

VAREC 711 SERIES

SPRING LOADED PRESSURE RELIEF VENT

The 711 Series is designed to protect low and medium pressure storage tanks, gas headers, process vessels and waste gas collection systems from being overpressured.



Introduction

The 711 Series provides immediate relief from the excessive pressure created by abnormal process conditions. In addition to emergency pressure relief, these valves may provide the necessary venting capacity for routine out-breathing or backup relief. By controlling the process vapors, costly product evaporation or loss is minimized.

Varec 711 Series pressure relief valves are suitable for use in petroleum refineries, marketing terminals, petrochemical and chemical processes, as well as pulp and paper, food and beverage, and waste water treatment plants.

Varec 711 Series valves utilize a spring loaded pressure pallet to provide higher relief settings. This spring-loaded valve can be installed on spheres, blimps, spheroids, pressure vessels or blowdown lines.

Features

- Varec 711 Series valves are designed with an extended neck between the flange and seat ring to prevent the seating surface from becoming distorted when installing the valve, eliminating potential leakage from a misaligned seating surface.
- A spun weatherhood and mesh screen protect the valve from debris and adverse weather conditions, ensuring reliable operation.
- The pallet is both side-and-center guided for reliability and stability. Soft seat pallet inserts are available for a tighter seal.
- All valves feature a knife-edged drip ring around the pallet periphery. This feature reduces the possibility of freezing by preventing condensate from collecting at the seat.
- The valve includes a replaceable seat ring which reduces maintenance time and replacement cost.

Flow curves can help you select the proper valve size for your pressure venting requirements. Additionally, Varec's applications engineering staff and factory trained representatives are always available to assist you.

Material selection is determined by operating conditions such as temperature and corrosive atmospheres. Metal-to-metal seating may be necessary for elevated process temperatures, but, where minimal leakage is desired, a soft seat pallet insert should be specified.

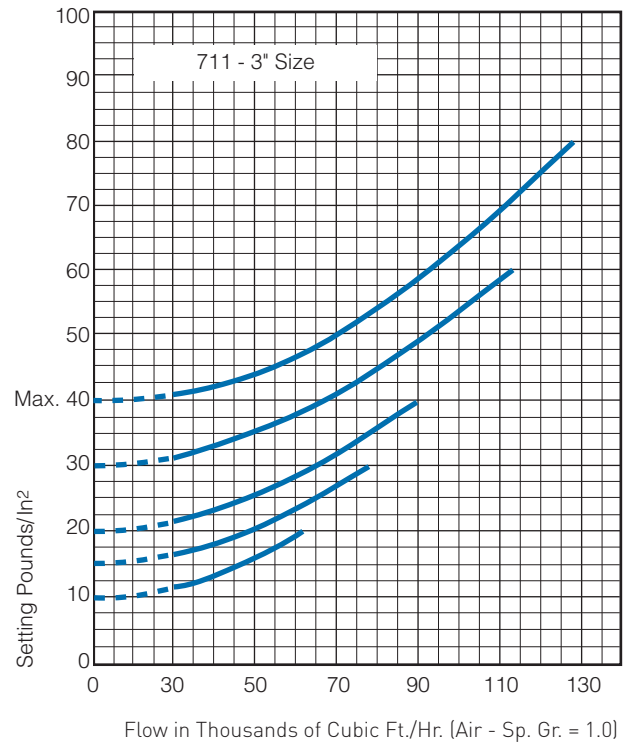
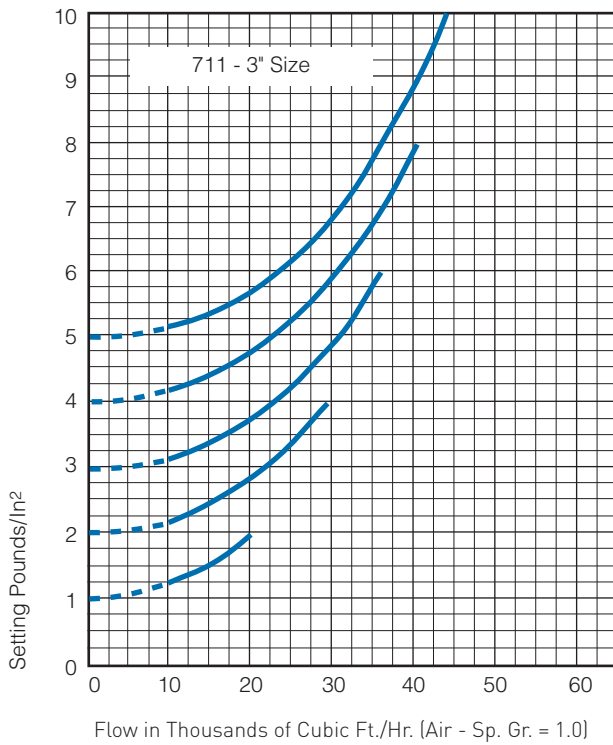
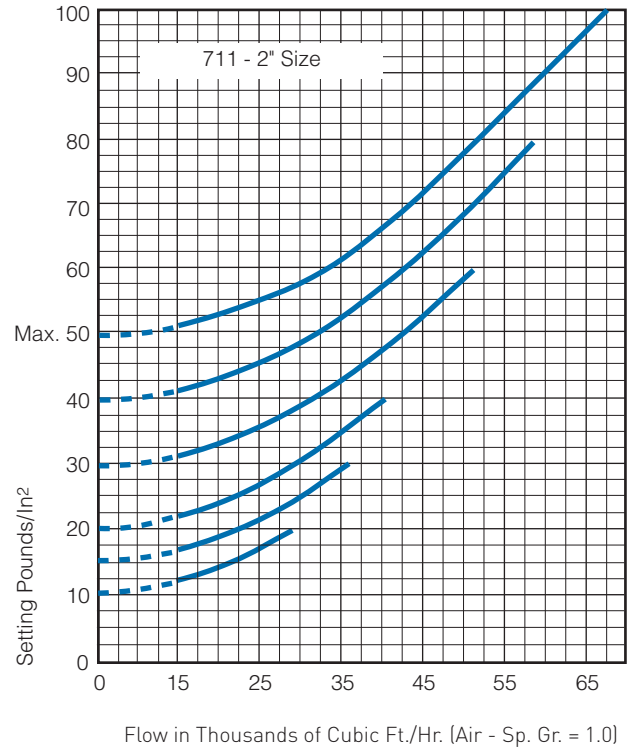
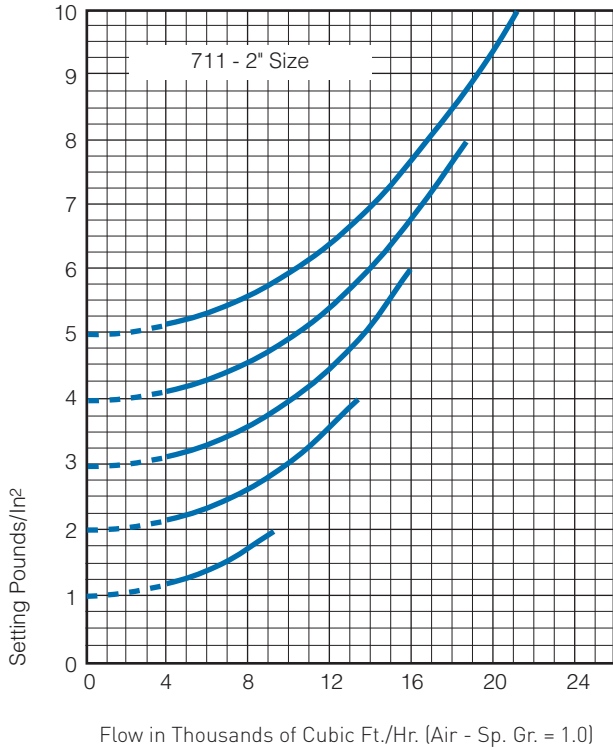
Technical data

- Replaceable seat ring.
- Extended neck eliminates seat distortion and leakage.
- Quick opening feature provides immediate relief from excessive pressure conditions.
- Side and center guided pallet.
- Settings up to 50 psig [3.4 barg].

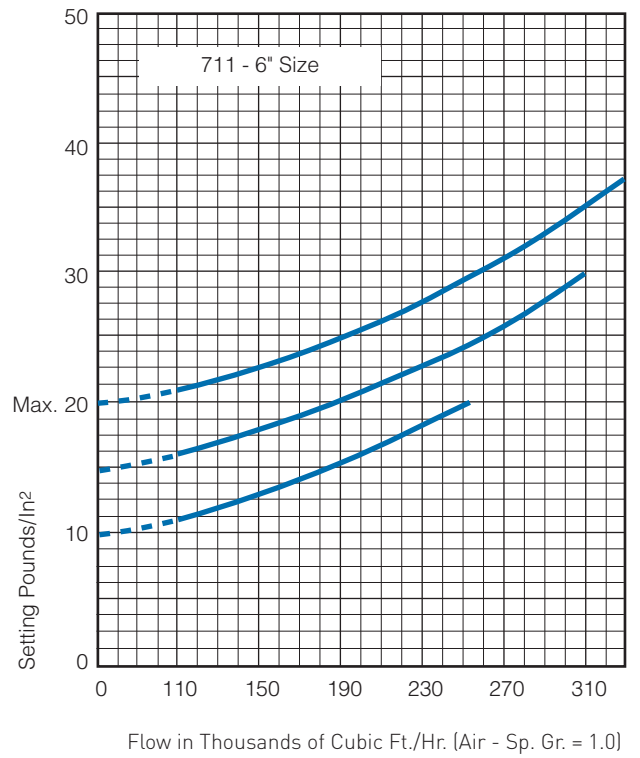
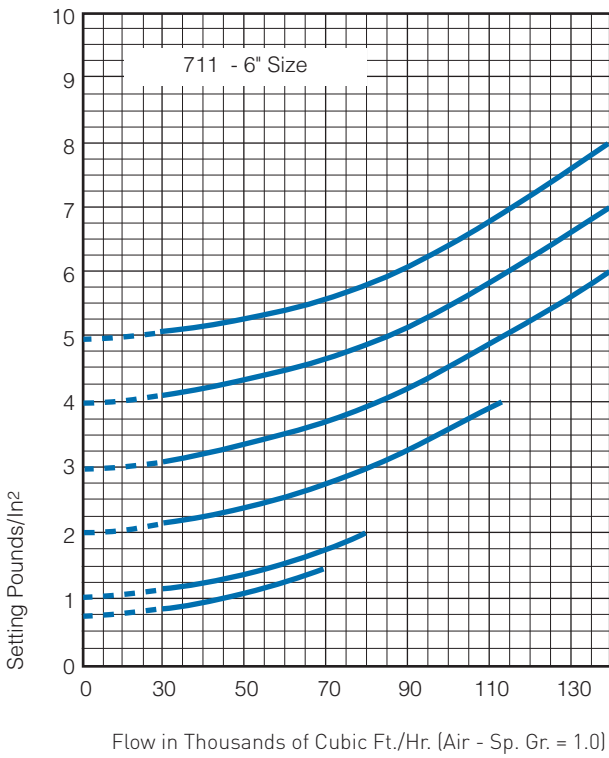
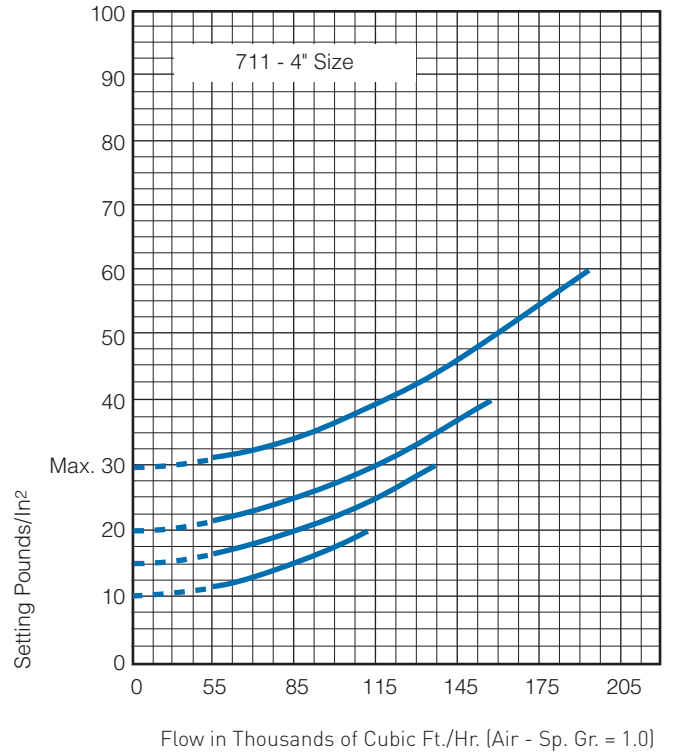
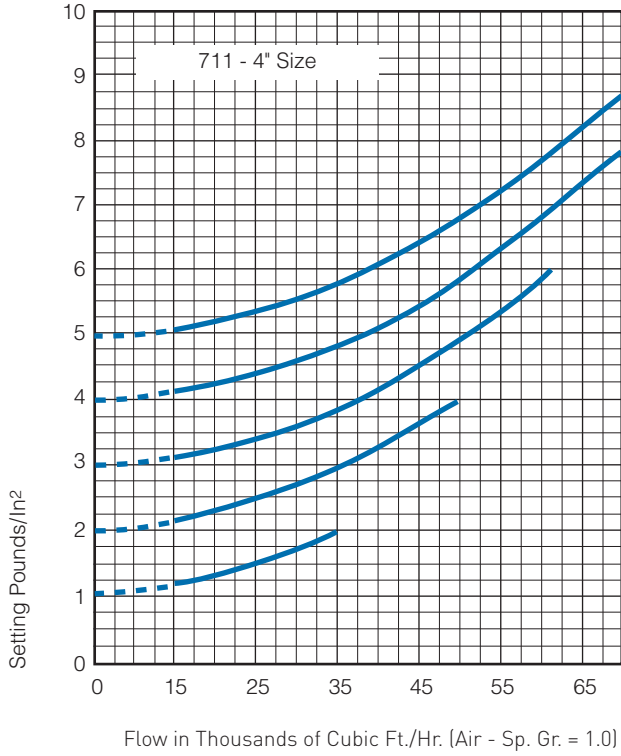
Available materials

- Aluminum
- Carbon Steel
- Stainless Steel
- Special Materials on Application

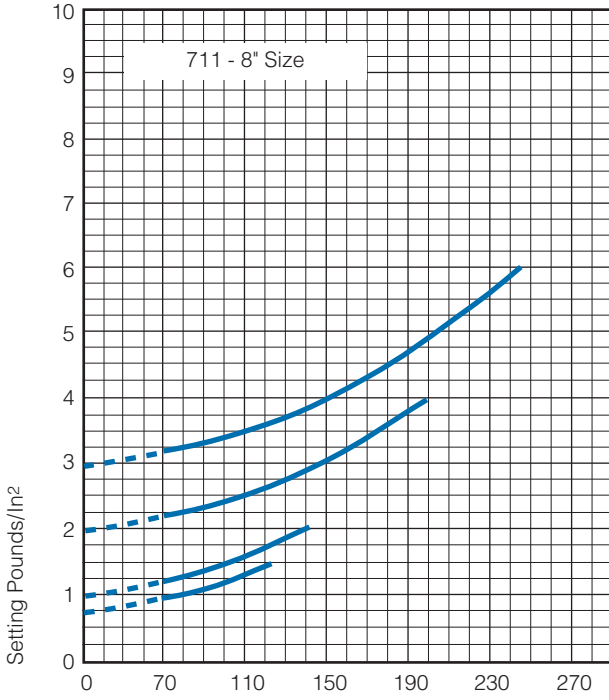
Flow Curves – 711 Series



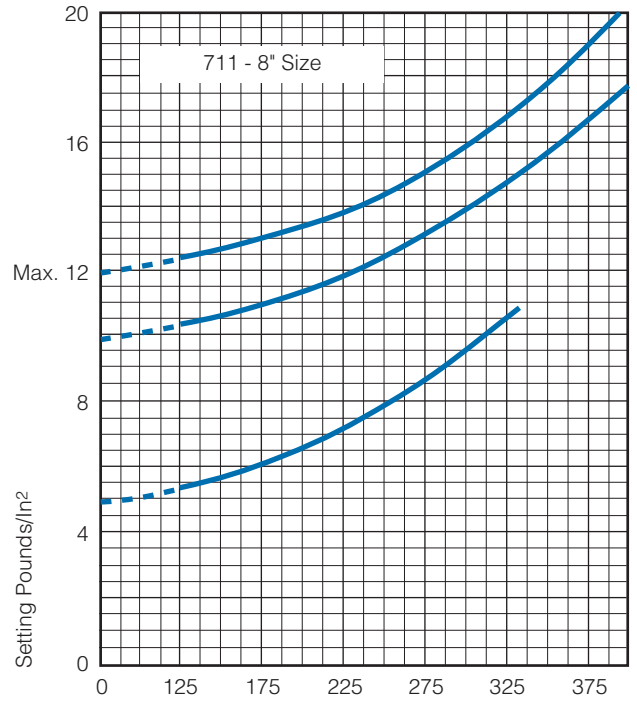
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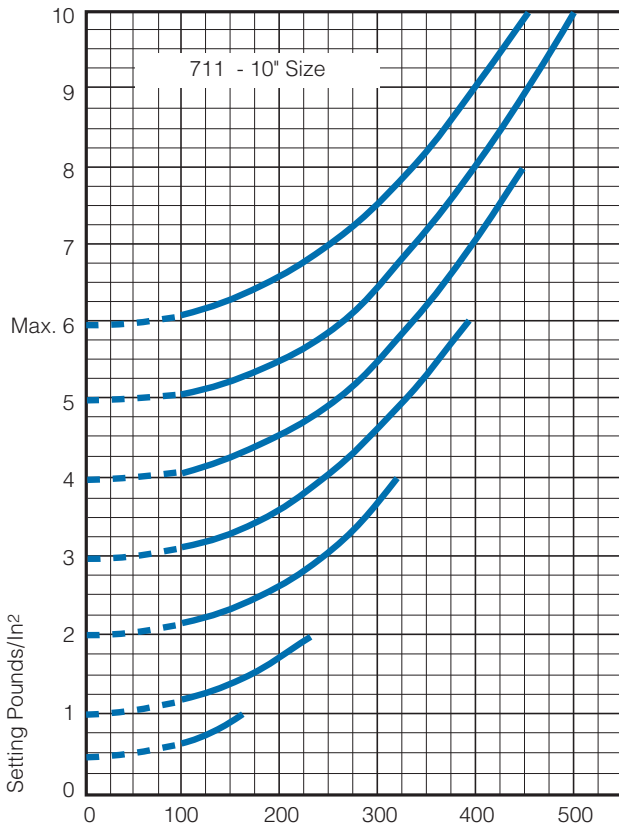
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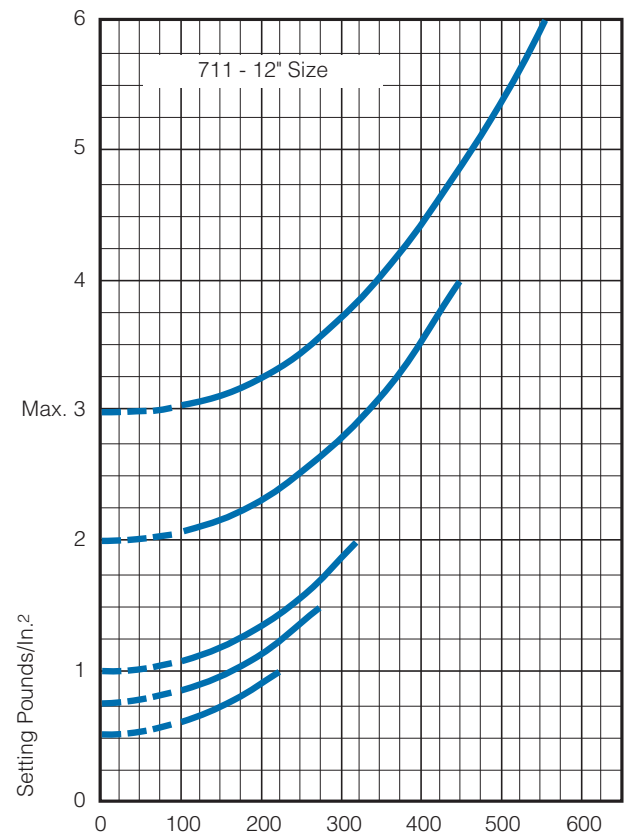
Flow in Thousands of Cubic Ft./Hr. (Air - Sp. Gr. = 1.0)



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Specifications

Connections - Standard Flange Drilling	
Aluminum	Drilled to ANSI Class 150 Flat Face dimensions
Carbon Steel and Stainless Steel	Drilled to ANSI Class 150 Raised Face dimensions

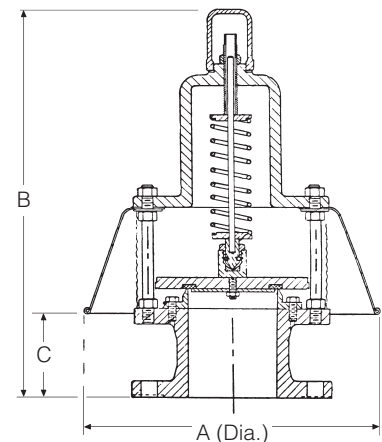
Sizes
2", 3", 4", 6", 8", 10", 12"

Materials/Temperature Limits				
Material Code	11	16	36	66
Body	356 T6 Low Copper Aluminum	356 T6 Low Copper Aluminum	Carbon Steel	316 Stainless Steel
Pallet	Low Copper Aluminum	316 Stainless Steel	316 Stainless Steel	316 Stainless Steel
Set Spring	Zinc Plated Carbon Steel	Zinc Plated Carbon Steel	Zinc Plated Carbon Steel	Stainless Steel
Hood	Aluminum	Aluminum	Carbon Steel	Stainless Steel
Protective Screens	HDPE	Stainless Steel	Stainless Steel	Stainless Steel
Pallet Seat Inserts:				
Code	Material			
M	Metal-to-Metal	0 to 250°F	0 to 250°F	0 to 300°F
B	BUNA-N	0 to 250°F	0 to 250°F	0 to 250°F
T	Teflon	0 to 250°F	0 to 250°F	0 to 300°F
V	Viton	0 to 250°F	0 to 250°F	0 to 300°F

Adjustable Setting Ranges		
Pressure		
Valve Size	Minimum	Maximum
2"	1 psig	50 psig
3"	1 psig	40 psig
4"	1 psig	30 psig
6"	12 oz/in ²	20 psig
8"	10 oz/in ²	12 psig
10"	8 oz/in ²	6 psig
12"	8 oz/in ²	3 psig

Dimensions, inches [millimeters]							
Size Code	02	03	04	06	08	10	12
Nominal Pipe Size	2 [50]	3 [80]	4 [100]	6 [150]	8 [200]	10 [250]	12 [300]
A	9 ⁷ / ₈ [251]	11 ¹ / ₂ [292]	13 ⁵ / ₈ [346]	14 [356]	16 ⁵ / ₈ [422]	20 [508]	23 ⁵ / ₈ [600]
B	19 ¹ / ₂ [495]	20 ¹ / ₄ [514]	21 ¹ / ₂ [546]	22 ¹ / ₂ [572]	23 [584]	23 [584]	23 [584]
C	3 [76]	3 ¹ / ₄ [83]	3 ³ / ₄ [95]	3 ³ / ₄ [95]	3 ³ / ₄ [95]	3 ³ / ₄ [95]	3 ¹ / ₂ [89]
Shipping Weight	20 [9]	30 [14]	40 [18]	60 [27]	80 [36]	100 [45]	125 [57]

Dimensions are for preliminary general information and should not be used for construction purposes. Certified dimensional drawings are available upon request.



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Ordering Information

Model	Description																
711	Spring Loaded Pressure Relief Valve																
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711	04 16 B (Example)																

Example: 4" Spring Loaded Valve with aluminum body, 316 Stainless Steel trim and BUNA-N soft seat insert. Specify setting when ordering.



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