

QH-3 Type Noiseless Heater

This product can be used to reduce noise and vibration that occur when steam is blown into water for making hot water. It can also be used for heating bathtub or other open type hot water tank (95°C or below). It is compact and has large heat conduction with sectional plane similar to that of lotus root.

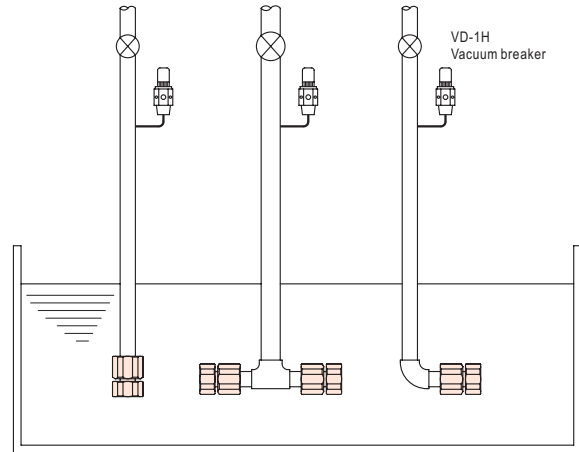
■ SPECIFICATIONS

Model name	QH-3
Code name	QH3-D
Size	15~50(1/2"~2")
Applicable pressure	Max. 0.7MPa
Warning sound temperature limit	95°C
End connection	Screwed JIS Rc
Materials	Stainless steel

■ DIMENSIONS

Size	d	A	B	C	Mass(kg)
15(1/2")	1/2"	50	34	32	0.21
20(3/4")	3/4"	53	40	38	0.28
25(1")	1"	60	48	46	0.5
32(1 1/4")	1 1/4"	63	65	55	1
40(1 1/2")	1 1/2"	65	75	63	1.4
50(2")	2"	70	110	95	3.4

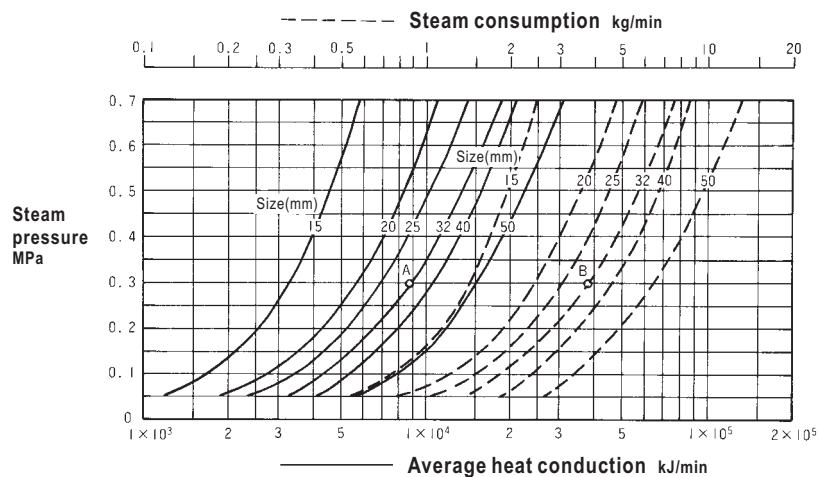
■ PIPING EXAMPLE



Note:

1. Install noiseless heater at least 300mm away from the wall or bottom of the tank.
2. Install VD-1H Type vacuum breaker valve for preventing backflow of water that may occur when steam supply is stopped.

■ CAPACITY CHART

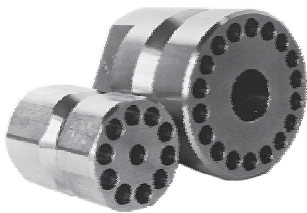


● HOW TO USE THE CHART

Where, size is 32mm and steam pressure 0.3MPa, the average heat conduction (solid line —), as shown by point A, is 8820kJ/min, and steam consumption (dashed line - - -), as shown by point B, is 3.8kg/min. The time to heat 700ℓ water from 20°C to 80°C will be:

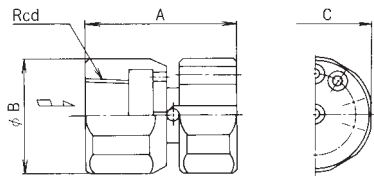
$$\frac{4.2}{8820} \frac{(80-20)}{700} = 20(\text{minutes})$$

The steam consumption will be: 3.8 20=76 kg

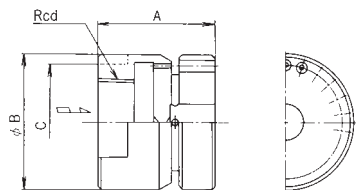


■ CONSTRUCTION

Size 15~25mm



Size 32~50mm



Depending on nominal diameter, the structure of the valve may be different from what is shown in the drawing.

VD-1H Type Vacuum Breaker

When the pressure gets down to the negative pressure below the set-press., the Vacuum breaker will open to absorb air and prevent formation of vacuum in pipe or device. Installation of this item in steam pipeline with Noiseless heater will prevent absorption of water that may occur when steam supply is stopped.

■ SPECIFICATIONS

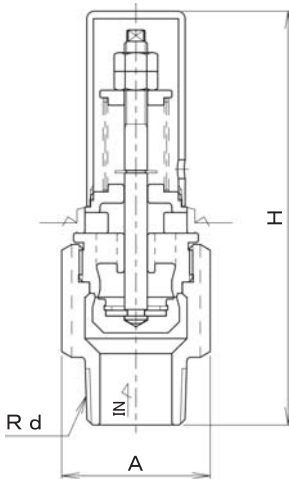
Model name	VD-1H	
Code name	VD1H-F □	VD1H-D □
	※ 1, 2, 3 or 4 for adjustable pressure range No. is required in □.	
Applicable fluid	Steam and air	
Applicable pressure	Max. 1.0MPa	
Adjustable pressure range	1: -0.5~-22kPa, 2: -22~-49kPa, 3: -49~-76kPa, 4: -76~-82kPa	
Fluid temperature	Max. 200°C	
End connection	Screwed JIS R	
Materials	Brass or Cast bronze	Stainless steel

■ DIMENSIONS

Size	d	A	H	Mass(kg)
15(1/2")	1/2"	Hexa. 34 39.3	110	0.4
20(3/4")	3/4"	Hexa. 34 39.3	110	0.4
25(1")	1"	Hexa. 34 39.3	110	0.6
32(1 1/4")	1 1/4"	Hexa. 50 57.7	107	0.8
40(1 1/2")	1 1/2"	Hexa. 55 63.5	122	1.1
50(2")	2"	Hexa. 68 78.5	153	1.9



■ CONSTRUCTION



Depending on nominal diameter, the structure of the valve may be different from what is shown in the drawing.

■ FLOW CHART

