



**Valve Concepts, Inc.**  
ISO Registered Company



**Model 2049 Manifold  
Shown with**

**Model 1049 Secure-Gard & Model 1078 Vacu-Gard  
All Patented Products**

## Model 2049 PV-Gard® Tank Manifold

### OBJECTIVE

Normally, an installation of this type requires three to four different nozzles: one per piece of equipment and sensing ports. The Model 2049 manifold is designed to allow a very compact installation of a blanketing valve and vent valve on one single tank nozzle.

### TECHNIQUE

The 2049 is designed so that the blanketing gas flows into the vapor space of the tank without affecting the normal operation of the vent valve.

### BENEFITS

- Single Tank Nozzle Required
- Ease of Installation & Maintenance

## GENERAL SPECIFICATIONS

### Body Material

Carbon Steel  
316 Stainless Steel  
Flange material of same general chemistry as body material.

### Tank Nozzle Connections

2", 3", 4", 6", 8", 10", 12" 150# RF flanges  
DN 50,80,100,150,200,250,300 (PN16) flanges  
or DN 200, 250, 300 (PN10) flanges

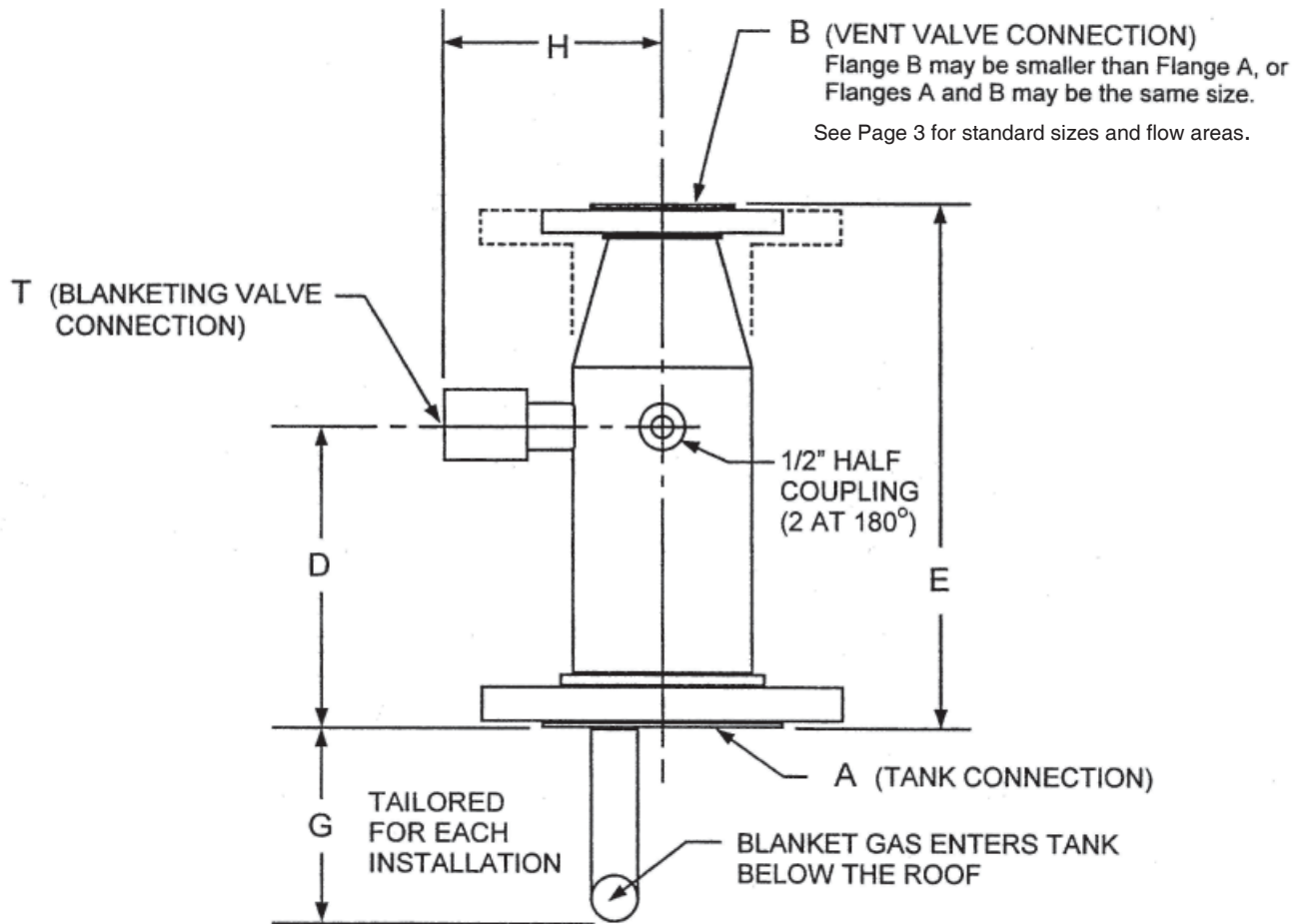
### Blanketing Connections

1/2" and 1" FNPT (screwed)  
1/2", 1", and 2" 150# RF flanges.  
DN 25,50 (PN16) flanges

### Venting Connections

2", 3", 4", 6", 8", 10", 12" 150# RF flanges  
DN 50,80,100,150,200,250,300 PN16 flanges  
or DN 200, 250, 300 (PN10) flanges

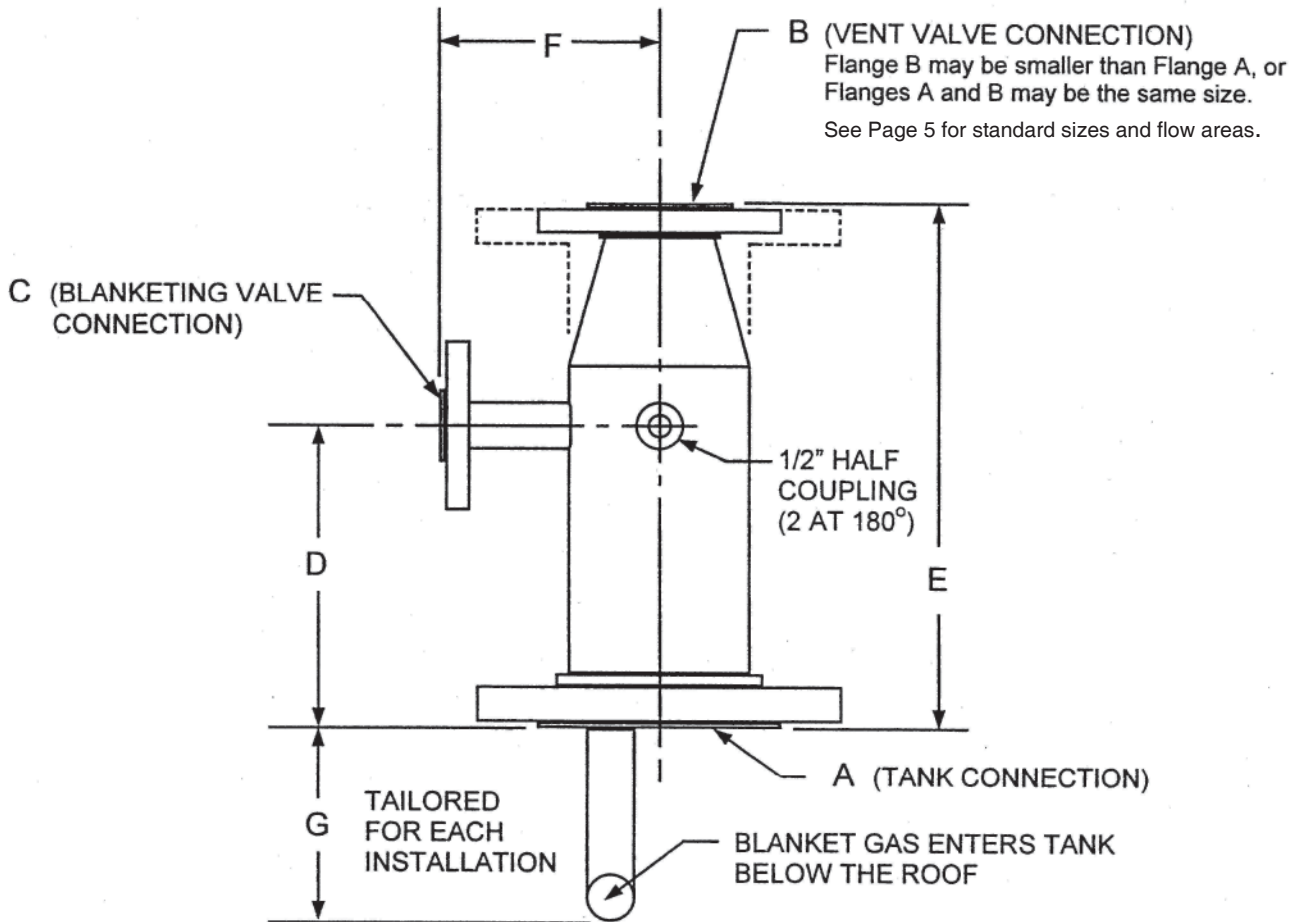
**MODEL 2049T MANIFOLD  
FEMALE PIPE THREAD SIDE CONNECTION  
(PATENTED)**



- Flanges (A & B) are 150# Raised Face
- T connection is always FNPT for the Model 2049T.
- All piping is standard weight.
- Specify length of probe G when ordering. It should be approximately 6 inches below the roof of the tank, not below flange A.

MODEL 2049T MANIFOLD DIMENSIONS					
Size (AXBXC)	"B" Flange Flow Area (SQ. In)	D (+/- 0.25")	E (+/- 0.25")	H (+/- 0.25")	Est. Wt. (lbs)
2"x2"x1/2"	2.32	6.00	12.00	2.84	18
3"x 2"x1"	3.35	8.00	13.62	3.93	29
3"x3"x1"	4.88	8.00	16.00	3.93	34
4"x 2"x1"	3.35	8.00	14.25	4.43	36
4"x 3"x1"	7.39	8.00	14.38	4.43	41
4"x4"x1"	10.22	8.00	16.00	4.43	46
6"x 2"x1"	3.35	8.00	15.62	5.50	51
6"x 3"x1"	7.39	8.00	15.75	5.50	56
6"x 4"x1"	12.72	8.00	15.87	5.50	60
6"x6"x1"	26.37	8.00	16.00	5.50	67
8"x 3"x1"	7.39	8.00	16.25	6.50	77
8"x 4"x1"	12.72	8.00	16.38	6.50	81
8"x 6"x1"	28.87	8.00	16.62	6.50	87
8"x8"x1"	47.50	8.00	16.00	6.50	100
10"x 4"x1"	12.72	8.00	17.37	7.56	111
10"x 6"x1"	28.87	8.00	17.62	7.56	117
10"x 8"x1"	50.00	8.00	17.87	7.56	128
10"x10"x1"	76.31	8.00	16.00	7.56	139
12"x 6"x1"	28.87	8.00	18.62	8.56	154
12"x 8"x1"	50.00	8.00	18.87	8.56	166
12"x 10"x1"	78.81	8.00	19.00	8.56	180
12"x12"x1"	109.37	8.00	16.00	8.56	195

MODEL 2049F MANIFOLD  
 FLANGED SIDE CONNECTION  
 (PATENTED)



- All flanges are 150# raised face
- All piping is standard weight.
- Specify length of probe G when ordering. It should be approximately 6 inches below the roof of the tank, not below flange A.

MODEL 2049F MANIFOLD DIMENSIONS					
Size (AXBXC)	"B" Flange Flow Area (SQ. In)	D (+/- 0.25")	E (+/- 0.25")	F (+/- 0.25")	Est. Wt. (lbs)
2"x2"x1/2"	2.32	6.00	12.00	3.75	18
3"x 2"x1"	3.35	8.00	13.62	4.87	29
3"x3"x1"	4.88	8.00	16.00	4.87	34
4"x 2"x1"	3.35	8.00	14.25	5.37	36
4"x 3"x1"	7.39	8.00	14.38	5.37	41
4"x4"x1"	10.22	8.00	16.00	5.37	46
6"x 2"x1"	3.35	8.00	15.62	6.44	51
6"x 3"x1"	7.39	8.00	15.75	6.44	56
6"x 4"x1"	12.72	8.00	15.87	6.44	60
6"x6"x1"	26.37	8.00	16.00	6.44	67
8"x 3"x1"	7.39	8.00	16.25	7.44	77
8"x 4"x1"	12.72	8.00	16.38	7.44	81
8"x 6"x1"	28.87	8.00	16.62	7.44	87
8"x8"x1"	47.50	8.00	16.00	7.44	100
10"x 4"x1"	12.72	8.00	17.37	8.50	111
10"x 6"x1"	28.87	8.00	17.62	8.50	117
10"x 8"x1"	50.00	8.00	17.87	8.50	128
10"x10"x1"	76.31	8.00	16.00	8.50	139
12"x 6"x1"	28.87	8.00	18.62	9.50	154
12"x 8"x1"	50.00	8.00	18.87	9.50	166
12"x 10"x1"	78.81	8.00	19.00	9.50	180
12"x12"x1"	109.37	8.00	16.00	9.50	195
8"x 4"x2"	12.72	15.00	24.87	9.00	115
8"x 6"x2"	28.87	15.00	25.12	9.00	121
8"x8"x2"	42.17	15.00	30.00	9.00	146
10"x 4"x2"	12.72	15.00	25.87	10.00	153
10"x 6"x2"	28.87	15.00	26.12	10.00	159
10"x 8"x2"	50.00	15.00	26.37	10.00	170
10"x10"x2"	70.98	15.00	30.00	10.00	200
12"x 6"x2"	28.87	15.00	27.12	11.00	202
12"x 8"x2"	50.00	15.00	27.37	11.00	214
12"x 10"x2"	78.81	15.00	27.50	11.00	228
12"x12"x2"	104.04	15.00	30.00	11.00	265

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# MODEL 2049 PRODUCT CODER 03/31/16



POSITION 3 - BODY MATERIAL	
Material	CODE
Carbon Steel	C
316 Stainless Steel	S

POSITION 4 - TANK CONNECTION			
Size	CODE	DIN Flange	CODE
2" - 150# RF Flange	A	50 (PN16)	H
3" - 150# RF Flange	B	80 (PN16)	J
4" - 150# RF Flange	C	100 (PN16)	K
6" - 150# RF Flange	D	150 (PN16)	L
8" - 150# RF Flange	E	200 (PN10)	M
		200 (PN16)	T
10" - 150# RF Flange	F	250 (PN10)	N
		250 (PN16)	V
12" - 150# RF Flange	G	300 (PN10)	P
		300 (PN16)	W

POSITION 5 - VENT CONNECTION			
Size	CODE	DIN Flange	CODE
2" - 150# RF Flange	A	50 (PN16)	H
3" - 150# RF Flange	B	80 (PN16)	J
4" - 150# RF Flange	C	100 (PN16)	K
6" - 150# RF Flange	D	150 (PN16)	L
8" - 150# RF Flange	E	200 (PN10)	M
		200 (PN16)	T
10" - 150# RF Flange	F	250 (PN10)	N
		250 (PN16)	V
12" - 150# RF Flange	G	300 (PN10)	P
		300 (PN16)	W

POSITION 6 - BLANKET CONNECTION	
Size	CODE
1/2" - NPT (DN15) *	X
1" - NPT (DN25)	1
1/2" - 150# RF Flange *	A
1" - 150# RF Flange	B
2" - 150# RF Flange **	C
DN25 (PN16) Flange	E
DN50 (PN16) Flange **	F

\* Only available for use w/Size 2" (DN50) Tank connection -see Position 4.  
 \*\* Only available for use w/Size 8" (DN200) or larger Tank connection - see Position 4.

POSITION 7 - PROBE LENGTH	
Length	CODE
12" (304mm)	D
14" (355mm)	E
16" (406mm)	F
18" (457mm)	G
20" (508mm)	H
22" (558mm)	J
24" (609mm)	K

Other lengths available.  
Please consult factory.

**NOTE:** Please code for Blanketing Valve and Vent Valve on separate model technical bulletins. Blanketing Valve must be horizontal outlet with remote sensing.