

Valves

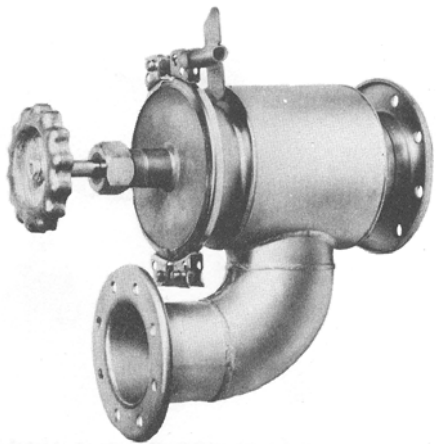
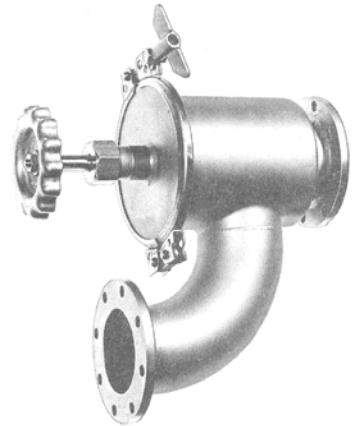
Betts Hydrolet Valves.....	233
Betts Emergency Unloading Fixture.....	234
Betts Flush Valve.....	234
Betts Rear Head Valve.....	234
Betts 3", 4", & 6" Sliding Valve.....	234
Betts Gate Valves.....	235
Betts Emergency Valves.....	236-238
Betts Valve Accessories.....	239-240
Betts Wet-R-Dri Valve (TTMA Style).....	241-242
Quick Clean Chemical Hydraulic Valve.....	243
Steam Jacketed Chemical Hydraulic Valve.....	243
Hot Products Valve.....	243
Internal Chemical Hydraulic Valve.....	244
External Chemical Hydraulic Valve.....	244
Hydraulic Vapor Valve.....	244
Dixon Bayco Check Valves, Butterfly, and Vapor Valves; Caps.....	245-246
Dixon Bayco Ball Valves, Relief Valve, Gate Valves, Emergency Valve, and API Valve.....	247
Misc. Butterfly Valves, Relief and Control Valve, Fisher Valve Parts, Thompson 60TTF Valve.....	248
Rego Valves, Waukesha 60ttf Valves, Mid:Com BV-188, Heil Six Hole Flange.....	249
Betts Mechanical Operators and Accessories.....	250-253

Betts Q.R.B Quick Clean Hydrolet Valve

The Betts Q.R.B. Quick Clean Hydrolet Valve with the Quick-Removable Bonnet and seamless construction is a valve designed for quick dismantling and easy cleaning. Valve is available in the two styles. Valve comes standard with Teflon disc, packing and gasket. Pressure & Temperature Rating: 35 PSI and 250°F, maximum working pressure and temperature.

For ordering information please refer to **Appendix S-12**

Replacements parts available, see **Appendix K-8 & K-9** for full parts breakdown



Betts Q.R.B Hydrolet Valve

The Betts Q.R.B. Hydrolet Valve with the Quick-Removable Bonnet, is designed for use on transport tanks hauling a variety of products, where easy dismantling for cleaning and inspection are essential. **Valve is available in the three styles; 3" and 4" sizes with flanged or threaded outlets.**

Pressure And Temperature Rating: Valves are rated at 35 PSI maximum working pressure. Temperature varies as to which packing, gasket & disc material is used. Valves with Teflon, Viton or Non-Asbestos are rated at 250°F maximum working temperature. Valves with Buna-N are rated at 150° F maximum working temperature.

Also available with outside screw and yoke

For ordering information please refer to **Appendix S-12 and S-13**

Replacements parts available, see **Appendix K-8**

Betts Steam Jacketed Q.R.B. Hydrolet Valve

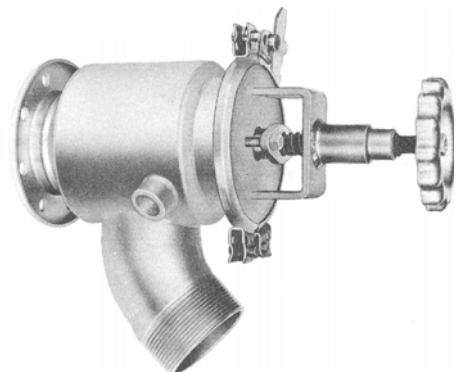
The Betts Steam Jacketed Q.R.B. Hydrolet Valve is designed to handle heavy, viscous liquids or other special products. The Quick-Removable Bonnet permits faster removal of internal parts for cleaning and inspection. This valve is available in the three styles shown below in 3" or 4" sizes with flanged or threaded outlets.

Pressure And Temperature Rating: Valves are rated at 35 PSI maximum working pressure. Temperature varies as to which packing, gasket & disc material is used. Valves with Teflon, Viton or Non-Asbestos are rated at 250°F maximum working temperature. Valves with Buna-N are rated at 150° F maximum working temperature. Steam jacket rated at 150 PSI maximum working pressure.

Also available with outside screw and yoke.

For ordering information please refer to **Appendix S-13 & S-14**

Replacements parts available, see **Appendix K-8**



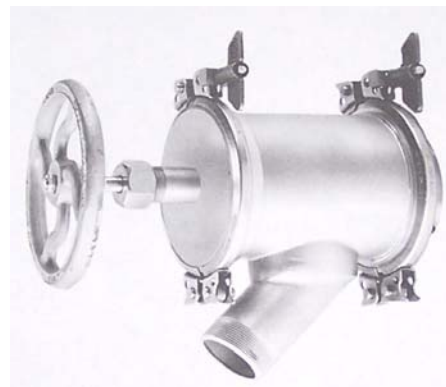
Outside Screw and Yoke

Betts Emergency Unloading Fixture

Assembly No. EM46443SS

This fixture is designed to make possible the emergency unloading of an overturned tank through a copper 3" NPT clean-out without spillage of product. After clamping on the unloading fixture as described in the operational instruction sheet, clean-out cap can be removed within the fixture and with proper discharge lines hooked up unload product down to the level of the clean-out.

Replacements parts available, see **Appendix K-10** for full parts breakdown.

**Betts Flush Valve**

With a metal to metal seat, the Betts Flush Valve is designed to handle heavy, viscous material. Fabricated design provides greater strength with less weight, full direct flow, complete drainage and replaceable parts. The outside screw and yoke keeps threads free of product, maintaining smooth operation. Temperature Rating: Steel or Stainless 500°F. max. **Available in two different styles and three different sizes. (3", 4", 6")**

NOTE: This valve must be mounted in a vertical position. Horizontal mounting will not allow the disc to seat properly.

For ordering information please refer to **Appendix S-14**

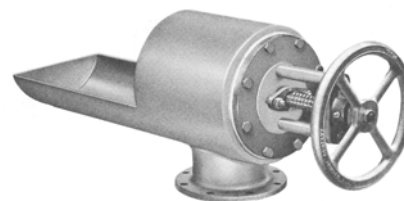
Replacements parts available, see **Appendix K-11** for a full parts breakdown

Betts Rear Head Valve

The Betts Rear Head Valve is designed to be welded into the bottom of the tank at the rear head, for use in hot, viscous material service. The valve is light in weight yet rugged due to the fabricated construction. The disc opens away from the product past the center line of the outlet, providing full flow. Temperature Rating: Aluminum valve 375°F max., Steel 500°F max. **Available in three different styles.**

For ordering information please refer to **Appendix S-15**

Replacements parts available, see **Appendix K-19** for full parts breakdowns

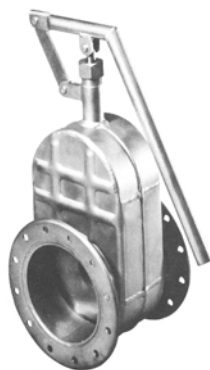
**Betts 3", 4", & 6" Sliding Valve**

The Betts Sliding Valve is an economical means of providing a quick opening – quick closing valve where high working pressure will not be encountered. All valves are standard with stainless steel gates which provide a bubble tight seal. **Available flanged x flanged or flanged x threaded.**

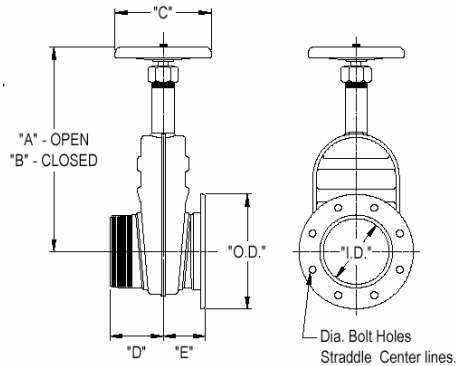
Sliding Valve with Replaceable O-Ring also available.

For ordering information please refer to **Appendix S-15 & S-16**

Replacements parts available, see **Appendix K-20** for full parts breakdowns



Flange X Threaded



Betts Gate Valves
Fabricated - Double Acting

Flexible action of Stainless Steel Belleville Discs insures a tighter valve over longer periods of time. No elastomers to deteriorate. Fabricated for greater strength, lighter weight and lower cost, in steel, stainless and aluminum. Double acting stem threads double the speed of operation. Valve closes in half the time. MAWP 50 PSI.

Betts Gate Valves come in an array of sizes:

1. **Flanged X Threaded**
2. **Flanged X Flanged**
3. **Grooved X Grooved**

For ordering information please refer to **Appendix S-16 & S-17**

Please refer to **Appendix K-21** for full parts breakouts and replacement parts on all models

Dimensions										
Pipe Size	Body					Pipe Thread	Flange			
	A	B	C	D	E		I.D.	O.D.	B.C.	No.
3	14 1/4	12 5/8	4 1/2	3 3/16	2 1/4	3" NPT	3 1/16	Stl & SS 6 1/8	4 7/8	8
								Aluminum 5 5/8		
4	15 1/4	13 1/8	6	3 5/16	2 5/8	4" NPT	4 1/32	Stl & SS 7 1/8	5 7/8	8
								Aluminum 6 5/8		

Betts Gate Valves
Replaceable O-Ring Seat

Replaceable O-Ring Seat provides positive sealing with easy repair. Flexible action of Stainless Steel Belleville Discs insures a tighter valve over longer periods of time. Fabricated for greater strength, lighter weight and lower cost, in steel, stainless and aluminum. Double acting stem threads double the speed of operation. Valve closes in half the time. MAWP 50 PSI

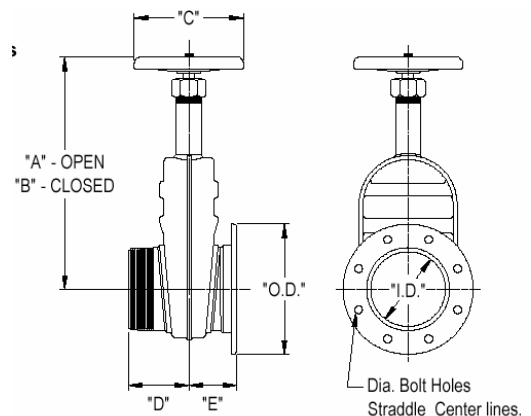
Betts Gate Valves come in an array of sizes:

1. **Flanged X Threaded**
2. **Flanged X Flanged**
3. **Grooved X Grooved**

For ordering information please refer to **Appendix S-18**

Please refer to **Appendix K-21** for replacement parts

Flange X Threaded



Dimensions										
Pipe Size	Body					Pipe Thread	Flange			
	A	B	C	D	E		I.D.	O.D.	B.C.	No.
4	15 1/4	13 1/8	6	3 5/16	2 5/8	4" NPT	4 1/32	Stl & SS 7 1/8	5 7/8	8
								Aluminum 6 5/8		

3" & 4" Aluminum Emergency Valve Tapered Seat Style

Betts tapered seat emergency valves are designed and manufactured to use Teflon encapsulated seals for compatibility with a wide range of products. Body is constructed of aluminum with stainless steel trim. Shear section tested per TTMA RP84 and meets 49CFR178.345-8.

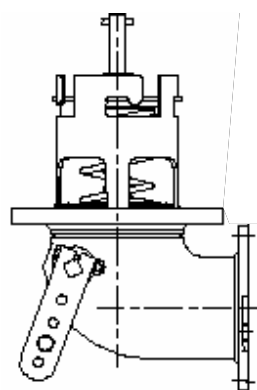
Air operated valves are provided with an external air cylinder to help prevent gasoline or other products from contaminating the air supply. The air cylinder is hard-coated aluminum with a polished stainless steel shaft. Cylinders have 1/8" NPT port for air connection and are supplied with a fusible plug installed.

Cable operated valves are supplied with a universal lever arm which provides up to 8 cable travel options to work with most operators. Lever arm is "E" Coated to provide exceptional corrosion resistance. Left-hand valves are available with air cylinder or cable lever arm on opposite side of valve.

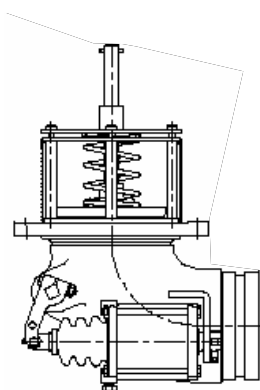
Air/grooved or cable/flanged by 90° elbow or straight.

For ordering information please refer to **Appendix S-20**

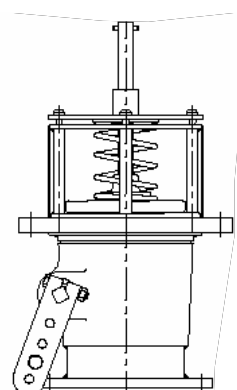
For more information see **Appendix K-29 & K-30**



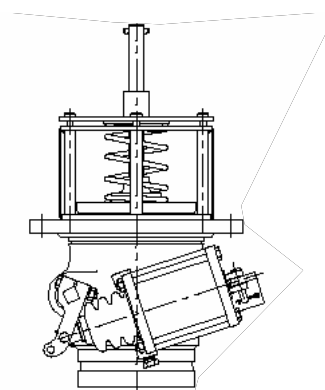
Cable/Flanged



Air/Grooved



Cable/Flanged



Air/Grooved

6" X 4" High Flow Aluminum Emergency Valve

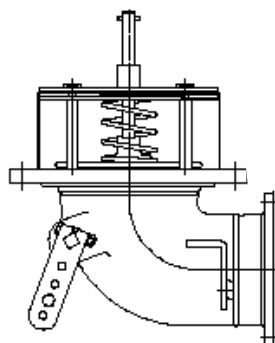
Betts High Flow Emergency valves provide increased flow rates compared to 4" emergency valves. Valves feature Teflon encapsulated seals for compatibility with a wide range of products and a special lift mechanism for smooth operation. Body is constructed of aluminum with stainless steel trim. Shear section tested per TTMA RP84 and meets 49CFR178.345-8.

Air operated valves are provided with an external air cylinder to help prevent gasoline or other products from contaminating the air supply. The air cylinder is hard-coated aluminum with a polished stainless steel shaft. Cylinders have 1/8" NPT port for air connection and are supplied with a fusible plug installed.

Available in Long-Radius and Short-Radius elbows. Use the Long-Radius for maximum flow or use the Short-Radius where clearance for piping is restricted. Left-hand valves are available with air cylinder or cable lever arm on opposite side of valve.

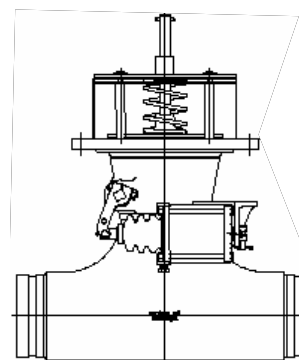
For ordering information please refer to **Appendix S-20 & S-23**

See **Appendix K-30** for a complete parts breakout



Short Radius Cable/Flanged

Air or Cable Operated
Stainless Trim
Teflon Encapsulated
Seals



Tee Air/Grooved

Emergency Valve 3", 4" & 6" Aluminum Internal Air, Tapered Seat Style

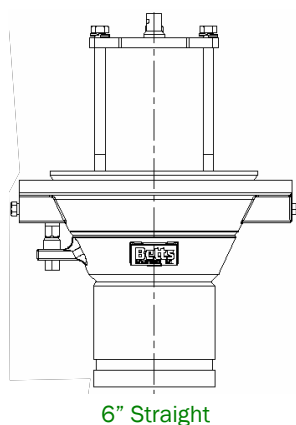
Betts internal air emergency valves are designed and manufactured to use Teflon[®] encapsulated seals for compatibility with a wide range of products. Body is constructed of aluminum and meets 49CFR178.345-8-shear section test per TTMA RP 84. Air inlet fitting shears with shear section to dump air pressure and insure the valve closes in case of an under-ride accident. Fusible plug installed in valve to dump air pressure in case of a fire. Internal air cylinder saves space on exterior of valve providing maximum clearance for piping. Air cylinder diameter is 4" for 6" valve and 3" for the 3" and 4" valve. Air cylinder is hard coated with hard-anodized shaft and guide. Valves have 1/8" NPT ports for air connection. Valves are equipped with a Stainless Steel jackscrew that allows for manual operation of the valve in case of an air system failure.

For ordering information please refer to **Appendix S-21 & S-22**

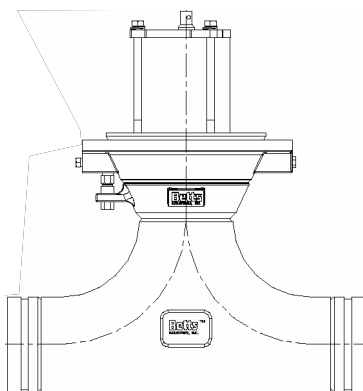
Full parts breakdowns for replacement parts available in **Appendix K-31 thru K-32**. Please feel free to call one of our knowledgeable staff if you have any questions regarding any Betts Valve

4" Valves Not Pictured

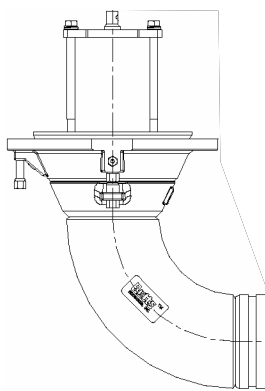
Internal Air Cylinder Frangible Air Inlet Teflon Encapsulated Seals Hard Anodized Wear Parts



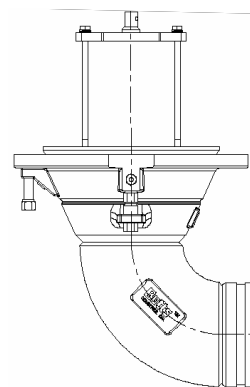
6" Straight



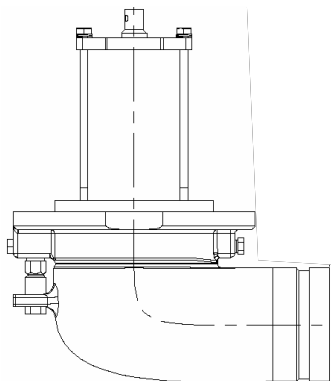
6" Tee



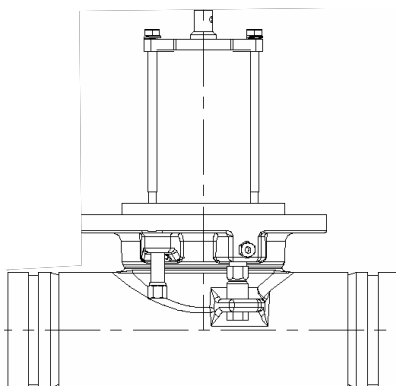
6" Elbow Long Radius



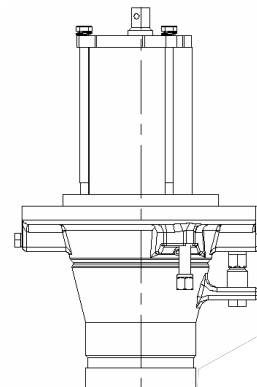
6" Elbow



3" Elbow



3" Tee



3" Straight

3" & 4" Betts Stainless Steel Emergency Valve

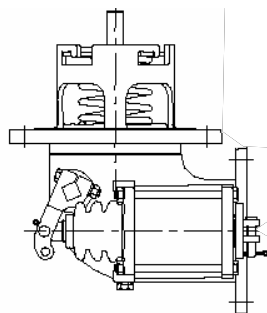
Betts Stainless Steel Emergency Valves are equipped with Teflon encapsulated O-ring seals which are compatible with a wide range of products. The tapered seat is self-cleaning to lessen the possibility of seat damage due to foreign objects. The stuffing box features two O-ring seals to provide positive sealing.

Air operated valves are provided with an external air cylinder to help prevent gasoline or other products from contaminating the air supply. The air cylinder is hard-coated aluminum with a polished stainless steel shaft. Cylinders have 1/8" NPT port for air connection and are supplied with a fusible plug installed.

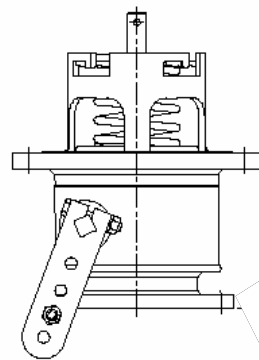
Available in a 3" or 4" Straight or 90° Elbow. Straight Valves are cable operated only.

For ordering information please refer to **Appendix S-19**

For more information see **Appendix K-27** for dimensions for a full parts breakout



Air or Cable Operated
Tapered Seat
Teflon Encapsulated
Seals



3" & 4" Betts Emergency Valve Aluminum Flat Seat Style

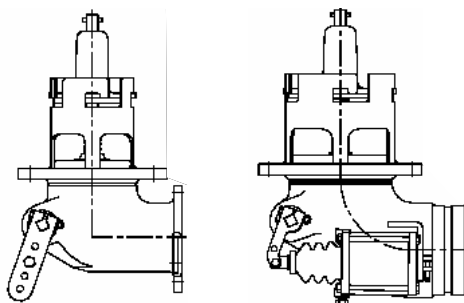
Betts flat seat style emergency valves combine Betts quality with an economical design. Valves feature aluminum construction with a specially designed seat disc to provide positive sealing. Shear section tested per TTMA RP84 and meets 49CFR178.345-8.

Air operated valves are provided with an external air cylinder to help prevent gasoline or other products from contaminating the air supply. The air cylinder is hard-coated aluminum with a polished stainless steel shaft. Cylinders have 1/8" NPT port for air connection and are supplied with a fusible plug installed. Cable operated valves are supplied with a universal lever arm which provides up to 8 cable travel options to work with most operators. Lever arm is "E" Coated to provide exceptional corrosion resistance. Left-hand valves are available with air cylinder or cable lever arm on opposite side of valve.

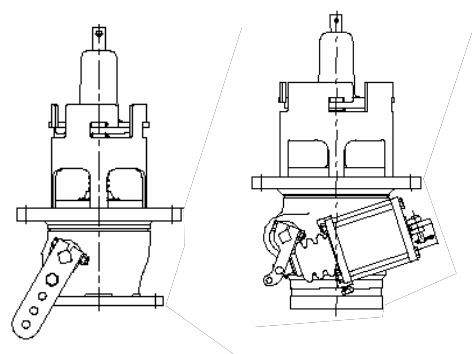
Available cable/flanged or air/grooved by 90° elbow or straight.

For ordering information please refer to **Appendix S-19**

For more information see **Appendix K-28** for dimensions on all models and full parts breakouts



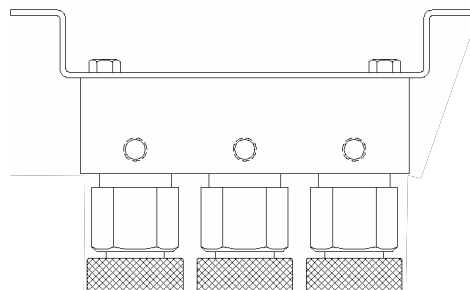
Air or Cable Operated
Groove or Flange Outlet
Buna Urethane or Viton
Seals



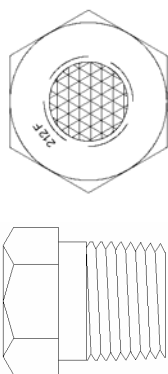
Betts Air Distributor
Part# AD25011

Betts Air Distributors have quick-acting 1/4 turn valves. Each valve operates independently and has long lasting composition discs. Mounting bracket furnished on all distributors. Available with up to 8 compartments.

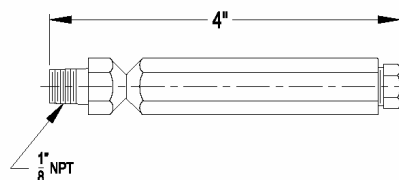
For parts breakdown see **Appendix K-47**

**Fusible Plug**
Part# FP15003BR

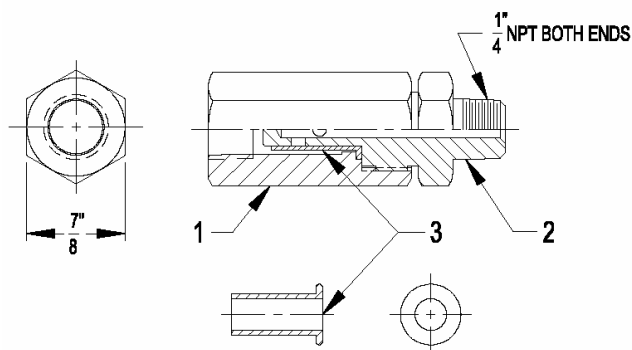
Thawing of plug dumps air and closes all emergency valves and air operated valves.

**Fusible & Frangible Plug**
Part# FP15017BR

Breaking of frangible device or thawing of plug dumps air and closes all emergency valves and air operated valves.

**Check Valve**
Part# CK25107BR

Used in conjunction with hand pump to check return air.



No.	Description	Req.	Part No.
1	Body	1	16896BR
2	Stem	1	16897BR
3	Sleeve	1	16007BN

Air Cylinder
Part# AC35005ALB

Used as an external air cylinder for air operated valves. This helps prevent gasoline or other products from contaminating the air supply. The air cylinder is hard-coated aluminum with a polished stainless steel shaft. Cylinders have 1/8" NPT port for air connection and are supplied with a fusible plug installed.

See **Appendix R-1** for complete specs and parts breakout

Pressure Gauge
Part# PG16349MS

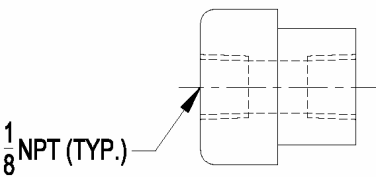
Gauge has 1/8" N.P.T. fitting.



Attach Fitting

Part# 15021MS

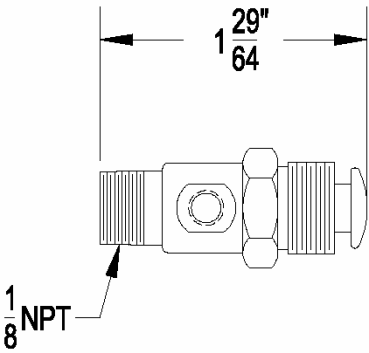
Used as a mounting device for the fusible and frangible plug.



Interference Control Valve

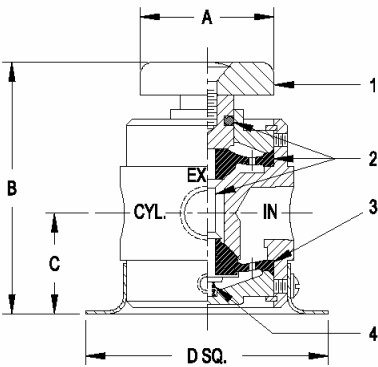
Part# IC17128BR

Closes all emergency valves when plunger is actuated by cabinet door or other means.



Master Control Valve

The Master Control Valve is a push button type on-off valve, spring loaded to the closed position. It is designed for use when the emergency valve air system is operated with air from the brake system.



Description	A	B	C	D	Material	Wt.	Assembly No.
Master Control Valve	1 1/4	2 3/8	15/16	2 1/4	Steel/Buna-N	.8	MC 16350 CP-B

Parts List

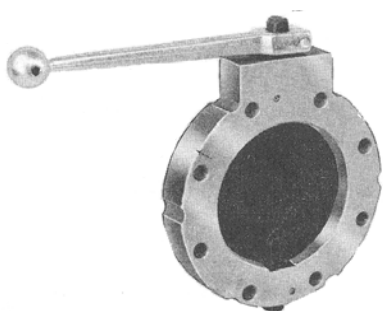
No.	Description	Req'd.	Material	Part No.
1	Knob	1	Alum.	16917AL
2	Stem & Diaphragm	1	Brass	17379BR
3	Perforated Diaphragm	1	Buna-N	17379BN
4	Spring	1	Steel	17379MS

Betts Wet-R-Dri Valve (TTMA Style) **Standard and Detent**

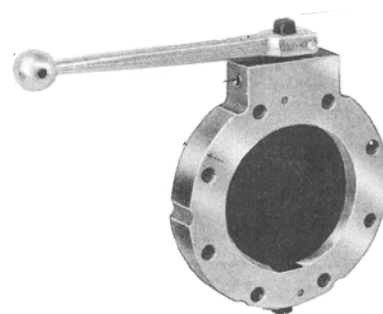
The Betts Wet-R-Dri valve is designed for handling liquid, gaseous or dry products, and is available in a variety of sizes and models. This space saving valve is lightweight, easily maintained, and has a positive stop in the open and closed position. The detent model has a detent spring and ball which assist in holding the disc in the open and closed position.

For ordering information please refer to **Appendix S-24**

For a full parts breakout refer to **Appendix K-22**



Standard



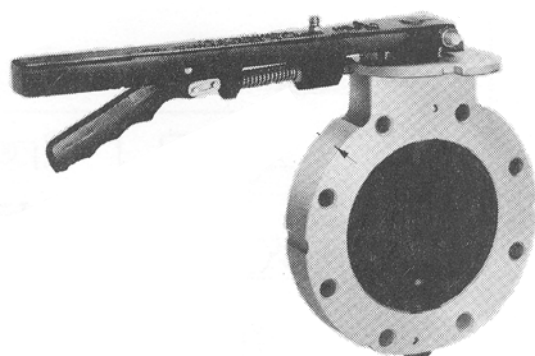
Detent

Betts Wet-R-Dri Valve (TTMA Style) **Locking and Metering**

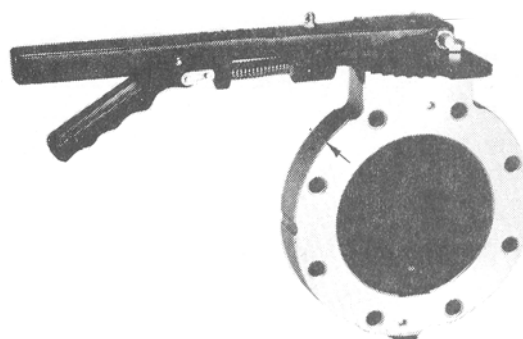
The Betts Wet-R-Dri Valve is designed for handling liquid, gaseous or dry products, and is available in a variety of sizes and models. This space saving valve is lightweight, easily maintained, and has a positive stop in the open and closed position. The Locking model has a 2 notch indexing plate which locks disc in the open or closed positions. The Metering model has a 10 notch indexing plate which allows disc to be positioned in 10 various positions.

For ordering information please refer to **Appendix S-25**

For a full parts breakout refer to **Appendix K-23**



Locking



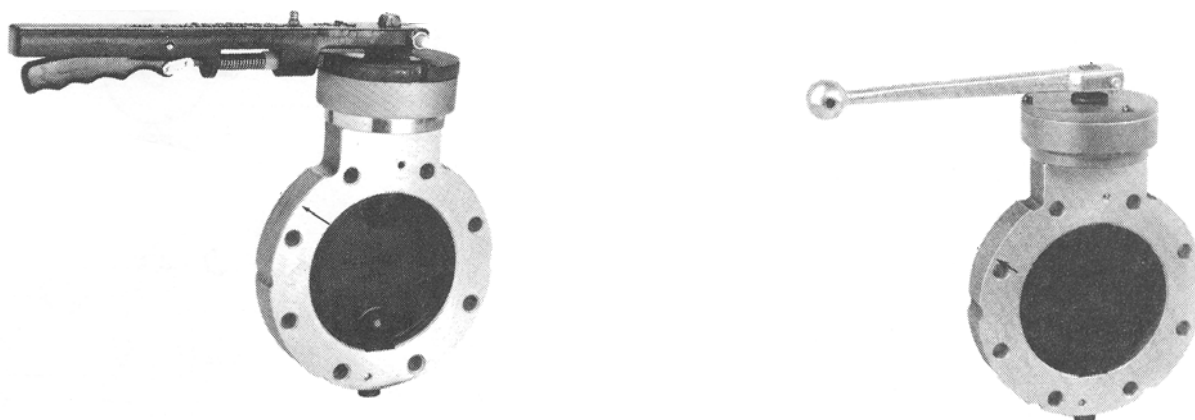
Metering

Betts Wet-R-Dri Valve (TTMA Style) **Locking Type Spring Loaded and Spring Loaded**

The Betts Wet-R-Dri Valve is designed for handling liquid, gaseous or dry products, and is available in a variety of sizes and models. This space saving valve is lightweight, easily maintained, and has a positive stop in the open and closed position. Both spring loaded valves provide an immediate and positive shut off. The locking type permits valve to be mechanically held open while the spring loaded type can be used for remote operation or as a dead man valve.

For ordering information please refer to **Appendix S-26**

For a full parts breakout refer to **Appendix K-24**

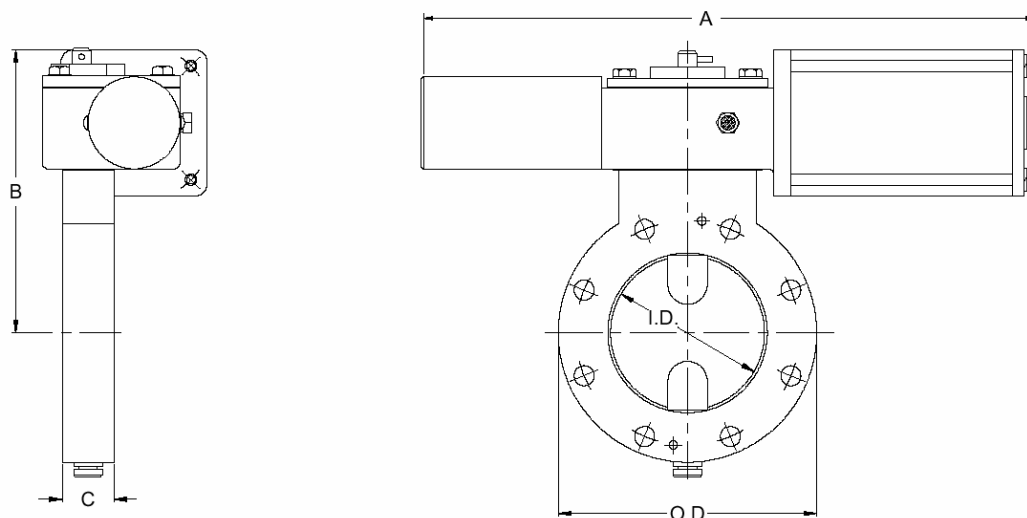


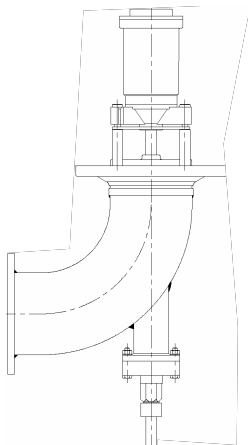
Betts Wet-R-Dri Valve (TTMA Style) **Air Operated**

The Betts Wet-R-Dri Valve is designed for handling liquid, gaseous or dry products, and is available in a variety of sizes and models. This space saving valve is lightweight, easily maintained, and has a positive stop in the open and closed position. The air operated valve is opened and closed by air. The air-spring operated valve can be sold as either an air to open, spring return valve or as an air to close spring to open valve. Please specify.

For ordering information please refer to **Appendix S-27**

For a full parts breakout refer to **Appendix K-25 & K-26**





Quick Clean Chemical Hydraulic Valve

The Quick Clean Chemical Hydraulic Valves are designed to meet the exacting requirements of today's chemical transportation industry. The valves feature quick removable spring housing and hydraulic actuator units for easy inspection and maintenance. Resilient Teflon encapsulated silicone core o-ring seals and the tapered seat provide positive sealing and product retention. An indicator rod shows whether the valve is open.

Maximum Allowable Working Pressure: 50 psig

Maximum Temperature: 265°

Maximum Hydraulic Pressure: 3000 psig

Betts Pump HP19165MS with 3000 psig bypass recommended.

For ordering information please refer to **Appendix S-28**

Full parts breakout **appendix K-12**

Steam Jacketed Chemical Hydraulic Valve

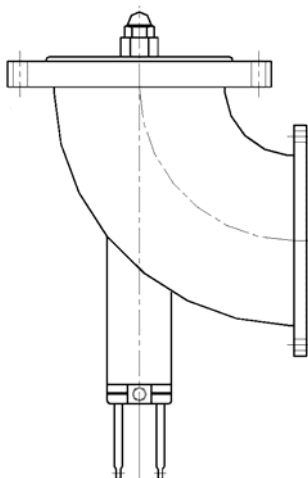
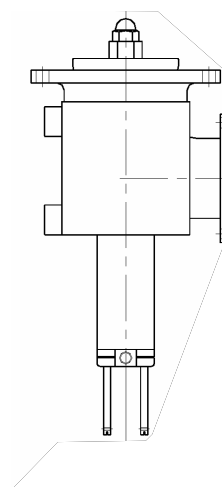
The Steam Jacketed Chemical Hydraulic Valve is designed for use with a wide variety of chemicals. A replaceable Teflon seat and removable disc are provided for ease in repairing should damage occur from dirt or other foreign material. A heavy mounting flange is provided to insure a flat gasketing surface. The steam jacket is fitted with two ¾" NPT fittings.

¼ NPT Hydraulic connection conveniently located at the base of the piston cylinder. Indicator pins, which move in relation to the piston, show the position of the disc at all times.

This valve does NOT contain a shear section. The cargo tank must protect the valve by providing suitable protection as specified in 49 CFR 178.345-8(2).

1,500 psi minimum hydraulic line pressure required to operate valve, but do not exceed 3,000 psi hydraulic line pressure.

For ordering information please refer to **Appendix S-28**



Hot Products Valve

The 6" Hot Products Hydraulic Valve is designed to provide high discharge rates for products such as heavy fuel oils. This enables a tank to be unloaded much faster than with conventional valves. A replaceable Buna disc is provided for ease in repairing should damage occur from dirt or other foreign material. A heavy mounting flange is provided to insure a flat gasketing surface.

¼ NPT Hydraulic connection conveniently located at the base of the piston cylinder. Indicator pins, which move in relation to the piston, show the position of the disc at all times.

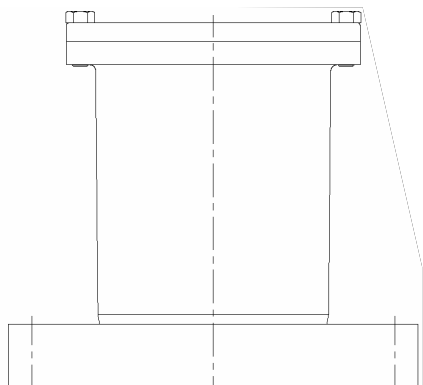
This valve does NOT contain a shear section. The cargo tank must protect the valve by providing suitable protection as specified in 49 CFR 178.345-8(2).

1,500 psi minimum hydraulic line pressure required to operate valve, but do not exceed 3,000 psi hydraulic line pressure.

For ordering information please refer to **Appendix S-28**

Parts breakout **Appendix K-16**

Internal Chemical Hydraulic Valve



The Chemical Internal Hydraulic Valve is designed for use for applications where a standard Chemical Hydraulic Valve would prove impracticable. Elbow supplied with shear section. A heavy mounting flange is provided to insure a flat surface for improved gasketing and positive seating of valve. Hydraulic connection (1/8" NPT) and air bleed are conveniently located on outside of mounting flange.

Note: Mounting pad No. MP16914SS is recommended to install valve and elbow, see Section 40. For Hydraulic pump and distributor, see page 3B.

Note: Teflon Envelope Gasket G27229TF-MIL is recommended for use between valve and outlet elbow.

Working Pressure 50 PSI Max. Temperature 365°F Max.

For ordering information please refer to **Appendix S-29**

Parts breakout **appendix K-13**

External Chemical Hydraulic Valve

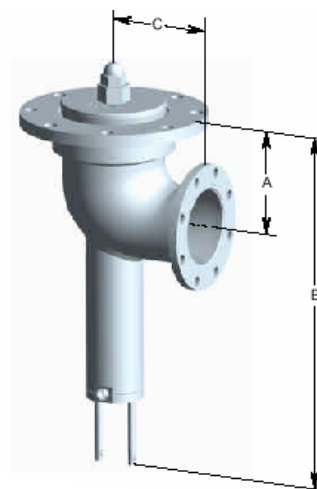
The Chemical Hydraulic Valve is designed for use with a wide variety of chemicals. A replaceable Teflon seat and removable disc are provided for ease in repairing should damage occur from dirt or other foreign material. A heavy mounting flange is provided to insure a flat gasketing surface.

1/4 NPT Hydraulic connection conveniently located at the base of the piston cylinder. Indicator pins, which move in relation to the piston, show the position of the disc at all times. This valve does NOT contain a shear section. The cargo tank must protect the valve by providing suitable protection as specified in 49 CFR 178.345-8(2).

1,500 psi minimum hydraulic line pressure required to operate valve, but do not exceed 3,000 psi hydraulic line pressure.

Standard Chemical Hydraulic Valve also available

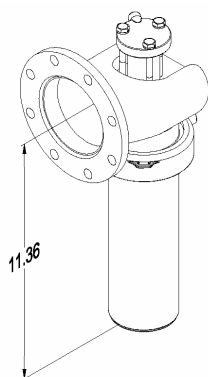
Size	Dimensions		
	A	B	C
4x3 90° Elbow	4 ³ / ₄	16	4 ¹ / ₂
4x4 90° Elbow	7 ⁵ / ₈	16	7 ⁷ / ₈



For ordering information please refer to **Appendix S-29**

Parts breakout **Appendix K-14 & K-15**

Hydraulic Vapor Valve



The Betts Stainless Steel 3" Vapor Recovery Valve is designed for use on chemical tankers requiring vapor recovery. Valve mounts to standard 3" clean out nozzle or 3" TTMA flange and provides 4 sq. in. through area for high venting capacity. Valve seat extends inward beyond the nozzle to minimize chance that product will freeze and prevent the valve from functioning properly.

External hydraulic cylinder isolates hydraulic oil from lading in case of hydraulic leak. Body constructed of 316 stainless steel with Tef-Sil o-rings used for all seals exposed to lading.

For ordering information please refer to **Appendix S-30**

Parts breakout **Appendix K-17**

Bayco 4" Check Valve Repair Kit

Part# DRY4040RK1

Replacement cover and white Nitrile flapper for 4" Bayco check valve. Mounting hardware including.

3" Square Aluminum Flange

Part# DRYFS3

Aluminum 4 bolt weld flange designed to mount 3 inch check valve.



Horizontal Swing Check Valves

Female NPT x Female NPT

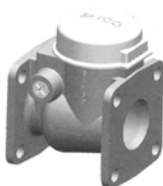
A positive seating disc allows flow only in one direction and a screw in cap provides easy access for cleaning. For horizontal or vertical use. Rated to 200PSI WOG. Brass Body and disc. Temperature range -20° Fahrenheit to 150° Fahrenheit.



Dixon Bayco 4" TTMA Flanged Check Valve

Part# DRY4040RD

Four inch swing check valve with white Nitrile disc for use in air or product lines on dry bulk transfer applications.



Squared Flange

2" Swing Checks

Aluminum cast, square flanged and threaded models. Self-aligning, molded "white food grade EPDM" rubber flapper assembly (350° Fahrenheit) with externally mounted springs to prevent ingestion of parts. Easy Open (no tools required) inspection cap and full flow performance.



Female NPT



Dixon Bayco 3" Swing Check Valves

High flow body design, drop in flapper assembly, high temperature white food grade seal, easy maintenance inspection lid, captive springs and shaft to prevent contamination, and stainless steel hardware.

Available in many different styles.

For ordering information please refer to [Appendix S-37](#)



3" Squared Flange

Dixon Bayco 3" and 4" Swing Check Valves

Cast aluminum and bronze inspection caps. Safety flapper assembly - all flapper assemblies are drilled and pinned and will not come apart. Choice of seals: metal to metal, Buna or Silicon rubber seals. Choice of models with or without spring loaded flapper. Full flow design - flappers swing out of flow path for maximum flow and low resistance. Designs with large caps allow flapper repair/rebuild on unit.

Available in many different styles, call for further details.

For ordering information please refer to [Appendix S-37](#)



3" Round Flange



4" Round Flanged or Threaded Ends



3" Threaded Ends

Dixon Bayco Butterfly Valves with Nodular Iron Disc

Aluminum body with nodular iron disc. Stem bushing are made of thermal plastic polymer top and bottom. Stem packing is a Buna-N. Nitrile, FDA approved resilient black seat. Handle is high strength 713 alloy aluminum with retrogressive rearing process - stronger than industry standard cast iron handles. Five position, high strength aluminum alloy throttling plate.

Available in 2", 3", 4", 4" TTMA, 5" and 6"

For ordering information please refer to **Appendix S-36**

For replacement parts, accessories, and further specs see **Appendix K-6 & K-7**

**Dixon Bayco Butterfly Valves with Stainless Steel Disc**

Aluminum body with stainless steel disc. Stem bushing are made of thermal plastic polymer top and bottom. Stem packing is a Buna-N. Nitrile, FDA approved white seat. Handle is high strength 713 alloy aluminum with retrogressive rearing process - stronger than industry standard cast iron handles. Five position, high strength aluminum alloy throttling plate.

Available in 3", 4", 5" and 6"

For ordering information please refer to **Appendix S-36**

For replacement parts, accessories, and further specs see **Appendix K-6 & K-7**

**Dixon Bayco Butterfly Valves with 316 Stainless Steel Disc**

Aluminum body with stainless steel disc. Stem bushing are made of thermal plastic polymer top and bottom. Stem packing is a Buna-N. Nitrile, FDA approved white seat. Handle is high strength 713 alloy aluminum with retrogressive rearing process - stronger than industry standard cast iron handles. Five position, high strength aluminum alloy throttling plate.

Available in 3", 4", 5" and 6"

For ordering information please refer to **Appendix S-36**

For replacement parts, accessories, and further specs see **Appendix K-6 & K-7**

Handle Assembly for Ultra Flow

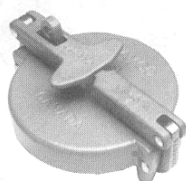
Aluminum handle with notched plate and mounting hardware for use on any ultra-flo dry transfer valve.



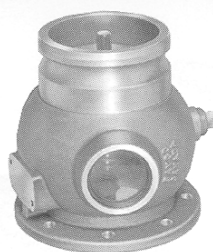
Part#	Description
DRYH23	2" - 3"
DRYH46	4" - 6"

Dixon Bayco Vapor Cap
Part# VR4050AL

Lockable push/pull cap for vapor valves (VR4000 & 4100) or vapor adapter (VR4086). Aluminum cap and arms with bronze locking cam and Buna gasket. Painted orange.

**Dixon Bayco Vapor Valve**
Part# VR4100

Features easy seal replacement while on tanker, heavy duty cast aluminum body, 4" female NPT, and with an air interlock mount. **Available as a special order without poppet (VR4100NP).**

**Dixon Bayco Vapor Valve**
Part# VR4000

Designed for maximum vapor flow, two acrylic sight glasses, quality cast aluminum construction, 4" TTMA flange, and drain plugs that allow viewing of drainage of fluid through sight glasses.



Dixon Bayco Stainless Steel Lockable Ball Valve

316 Stainless Steel full port ball valve rated to 1000 PSI WOG with lockable handle.



Part#	Size
DIXSSLBV50	1/2"
DIXSSLBV75	3/4"
DIXSSLBV100	1"
DIXLBV150	1-1/2"
DIXLBV200	2"

Dixon Bayco Relief Valve

Cast iron body valve available in various settings for dry bulk applications.



Part#	Description
DRY2180-15	15#
DRY2180-18	18#
DRY2180-20	20#
DRY2180-22	22#
DRY2180-25	25#

Dixon Bayco Brass Ball Valve

Full port brass ball valves rated to 600 PSI WOG, for use in air, water, or petroleum applications.



Part#	Description
DIXFBV25	1/4"
DIXFBV38	3/8"
DIXFBV50	1/2"
DIXFBV75	3/4"
DIXFBV100	1"
DIXFBV125	1-1/4"
DIXFBV150	1-1/2"
DIXFBV200	2"

Dixon Bayco 3/4" Brass Gate Valve

Part# DIXBGV75

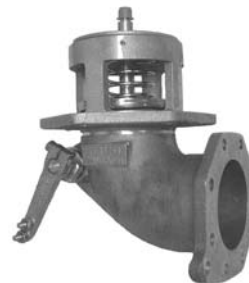
Brass body gate valves rated to 200 PSI. Available 1/4" thru 4"



Emco Wheaton 3" Emergency Valve

Part# F241 & F242

Manufactured to DOT 406 regulations, openable from above and below valve, conical spring for maximum flow, concentric plunger prevents leakage, stainless steel trim available for chemical applications, TTMA flanges, cable guide cast in outlet flange, standard seal is Buna (others available), optional air cylinder kit (**part# 724000202**), and other options available (screen, fuse plate, and support)



For replacement parts please see parts breakout in **Appendix K-37 thru K-39**



Emco Wheaton API Adapter "Y" Valve

Part# F552

Specifically designed for high speed unloading with the **highest flow rate in the industry**. Designed and built in accordance with API RP1004, product loading accomplished via API head and product unloading accomplished via bottom faucet configuration, two piece aluminum body, faucet body moves out of product flow providing unrestricted unloading, 4" TTMA piping connection and faucet outlet, handle is ductile iron with baked on coating to eliminate corrosion, and standard dust cap (F499).

For replacement parts please see parts breakout in **Appendix J-8 & J-9**

Milwaukee Valve With Handle**Part# DRYV4MV**

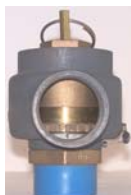
With a cast iron body this valve is used for many dry bulk line applications. Available in other sizes upon request. Available in sizes 2" thru 12".

**Sure Seal Valve With Handle****Part# DRY890-3**

Butterfly type valve designed for use in air or product lines. Standard with steel handle. Available in sizes 2" to 12".

**Kunkle 2" Relief Valve****Part# DRY33722**

Brass body, relief valve designed to release at 22 PSI. Other pressure settings upon request.

**Flow Control Valve Assembly****Part# PHIA1996**

90° angle check valve with built in air switch used to control pumping speed on retail petroleum trucks.

**150# Relief Valve****Part# MISPRV1/2**

1/2" steel body pressure relief valve set at 150 PSI. Other sizes and pressure settings available.

**Philly Air Inner Body****Part# PHIA1997**

Check valve and air switch inner body for flow control valve.

**Fisher Valve Parts**

DBL carries stocks parts for Fisher Type 402, 421, and 427 valves. Please refer to **Appendix K-44 thru K-46** for a full parts breakout on these fisher valves.



Part#	Description
PRORC40016T012	2" Internal Valve Kit
PRORC40424T012	Flanged Internal Valve Kit
PRORCG	3-1/2" Acme Cap Gasket

Thomsen 60TTF 3" Tanker Valve

For replacement parts refer to **Appendix K-4 & K-5**



Part#	Description
TH01054-00	5/8" Wing Nut
TH013635-00	Spring Clip
TH014000-97	Aluminum Valve Cover
TH014023-00	Stainless Steel Washer
TH014027-00	3/4" Nut
TH014030-00	Valve Bonnet
TH014032-00	3" Lower Bonnet
TH014034-00	3" Upper Bonnet
TH014050-00	Valve Handle
TH014095-00	Stem and Seat
TH014116-00	Valve Seat
TH014163-00	Safety Clip and Cable
TH014182-00	3" Valve Stem and Seal
TH014225-00	3"x3"x2" Valve Housing
TH014226-00	3"x3"x2" Valve Housing
TH014233-00	3" Short Housing
TH02248-00	3-1/2" Hex Nut
TH03117-00	Bonnet O-Ring
TH03129-00	Stem O-Ring
THOSCLIP	Stainless Steel Safety Clip

Rego Valve Parts

DBL stocks a full line of repair parts for propane and compressed gas valves and tankers.

For a parts breakout on Rego A77513 valve assembly refer to **Appendix K-43**.



Part#	Description
PRO7513-8T	2" Teflon Gasket
PROA7513-4T	2" Teflon Disc
PROA7513-50	2" Valve Kit
PROA7515-4T	3" Teflon Disc
PROA7515-50	3" Valve Kit
PROA7515-8T	3" Teflon gasket
PROTA7513-50	2" Teflon Valve Kit

Mid:Com BV-188

Electric, two stage solenoid valve.

For a complete list of replacement parts see **Appendix K-41 & K-42**



Part#	Description
MID125-0024	Small Gasket
MID125-0025	Large Gasket
MID125-0027	Small U-Cup
MID125-0029	Large U-Cup

Waukesha 60TTF Valve

DBL carries a variety of replacement parts for the Waukesha 60TTF valve.

Please refer to **Appendix K-1 thru K-3** for replacement parts



Part#	Description
WAU162-31	Stem Without Seal
WAU20-11	Nylon Bushing
WAU20-45	White Valve Seal
WAU52-188	Lower Bonnet
WAU52-8	Valve Bonnet
WAU54-8	Valve Handle
WAUN50335	Bonnet O-Ring
WAUN70210	Stem O-Ring

Hell Six Hole Aluminum Valve Flange

Aluminum 6 hole flange designed to attach to tank hopper for mounting discharge valves. **Four sizes** kept in stock with other available upon request.

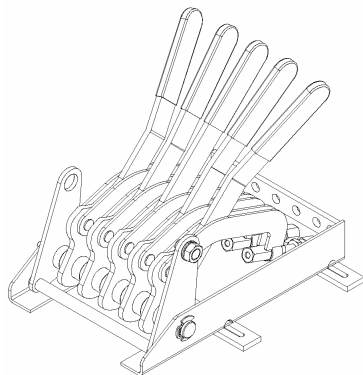
Part#	Size
DRYFR3	3"
DRYFR4	4"
DRYFR5	5"
DRYFR6	6"

3/16" Stainless Steel Cable

Part# **MISSCABLE3**

Air craft grade stainless steel wire rope designed for use with manual safety valves.



Fusible Joint on Each Compartment***Non-slip Cable Connectors******1-1/2" or 2-1/8" Cable travel******Choice of Two Lever Styles*****Universal Mechanical Operator**
Lubricated or Non-Lubricated

Betts Universal mechanical operators function cable operated emergency valve from a central location on a cargo tank. Operators are available in any number of compartments from 1 up to 7. Each compartment is supplied with a fusible joint designed to melt at not more than 250° Fahrenheit. Non-slip cable connectors for each compartment allow cable to be cut to length after installation. (Lubricated version has grease fittings installed in each lever bushing to allow for greasing.)

Emergency valves are held open by the over-center action of the lever assembly, thereby eliminating the need for springs and latches. Trip levers close all open valves when the remote control is tripped. Two trip levers allow for flexibility in locating remote control or for attaching two remote controls, if required.

Fabricated steel construction provides strength while keeping weight to a minimum. Tubular brass shaft provides an excellent bearing surface for levers. Levers are available in two styles. Operators are also available with an optional black "E" coating which provides an attractive finish with excellent corrosion resistance.

For ordering information please refer to **Appendix S-30 & S-31**

For a full parts breakout refer to **Appendix Q-1 & Q-2**

Universal Mechanical Operator
Delta 1 & Delta 2

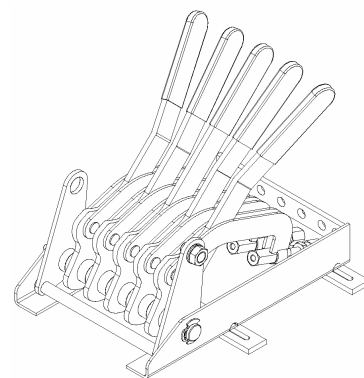
Betts Universal mechanical operators function cable operated emergency valve from a central location on a cargo tank. Provision is made for mounting 3-way air valve (part# 20761) on side of operator. Air valve is actuated when any compartment is open, thereby assuring that all air vents are energized when an emergency valve is open. Operators are available in any number of compartments from 1 up to 6. Each compartment is supplied with a fusible joint designed to melt at not more than 250° Fahrenheit. Non-slip cable connectors for each compartment allow cable to be cut to length after installation.

Emergency valves are held open by the over-center action of the lever assembly, thereby eliminating the need for springs and latches. Trip levers close all open valves when the remote control is tripped. Two trip levers allow for flexibility in locating remote control or for attaching two remote controls, if required.

Fabricated steel construction provides strength while keeping weight to a minimum. Tubular brass shaft provides an excellent bearing surface for levers. Levers are available in two styles. Operators are also available with an optional black "E" coating which provides an attractive finish with excellent corrosion resistance.

For ordering information please refer to **Appendix S-31**

For a full parts breakout refer to **Appendix Q-3 & Q-4**

***Automatically Functions Air Vents******Fusible Joint on Each Compartment******Non-slip Cable Connectors******1-1/2" or 2-1/8" Cable travel******Choice of Two Lever Styles***

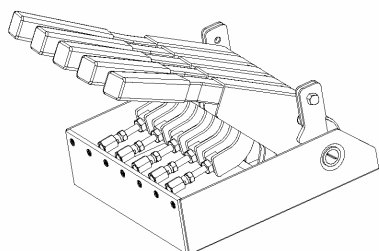
Heavy Duty Tubular Steel Levers

Twice the Leverage of Universal Operators

2-1/2" Stroke

Non-slip Cable Connectors

Fusible Joint on Each Compartment



Mechanical Operator
Deluxe

Betts Deluxe Mechanical operators function cable operated emergency valves from a central location on a cargo tank. Operators are available in any number of compartments from 1 up to 5. Each compartment is supplied with a fusible joint designed to melt at not more than 250° F. Non-slip cable connectors for each compartment allow cables to be cut to length after installation.

Deluxe Operators Provide a mechanical advantage of 6.5:1 or about twice that of universal operators. They also provide a longer stroke of 2-1/2". Emergency valves are held open by the over-center action of the lever assembly, thereby eliminating the need for springs and latches. Trip levers close all open valves when the remote control is tripped. Two trip levers allow for flexibility in locating remote control or for attaching two remote controls, if required.

Fabricated steel construction provides strength while keeping weight to a minimum. Heavy duty tubular steel levers provide for durability. Grease fittings in lever bushings and trip levers provided for lubrication.

For ordering information please refer to **Appendix S-32**
For a full parts breakout refer to **Appendix Q-5**

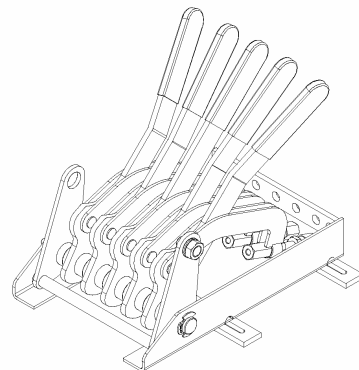
Mechanical Operator
Compact - Lubricated and Non-Lubricated

Betts Compact Mechanical Operators function cable operated emergency valves from a central location on a cargo tank. Available from 1 up to 5 compartments in stainless or powder coated steel; each compartment is supplied with a fusible link designed to melt at not more than 250°F as well as non-slip cable connectors that allow cable to be cut to length after installation.

New design is more compact than comparable Universal or Deluxe models. Slotted mounting straps are available as an option to allow for replacement of Deluxe operators without drilling new mounting holes. Specify straps by adding suffix "001" to assembly number. Other mounting options available by contacting our Parts department at 1-877-DBL-TANK.

Lever arms provide 2-3/8" stroke and 5.6:1 mechanical advantage. Two trip levers provided for flexibility in locating cable remote control or for attaching two remotes, if required. See remote control on page 252.

For ordering information please refer to **Appendix S-32**
For a full parts breakout refer to **Appendix Q-6 & Q-7**



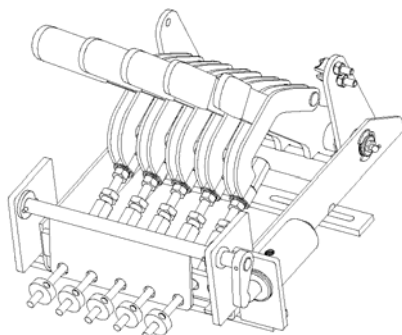
Heavy Duty Tubular Steel Levers

Twice the Leverage of Universal Operators

2-1/2" Stroke

Non-slip Cable Connectors

Fusible Joint on Each Compartment



Mechanical Operator **Compact Delta 1 Lubricated and Non-Lubricated**

Betts Compact Mechanical Operators function cable operated emergency valves from a central location on a cargo tank. Provision is made for mounting 3-way air valve (part no. 20761) on side of operator. Air valve is actuated when any compartment is opened, thereby assuring that air vents are energized when any emergency valve is opened. Air valve is not included. Add suffix "003" to include air valve. Available from 1 up to 5 compartments in stainless or powder coated steel; each compartment is supplied with a fusible link designed to melt at not more than 250°F as well as non-slip cable connectors that allow cable to be cut to length after installation.

New design is more compact than comparable Universal or Deluxe models. Slotted mounting straps are available as an option to allow for replacement of Deluxe operators without drilling new mounting holes. Specify straps by adding suffix "001" to assembly number. Other mounting options available by contacting sales. Lubricated shaft and handle is standard as well as grease fittings on both ends of shaft on the lubricated version.

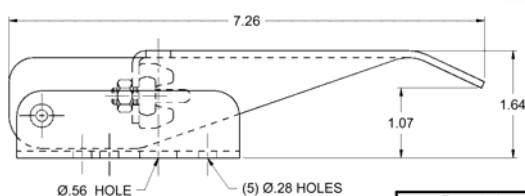
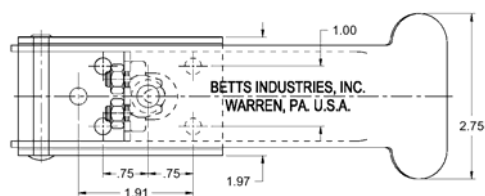
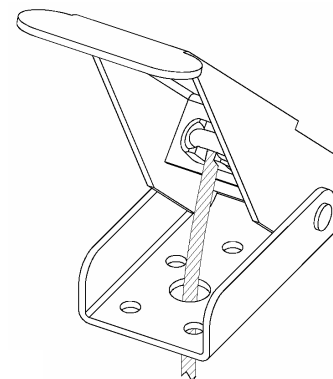
Lever arms provide 2-3/8" stroke and 5.6:1 mechanical advantage. Two trip levers provided for flexibility in locating cable remote control or for attaching two remotes, if required.

For ordering information please refer to **Appendix S-33**

For a full parts breakout refer to **Appendix Q-8**

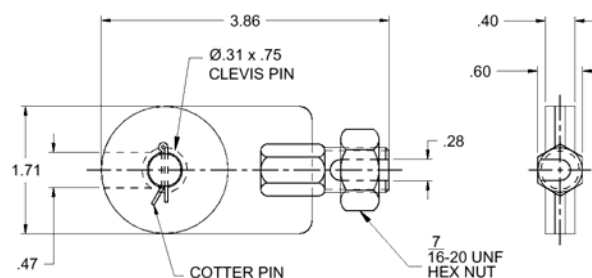
Cable Remote Control

New design provides greater stroke (2-1/8") and leverage. Stainless steel to resist corrosion. Remote attaches to trip lever on operator using cable. Pulling remote lever rotates operator trip lever and bar assembly, causing all open emergency valves to close. Per 49CFR178.345-11, remote must be located at least 10 feet away from loading/unloading outlet (where vehicle length allows) or on the end of the cargo tank farthest from the loading/unloading outlet. Test cable remote controls and operators at least once a day to insure proper functioning.



Fusible Link **Part# 21050A**

Heavy duty fusible cable links are designed to attach the cable to the emergency valve cable lever arm and to provide thermal activation at the emergency valve. Fusible element melts at not more than 250°F, releasing the cable tension and allowing the emergency valve to close. Uses same non-slip, adjustable cable attachment as on Betts operators.



Fusible Link

Part# 21050A

Heavy duty fusible cable links are designed to attach the cable to the emergency valve cable lever arm and to provide thermal activation at the emergency valve. Fusible element melts at not more than 250°F, releasing the cable tension and allowing the emergency valve to close. Uses same non-slip, adjustable cable attachment as on Betts operators.

