

## FOAM MIXERS

**Balanced pressure proportioner**

This mixer works balancing the pressure from water and foaming agent in order to assure a correct mixing ratio for different water pressure values, the device adjusts instantly the mixing ratio since the two pressure values are picked up from the water line and the foaming agent line and transferred into a balancing diaphragm at the top of the device.

Therefore the stem of the inside regulation valve positions itself to assure the correct quantity of foaming agent to be injected into the water line, which happens in the low pressure area of the Venturi mixer contained in the lower part.

A calibrated diaphragm at the inlet of the lower body defines the nominal mix percentage.

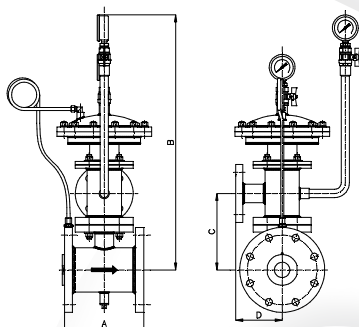
It is required for a correct operation the foaming agent pressure to be about 2 bar higher than the main water pressure line.

**Adjustable mixing rate**

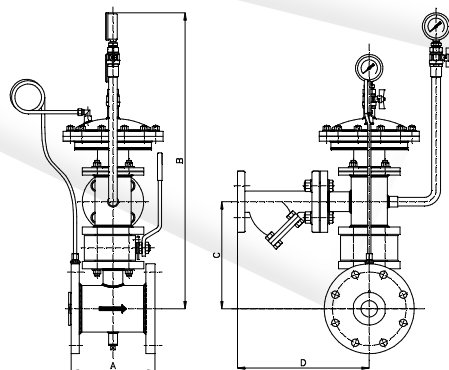
An optional valve can be assembled between the lower Venturi on the water line and the upper balancing section, allowing to adjust the device mixing ratio, which allows to use the same mixer with foaming agents working at a different percentages. Therefore a proportioner designed for 6% mixing ratio can work with a 3% foaming agent when required.

These mixers carry a RINA Type Approval Certificate, which is available on request.

STANDARD



OPTIONAL



Code (standard)	Flange Water		Flange Foamer		A	B	C	D	W
	PN16	ANSI 150	PN16	ANSI 150	mm	mm	mm	mm	kg
URD 0100 G1 XY	DN 100	4"	DN 40	1 ½"	205	661	198	120	57
URD 0125 G1 XY	DN 125	5"	DN 40	1 ½"	250	673	210	120	61
URD 0150 G1 XY	DN 150	6"	DN 50	2"	300	729	266	135	76
URD 0200 G1 XY	DN 200	8"	DN 50	2"	400	749	286,5	135	93
URD 0250 G1 XY	DN 250	10"	DN 65	2 ½"	500	785	322	145	147
URD 0300 G1 XY	DN 300	12"	DN 65	2 ½"	600	813	350,5	145	177
URD 0350 G1 XY	DN 350	14"	DN 65	2 ½"	690	830	367	145	215

Code (optional)	Flange Water		Flange Foamer		A	B	C	D	W
	PN16	ANSI 150	PN16	ANSI 150	mm	mm	mm	mm	kg
URD 0100 MMXY	DN 100	4"	DN 40	1 ½"	205	725	262	322	72
URD 0125 MMXY	DN 125	5"	DN 40	1 ½"	250	737	274	322	76
URD 0150 MMXY	DN 150	6"	DN 50	2"	300	805	342	367	95
URD 0200 MMXY	DN 200	8"	DN 50	2"	400	825	362,5	367	112
URD 0250 MMXY	DN 250	10"	DN 65	2 ½"	500	885	422	437	179
URD 0300 MMXY	DN 300	12"	DN 65	2 ½"	600	913	450,5	437	209
URD 0350 MMXY	DN 350	14"	DN 65	2 ½"	690	930	467	437	247

**Materials**

Mixer body

Inox AISI 304/316

Venturi nozzle

Bronze

Automatic valve parts

AISI 316 stainless steel

Mix ratio valve

Body carbon steel

Ball AISI 316 stainless steel

**Mix percentage**

The codes given in the above table refer to a mix percentage of 3%. Please refer to following page for complete coding information.

### Order Code

To have a precise identification of required product, the order code must be completed as in the following.

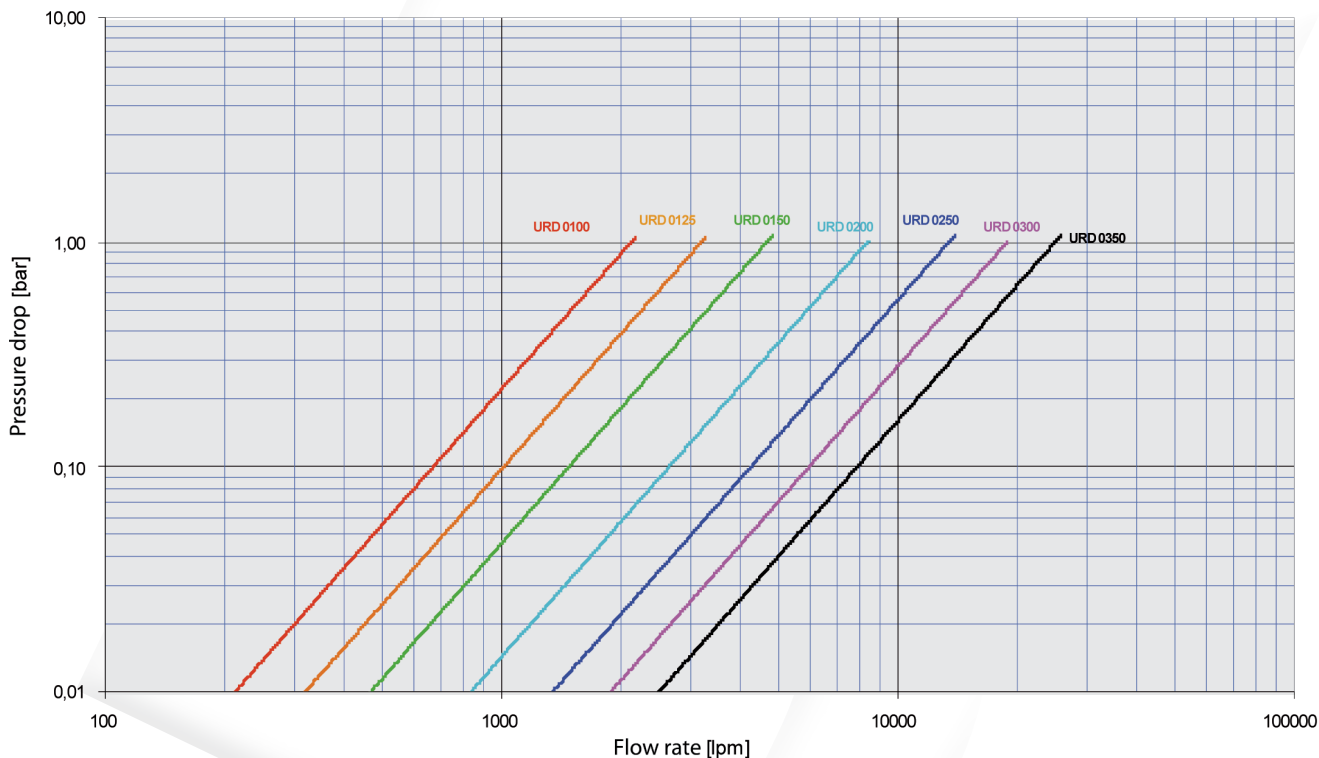
URD 0125 G1 X Y Z

**X** Flange type  
**Y** Mixing percentage  
**Z** Model of mixer

A = UNI Flange  
 3 = 3% Mixture  
 R = Regulating

B = ANSI Flange  
 6 = 6% Mixture  
 - = Fixed Percentage

### Pressure drop diagram for URD mixers



### User manual

A complete user manual, including service instructions and spare parts list is available at our offices upon request and at no cost for our customers.



CTG FF12 BR

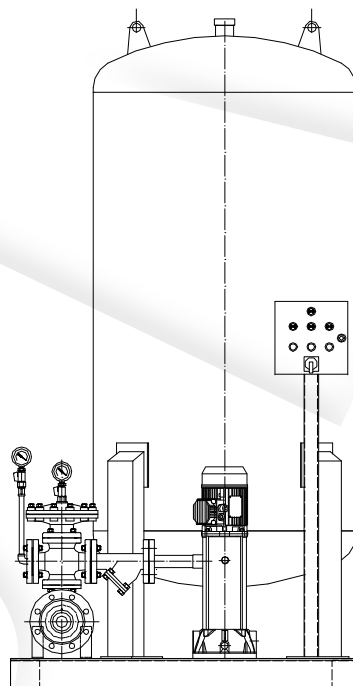


**FOAM MIXERS*****Independent mixing unit***

This system is designed as a replacement for bladder tanks in those cases where an emergency electrical line is available, and works with a balanced pressure proportioner where the foaming agent is supplied from a simple atmospheric pressure tank by means of a pump powered by an electro-motor.

Sensible advantages in terms of lower investment cost, ease of refilling the foaming agent change and no bladder to be replaced are immediately apparent to service technicians.

Such systems can be designed making use of any of the URD proportioner types shown in the previous pages, and with the foaming agent tank capacity required, therefore we are not showing any standard types and design each one of these systems based on the customer requirements.

**Materials**

Mixer	Cast iron/Stainless Steel
Pump	Stainless Steel
Frame&Tank	Carbon Steel
Surface coating	Epoxy primer / Polyurethanic enamel RAL 3000

**Technical characteristics**

Capacity	From 1000 l up to 10.000 l
Foam mixer	URD 100
Pump type	Centrifugal Pump

A wide series of mixer types, tank capacities and pump performance can be combined, to follow any customer request.

**Order Code**

To have a precise identification of required product, the order code must be completed with this code:

URE 0100 **X Y Z**

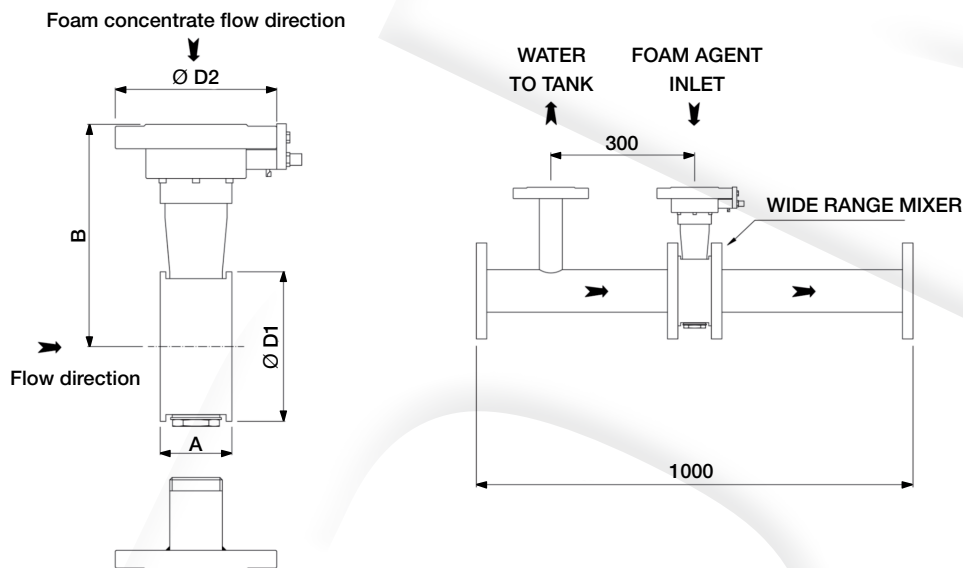
<b>X</b>	Mixing percentage	3 = 3% Mixture	6 = 6% Mixture
<b>Y</b>	Model of mixer	R = Regulating	- = Fixed Percentage
<b>Z</b>	Foaming agent tank capacity		

The product shown in this page has a very flexible design and can be developed considering the customer requests.

This very special mixer offers a very extended capacity range and is expressly designed for such systems where a large number of spray devices can be totally or partially required in use.

The mixer is built up from totally machined parts without castings, which makes it possible a construction in bronze, stainless steel and any other special alloy.

The lower part including the Venturi profile mixing area has a wafer design, that allows an easy assembly with flanges of any type.



### Materials

Body

Brass

AISI 316L stainless steel

Inner parts

AISI 316 stainless steel

Code	A mm	B mm	D1 inches	D2 inches	Capacity lpm	Press. drop bar	Ratio %	K factor	W kg
URI 100 T1 W	70	210	4"	2"	80/2450	0,2 - 2	3	2.038	15
URI 150 T1 W	70	240	6"	2"	110/5500	-	-	4.560	23
URI 200 T1 W	82	290	8"	3"	125/10500	-	-	8.640	39
URI 250 T1 W	82	322	10"	3"	150/16000	-	-	13.000	48