PHARMACEUTICAL
BUBBLE TRAP
SIZING GUIDE

The most important feature of any bubble trap installation is the selection of the correct size trap, there are two over-riding factors that ultimately dictate which size bubble trap you require:

Flow Rate (Q) - Flow Rate of the media entering the bubble trap, measured in litres per minute (LPM)
Operating Pressure - Pressure inside the system when entering the bubble trap

When the above two factors are known a bubble trap can easily be selected from the table below :

BUBBLE TRAP - STANDARD SIZES DATA SHEET

Bubble Trap Diameter (Inches)	Rec. Fill Volume (litres)	To Suit Flow Rate (litres/min)	Operating Pressure Borosilicate 3.3 bar (psi)	Operating Pressure Acrylic bar (psi)	Base Inlet / Outlet Tri-Clamp Ferrule Sizes 1/2"	3/4"	1"	1 1/2"	2"	Lid Controls (2 Ports) Tri-Clamp Ferrule Size 1/2"	3/4"	1"	1 1/2"	2"	Lid Controls (3 Ports) Tri-Clamp Ferrule Size 1/2"	3/4"	1"	1 1/2"	2"
4"	1	4	6.0 (87)	7.0 (102)	●	●	●			●	●	●	●		●	●	●		
	2	8			●	●	●			●	●	●	●		●	●	●		
	3	12			●	●	●			●	●	●	●		●	●	●		
6"	2	8	5.5 (80)	6.0 (87)		●	●	●		●	●	●	●	●	●	●	●	●	
	3	12				●	●	●		●	●	●	●	●	●	●	●	●	
	4	16				●	●	●		●	●	●	●	●	●	●	●	●	
	6	24				●	●	●		●	●	●	●	●	●	●	●	●	
	8	32				●	●	●		●	●	●	●	●	●	●	●	●	
8"	6	24	5.0 (73)	5.0 (73)			●	●	●	●	●	●	●	●	●	●	●	●	
	8	32					●	●	●	●	●	●	●	●	●	●	●	●	
	10	40					●	●	●	●	●	●	●	●	●	●	●	●	
	12	48					●	●	●	●	●	●	●	●	●	●	●	●	
10"	12	48	3.5 (51.0)	4.0 (58)			●	●	●	●	●	●	●	●	●	●	●	●	●
	16	64					●	●	●	●	●	●	●	●	●	●	●	●	●
	20	80					●	●	●	●	●	●	●	●	●	●	●	●	●

It should be noted that each separate diameter size of bubble trap overlaps the previous size, this is particularly useful as the small diameter longer length bubble trap will always have a higher pressure rating than its larger sized diameter alternative.

The above data is derived from the underlying principal that the media should remain inside the bubble trap for a minimum of 15 seconds (residence time) and is generated from the basic formula:

$$Rt = \frac{Rfv}{Q} \times 60$$

Rt = Residence Time (Greater Than 15 Secs)
Rfv = Recommended Fill Volume (Litres)
Q = Flow Rate (Litres Per Minute)

Note : If your exact flow rate is not shown on the table above, the bubble trap sized for the nearest flow rate larger / quicker than yours must be selected. This will guarantee the residence time will exceed the 15 second minimum.

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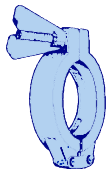

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