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TECHNICAL DATASHEET
PACIFIC VALVES® - Pressure Seal Valves

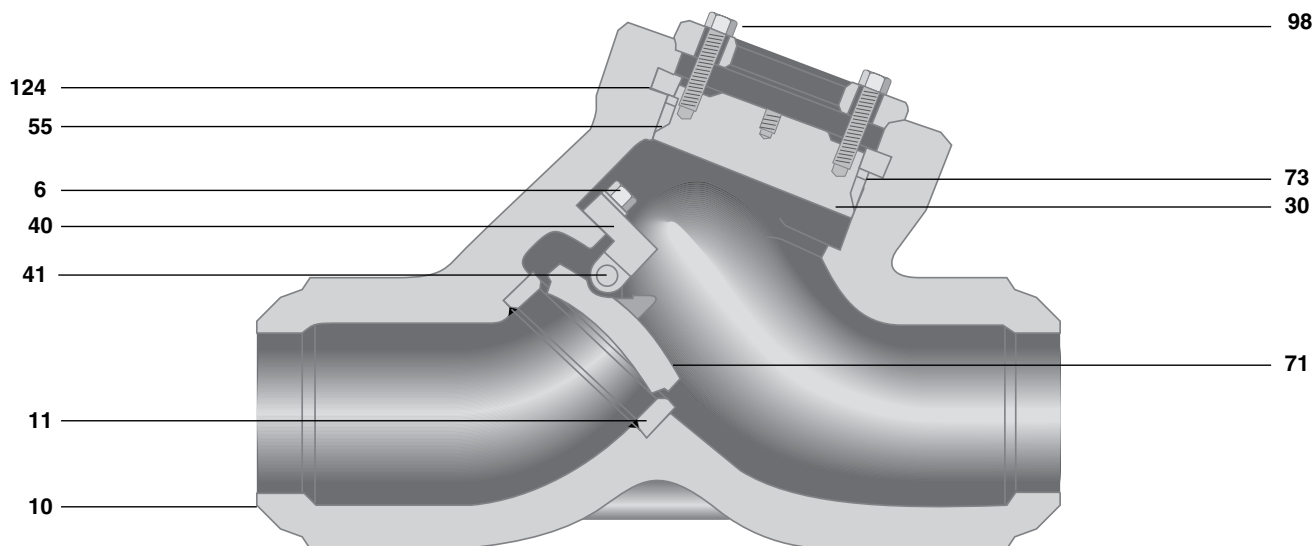


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Materials Tilting Disc Check Valves

Tilting Disc Check Valve



NO	PART NAME	CARBON STEEL	1¼CHROME	2¼ CHROME	9Cr-1Mo-V	316 STAINLESS
30	BONNET CAP	CARBON STEEL	ASTM A182 GR F11/F22	ASTM A182 GR F22	ASTM A182 GRF91	ASTM A182 GR F316
2	BONNET CARRIER	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL	CARBON STEEL
98	BONNET CAP SCREW	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B7
73	THRUST RING	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140
124	SEGMENT RING	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140	AISI 4340 OR 4140
6	HINGE CAP SCREW	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B7	ASTM 193 GR B8
55	GASKET	GRAPHITE/SS CAPS OR MILD STEEL SILVER PLATED*	GRAPHITE/SS CAPS OR MILD STEEL SILVER PLATED*	GRAPHITE/SS CAPS OR MILD STEEL SILVER PLATED*	GRAPHITE/SS CAPS OR MILD STEEL SILVER PLATED*	GRAPHITE/SS CAPS OR MILD STEEL SILVER PLATED*
40	HINGE	ASTM A351 GR CA-15	ASTM A351 GR CA-15	ASTM A351 GR CA-15	ASTM A351 GR CA-15	ASTM A351 GR CF8M
41	HINGE PIN	ASTM A582 GR 416	ASTM A582 GR 416	ASTM A582 GR 416	ASTM A582 GR 416	ASTM A705 GR 630
11	SEAT RING	CARBON STEEL	316 SS OR 2¼ CR	316 SS OR 2¼ CR	ALLOY 91	316L SS
		W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY
71	DISC	ASTM A216 GR WCB	ASTM A217 GR WC6	ASTM A217 GR WC9	ASTM A351 GR 8M	ASTM A351 GR CF8MW
		W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY	W/CO-CR OVERLAY
10	BODY	ASTM A216 GR WCC ³	ASTM A217 GR WC6 ²	ASTM A217 GR WC9 ²	ASTM A217 GR C12A	ASTM A351 GR CF8M
118	SHIM	316SS	316SS	316SS	316SS	316SS
126	LOCKING DEVICE	316SS	316SS	316SS	316SS	316SS

Pacific Valves® reserves the right to change or modify product design or construction without prior notice and without incurring any obligation to make such changes and modifications on products previously or subsequently sold.

NOTES:

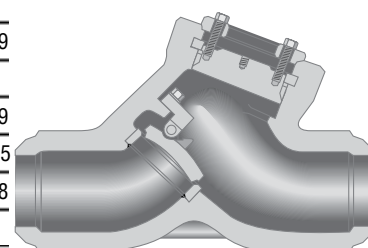
1. Body material for weld end valves will be ASTM A351 GR CF3M (316L).
2. A 309 SS inlay is standard in the gasket area of the body on ASME class 2500 valves. For this option on other pressure classes, specify special features suffix H.
3. WCC valve bonnets and internals will be manufactured with 300 series SS and/or 2¼ CR.

*Graphite Pressure Seal Bonnet Gasket standard. Mild Steel Silver Plated available on request.

Dimensions Tilting Disc Check Valves • ASME Class 900

Fig. No. **58809-7-WE*** Butt Weld Ends
 Fig. No. **58809-7** Flanged, Raised Face
 Fig. No. **58809-7-RJ** Flanged, Ring Joint

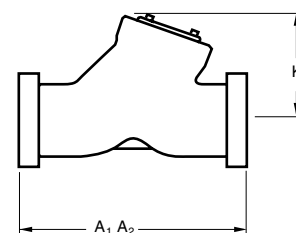
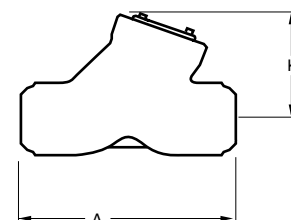
Dim	Description		VALVE SIZES (inches)												
			2	2.5	3	4	6	8	10	12	14	16	18	20	24
A	End-to-End Weld Ends	in.	10	10	12	14	20	26	31	36	39	43	48	52	61
		mm	254	254	304	355	508	660	787	914	990	1092	1219	1320	1549
A1	Face-to-Face Flanged Ends	in.	N/A	N/A	15	18	24	19	33	38	40.5	44.5	48	52	61
		mm	N/A	N/A	381	457	609	736	838	965	1028	1130	1219	1320	1549
A2	Face-to-Face RTJ	in.	N/A	N/A	15.13	18.13	24.13	29.13	33.13	38.13	40.88	44.88	48.5	52.5	61.75
		mm	N/A	N/A	384	460	612	739	841	968	1039	1140	1232	1333	1568
K	Center-to-Top	in.	7.5	7.5	7.5	7.5	9.5	12	15	16.5	18	19.75	23.5	26	31
		mm	190	190	190	190	241	304	381	419	457	501	596	660	787
	Weight Weld Ends	lbs	45	45	45	50	130	240	470	720	900	1300	1840	2430	4200
		kg	20	20	20	23	59	109	213	326	408	589	834	1102	1905
	Weight Flange Ends	lbs	N/A	N/A	110	150	350	610	1000	1460	2000	2600	3650	4725	8400
		kg	N/A	N/A	50	68	159	276	473	662	907	1179	1655	2143	3809



VENTURI TILTING DISC CHECK VALVES

Fig. No. **58809-7-WE*** Butt Weld Ends

Dim	Description		VALVE SIZES (inches)						
			8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18	20x18x20
A	End-to-End	in.	24	29	33	38	40.5	44.5	48
		mm	609	736	838	965	1028	1130	1219
K	Center-to-Top Open	in.	9.5	12	15	16.5	18	19.75	23.5
		mm	241	304	381	419	457	501	596
	Weight	lbs	140	250	485	740	930	1350	1890
		kg	63	113	219	335	421	612	857



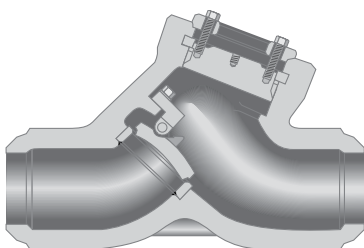
General Notes:

1. Dimensions, weights, and other engineering data are subject to change or modification. This data is not to be used for construction unless confirmed by Pacific Valves®.
2. For best performance, size for full open operation. See Flow Calculations in the Technical Data Section.
* Specify pipe schedule.
3. Related data available in Technical Data, Actuators, and Accessories sections.

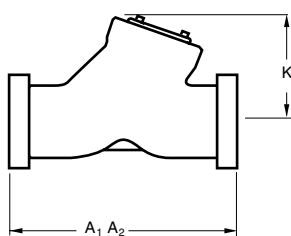
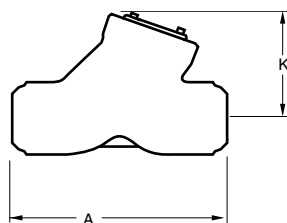


Dimensions Tilting Disc Check Valves • ASME Class 1500

Fig. No. **58815-7-WE*** Butt Weld Ends
 Fig. No. **58815-7** Flanged, Raised Face
 Fig. No. **58815-7-RJ** Flanged, Ring Joint



Dim	Description		VALVE SIZES (inches)												
			2	2.5	3	4	6	8	10	12	14	16	18	20	24
A	End-to-End Weld Ends	in.	12	12	12	16	22	28	34	39	42	47	52	56	66
		mm	254	254	304	406	558	711	863	990	1066	1193	1320	1422	1676
A1	Face-to-Face Flanged Ends	in.	18.5	18.5	18.5	21.5	27.75	32.75	39	44.5	49.5	54.5	60.5	65.5	76.5
		mm	469	469	469	546	704	831	990	1130	1257	1384	1536	1663	1943
A2	Face-to-Face RTJ	in.	18.63	18.63	18.63	21.63	28	33.13	39.38	45.13	50.25	55.38	61.38	66.38	77.63
		mm	473	473	473	549	711	841	1000	1146	1276	1406	1559	1686	1972
K	Center-to-Top	in.	7.5	7.5	7.5	8.5	10.5	13.5	16.5	18.5	20	22	26	29	34.5
		mm	196	196	196	215	266	342	419	469	508	558	660	736	876
	Weight Weld Ends	lbs	55	55	55	80	200	400	720	1100	1380	1980	2790	3700	6370
		kg	25	25	25	36	91	182	326	499	625	857	1265	1678	2888
	Weight Flanged Ends	lbs	150	150	150	220	520	935	1600	2400	3046	4840	6120	8200	12540
		kg	68	68	68	99	235	424	725	1088	1381	2195	2775	3718	5687



VENTURI TILTING DISC CHECK VALVES

Fig. No. **58815-7-WE*** Butt Weld Ends

Dim	Description		VALVE SIZES (inches)						
			8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18	20x18x20
A	End-to-End	in.	27.75	32.75	39	44.5	49.5	54.5	60.5
		mm	705	831	990	1130	1257	1384	1536
K	Center-to-Top Open	in.	10.5	13.5	16.5	18.5	20	22	26
		mm	266	342	419	469	508	558	660
	Weight	lbs	220	430	750	1140	1425	2030	2840
		kg	99	195	340	517	646	920	1287

General Notes:

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* Specify pipe schedule.
- Related data available in Technical Data, Actuators, and Accessories sections.

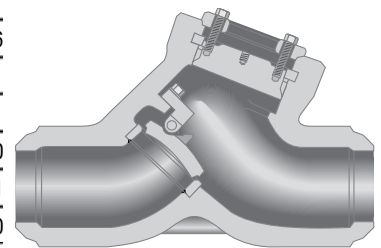
Dimensions Tilting Disc Check Valves • ASME Class 2500

Fig. No. **58825H-7-WE*** Butt Weld Ends
 Fig. No. **58825H-7** Flanged, Raised Face
 Fig. No. **58825H-7-RJ** Flanged, Ring Joint

Dim	Description		VALVE SIZES (inches)												
			2	2.5	3	4	6	8	10	12	14	16	18	20	24
A	End-to-End Weld Ends	in.	13	13	14.5	18	24	30	36	41	44	48	53	57	66
		mm	330	330	368	457	610	762	914	1041	1117	1219	1346	1447	1676
K	Center-to-Top	in.	8	8	8	12	13	16	18	21	23	26	28	31	36
		mm	203	203	203	304	330	406	457	533	584	660	711	787	914
	Weight Weld Ends	lbs	80	80	80	110	320	620	1150	1600	2150	2750	3500	4250	6000
		kg	36	36	36	50	145	281	520	725	975	1247	1587	1927	2721
	Weight Flanged Ends	lbs	250	250	250	350	980	1530	3150	4560	4900	5700	6300	7200	9000
		kg	113	113	113	159	445	694	1429	2068	2227	2590	2864	3272	4091

NOTE:

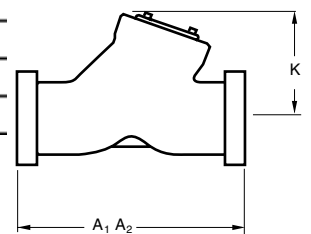
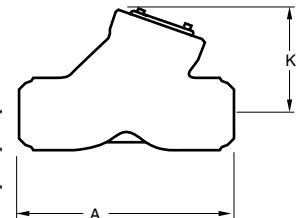
1. For flanged end data on 14"- 24" — contact Pacific Valves®.



VENTURI TILTING DISC CHECK VALVES

Fig. No. **58825H-7-WE*** Butt Weld Ends

Dim	Description		VALVE SIZES (inches)						
			8x6x8	10x8x10	12x10x12	14x12x14	16x14x16	18x16x18	20x18x20
A	End-to-End	in.	28	34	39.75	41	44	49	59.5
		mm	711	863	1009	1041	1117	1244	1511
K	Center-to-Top Open	in.	13	16	18	21	23	26	28
		mm	330	406	457	533	584	660	711
	Weight	lbs	340	640	1200	1660	2230	2850	4300
		kg	154	290	544	752	1011	1292	1950



General Notes:

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- For best performance, size for full open operation. See Flow Calculations in the Technical Data Section.
* Specify pipe schedule.
- Related data available in Technical Data, Actuators, and Accessories sections.



Pressure Seal Figure Number System

1 2 - 4 5 6 7 8 - 10 11 12 13 - 15 - 17 - 19 20 21 - 23 24 25 26 27 28 29 30

1 - 2 = Size of Connection

2H = 2 1/2" Valve
03 = 3" Valve

4 - 6 = Valve Type

554 = Parallel Disc
555 = Flex Wedge
560 = T-Globe Stop
565 = T-Globe Stop Check (non-return)
580 = Swing Check
586 = Lift Check - Globe
588 = Tilting Disc Check
590 = Y Globe Stop Valve
595 = Y Globe Stop Check
596 = Y Globe Life Check

7 - 8 = Pressure Class

06 = 600
6C = 600 Intermediate Class
(see sales order notes)
09 = 900
9C = 900 Intermediate Class
(see sales order notes)
15 = 1500
1C = 1500 Intermediate Class
(see sales order notes)
25 = 2500
2C = 2500 Intermediate Class
(see sales order notes)
45 = 4500

10 = Valve Port Size

*S = Standard port
R = Reduced port
E = Expanded port

11 - 12 = By Pass, Drain & Bleed Arrangements

* NN = N.A.
EA = Equalizing Line from body neck to A
EB = Equalizing Line from body neck to B
KW = Bonnet Vent in upstream side of wedge
J1 = Single valve bypass from A to B
J2 = Double valve bypass from A to B
J3 = Triple valve bypass from A to B and body neck
JA = Single valve equalizing line from body neck to A
JB = Single valve equalizing line from body neck to B
VV = 6" socket weld nipples with globe style drain valves at locations C&D
PP = 6" socket weld nipples capped at locations C&D
V? = 6" socket weld nipple with globe style drain valve at location? (A-G)
P? = 6" socket weld nipple capped at location? (A-G)

13 = Custom Feature

*N = N.A.
X = See sales order notes

15 = Special Processing

*S = No special processing
Z = See sales order notes

17 = Body Material

1 = WCB
2 = WCC
4 = C12A
5 = C5
6 = WCC6
9 = WC9

19 = Customer Pipe Schedule

A = 10
B = 20
C = 30
D = 40
E = STD
F = 60
G = 80
H = XS
J = 100
K = 120
L = 140
M = 160
N = XXS
X = Custom (see sales order notes)

20 - 21 = Valve Weld End Prep Figure (per ASME B16.25)

Pipe wall thickness .1875" to .88"
*2B = For use with no backing ring or split rectangular backing ring
2C = For use with continuous rectangular backing ring
2D = For use with continuous tapered backing ring
Pipe wall thickness greater than .88"
*3B = For use with no backing ring or split rectangular backing ring
3C = For use with continuous rectangular backing ring
3D = For use with continuous tapered backing ring

For use with GTAW root pass or consumable insert ring

5B = Pipe wall thickness from .38" to 1.0"
6B = Pipe wall thickness over 1.0"

XX= Custom weld ends (see sales order notes)

RF= Raised face flanged end connections

23 = Manual Operation

N = N.A.
H = Handwheel
L = Handwheel with locking device (closed)
R = Handwheel with locking device (open)
J = Handwheel with chain
G = Manual Bevel Gear Operator
C = Manual Bevel Gear Operator with Chainwheel
A = Manual Bevel Gear with Air Wrench
P = Manual Bevel Gear with position indicator
M = Manual Bevel Gear Operator with locking device (closed)
R = Manual Bevel Gear Operator with locking device (open)
B = Hammerblow Handwheel

24 = Valve Actuator

N = N.A.
E = Direct mount Electric Motor Operator
T = Direct mount Electric Motor Operator with thermal compensating device
F = Electric Motor Operator with Bevel Gear
P = Pneumatic Operator
H = Hydraulic Operator
M = Operator mounted by customer

25 = Gear & Actuator Mounting Dimensions (per MSS SP-102)

N = N.A. 5 = FA25
1 = FA7 6 = FA30
2 = FA10 7 = FA35
3 = FA14 8 = FA40
4 = FA16 9 = Other

* Denotes Standard Offering

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