

MODEL 4200

SPRING LOADED PRESSURE/VACUUM VENT WITH PIPE-AWAY

OVERVIEW

The Model 4200 Spring Loaded Vent provides pressure and vacuum relief in applications where higher pressure settings are required and that require vapors to be piped away.



SPECIAL FEATURES

Modular:

The Model 4200 pipe-away conservation vent is part of the Valve Concepts, Inc. modular vent product line. The Model 4200 can easily be converted to a vacuum only vent or end-of-line pressure / vacuum vent and can either be direct acting or pilot operated. Only Valve Concepts, Inc. offers complete modularity throughout its complete vent product line.

Maintains Accurate Settings:

The minimum pressure setting is .5 oz./ in² and the minimum vacuum setting is .5 oz/ in². Maximum pressure setting is 15 psig and maximum vacuum setting is 15 psig. Lower settings may require weight loading instead of springs on vacuum side. All vents are tested to Valve Concepts, Inc. high standards for both leakage and set point prior to shipment. A certified test certificate is included with each vent verifying the accuracy of both the pressure and vacuum setting and leakage. A leakage rate of less than 1 SCFH at 90% of set point is verified for both pressure and vacuum.

Condensate Drainage:

Self-draining housing body and drip rings keep condensate away from seating surfaces, preventing freezing, binding and clogging.

Air-Cushioned Seating:

Air-cushion seating provides tight sealing to reduce evaporation losses and the release of toxic vapors into the outlet piping, except under normal breathing conditions. The pallets have outer guiding and center stabilizing stem to provide self alignment and tight seating.

TECHNIQUE

A spring loaded pallet on the pressure side of the vent allows the discharge of vapors to the outlet piping when the tank pressure exceeds the set point and a weight loaded/spring pallet on the vacuum side of the vent allows the intake of air when the tank vacuum exceeds the set point. The pallets open and close to regulate the tank pressure within permissible limits to avoid damage to the tank as the tank normally breathes due to the thermal changes or product movement. Virtually eliminates the intake of air and the escape of vapors, except during normal tank breathing, thus reducing product loss.

MODEL 4200



LINE SIZES AVAILABLE
2" (DN50), 3" (DN80), 4" (DN100),
6" (DN150)



END CONNECTIONS
FLANGED



COMMON APPLICATIONS
WHERE HIGHER PRESSURE SETTINGS
ARE REQUIRED



DESIGN PRESSURE
MULTIPLE SET PRESSURE & VACUUM
RANGES AVAILABLE

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Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
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Курган (3522)50-90-47
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Ярославль (4852)69-52-93

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Киргизия +996(312)96-26-47

CONSTRUCTION

Housing Material: The Model 4200 is a rugged design made to last. Available in Aluminum, Carbon Steel, or 316 SST.

Sizes and Connections: Available in Sizes 2" through 6". CS and SST vents have Raised Face Flange, Aluminum vents have Flat Face Flange to mate with standard ASME 150# flange connections. On sizes 2" through 6", the Model 4200 is available with the same size inlet and outlet to reduce outlet piping cost.

MATERIALS OF CONSTRUCTION		
Series	Housing	Pallet
4200CS	CS	316 SST
4200SST	316 SST	316 SST
4200A	Aluminum	316 SST

Pallet Diaphragm Material: FEP TFE is Standard. Also available Buna-N, EPDM or Fluorocarbon Elastomer (FKM).

STANDARD/GENERAL SPECIFICATIONS

Gaskets: Standard: TFE/TFE Rope

Painting: Standard: Exterior coating will be a combination of Cashco Paint Specs #S-1777 epoxy and #S-1743 powder coated. fasteners, seat surfaces and corrosion resistant parts excluded.

Diaphragm Temperature Limits:
FEP-TFE:
 -400° to 400° F (-240° to 204°C)
Fluorocarbon Elastomer – (FKM):
 -20° to 400° F (-28° to 204°C)
Buna-N (Nitrile-NBR):
 -30° to 200° F (-34° to 93°C)
EPDM (Ethylenepropylene):
 -40° to 225° F (-40° to 107°C)

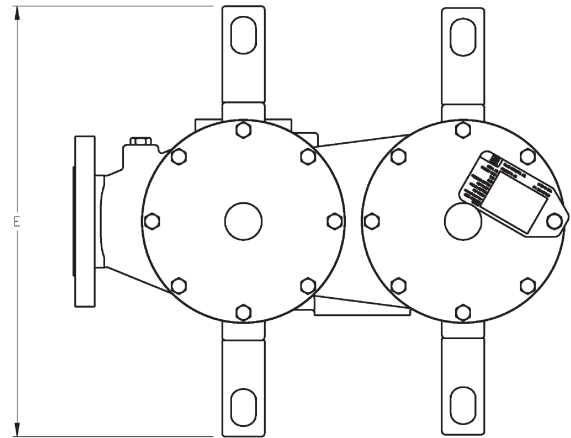
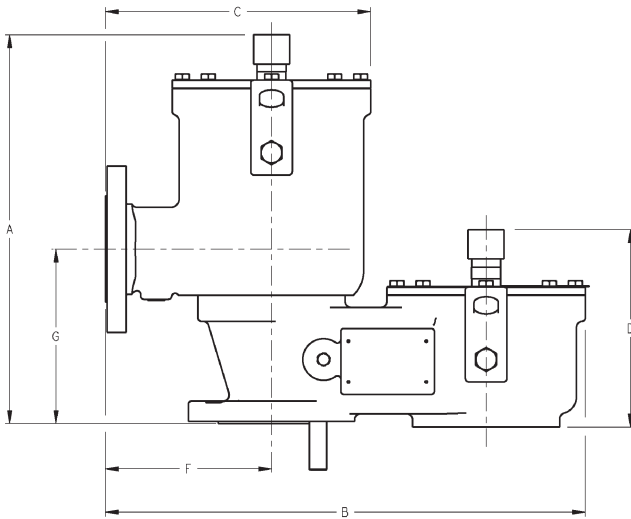
Pressure & Vacuum Ranges: See Table 5 and Table 7 on the coder. Differential Pressures greater than 2 psid will limit the minimum vacuum set point to 2 oz/in².

OPTION SPECIFICATIONS

BUG SCREEN - 304 stainless steel, 4x4 welded mesh.

FLAME SCREEN - 304 stainless steel, 30x30 woven mesh

DIMENSIONS



ENGLISH Units - in Aluminum, Carbon Steel & Stainless Steel Body									
SIZE In	A	B	C	D	E	F	G	Weight lbs.	
								Alum	CS / SST
2" x 2"	14.40"	17.33"	9.76"	7.12"	14.79	6.00"	6.29"	38	83
2" x 3"	14.00"	17.33"	9.76"	7.12"	14.78	6.19"	6.85"	40	86
3" x 3"	17.19"	18.80"	10.50"	8.16"	15.77	6.50"	8.03"	50	106
3" x 4"	17.19"	18.81"	10.50"	8.16"	15.80	6.50"	8.53"	49	110
4" x 4"	19.80"	24.38"	13.36"	9.59"	18.23	8.00"	9.52"	75	168
4" x 6"	19.80"	24.38"	13.36"	9.59"	18.23	8.00"	10.52"	77	172
6" x 6"	21.94"	28.00"	15.18"	10.70"	22.67	9.00"	10.98"	103	243
6" x 8"	21.94"	28.00"	15.18"	10.70"	22.67	9.00"	12.17"	107	254

METRIC Units - mm Aluminum, Carbon Steel & Stainless Steel Body									
SIZE (DN)	A	B	C	D	E	F	G	Weight kg.	
								Alum	CS / SST
(50) x (50)	356	440	248	181	378	152	160	17	38
(50) x (80)	356	440	248	181	376	157	174	18	39
(80) x (80)	437	478	267	207	401	165	204	22	48
(80) x (100)	437	478	267	207	401	165	217	22	50
(100) x (100)	503	619	339	244	463	203	242	34	76
(100) x (150)	503	619	339	244	463	203	267	35	78
(150) x (150)	557	711	386	272	576	229	279	47	110
(150) x (200)	557	711	386	272	576	229	309	49	115

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4200 Series PRODUCT CODE

02/07/20

Last 6 Characters reserved for SPQ drawing numbers assigned by Cashco Inc.
(Format as - # # # # # #)



POSITION 3 - FLANGE - INLET SIZE			
ASME INCH	CODE	DIN FLANGE DN (rating)	CODE
2"	2	50 (PN16)	H
3"	3	80 (PN16)	J
4"	4	100 (PN16)	K
6"	6	150 (PN16)	L

POSITION 4 - FLANGE - OUTLET SIZE			
INCH	CODE	DIN FLANGE DN(rating)	CODE
2"	2	50 (PN16)	H
3"	3	80 (PN16)	J
4"	4	100 (PN16)	K
6"	6	150 (PN16)	L
8"	8	200 (PN10)	M
		200 (PN16)	T

POSITION 5 - BODY / TRIM MATERIALS			
MATERIAL	Std. W/O Flamescreen	W/ Flame Screen	W/ Bug Screen
	CODE	CODE	CODE
ALUM/SST	A	B	N
CS/SST	C	D	P
SST/SST	S	T	R

POSITION 7 - DIAPHRAGM MATERIALS	
Diaphragm	CODE
FEP TFE (Std.)	A
Buna-N	B
EPDM	D
FKM	F

POSITION 8 - PRESSURE SET POINT			
Weight Loaded Range		WEIGHT MATERIAL	
		STD *	SST
psig	barg	CODE	CODE
< 1.25	< .08	1	A
Spring Loaded Range		CODE	
psig	barg		
1.25 - 4	.08 - .27	2	
> 4 - 6	> .27 - .41	3	
> 6 - 8	> .41 - .55	4	
> 8 - 10	> .55 - .68	5	
> 10 - 12	> .68 - .83	6	
> 12 - 13	> .83 - .89	7	
> 13 - 15	> .89 - 1.03	8	

* Lead or Lead / SST combination.

POSITION 9 - SIGHT GLASS		
None (Std)	CODE	
	0	
Location	Vacuum Side Only	Pressure Side Only
	1	2
Weight loaded range only.		

POSITION 10 - VACUUM SET POINT			
Weight Loaded Range		WEIGHT MATERIAL	
		STD *	SST
psig	barg	CODE	CODE
< 1.0	< .06	1	A
Spring Loaded Range		CODE	
psig	barg		
1.0 - 4	.06 - .27	2	
> 4 - 6	> .27 - .41	3	
> 6 - 8	> .41 - .55	4	
> 8 - 10	> .55 - .68	5	
> 10 - 12	> .68 - .83	6	
> 12 - 13	> .83 - .89	7	
> 13 - 15	> .89 - 1.03	8	

* Lead or Lead / SST combination..

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