

## Balanced Pressure Proportioner PP and PPW

### General Description

The balanced pressure proportioner induces foam concentrate into the feed water line and the proportioning rate is site adjustable, though initially set during manufacture.

### Application Description

This type of proportioner is used in foam pump systems. The PP series is designed for monitor and deluge systems.

The PPW (wide range proportioner) offers accurate proportioning of foam concentrate irrespective of variations in flow and pressure. These capabilities are vital for the correct proportioning of foam concentrates into feed water lines.

### Product Features

- Easily adjustable integrated foam regulating nozzle
- Accurate proportioning over the range
- Maintenance free construction
- Compact design
- Water connection wafer type
- Foam connection flanged or screw threaded
- Made of high grade corrosion resistant bronze and stainless steel
- Dynamic flow range up to 100:1 (PPW)

### Connections

- Water: Wafer mounted between flanges (see table)
- Foam inlet: flanged to fit DIN PN16 or ANSI 150 lbs or screw threaded BSP

### Listings and Approvals

- Det Norske Veritas (DNV)
- Factory Mutual approval for: PP-100/50; 150/50; 200/80; PPW-100/50; 150/50; 200/80
- RINA approval for PP-100/50; PPW-100/50
- Russian Maritime Register of Shipping
- Chinese class CCS PP-100/50 and 150/50

### Operation

The proportioner will operate automatically when the flow and pressure are within the flow range. The foam pressure must be at least one bar higher than the water pressure through the proportioner.



PP-80/20



PP-100/50



### Optional

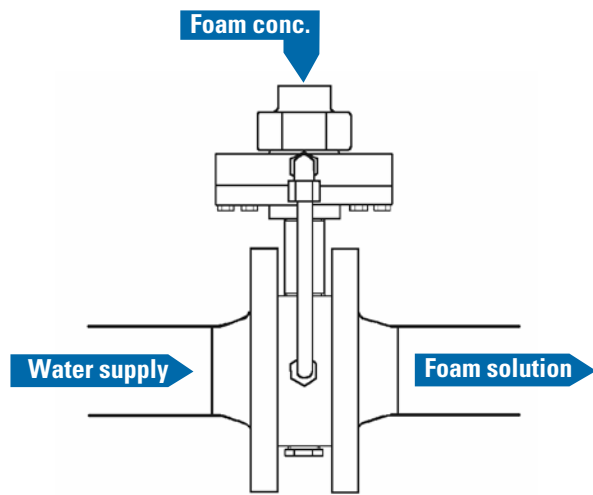
- Available in optional materials including stainless steel, super duplex and titanium.
- Gauges on foam/water lines

### Order Information - Please Specify

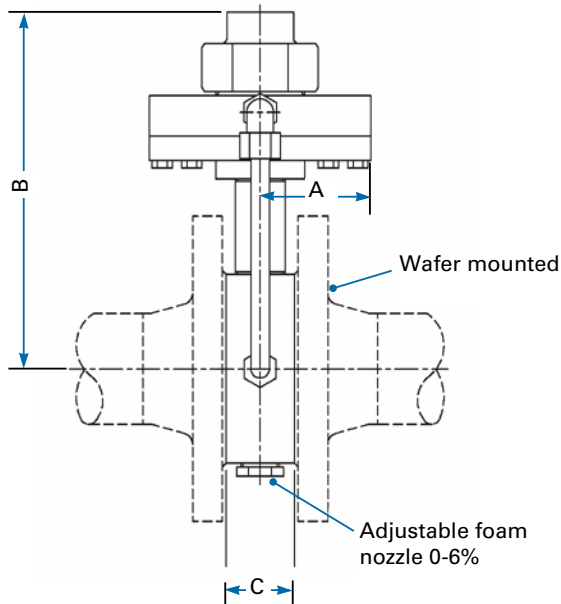
1. Size
2. Connection: DIN or ANSI

Part No.	Description
■ 123010102	PP-100/50 DIN/ANSI
■ 123015105	PP-150/50 DIN/ANSI
■ 123020103	PP-200/80 DIN
■ 123020152	PP-200/80 ANSI
■ 123025108	PP-250/80 DIN
■ 123025157	PP-250/80 ANSI
■ 123210106	PPW-100/50 DIN/ANSI
■ 123215114	PPW-150/50 DIN/ANSI
■ 123220105	PPW-200/80 DIN
■ 123220154	PPW-200/80 ANSI
■ 123225104	PPW-250/80 DIN
■ 123225153	PPW-250/80 ANSI

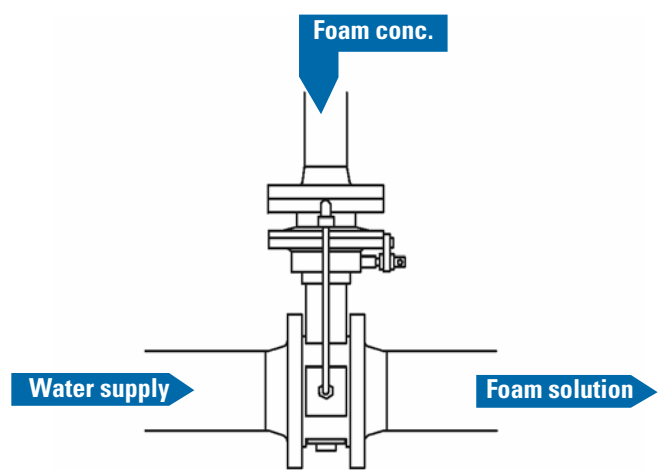
## PP-50 PP-80



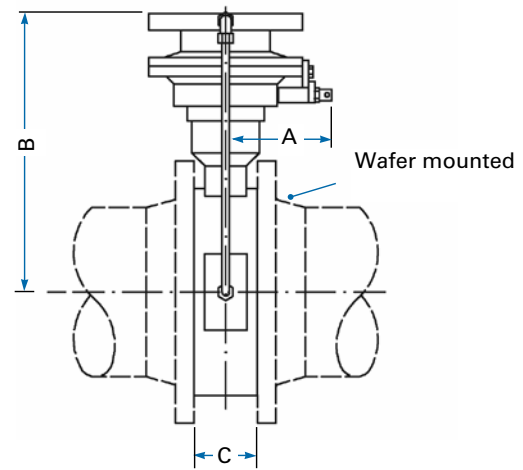
Principle flow diagram



## PP / PPW



Principle flow diagram



## Dimensions PP and PPW

PP	PPW	A mm	B mm	C mm
■ PP-50/20		60	200	37
■ PP-80/20		60	200	37
■ PP-100/50	PPW-100/50	115	271	70
■ PP-150/50	PPW-150/50	115	297	70
■ PP-200/80	PPW-200/80	140	361	82
■ PP-250/80	PPW-250/80	140	390	82

## Performance Data PP Proportioners

Type	Connection		Min. capacity		Max. capacity*		Weight	
	Foam/Water	Water	l/min	USGPM	l/min	USGPM	kg	lbs
PP-50/20	¾" BSP	50 / 2"	125	33	800	211	6	13
PP-80/20	¾" BSP	80 / 3"	300	79	2,000	528	10	22
PP-100/50	50 / 2"	100 / 4"	770	203	4,900	1,295	20	44
PP-150/50	50 / 2"	150 / 6"	1,500	395	9,800	2,589	25	55
PP-200/80	80 / 3"	200 / 8"	2,875	760	21,100	5,575	44	97
PP-250/80	80 / 3"	250 / 10"	5,100	1,347	33,100	8,745	54	119

The foam concentrate pressure must exceed the water pressure by at least 1 bar  
 \*(at 1.5bar pressure drop,  $Q [lpm] \sqrt{p} = k\text{-factor}$ )

## Performance Data PPW Proportioners

Type	Connection		Min. capacity		Max. capacity*		Weight	
	Foam/Water	Water	l/min	USGPM	l/min	USGPM	kg	lbs
PPW-100/50	50 / 2"	100 / 4"	75	20	2,500	661	20	44
PPW-150/50	50 / 2"	150 / 6"	100	26	5,600	1,480	26	57
PPW-200/80	80 / 3"	200 / 8"	125	33	10,600	2,801	45	99
PPW-250/80	80 / 3"	250 / 10"	150	40	16,100	4,254	55	121

\*At proportioner system pressure drop 1.5 bar, Min. 0.3 bar  
 $Q [l/min.] \div \sqrt{P \text{ bar}} = k\text{-factor}$   
 1 bar = 0.1 MPa = 14.5 psi  
 Max. working pressure: 16 bar/235 psi