



## Model 4400

Spring Loaded  
Pressure Vent To Atmosphere

### OBJECTIVE

The Model 4400 spring loaded pressure relief vents are designed for higher pressure settings and are used in applications for normal or emergency venting pressure relief. The series 4400 vents are pressure only devices and as such do not provide vacuum relief. Vacuum relief must be supplied by the operating vent with which the tank is equipped. If vacuum relief is needed, see Valve Concepts, Inc., Technical Bulletin 3300, 3600, 4100, or the 4200.

### TECHNIQUE

Under normal operating conditions, the spring-loaded pallet assembly is closed providing a vapor-tight seal. In the event the tank pressure reaches the set point of the vent, due to product movement into the tank, thermal expansion of the product and vapors or due to an emergency (fire involvement of the tank), the spring-loaded pallet lifts to vent excess vapors thereby protecting the tank from dangerous over pressurization. Once the over pressure condition is relieved the spring-loaded pallet closes to provide a vapor tight seal.

### CONSTRUCTION

**Housing Material:** Flange base and weatherhood available in Aluminum, Carbon Steel, or 316 SST.

**Sizes - Connections.** Available is Sizes 2" thru 6". CS and SST vents have Raised Face Flange, Aluminum vents have Flat Face Flange to mate with standard ASME150# flange connections.

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

### SPECIAL FEATURES

**Easy Inspection.** The 4400 series vent is light weight and designed for trouble free entry for inspection and maintenance. A coarse, mesh screen prevents entry of foreign matter into seating area.

**Maintains Accurate Settings.** The minimum pressure setting is 1.25 psig and the maximum setting is 15 psig. As with every vent supplied by Valve Concepts, Inc. a certified test report is provided verifying vent setting and a leakage rate of no more than 1 SCFH at 90% of the customer specified set point.

**Air-Cushioned Seating.** Air-cushion seating provides tight sealing to reduce the unnecessary release of vapors and loss of product to the atmosphere.

MATERIALS OF CONSTRUCTION		
Series	Housing	Pallet
4400CS	CS	316 SST
4400SST	316 SST	316 SST
4400A	Aluminum	316 SST

## 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):  
0° to 400° F (0° 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)

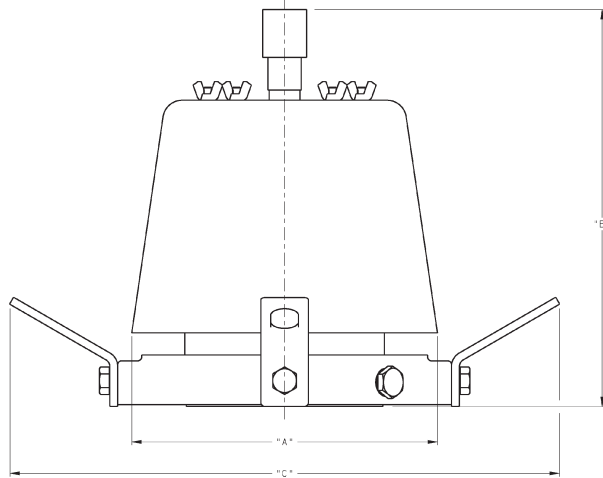
Alternate Paint: See Opt-95OS.

## OPTION SPECIFICATIONS

**Option -40:** NACE CONSTRUCTION. Internal wetted portions meet NACE standard MR0175, when exterior of the vent is not directly exposed to a sour gas environment, buried, insulated or otherwise denied direct atmospheric exposure.

**Option -95OS:** OFFSHORE installations. Coating of all exterior surfaces will be per Cashco Paint Specs #S-1777 epoxy. Fasteners, seat surfaces and corrosion resistant parts excluded. Painting of fasteners optional upon special request.

**DIMENSIONS**



Aluminum, Carbon Steel & Stainless Steel Flange & Weather Hood in. (mm)						Weight lbs. (kg.)		
Size In (DN)	A (diam.)		B		C		Aluminum	CS / SST
2" (50)	7.50"	(191)	9.54"	(242)	N/A	N/A	7 (3)	14 (6)
3" (80)	9.20"	(234)	10.56"	(271)	N/A	N/A	11 (5)	22 (10)
4" (100)	9.62"	(244)	12.50"	(317)	17.29"	(439)	16 (7)	32 (14)
6" (150)	13.00"	(330)	14.61"	(371)	19.29"	(490)	21 (9)	42 (19)

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# 4400 Series PRODUCT CODE

04/06/16

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

**44** **0** **POS 4** **POS 5** **B** **POS 7** **POS 8** **0** **0** **POS 11** **POS 12** **0** **0** **0** **0** **0** **0**

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

POSITION 5 - BODY / TRIM / WEATHER HOOD MATERIALS	
MATERIAL	W/O Flamescreen
	CODE
ALUM/SST/SST	A
CS/SST/CS *	C
SST/SST/SST *	S

\* Select for NACE Construction.

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

\* Select for NACE Construction.

POSITION 8 - PRESSURE SET POINT		
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

POSITION 11 - OPTION		
DESCRIPTION	OPTION	CODE
No Option	-	0
NACE Constr.	-40	N
Offshore Paint	-95OS	Y

POSITION 12 - ACCESSORY / CERTS			
OPTION	Certification		
	Std	ATEX *	PED *
	CODE	CODE	CODE
None	0	A	E
Electric Trace	H	B	F
Steam Jacket	J	C	G
Steam Trace	S	D	K

\* Forward Completed "EU" Application Recorder prior to quotation. (Without Recorder- Processing of Purchase Order will be delayed).  
"PED" Compliance - Ref to Directive 97/23/EC.  
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