



Model 5200 PILOT OPERATED

Pressure / Vacuum Vent with Pipe-Away

OBJECTIVE

The Pilot Operated Model 5200 vent provides pressure and vacuum relief in applications that require vapors to be piped away.

TECHNIQUE

The Model 5200 has a pilot operated pressure side which permits tank operating pressures closer to the maximum allowable operating pressure. This provides a more positive control over vapor generation inherent in fluids with higher vapor pressures. The vacuum side of the vent is weight loaded and allows intake of air when necessary to remain within the vacuum design rating of the tank.

CONSTRUCTION

Body Material: Available in Aluminum, Carbon Steel or 316 SST.

Numerous Sizes. 2-inch thru 12-inch. All CS & SST vents mate with standard ASME 150#RF flange connection. Aluminum vents mate with a 125#FF flange connection.

Pallet Diaphragm Material: Fluorocarbon Elastomer-Standard; also available Buna-N, EPDM or FEP-TFE.

Diaphragm Case Material: Available in Carbon Steel or Stainless Steel.

Actuator Diaphragm Material: Fluorocarbon Elastomer (FKM) - Standard; also available Buna-N, FEP-TFE or FKM w/FEP liners.

Pilot Body Material: 316SST.

Pilot Seat & Seals (o-rings): Fluorocarbon Elastomer - Standard; also available Buna-N, Chemrez, EPDM or Kalrez.

Pilot (Sensing) Diaphragm: FEP-TFE.

SPECIAL FEATURES

Modular: The Model 5200 pipe-away conservation vent is part of the Valve Concepts, Inc. modular vent product line. The Model 5200 can easily be converted to a vacuum only vent or end-of-line pressure / vacuum vent and can either be direct activating or pilot operated.

Maintains Accurate Settings. The Pilot Operated Model 5200 provides bubble tight (no leakage) up to 95% of set pressure or 0.5" WC, whichever is greater and less than 1 SCFH at 90% of setting on the vacuum side of the vent. A certified test certificate is included with each vent verifying the accuracy of both the pressure and vacuum setting and leakage.

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. The pallets have outer guiding and center stabilizing stem to provide self alignment and tight seating.

MATERIALS OF CONSTRUCTION

Series	Housing	Trim	Diaphragm Cases	Tube & Fittings
5200CS	CS	316 SST	CS	CS
5200SST	316 SST	316 SST	SST	SST
5200A	Aluminum	316 SST	CS	CS®

STANDARD/GENERAL SPECIFICATIONS

Spring Ranges:

SPRING RANGES	
in/WC	(mbarg)
2.0" - 10.0"	(4.9 - 24.9)
8.0" - 16.0"	(19.9 - 39.7)
14.0" - 35.0"	(34.7 - 86.8)
33.0" - 55.4"	(81.8 - 137.4)
PSIG	(Barg)
1.75 - 5.5	(.12 - .38)
4.5 - 9.0	(.31 - .62)
8.0 - 15.0	(.55 - 1.03)

Painting:

Standard: All non-corrosion resistant portions to be painted with corrosion resistant epoxy paint per Cashco Spec #S-1606.

Alternate: See Opt-95.

Gaskets:

Standard: TFE/TFE Rope

Alternate: Gortex.

OPTION SPECIFICATIONS

ELECTRIC TRACE - Electric heat tape is wrapped around external surface of the vent body. A thermal insulation jacket is secured over the tape and vent body to minimize heat loss. Commonly used to prevent the formation of ice during freezing conditions. See STEAM JACKETING if elevated process temperatures are desired.

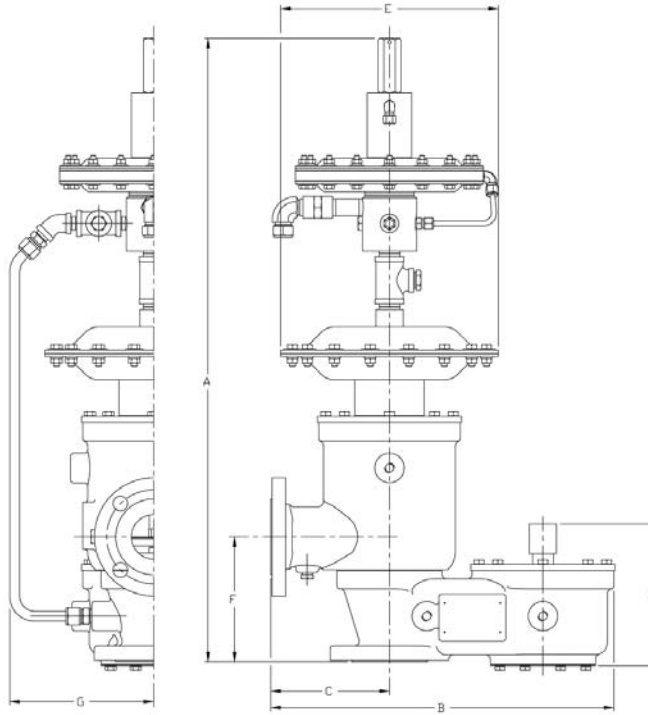
Option -95:

EPOXY PAINT. Special epoxy painting of all non-corrosion resistant external surfaces per Cashco Spec #S-1547. Utilized in harsh atmospheric conditions.

STEAM TRACE - Copper tubing is wrapped around the external surface of the vent body. A thermal insulation jacket is secured over the tubing and vent body to minimize heat loss. Commonly used to prevent the formation of ice during freezing conditions. See STEAM JACKETING if elevated process temperatures are desired.

STEAM JACKETING - Cast aluminum jacket with integrated carbon steel steam chambers are bolted around the vent body. Vent valve and jacket are shipped unassembled as vent valve must first be installed. Commonly used to prevent stored media vapors from crystallizing at ambient temperatures.

DIMENSIONS



ENGLISH Units - in Aluminum, Carbon Steel & Stainless Steel								Approx. wt - lbs	
SIZE In	A	B	C	D	E (diam)	F	G	Alum	CS / SST
2" x 2"	31.75	17.33	6.00	7.17	11.00	6.32	7.75	75	129
2" x 3"	31.75	17.52	6.19	7.17	11.00	6.88	7.75	78	133
3" x 3"	34.50	18.81	6.50	8.60	11.00	8.06	7.75	94	156
3" x 4"	34.50	18.81	6.50	8.60	11.00	8.56	7.75	95	160
4" x 4"	40.75	24.38	8.00	10.56	16.50	9.55	9.25	155	254
4" x 6"	40.75	24.38	8.00	10.56	16.50	10.55	9.25	158	258
6" x 6"	42.38	29.00	9.00	11.84	16.50	11.03	9.25	185	289
6" x 8"	42.38	29.00	9.00	11.84	16.50	12.22	9.25	192	300
8" x 10"	47.38	33.84	11.00	15.59	23.81	15.27	12.94	355	571
10" x 12"	49.25	40.38	12.25	15.44	23.81	16.44	13.25	478	765
12" x 14"	51.88	43.50	14.00	17.18	23.81	18.40	13.38	559	891

METRIC Units - mm Aluminum, Carbon Steel & Stainless Steel								Approx. wt - kgs	
SIZE (DN)	A	B	C	D	E (diam)	F	G	Alum	CS / SST
(50) x (50)	806.4	440.1	152.4	182.1	279.4	160.5	196.8	35	59
(50) x (80)	806.4	445.0	157.2	182.1	279.4	174.7	196.8	36	61
(80) x (80)	876.3	477.7	165.1	218.4	279.4	204.7	196.8	43	71
(80) x (100)	876.3	477.7	165.1	218.4	279.4	217.4	196.8	44	73
(100) x (100)	1035.0	619.2	203.2	268.2	419.1	242.5	234.9	71	115
(100) x (150)	1035.0	619.2	203.2	268.2	419.1	267.9	234.9	72	117
(150) x (150)	1076.4	736.6	228.6	300.7	419.1	280.1	234.9	84	131
(150) x (200)	1076.4	736.6	228.6	300.7	419.1	310.3	234.9	87	136
(200) x (250)	1203.4	859.5	279.4	395.9	604.7	387.8	328.6	161	259
(250) x (300)	1250.9	1025.6	311.1	392.1	604.7	417.5	336.5	217	347
(300) x (350)	1317.7	1104.9	355.6	436.3	604.7	467.3	339.8	254	404

5200 Series PRODUCT CODE

06/03/09

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

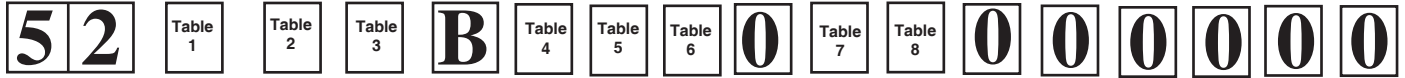


TABLE 1 - INLET SIZE			
INCH	CODE	DN	CODE
2"	2	50 (PN16)	H
3"	3	80 (PN16)	J
4"	4	100 (PN16)	K
6"	6	150 (PN16)	L
8" *	8	200 * (PN10)	M
		200 * (PN16)	T
10" *	A	250 * (PN10)	N
		250 * (PN16)	V
12" *	B	300 * (PN10)	P
		300 * (PN16)	W

TABLE 2 - OUTLET SIZE			
INCH	CODE	DN	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
10" *	A	250 * (PN10)	N
		250 * (PN16)	V
12" *	B	300 * (PN10)	P
		300 * (PN16)	W
14" *	C	350 * (PN10)	R
		350 * (PN16)	Y

TABLE 3 BODY/TRIM MATERIALS		
Material	W/O Flame-screen	W/Flamescreen
	CODE	CODE
ALUM/SST *	A	B
CS/SST	C	D
SST/SST	S	T

* Alum mates with ASME 125# flat face flange, CS & SST with ASME 150#RF flange

* 8" inlet only available w/10" outlet.
* 10" inlet only available w/12" outlet.
* 12" inlet only available w/14" outlet.

TABLE 4 - PALLET DIAPHRAGM & GASKET MATERIALS		
Diaphragm Material	Gasket Material	
	TFE/TFE Paste Std.	Gortex
	CODE	CODE
FEP	A	G
Buna-N	B	C
EPDM	D	E
FKM (Std)	F	H

TABLE 5 - SPRING RANGES	
Spring Ranges	CODE
2.0" - 10.0" WC (4.9 - 24.9 mbar)	3
8.0" - 16.0" WC (19.9 - 39.7 mbar)	6
14.0" - 35.0" WC (34.7 - 86.8 mbar)	7
33.0" - 55.4" WC (81.8 - 137.4 mbar)	8
1.75 - 5.5 psig (.12 - .38 barg)	9
4.5 - 9.0 psig (.31 - .62 barg)	H
8.0 - 15.0 psig (.55 - 1.03 barg)	L

TABLE 6 - PILOT VALVE SEAL, SEAT & DIAPHRAGM MATERIALS.					
Pilot Seal & Seat Materials	Actuator Diaphragm Material				
	Buna-N	EPDM	FKM (Std)	FEP TFE for (2.0"-10"WC)	FKM w/FEP Liners
	CODE	CODE	CODE	CODE	CODE
Buna-N	B	-	-	-	-
EPDM	-	E	H	-	-
FKM (Std)	P	R	V	S	U
Chemrez	-	-	-	C	D
Kalrez	-	-	-	K	L

TABLE 7 - SENSING / PAINT OPTIONS			
Sensing Configuration & Accessory Options SST Pilot Filter Element Exhaust to Atmosphere		Std Paint	Epoxy Painted Opt.-95
		CODE	CODE
Standard	Internal Sensing.	0	W
Option 2:	Remote Sensing.	2	V
Option 3:	Internal Sensing with Manual Blowdown Valve	3	T
Option 4:	Internal Sensing with Backflow Preventer	4	S
Option 5:	Internal Sensing with Backflow Preventer & Field Test Connection	5	R
Option 6:	Internal Sensing with Rotometer to Purge Pilot Sense & Discharge Line	6	P

TABLE 8 - ACCESSORY / CERTS			
OPTION	Certification		
	Std	ATEX	CE
	CODE	CODE	CODE
None	0	A	E
Electric Trace	H	B	F
Steam Jacket	J	C	G
Steam Trace	S	D	K

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