

97130 Thermal Valve

The S&J 97130 Thermal Valve is a thermally operated shut-off valve typically located in low pressure biogas lines such as downstream of anaerobic digesters, landfills and lagoons or upstream of flares and waste gas burners.

Its normal operating position is open until the melting point of the fusible element is exceeded. When the line temperature reaches 255°F, which is usually in the presence of fires and flame propagation, the fusible element melts causing the spring loaded pallet to positively shut off gas flow and prevent the fire from continuing. Indicator Rod provides notification of valve actuated to the closed position. Fusible element is easily replaceable without disassembling the valve.

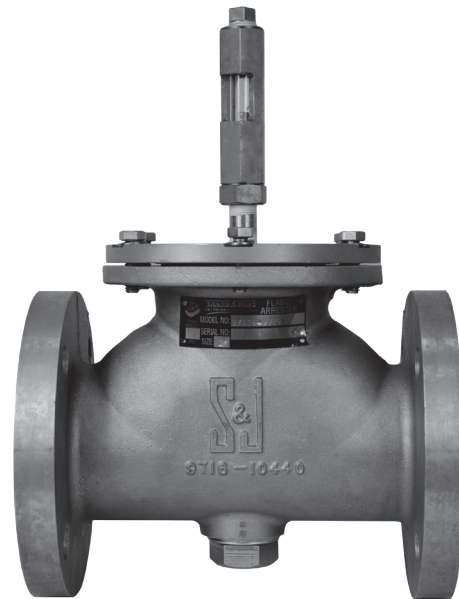
The valve can be installed in either a horizontal or vertical position and is good for working pressures up to 5 psig.

This unit can be used alone, but its most common application is as a component in the Shand & Jurs 97140/97141, Flame Trap Assembly.

Its aluminum and stainless steel components withstand the severest of process environments. The S&J 97130 is especially designed for hydrogen sulfide and hot, wet methane which are the main components of digester gas streams in municipal waste water treatment facilities.

Standard materials of construction include low copper cast aluminum body, pyrex for the sight glass indicator and aluminum pallet with stainless steel spring and stem.

An optional proximity switch is available that can be mounted to the visual indicator and will send a signal once the pallet has closed.



Features

- Positive Emergency Shutoff
- Valve Closed Indicator Rod
- 255°F Fusible Link
- Sizes 2" Through 12"
- Optional Proximity Switch and Insulation Jackets available

Specifications:

Valve Body & Pallet:

Low Copper Aluminum or Stainless Steel

Valve Internals:

Stainless Steel

Pressure Rating:

5 PSIG standard

Isolated Sight Glass:

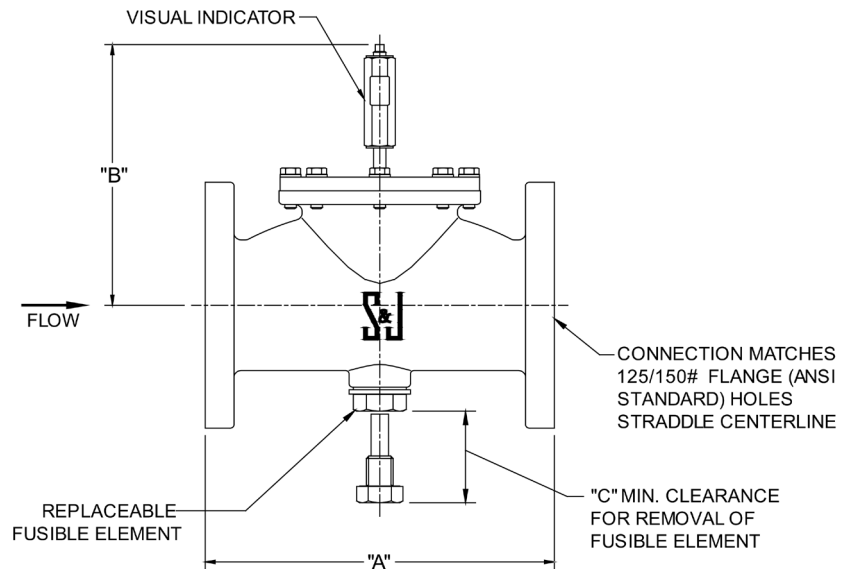
Heat Resistant Pyrex with Buna-N Gaskets

Fusible Element:

Lead; 255°F Standard

Dimensions

(Inches [mm])			
Line Diameter	"A"	"B"	"C"
2 [50]	8 ¾ [222]	8 ⅞ [225]	2 [50]
3 [75]	10 [254]	9 ½ [241]	2 [50]
4 [100]	11 ⅜ [289]	9 ½ [241]	2 [50]
6 [150]	15 [381]	11 ⅞ [302]	4 [100]
8 [200]	22 ¼ [565]	13 ⅞ [352]	5 ½ [140]
10 [250]	27 ⅜ [706]	14 ⅞ [378]	5 ½ [140]
12 [300]	33 [838]	20 ½ [521]	8 [200]



Air Flow Capacity in Standard Cubic Feet per Hour x 1000 @ 60°F

Pressure Inches W.C.	Line Diameter						
	2"	3"	4"	6"	8"	10"	12"
1	1.2	3.1	6	13.1	25.4	39.1	55
2	1.7	4.3	8.7	19.6	36.4	60.0	92
3	2.3	5.5	10.9	24.1	46	74.2	114
4	2.8	6.6	12.5	28.0	53	88.0	134
5	3.2	7.4	14.3	31.6	61	98.5	156
6	3.7	8.1	15.8	34.6	67	108	170
7	4	8.8	17.3	37.8	73	116	182
8	4.4	9.5	18.2	40.6	78	125	197
9	4.6	10.2	19.5	43.1	85	134	210
10	4.9	10.8	20.6	45.7	91	141	220
11	5.1	11.4	21.5	48.5	97	148	230
12	5.3	11.8	22.7	50.4	101	155	240
13	5.5	12.3	23.7	52.7	106	162	248
14	5.8	12.8	24.3	54.6	110	168	256
15	6	13.2	25.2	56.5	115	173	264
16	6.3	13.8	26	58.7	119	178	270
17	6.5	14.3	26.6	60.3	122	182	275
18	6.7	14.6	27.2	62.3	125	186	280
19	6.8	15.1	27.8	64.1	128	189	285
20	7	15.6	28.5	65.7	131	193	290

All designs subject to change. Certified dimensions and specifications available upon request.