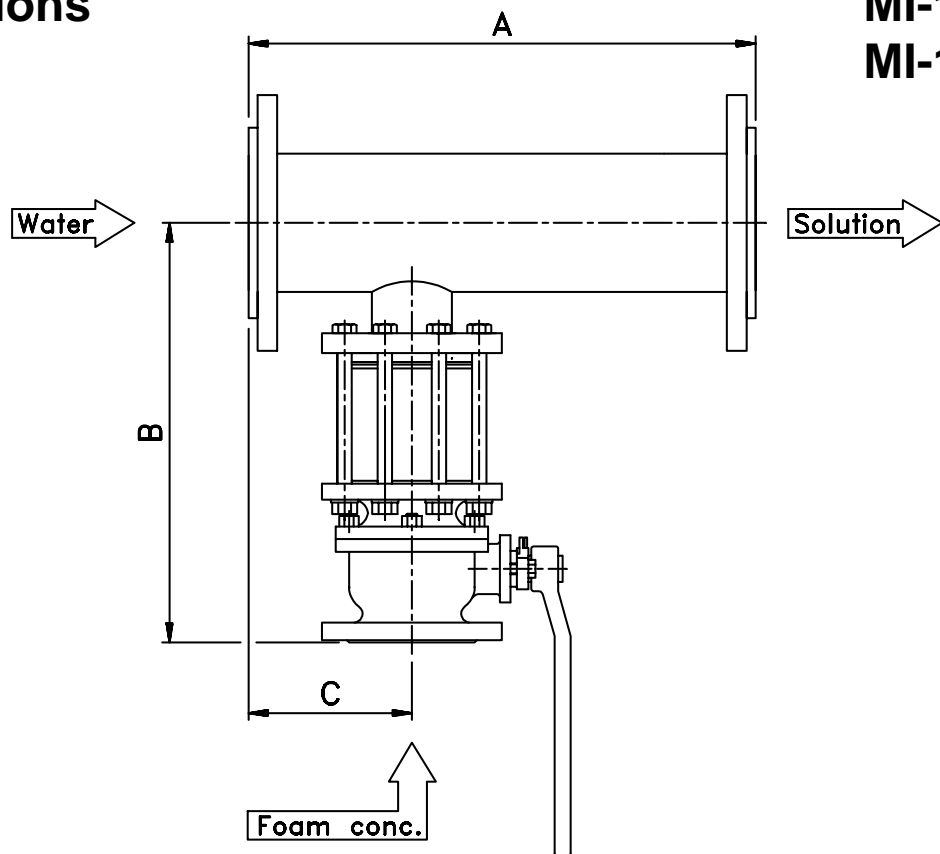
Description

The basic function of this stationary inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance

between inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be mounted anywhere in the main water line between the pressure water source and the foam generator(s).



Dimensions**MI-100 F**
MI-150 F**Performance data****1 bar = 0,1 MPa = 14,5 psi**

Working pressure:	Max. 16 bar/232 psi
Proportioning:	Max. 6 %
Pressure drop:	Approx. 35 % of inlet pressure
Material:	
Body	Stainless steel
Nozzle and diffusor	Polypropylene
Flange	Galvanized steel
Foam concentrate regulating valve	Stainless steel

MI	100 F	150 F
Water capacity at 16 bar	Max. 4670 l/min. - 1230 USGPM	Max. 11350 l/min. - 2990 USGPM
Connection: Water	100 DIN PN 16 or 4"ANSI 150 lbs	150 DIN PN 16 or 6"ANSI 150 lbs
Foam conc.	50 DIN PN 16 or 2"ANSI 150 lbs	80 DIN PN 16 or 3"ANSI 150 lbs
Dimensions, mm approx.	A	490
	B	337
	C	144
Weight	26 kg/57 lbs	55 kg/121 lbs

Foam concentrate regulating shut-off valve and foam concentrate check valve included.

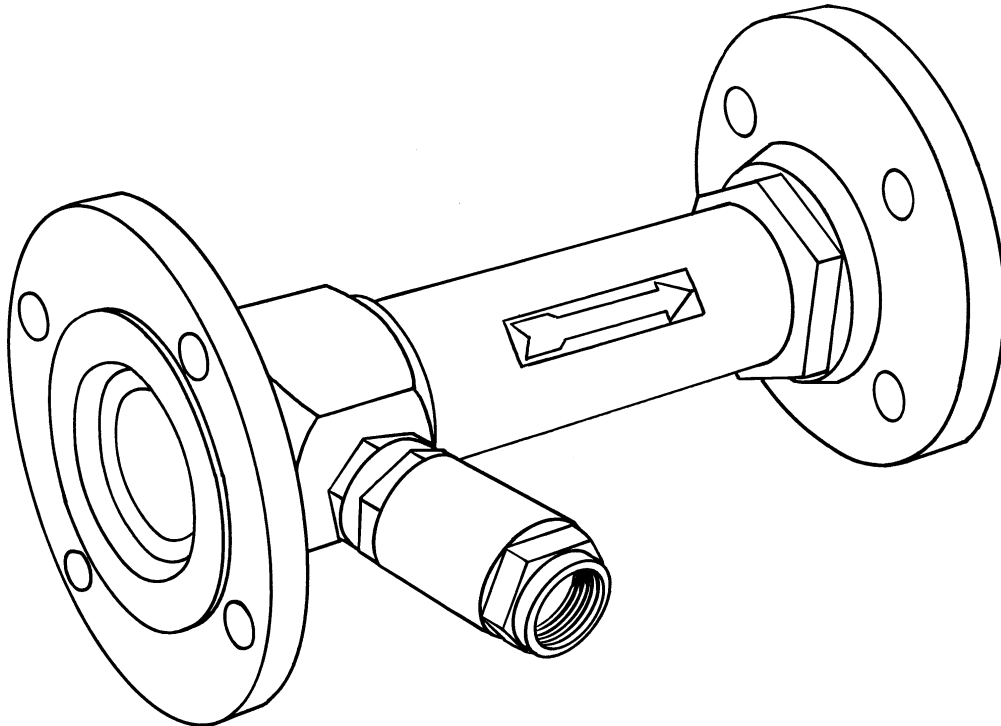


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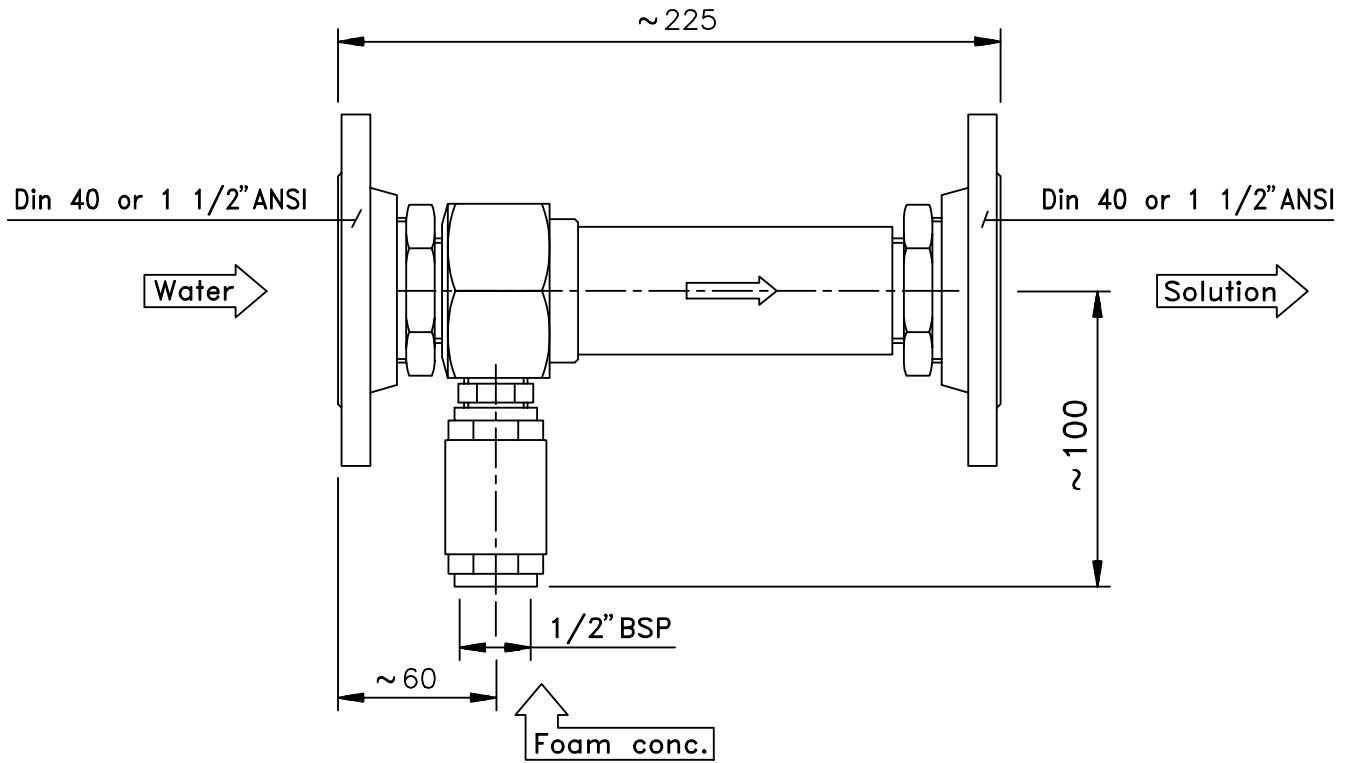
MI-25/40 F**Description**

The basic function of this stationary inline inductor is to inject foam concentrate into a water line. It provides a simple and dependable means of injection. The MI inductor is designed to handle high counter pressures, related to the inlet pressure, meaning that a long distance

between inductor and the foam generator can normally be tolerated.

Each inline inductor is calibrated for a given fixed flow/pressure relation. It can be mounted anywhere in the main water line between the pressure water source and the foam generator(s).



Dimensions**MI-25/40 F****Performance****1 bar = 0,1 MPa = 14,5 psi**

Working pressure:	Max 16 bar/232 psi
Water capacity at 16 bar:	Max 400 l/min - 105 USGPM
Proportioning:	Max 6%
Pressure drop:	Approx. 35% of inlet pressure
Material:	
Body	Brass
Flange	Galvanized steel
Connection:	
Water	40 Din PN 16 or 1 1/2" ANSI 150 lbs
Foam concentrate	Female 1/2" BSP
Weight:	7 kg/15,5 lbs
Foam concentrate check valve included.	
Optional: Foam conc. suction hose.	



Technical changes reserved without notice