Dry Bulk - Chemical -Petroleum Nozzles & Valves Index

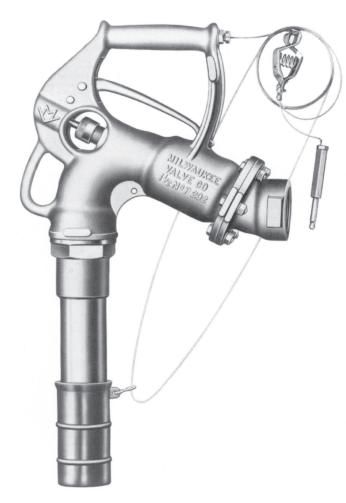
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HOSE NOZZLE P-202, P-2022

BRONZE OR ALUMINUM

Overwing Aircraft Refueling • Tank Trucks
Bronze Internal Parts • 2 Stage Fulcrum Lever
Balanced Dashpot Control
Dual Disk



This easy-opening, soft-close valve minimizes shock. It is designed for operations up to 60 psi at inlet. Easy opening is achieved by balanced pressures on the valve assembly. Soft close controlled by balanced dashpot mechanism. Curved body minimizes friction and permits full flow. Poppet and dashpot assembly easily removed for repairs. Nozzle normally furnished with inlet adaptor, rigid tube, 100 mesh strainer, dust cap and ground cable. NPT inlet threads.

MODEL	SIZE/INCHES	DESCRIPTION
P-202	1 1/2, 2	Bronze
	2 1/2 x 2	(less strainer, cap and cable)
P-202-G	1 1/2, 2	Bronze
	2 1/2 x 2	(with strainer, cap and cable)
P-202-HG	1 1/2 x 1 1/4	Bronze (with reducing tube,
		strainer, cap and cable)
P-2022-R	1 1/4,1 1/2, 2	Aluminum
1 -2022-11	2 1/2 x 2	(less strainer, cap and cable)
P-2022-G	1 1/4, 1 1/2, 2	Aluminum
	2 1/2 x 2	(with strainer, cap and cable)
P-2022-HG	1 1/2 x 1 1/4	Aluminum (with reducing tube,
		strainer, cap and cable)

NOTE: P-2022 available with stainless steel trim for demineralized water.

MILITARY SPECIFICATION						
P-202	Conforms to MIL-N-4180 Type II					
P-2022	Conforms to MIL-N-4180 Type I					

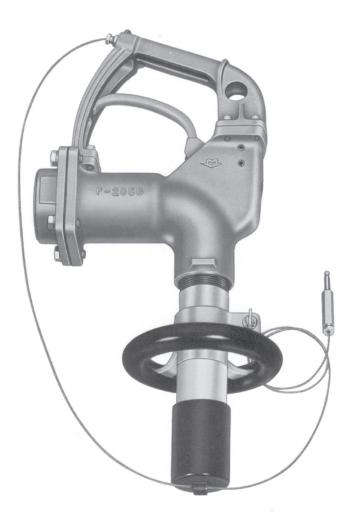
AVAILABLE EXTRA				
P-84196	Filler Neck Protector			





HOSE NOZZLE P-2056 ALUMINUM

Aircraft Refueling • Cushion Close
135 GPM 25 psi Inlet Nozzle Pressure
Aluminum & Stainless
Internal Parts



This Cushion Close Nozzle protects hose against hydraulic hammering effect with a timed soft close action. A tamper proof, non-adjustable design provides positive constant setting. Normal setting of 1.5 seconds is provided unless other is requested. This is a balanced valve with less than 15 lbs. lever pull under full line pressure from 25 to 70 psig. Line pressure offsets spring load for easy operation. Nozzle normally furnished with Aluminum Rigid Tube, 100 Mesh Strainer, Filler Neck Protector, Nozzle Cap and Ground Cable. P-2056 Nozzles are intended for use on ground equipment for servicing aviation fuel. Also can be used for servicing automotive fuels to ground vehicles and equipment.

SIZE						
2" Inlet x 2	2" Inlet x 2" Outlet (Spout)					
	MILITARY SPECIFICATION					
P-2056 Conforms to MIL-N-87963 Type MD-3						
AVAILABLE EXTRA						
4178-HJ	2" x 1 1/2" Inlet Reducing Bushing					
4178-G5A	2" x 1 1/4" Inlet Reducing Bushing					



BUTTERFLY P-2850, 2851 SERIES

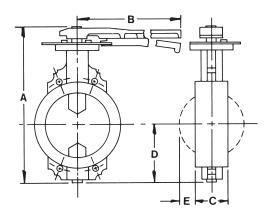
ALUMINUM

Tank Trucks • Bulk Plants • Dry Bulk Plants 90° Arc • Quick Open



LOCATES BETWEEN A.N.S.I., T.T.M.A. AND COMPETITIVE SPECIAL FLANGES

These Butterfly valves of rugged lightweight aluminum are designed to accept a variety of flange fittings. They have been developed specifically for tank truck application. Three different liners are offered. The "E" (EPDM) liner is a general purpose liner for dry bulk product and air lines. The "H" (Hydrin) liner is for use with petroleum products. The "X" (Polyurethane) liner is a special high abrasion material for dry bulk product lines where the temperature does not exceed 200° F. Model P-2850 valves have plated ductile iron discs. P-2581 valves have stainless steel discs.



DIMENSIONS-INCHES

SIZE	Α	В	С	D	E
2	7 1/2	8 1/2	1 3/4	2 15/32	9/32
3	8 9/16	8 1/2	1 7/8	3	3/4
4	9 3/4	11 1/16	2 1/8	3 21/32	1 1/8
5	11 1/16	11 1/16	2 5/16	4 3/16	1 1/2
6	12 1/4	11 1/16	2 5/16	4 21/32	2

FLANGE SPECIFICATIONS-INCHES

SIZE		ASA		T.T.M.A.			COMPETITIVE		
	B.C DIA.	BOLT DIA.	NO. BOLTS	B.C DIA.	BOLT DIA.	NO. BOLTS	B.C DIA.	BOLT DIA.	NO. BOLTS
2	4 3/4	5/8	4	3 3/4	3/8	6	4 17/64	3/8	4
3	6	5/8	4	4 7/8	3/8	8	4 29/32	3/8	6
4	7 1/2	5/8	8	5 7/8	3/8	8	7 1/32	1/2	6
5	8 1/2	3/4	8	7	3/8	12	7 9/16	1/2	6
6	9 1/2	3/4	8	8 1/8	3/8	12	8 15/16	1/2	6

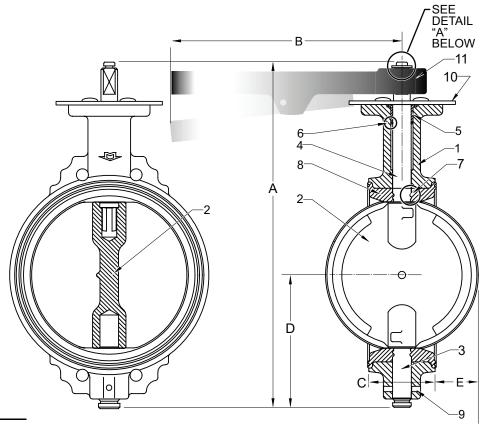
BUTTERFLY P-2855E, P-2855H ALUMINUM

Tank Trucks • Bulk Plants • Dry Bulk Plants 90° Arc • Quick Open

Lightweight aluminum accepts a variety of flanged flange fittings developed specifically for Tank Truck applications.

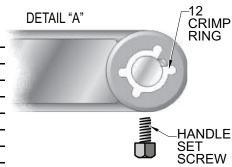
MODEL 2855E has an EPDM liner that is for dry bulk product and airlines.

MODEL 2855H has an HYDRIN liner that is for use with petroleum products.



MATERIALS LIST							
ITEM	PART NAME	MATERIALS					
1	Body	Aluminum					
2	Disc	Ductile Iron					
		Ni-Plated					
3	Bottom Stem	Stainless Steel					
		T-416					
4	Top Stem	Stainless Steel					
		T-416					
5	Top Bearing with	Thermo					
	Integrated Dirt Seal	Setting Alloy					
6	C-Clip	Spring Steel					
7	Stem Seal	EPDM					
8	Liner	EPDM					
9	Spring Pin	Stainless Steel					
		T-302					
10	Stop Plate	Carbon Steel					
		Zinc Plated					
11	Handle	Cast Iron					
12	Crimp Ring	Stainless Steel					
		T-309					

VALVE DIMENSIONS								
	2" 3" 4" 5" 6"							
Α	8.15	9.25	10.52	11.60	12.5			
В	9	9	11	11	11			
С	1.62	1.74	1.99	2.24	2.31			
D	2.90	3.52	4.01	4.68	4.78			
Е	0.30	0.72	1.10	1.46	2			



	FLANGE SPECIFICATIONS										
		ASA		T.T.M.A.			COMPETITIVE				
PIPE	B.C.	B.C. BOLT NO.			BOLT	NO.	B.C.	BOLT	NO.		
SIZE	DIA.	DIA.	BOLTS	DIA.	DIA.	BOLTS	DIA.	DIA.	BOLTS		
2	4 3/4	5/8	4	3 3/4	3/8	6	4 17/64	3/8	4		
3	6	5/8	4	4 7/8	3/8	8	4 29/32	3/8	6		
4	7 1/2	5/8	8	5 7/8	3/8	8	7 1/32	1/2	6		
5	8 1/2	3/4	8	7	3/8	12	7 9/16	1/2	6		
6	9 1/2	3/4	8	8 1/8	3/8	12	8 15/16	1/2	6		

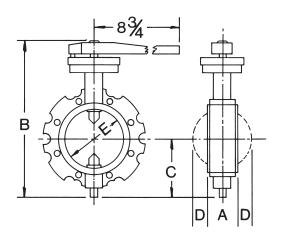
BUTTERFLY P-2860X, P-2860H ALUMINUM

Tank Trucks ● Bulk Plants ● Dry Bulk Plants 90° Arc ● Quick Open

This Butterfly valve of rugged lightweight aluminum is dedesigned to accept a variety of flange fittings. It has been developed specifically for tank truck application.

Model P-2860X has a high abrasion seat for dry bulk applications to 200°F and provides longer life and more durability than valves having Buna type seats.

Model P-2860H has a Hydrin liner for air lines and a wide variety of chemicals to 300°F. Discs are stainless steel.





LOCATES BETWEEN A.N.S.I., T.T.M.A. AND COMPETITIVE SPECIAL FLANGES

DIMENSIONS-INCHES

SIZE	Α	В	С	D	E
2	1 3/4	8 3/16	3 1/8	11/32	2 3/8
3	1 7/8	9 7/8	3 3/4	13/16	3 3/8
4	2 1/8	10 13/16	4 1/4	1 1/8	4 3/8

FLANGE SPECIFICATIONS-INCHES

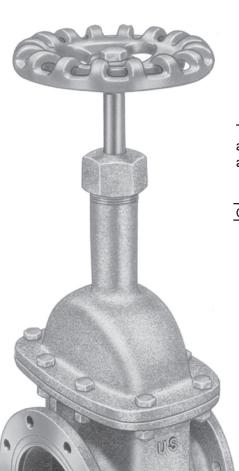
SIZE	A.N.S.I.			T.T.M.A.			COMPETITIVE		
	B16.24 150 LB.								
	B.C	BOLT	NO.	B.C	BOLT	NO.	B.C	BOLT	NO.
	DIA.	DIA.	BOLTS	DIA.	DIA.	BOLTS	DIA.	DIA.	BOLTS
2	4 3/4	5/8	4	3 3/4	3/8	6	4 1/4	3/8	4
3	6	5/8	4	4 7/8	3/8	8	4 7/8	3/8	6
4	7 1/2	5/8	8	5 7/8	3/8	8	7	1/2	6

TT-5

GATE C-35551/5551

ALUMINUM

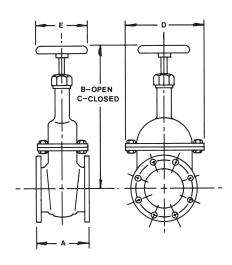
Tank Trucks ● Bulk Plants ● Filling Stations Rising Stem ● Double Disc ● Bolted Bonnet Round Flange Ends



These rugged aluminum with bronze trim gate valves are built for long life with positive closure. Internal parts are quickly and easily replaced.

MILITARY SPECIFICATION

C-35551/5551 Conforms to MIL-V-58039 Type I



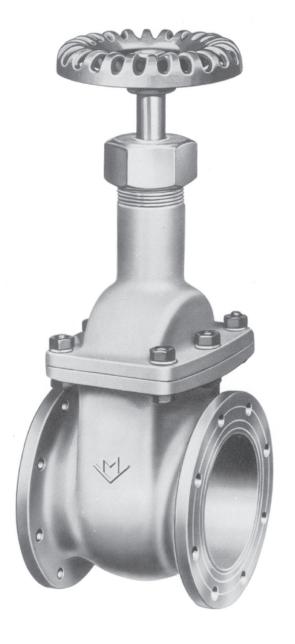
DIMENSIONS-INCHES

SIZE	A	ь	٥	ט			
3	5	12 7/8	11 3/8	5 15/16	5		
4	5 3/8	15 5/8	14 1/2	7 5/8	5		
6	6 1/4	19 3/8	17 1/2	9 7/8	6		
FLANGE SPECIFICATIONS-INCHES							
SIZE	O.D.	Thickness	B.C. Dia.	Bolt Dia.	No. Bolts		
SIZE 3	O.D. 5 5/8	Thickness 3/8	B.C. Dia. 4 7/8	Bolt Dia. 7/16	No. Bolts		
					No. Bolts 8 8		
	5 5/8	3/8	4 7/8	7/16	No. Bolts 8 8 12		

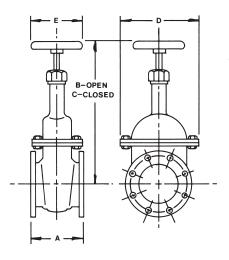


GATE P-2699RF ALUMINUM

Transport Tank • Bulk Plants • Filling Stations
Rising Stem • Split Wedge Disc • Bolted Bonnet
Round Flange Ends



This rugged, lightweight aluminum gate will give you positive closure and long life. Bolted Bonnet, makes inspection, cleaning, repairs or replacement simple and quick. (Formerly C35495).



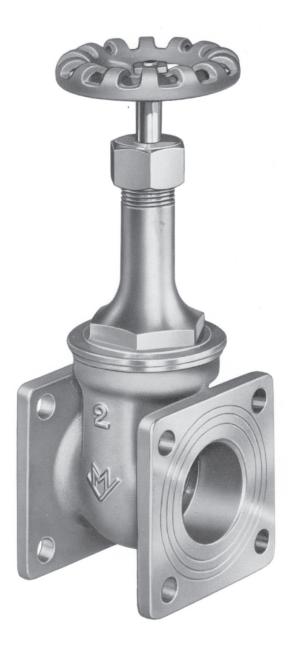
DIMENSIONS-INCHES

SIZE	Α	В	С	D	E		
4	5 3/8	15 5/8	14 1/2	7 5/8	5		
FLANGE SPECIFICATIONS-INCHES							
SIZE	O.D.	Thickness	B.C. Dia.	Bolt Dia.	No. Bolts		
4	6 3/4	3/8	5 7/8	7/16	8		

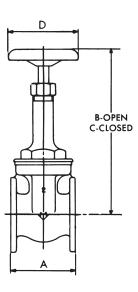


BRONZE

Tank Trucks ● Bulk Plants ● Filling Stations
Rising Stem ● Double Disc ● Threaded Bonnet
Flange Ends



Rugged all bronze construction for long life and positive closure. Internal parts easily replaced.



DIMENSIONS-INCHES

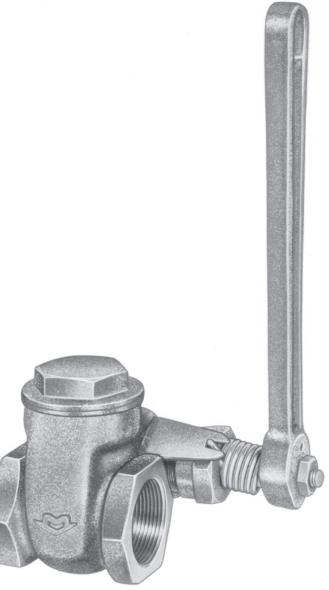
	DIMENSIONS-INCLIES					
SIZE	Α	ВС		D		
2	3 7/8	11 3/4	9 5/8	4		
FLANGE SPECIFICATIONS-INCHES						
SIZE	FLANGE	THICKNESS	B.C. Dia.	B.H. DIA.		
2	4 1/4 Sq.	3/8	4 1/2	9/16		



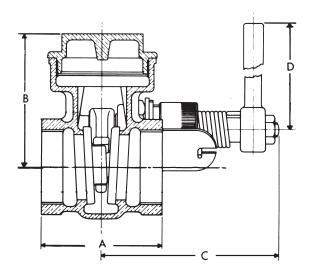
BRONZE - QUICK OPENING

Hazardous Liquid • 150 lb. WOG †

Lever Operated • Double Disc • Gland Packed



These lever operated, quick opening, gate valves have uniform strength and long operating life assured by the use of high grade bronze. The double discs, make ball and socket joints, are specially ground to insure positive close and perfect seating. The heavy duty spring on the lever assists in closing the valve when handle is released. The lever handle is malleable iron.



DIMENSIONS-INCHES

DIMEROIGHO INOTIES						
SIZE	Α	В	С	D		
1	2 1/2	2 3/8	3 1/4	7		
1 1/4	2 7/8	2 7/8	4 3/8	8 1/4		
1 1/2	3 3/16	3 1/4	4 11/16	10 1/2		
2	3 3/4	4 1/8	5 7/16	10 1/2		
2 1/2	4 1/4	4 1/2	5 9/16	11 1/2		
3	4 3/4	5 5/8	5 5/8	11 1/2		

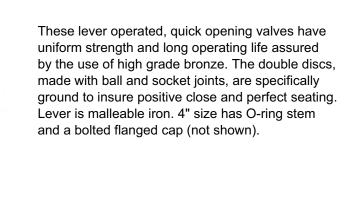
† Non-Shock

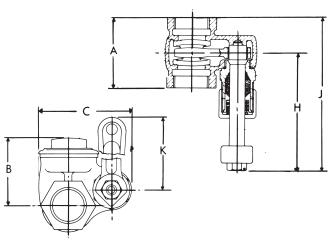
TT-9

BRONZE - QUICK OPENING

Double Disc • Gland Packed • 150 lb. SWP

300 lb. WOG† ● Lever Operated





DIMENSIONS-INCHES

	Dillization at the state of the						
SIZE	Α	В	C	Н	7	K	
1/2	2	1 3/4	2 3/8	2 13/16	3 13/16	4 3/4	
3/4	2 1/4	2 3/16	3 1/4	3 1/2	4 3/4	4 3/4	
1	2 1/2	2 3/8	3 1/4	4 1/4	5 1/2	7	
1 1/4	2 7/8	2 7/8	3 11/16	3 11/16	5 1/8	8 1/4	
1 1/2	3 3/16	3 1/4	4 3/16	4 11/16	6 5/16	10 1/2	
2	3 3/4	4 1/8	5 5/16	5 7/16	7 5/16	10 1/2	
2 1/2	4 1/4	4 1/2	5 7/8	5 9/16	7 11/16	11 1/2	
3	4 3/4	5 5/8	7	5 5/8	8	11 1/2	
4	5 3/4	7 7/8	8 3/4	5 5/8	8 1/2	14	

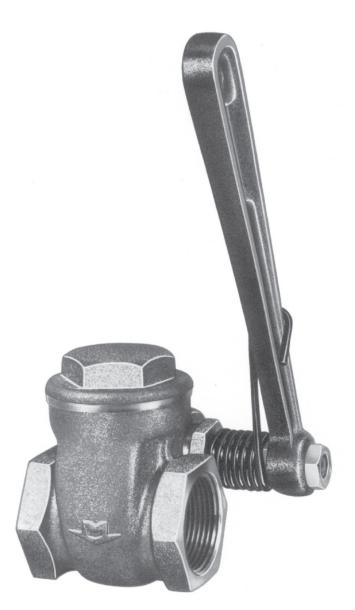
† Non-Shock



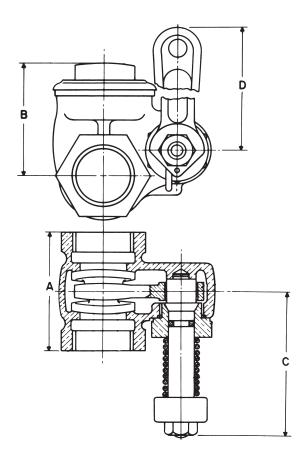
BRONZE - QUICK OPENING

Tank Trucks • Bulk Plants • 150 lb. WOG †

Lever operated • Double Disc O-Ring Stem Packed



These lever operated, quick opening gate valves have uniform strength and long operating life assured by the use of high grade bronze. The double discs, made with ball and socket joints, are specifically ground to insure positive close and perfect seating. The heavy duty spring on the lever assists in closing the valve when handle is released. The lever handle is malleable iron.



DIMENSIONS-INCHES

	Billizitoroito litorizo					
SIZE	Α	В	С	D		
3/4	2 1/4	2 3/16	2 1/2	4 3/4		
1 1/4	2 7/8	2 7/8	3 1/8	8 1/4		

† Non-Shock



CHECK P-509, P-509T

BRONZE - HORIZONTAL SWING

Tank • Dry Bulk Trucks • Bronze Disc Threaded Cap • Threaded Ends

P-509

A rugged multi-purpose swing check for general tank truck and loading rack installations. All the advantages of the full flow afforded by swing check design.

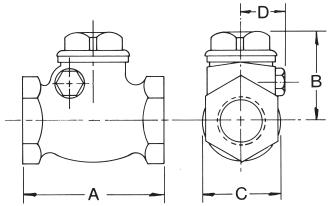
P-509T

Same as P-509 except with Teflon Disc (sizes 1/4" to 2").

C-35326

Same as P-509 except with Stainless Steel hinge pin and side plugs.





DIMENSONS-INCHES

SIZE	Α	В	С	D		
1/4	2 1/8	1 1/2	15/16	21/32		
3/8	2 1/8	1 1/2	1	21/32		
1/2	2 5/16	1 1/2	1 3/16	21/32		
3/4	2 5/8	1 11/16	1 1/2	13/16		
1	3 1/4	2	1 7/8	31/32		
1 1/4	3 9/16	2 1/8	2 1/16	1 1/8		
1 1/2	4	2 3/8	2 3/8	1 1/4		
2	4 3/4	2 3/4	3	1 5/16		
2 1/2	6 1/4	3 11/16	4	1 11/16		
3	6 7/8	4 1/4	4 11/16	1 11/16		



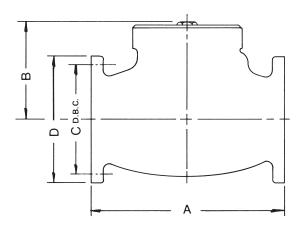
SWING CHECK P-2519A

ALUMMINUM

Dry Bulk Transports ● Tank Truck Aluminum Disc With Viton® Seat 150 WOG †



A rugged multi-purpose swing check for general tank and loading rack installations. All the advantages of full flow afforded by swing check design, near silent operation, leak resistance and quick cap removal; stainless steel pin and plugs.



DIMENSONS-INCHES

SIZE	Α	В	С	D	E	F
3	6 7/8	4 1/16	5	4 3/4	4	9/16

DIMENSION DESCRIPTION

С	Diameter Bolt Circle
D	For 3" Square Flange
Е	Number of Bolt Holes
F	Size of Bolt Holes

† Non-Shock

NOTE: P-2519-4" Also Available - Consult Factory.



ANGLE LIFT CHECK P-717F ALUMINUM

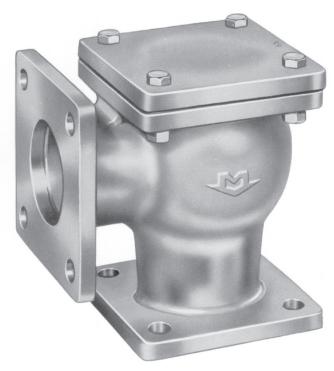
125 psi WOG at 100°F ● 25 psi WOG at 350°F Square Bolted Cap ● Square Flange

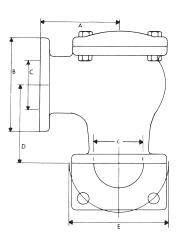
Lightweight, positive closing, Viton-A* renewable disc. Stainless steel poppet stem and disc retainers. Guided top and bottom in friction free bearings.

NOTE: This valve was formerly identified by drawing number C-35417-F.

Valve must be mounted in upright position.

For 2" Threaded Bronze Angle Check see P-717S.





DIMENSIONS-INCHES

Size	Α	В	С	D	E	
2 1/2	4	4 3/4	2 1/2	4	5	
CAP FLANGE SPECIFICATIONS-INCHES						
Size	FLANGE	BOLT DIA.		NO.	BOLTS	
2	4 3/4 Sq.	3/8		4		

^{*}Registered E.I. DuPont Trademark



MILWAUKEE VALVE

ANGLE CHECK P-717S BRONZE

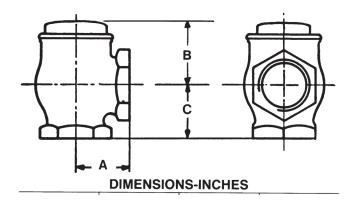
125 psi WOG at 100°F ● 25 psi WOG AT 350°F Threaded Cap ● Threaded Ends

Light weight, positive closing. Viton-A* renewable disc. Guided in friction free bearing. This valve was formerly identified by drawing number C-35417-S.

Valve must be mounted in upright position.

For 2 1/2" Flanged Aluminum Check, P-717F





DIMENSIONS-INCHES

SIZE	Α	В	С
2	2 9/16	2 7/16	2 9/16

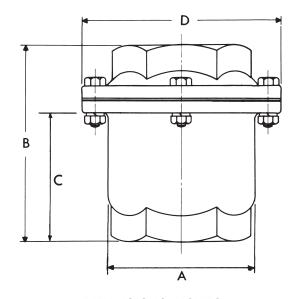
*Registered E.I. DuPont Trademark

LIFT CHECK P-728 ALUMINUM

Dry Bulk Transports ● Tank Trucks ● 125 psi WOG †@ 100°F 25 psi @ 350°F ● Spring Loaded Composition Disc Threaded Ends



Vibration-proof disc construction, Viton-A* renewable disc assures tight close at high temperature operation. Stainless poppet stem and disc retainer, guided top and bottom in friction free bushings.



DIMENSIONS-INCHES SIZE A B C D 3 5 6 3/4 4 9/16 6 3/4

†Non-Shock

*Registered E.I. DuPont Trademark

LIFT CHECK P-729

ALUMINUM

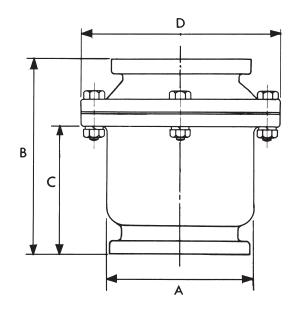
Dry Bulk Transports ● Tank Trucks ● 125 psi WOG †@ 100°F 25 psi @ 350°F • Spring Loaded **Composition Disc** Flanged Ends



Vibration-proof disc construction, Viton-A* renewable disc assures tight close at high temperature operation. Stainless poppet stem and disc retainer, guided top and bottom in friction-free bushings. Similar Lift Check with Quick Coupler Outlet is also available. For Threaded Version see P-728.

P-728

Threaded version.



DIMENSIONS-INCHES

SIZE	Α	В	С	D			
3	5	6 7/8	4 3/4	6 3/4			
FLANGE SPECIFICATIONS-INCHES							
SIZE	FLANGE B.C. DIA. B.H. DI.			DIA.			
3	4 3/4 Sq.	5	9/	/16			

†Non-Shock

^{*}Registered E.I. DuPont Trademark

RELIEF VALVE P-612A

ALUMINUM

Bulk Tank Trucks • Pneumatic Conveyor Systems
Railroad Dry Bulk Tanks
NPT Threaded Inlet



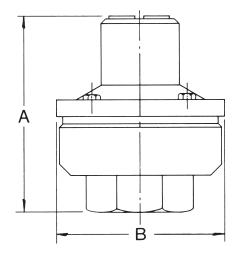
NEW IMPROVED DESIGN

The new seat design offers increased capacity and improved blowdown (reseating).

TAMPERPROOF.

Tank trailer drives cannot alter the pressure setting in the field to speed up delivery. A wire seal assures the pressure setting. Aluminum body plus stainless steel seating provide both lightweight construction and corrosion resistance. Inlet is 2" FNPT.

Temperature Range (-20°F to 400°F). This valve has a VITON diaphragm and stainless steel disc.



DIMENSIONS-INCHES

SIZE	Α	В
2	5 1/2	4 5/8

