



Represented by: **DUNCAN CO** Ph: 612-331-1776
www.duncanco.com



Model 3400 Pressure Only Vent To Atmosphere

OBJECTIVE

The Model 3400 pressure vents are designed vent is designed for use on atmospheric and low-pressure storage tanks where pressure relief is required.

TECHNIQUE

Under normal operating conditions, the pallet assembly is closed providing a vapor-tight seal. In the event the tank pressure increases to the set point of the Model 3400, the pallet lifts to vent excess vapors thereby protecting tank from dangerous over-pressurization. Pallet automatically closes and reseals when the pressure is reduced.

CONSTRUCTION

Flange and Weather Hood Material: The Model 3400 is a rugged design made to last. Available in Aluminum, Carbon Steel, Stainless Steel or Corrosion Resistance Fiberglass.

Trim Material: Aluminum or 316 SST on metal vents. Fiberglass - Standard on all FRP vents.

Pallet Diaphragm Material: FEP TFE - Standard. Also available in FKM, EPDM and Buna-N.

SPECIAL FEATURES

Easy Inspection. Easy Inspection: It is light weight for easy handling, inspection and maintenance. Coarse mesh screen prevents entry of foreign matter into seating area.

Maintains Accurate Settings. The minimum setting available is down to 0.25 oz/in². Maximum pressure setting 2" - 12" upwards to 2 psig, for 16" - 24" upwards to .5 psig. See Vent Weight Table. If higher settings are required see Valve Concepts Series 4400 Spring Loaded Vent or 5400 Pilot Operated Vent.

Air-Cushioned Seating. Vent pallet assembly incorporates a flat, smooth film of FEP Teflon to form a floating air seal. All units are tested to Valve Concepts, Inc. high standards to insure low leakage rates. Leakage rates is no more than 1 SCFH at 90% of customer specified set point. As with all vents supplied by Valve Concepts, Inc. a certified test report is provided.

Sizes - Connections. CS and SST available in sizes 2" through 12" Raised Face Flange; sizes 16" through 24" Flat Face Flange. Aluminum and FRP vents have Flat Face Flange. Both mate with standard ASME 150# flange. Ref to position 4 on coder for selection of DIN or API flange specification.

MATERIALS OF CONSTRUCTION		
Series	Flange Housing	Pallet *
3400CS	CS	316 SST
3400SST	304SST or 316 SST	316 SST
3400D	Derakane® 470	Derakane® 470
3400F	Hetron® 800	Hetron® 800
3400A	Aluminum	Alum or 316 SST

* For settings below 0.5 oz/in², requires Polycarbonate Pallets; only with CS, SST, and Alum. Derakane, Furan and Hetron are Registered trademarks of Ashland Inc. Hetron is now offered as an equal replacement to Furan.

STANDARD/GENERAL SPECIFICATIONS

Gaskets: Standard: TFE/TFE Paste

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)

Alternate Paint: See Opt-95OS.

Size	VENT WEIGHT Set Point Limits oz/in ²			
	Standard Material		SST Material	
	Min	Max	Min	Max
2"	0.25	30.50	0.25	28.50
3"	0.25	31.50	0.25	32.00
4"	0.25	32.50	0.25	33.00
6"	0.25	30.50	0.25	31.00
8"	0.25	30.00	0.25	30.50
10"	0.25	31.00	0.25	31.50
12"	0.25	29.50	0.25	30.50
16"	N/A	N/A	1.00	7.00
18"	N/A	N/A	1.00	7.00
20"	N/A	N/A	1.00	7.00
24"	N/A	N/A	1.00	7.00

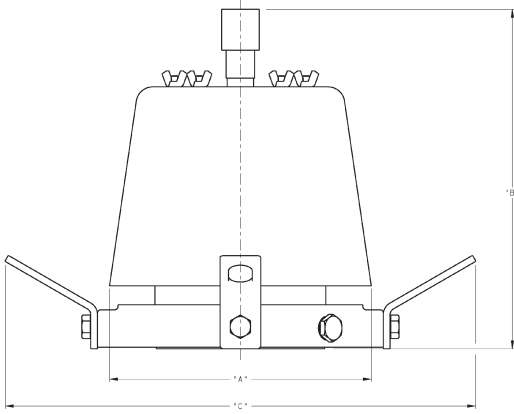
OPTION SPECIFICATIONS

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.

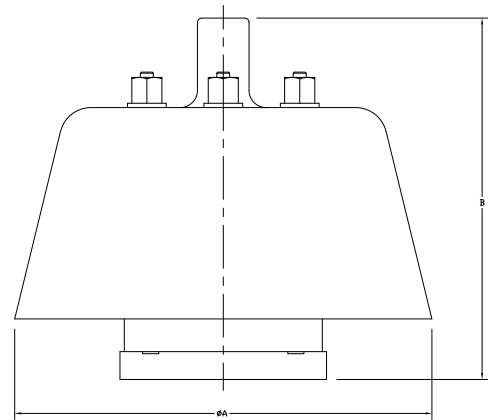
Option -95OS: OFFSHORE installations. Coating of all exterior surfaces will be per Cashco Paint Specs #S-1777 epoxy. Fasteners, seat surfaces and corrosion resistant parts excluded. Painting of fasteners optional upon special request.

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DIMENSIONS & WEIGHTS

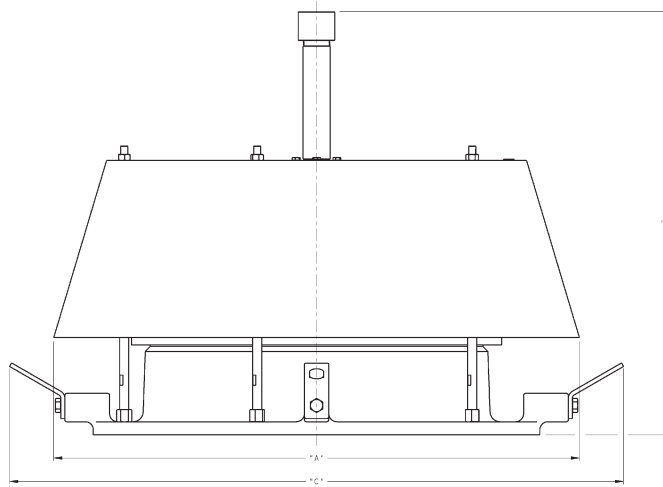


Standard Construction for Alum, CS & SST



Standard Construction for FRP

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)
8" (200)	16.00"	(406)	16.25"	(413)	21.73	(554)	28 (13)	56 (26)
10" (250)	19.06"	(484)	16.92"	(430)	24.29	(617)	36 (16)	75 (34)
12" (300)	24.00"	(610)	19.88"	(505)	27.30	(694)	50 (23)	106 (48)
Corrosion Resistant Fiberglass (FRP) Flange & Weather Hood							Weight lbs (kg)	
2" (50)	12.12"	(308)	10.50"	(267)	N/A	N/A	C/F	C/F
3" (80)	12.12"	(308)	10.50"	(267)	N/A	N/A	C/F	C/F
4" (100)	15.91"	(404)	11.55"	(293)	N/A	N/A	C/F	C/F
6" (150)	16.32"	(414)	13.34"	(339)	N/A	N/A	C/F	C/F
8" (200)	22.35"	(568)	16.16"	(410)	N/A	N/A	C/F	C/F
10" (250)	23.04"	(585)	17.46"	(443)	N/A	N/A	C/F	C/F
12" (300)	26.59"	(675)	18.83"	(478)	N/A	N/A	C/F	C/F



Standard Construction for Alum & SST

Aluminum & Stainless Steel Flange & Weather Hood in. (mm)							Weight lbs (kg)	
Size In (DN)	A (diam.)		B		C		Aluminum	SST
16" (400)	30.13"	(765)	18.56"	(472)	N/A	N/A	60 (27)	136 (62)
18" (450)	33.13"	(842)	21.06"	(535)	N/A	N/A	68 (31)	153 (70)
20" (500)	32.38"	(822)	26.00"	(660)	37.79	(953)	94 (43)	243 (111)
24" (600)	39.61"	(1006)	26.00"	(660)	42.79	(1087)	131 (60)	223 (101)

3400 Series PRODUCT CODE

04/05/16

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



POSITION 3 - PALLET DESIGN	
Material	CODE
STD	0
No Pallet (Free Vent)	B

POSITION 4 - FLANGE - SIZE			
ASME INCH	CODE	DIN FLANGES PN (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
		250 (PN10)	N
10"	A	250 (PN16)	V
		300 (PN10)	P
12"	B	300 (PN16)	W
		400 (PN16)	1
16"	F	450 (PN16)	5
18"	C	500 (PN16)	7
20"	D	600 (PN16)	9
24"	E		
API 650 Flange Specification			
20"	S	----	----
24"	Z	----	----

FLANGE SIZES	POSITION 5 - FLANGE / TRIM / WEATHERHOOD MATERIALS	
	MATERIAL	Standard CODE
2 - 12"	ALUM/ALUM/SST	A
	CS/SST/CS * RF	C
	316SST/SST/SST * RF	S
16 - 24"	ALUM/SST/CS	M
	304SST/SST/Alum FF	D
	304SST/SST/CS FF	B
	304SST/SST/SST FF	R
	316SST/SST/SST * FF	V
All	ALUM/SST/ALUM	E
	ALUM/SST/SST	K
	Derakane 470 w/SST Studs	F
	Derakane 470 w/Hast C Studs	H
	Hetron 800 w/SST Studs	G
	Hetron 800 w/Hast C Studs	J

* Select for NACE Construction.
Alum & FRP vents have Flat Face Flange
RF = Raise Face. FF = Flat Face

POSITION 7 - DIAPHRAGM MATERIALS	
DIAPHRAGM	CODE
FEP TFE (Std) *	A
Buna-N	B
EPDM	D
FKM *	F
No Diaphragm (Free Vent)	0

* Select for NACE Construction.

POSITION 9 - SIGHT GLASS	
	CODE
None (Std)	0
Sight Glass	1

POSITION 10 - WEIGHT MATERIAL	
Material	CODE
STD *	0
ALL SST	S
No weight (Free Vent)	P
Encapsulated weight Option For FRP Body Material ONLY	E

See Vent Weight Table (pg.2) for set point limits.
* Steel or Steel / SST combination.
For NACE application must select ALL SST weight material code.

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

POSITION 12 - CERTS	
CERTIFICATES	CODE
Standard	0
ATEX * **	A
PED *	E

* 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. Contact Cashco for Assistance.
** ATEX Cert not available for FRP Construction.

Cashco, Inc.
P.O. Box 6
Ellsworth, KS 67439-0006
PH (785) 472-4461
Fax. # (785) 472-3539
www.cashco.com
email: sales@cashco.com
Printed in U.S.A. 3400-TB

Cashco GmbH
Handwerkerstrasse 15
15366 Hoppegarten, Germany
PH +49 3342 30968 0
Fax. No. +49 3342 30968 29
www.cashco.com
email: germany@cashco.com

Cashco do Brasil, Ltda.
Al.Venus, 340
Indaiatuba - Sao Paulo, Brazil
PH +55 11 99677 7177
Fax. No.
www.cashco.com
email: brazil@cashco.com