

Table of Contents

Dry Bulk Products	. 2-24
Air relief valve technical information	. 2, 21
Theory of operation	
Periodic inspection, cleaning and maintenance	2
Stationary air relief tester	21
Blower air relief valves (2182 series)	3
Trailer/tank mounted vacuum relief valves	4-7
Fixed pressure setting	4
Adjustable pressure setting	5
PVC coated lanyards	5
Vacuum relief valves	6
Air relief valve flow rates	7
Products for blowers	8
Blower mounted swing check/air relief manifold	ls8
TTMA series flange adaptors9,	22, 24
Flange gaskets	9
Swing check valves	10-11
High Flow series	
Classic 3000 series	
Pneuclean™ pneumatic filtration system	12
Clump busters	
Cam & groove in-line sight glasses	
Grooved pipe connections	
Aluminum bolt clamps	
Aluminum quick connect clamps	
Painted iron groove x groove bolt clamps	
Butterfly valves	
One-piece (iron disk/black Buna-N seals)	
One-piece (stainless disk/white Buna-N seals).	
Two-piece (stainless disk/white Buna-N seals).	
Composite	18

Hopper tees	19
Straight tees	19
Bottom drop tees	19
Disc fluidizers	20
Hose tube doors	21
TTMA flange adapters	9, 22, 24
Threaded flange adapters	9
Flange dimensions	9
Flange gaskets	9
Weldable flanges	22
Reducing flange adapters	24
Cam & Groove	
Coupling x TTMA flange	
Coupling with straight thread (NSPM)	24
Replacement Parts	25-37
Blower air relief valves	
Trailer/tank truck mounted vacuum relief valves	
Swing check valves	
Clump buster	
Grooved pipe connections	
Butterfly valves	
Hopper tees	
••	
Index	38-40

We Commit

- To ensure that internal and external customer needs are identified and that our products and services meet these needs.
- To fully meet and exceed the requirements of the ISO 9001 Quality Program.
- To strive for quality in each and every phase of our business.
- To exceed competitor's quality.
- To provide systems and training for all Dixon[®] employees.
- To create an environment that will allow each employee to do it right the first time, and accept the responsibility for quality in each and every task they perform.
- That no employee will ever be called on to do anything morally, legally or ethically wrong.

Bayco brand dry bulk products are designed for use with bulk trailers and truck blowers for the pneumatic transfer of dry bulk commodities such as powders, grains and plastic pellets. Other industrial applications are possible where pneumatic control of air or dry products is required.



Air Pressure Relief Valves

Theory of Operation

All Bayco air relief valves are spring-loaded system-pressure actuated devices consisting of a valve disc held in a closed position against a valve seat by means of a spring. The pressure in the system to be protected acts on the valve disc and tends to open the valve; however, the spring load is set to ensure that at normal operating pressures, the pressure in the system is insufficient to open the valve. However, when the system pressure builds to a level where the pressure load on the valve disc is equal or near to the load exerted by the spring, the valve will begin to open. If the pressure in the system were to be held at this level, the load due to system pressure and the spring load would remain in equilibrium and the valve would be neither opened nor closed. In such circumstances the valve will tend to flutter on the valve seat and may release a small amount of air but will not be relieving significant pressure from the system. This point is known as the warning pressure, cracking pressure or hissing pressure.

If the pressure in the system continues to rise, the load acting on the face of the valve will also rise and will begin to exceed the load exerted by the spring. When the load due to system pressure exceeds the spring load, the valve will open and will remain open as long as the system pressure remains sufficient. This point is known as the opening pressure or set pressure (also referred to as rated or popping pressure). The difference between the crack pressure and opening pressure varies between valves and is related to the system flow rate. However, the two should not be confused as there is a significant difference in pressure between the two points.

If the system pressure continues to rise, the valve will continue to open and will relieve more and more air until the valve is fully open. At this point the valve will be relieving close to its maximum airflow rate; further increase in system pressure will show only relatively minor increases in flow rate. If the system pressure decreases, the relieving airflow rate will reduce and the valve will start to close. However, the valve will not fully re-seat until the pressure is below the opening pressure. This pressure is known as the Reseating Pressure and the difference between the two pressures is known as "blowdown".

In practice the valve should be matched to the system to be protected such that the maximum airflow rate of the valve is never utilized, i.e. the valve should be capable of relieving a sufficient volume flow rate of air at the opening pressure to ensure that the system pressure drops significantly. If the valve is open and the system pressure continues to rise above the opening pressure then the valve is relieving less air than is being put into the system. This is a potentially dangerous situation that may lead to over pressurization. The relieving airflow rate of an air relief valve at the maximum allowable system pressure, and ideally at the opening pressure, should be well in excess of the system input flow rate at that same pressure.

Periodic Inspection, Cleaning and Maintenance

Dixon Bayco air relief valves are designed and built to provide accurate and consistent operation; however periodic inspection, cleaning, and maintenance of these valves is required to ensure continued trouble free service.

Dixon Bayco air relief valves consist of a spring-loaded poppet valve that seals against a rigid annular valve seat. When the system pressure reaches the valve opening pressure, the poppet lifts and system air passes under the poppet and out to atmosphere. When a sufficient volume of air has been relieved, the system pressure will drop and the poppet will re-seat.

When these valves are used in applications that subject them to particulate laden air, there is potential for contamination of the valve. Larger particles such as grains, plastic pellets etc. can get trapped between the valve seating surfaces. Applications involving fine particles such as cement, fly ash, lime, flour etc. can result in a cementing of hardened product on the valve seat or poppet surface. These situations can prevent the valve from fully re-seating, prevent it from opening and can lead to early opening or leakage from the valve.

To prevent this from occurring we advise that air/vacuum relief valves be regularly inspected, cleaned and maintained. At a minimum the valve seat and poppet sealing surface should be inspected and cleaned, and the small air vent hole in the top casting checked for blockage. The inspection, cleaning, and maintenance should be carried out with the valve removed from the system, and in a clean environment.

All relief valves are available with threaded connections. In addition 2180, A2180 and A2182 series air relief valves are available with cam and groove adapter or grooved pipe connections. These types of connections make removal and installation of the valves much easier to allow for inspections, cleaning and maintenance.



Before servicing or removing any component from the pneumatic system, the blower must be turned off and all residual air released from the system.

Products for Blowers

Blower Air Relief Valves

Application:	Designed specifically for use on tractor mounted air blowers. The 2182 air relief valves have a temperature compensated pressure relief setting to accommodate the high temperatures and dynamic air produced by the blower. If a system blockage were to occur, the valves are designed to vent to atmosphere once the valve pressure setting is achieved.
Standards:	 The 2182 valve will relieve at the ordered set pressure at a temperature of 400°F (204°C). At room temperature 73°F (22°C) the 2182 valve will relieve approximately 4 PSI higher than the ordered set pressure. The product label shows the set relief pressure at the blower operating temperature, plus the relief pressure at 73°F (22°C) (for testing purposes). Depending on the blower type, amount of vibration, and operating temperature a difference of observable set pressure may occur. Example: 2182-18 is set to relieve at 18 PSI while at operating temperature. This same valve will test at 22 PSI while at room temperature on a test bench. Both set points are listed on the label. Available with 2" male or female NPT connections
Materials:	Aluminum anodized hard coat body, white food grade silicone poppet and diaphragm
Features & Benefits:	 The popular pressure setting for truck mounted blowers is 20 PSI. Valves are available for other applications with temperature compensated pressure settings of between 3 PSI and 24 PSI. Customer should request set pressure at time of order. High relieving capacity varies between 800 SCFM and 1700 SCFM depending upon the chosen set pressure; for specific relief rates please refer to our graph on page 7 or contact Dixon[®]. Installed cup seal deters tampering Anodized aluminum body reduces thread galling







2182

Part #	Connection
2182F/xx	2" NPTF air relief valve with special factory setting, see note xx below
2182F/18	2" NPTF air relief valve 18 PSI setting
2182F/20	2" NPTF air relief valve 20 PSI setting
2182/xx	2" NPTM air relief valve with special factory setting, see note xx below
2182/18	2" NPTM air relief valve 18 PSI setting
2182/20	2" NPTM air relief valve 20 PSI setting

- Request the required pressure setting when ordering (xx refers to choice of pressure setting).
- See chart on page 6 for factory pressure range offered.
- See page 21 for air relief testing equipment

Fixed Pressure Setting Valves

	i mod i roccare commig rantos
Application:	Designed specifically for use on trailer tanks containing dry bulk products. If a system blockage were to occur the valves are designed to vent to atmosphere once the valve pressure setting is achieved. Not intended for blower service (for blower service applications see the 2182 series air relief valves shown on page 3).
Standards:	 2180/3180 series have a +3/-0 set pressure tolerance (valve opens at set pressure plus 3 PSI): 2180 are available with 2" male or female NPT, cam and groove adapter or grooved pipe connections. 3180 are available only with 3" female NPT connections
Materials:	Bayloy vent cowl with aluminum upper, bronze poppet with white food grade silicone diaphragm in the 2180, red silicone diaphragm in the 3180
Features & Benefits:	 Available with a variety of pressure settings, see chart below for model specific available pressure settings. Customer should request set pressure at time of order. Relieving capacity (SCFM) varies dependent upon model and pressure setting. See graph page 7, or for specific relief rates please refer to our website or contact Dixon[®]. Installed cup seal deters tampering Bayloy body helps prevent thread galling PVC coated wire lanyard available for securing air relief valves with cam and groove adapter or groove pipe connections









2180

2180B/15 2180V/15 3180

Valve Series	Valve Connection	Available Factory Set Pressure Range (PSI) ¹	Set Pressure Tolerance (PSI)	Diaphragm Material	Relieving Capacity (SCFM) ²
2180/xx	2" female NPT	2 to 25	+3/-0	white food grade silicone	500 to 950
2180/15	2" NPTF air relief valve	15	+3/-0	white food grade silicone	500 to 950
2180/18	2" NPTF air relief valve	18	+3/-0	white food grade silicone	500 to 950
2180B/15	2" cam and groove adapter	15	+3/-0	white food grade silicone	500 to 950
2180V/15	2" grooved	15	+3/-0	white food grade silicone	500 to 950
3180/xx	3" female NPT	4 to 30	+3/-0	red silicone	750 to 1500

- ¹ Request the required pressure setting when ordering (xx refers to choice of pressure setting)
- ² Relieving capacity (SCFM) varies with set pressure, for specific rates please refer to our website or contact Dixon®
- See page 29 for repair kits
- · See page 21 for air relief testing equipment

PVC Coated Lanyards



Part #	Description
CAL15	15" long PVC coated carbon steel cable, with aluminum crimp sleeves. One end is factory crimped, other end is un-crimped for field inspection.
CAL25	25" long PVC coated carbon steel cable, with aluminum crimp sleeves. One end is factory crimped, other end is un-crimped for field inspection.

Adjustable Pressure Setting Valves

	•
Application:	Designed specifically for use on trailer tanks containing dry bulk products. If a system blockage were to occur, the valves are designed to vent to atmosphere once the valve pressure setting is achieved. The advantage of the adjustable air relief valve is that the factory preset pressure can be tuned by -3/+3 PSI to meet tank/application specific pressure requirements (adjustments should be performed by either the tank builder or tank maintenance facility). Not intended for blower service (for blower service applications see the 2182 series air relief valves shown on page 3). Not Rated for ASME Coded Service Requirements
Standards:	Valves have a +1/-0 set pressure tolerance (valve opens at set pressure plus 1 PSI) and are adjustable by -3/+3 PSI . • A2180ADJ has a 2" female NPT and A3180ADJ has a 3" female NPT connection
Materials:	Bayloy vent cowl with aluminum upper, bronze poppet with white food grade silicone diaphragm in the 2180, red silicone diaphragm in the 3180
Features & Benefits:	 Available with a variety of pressure settings, see chart below for model specific available pressure settings. Customer should request set pressure at time of order. Factory preset pressure can be tuned by -3/+3 PSI to meet tank/application specific pressure requirements (adjustments should be performed by either the tank builder or tank maintenance facility) Relieving capacity (SCFM) varies dependent upon model and pressure setting, see graph on page 7, or for specific relief rates please refer to our website or contact Dixon® Installed cup seal deters tampering Bayloy body helps prevent thread galling







A3180-xxADJ

Valve Series	Valve Connection	Available Factory Set Pressure Range (PSI) ¹	Set Pressure Tolerance (PSI)	Diaphragm Material	Relieving Capacity (SCFM) ²
A2180/xxADJ	2" female NPT	9 to 30	+1/-0	white food grade silicone	500 to 950
A3180/xxADJ	3" female NPT	9 to 30	+1/-0	red silicone	750 to 1500

- ¹ Request the required pressure setting when ordering (xx refers to choice of pressure setting)
- ² Relieving capacity (SCFM) varies with set pressure, for specific rates please refer to our website or contact Dixon[®]
- Relieving pressure is factory set at 71°F (21°C), high temperatures will affect the actual relieving pressure.
- · See page 21 for air relief testing equipment

Boss-Lock™ Coupler x Tube with 45° Cut

Application:	For use on trailer relief valves.
Material:	356T6 aluminum
Features & Benefits:	 Butt weld tubing Buna-N gaskets standard, other gaskets available All Boss-Lock™ couplers are supplied with pull-ring safety clips

Part #	Description
AC200TUBE	2" Boss-Lock™ coupler x tube with 45° cut



Vacuum Relief Valves

Application:	Designed specifically for use on trailer tanks containing dry bulk products. If a system blockage were to occur the valves are designed to open to atmosphere to help prevent the tank from imploding.
Standards:	These valves come with a set vacuum tolerance of +/-0.5 HG, available in 3 body sizes: • 1½" male NPT outlet (tank connection) x 1½" female NPT inlet (atmosphere) • 2" male NPT outlet (atmosphere) x 2" female NPT inlet (tank connection) • 3" female NPT outlet (tank connection) x 3" female NPT inlet (atmosphere)
Materials:	Bayloy body and bronze poppet
Features & Benefits:	 Available with a variety of vacuum settings, see chart below for model specific available pressure settings. Customer should request set pressure at time of order. Relieving capacity (SCFM) varies deponent upon model and pressure setting. See graph on page 7, or for specific relief rates please refer to our website or contact Dixon[®]. Installed bolt seal deters tampering Bayloy body helps prevent thread galling







1120

3120

Valve Series	Valve Outlet (Tank Connection)	Valve Inlet (Atmosphere)	Available Factory Set Vacuum Range (HG) 1	Set Pressure Tolerance (PSI)	Relieving Capacity (SCFM) ²
1120/xx	1½" male NPT outlet (tank connection)	1½" male NPT inlet (atmosphere)	6 to 24	+/- 0.5 HG	175 to 420
2120/xx	2" male NPT outlet (tank connection)	2" male NPT inlet (atmosphere)	5 to 24	+/- 0.5 HG	280 to 600
3120/xx	3" female NPT outlet (tank connection)	3" female NPT inlet (atmosphere)	11 to 25	+/- 0.5 HG	700 to 1350
3120ADJ/XX	3" adjustable vacuum valve		14 to 22	0	700-1350

- Request the required pressure setting when ordering (xx refers to choice of pressure setting)
- ² Relieving capacity (SCFM) varies with set pressure, for specific rates please refer to our website or contact Dixon[®]

Air Relief Valve Settings

Pressure Relief Valves Minimum and Maximum Settings

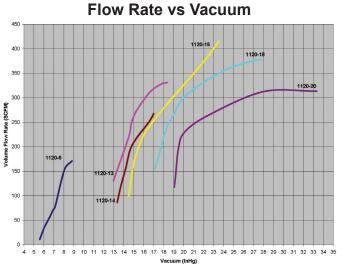
Valve Series	Factory Setting			
valve Selles	Min. Setting (PSI)	Max. Setting (PSI)		
2180	2	25		
A2180ADJ 3	9 ³	30 ³		
2182	3	24		
A2182	6	27		
3180	4	30		
A3180ADJ ³	9 ³	30 ³		

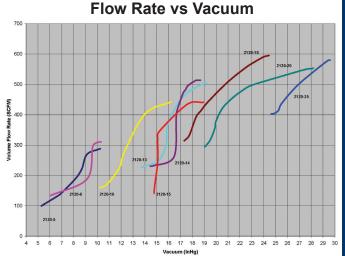
Vacuum Relief Valves Minimum and Maximum Settings

Valve Series	Factory Setting			
valve Selles	Minimum Setting	Maximum Setting		
1120	5" Hg	25" Hg		
2120	5" Hg	24" Hg		
3120	11" Hg	25" Hg		

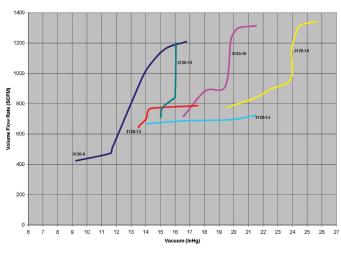
- ³ Customer adjustable by a further +/- **3 PSI**. Settings below **9 PSI** are obtainable by turning the valve adjustment screw.
- Example for an 8 PSI setting the valve adjustment would be +4/-2, for 7 PSI +5/-1 and for 6 PSI +6/-0.
- Settings above **30 PSI** are obtainable by turning the valve adjustment screw. Example for a **31 PSI** setting the valve adjustment would be +2/-4, for **32 PSI** +1/-5 and for **33 PSI** +0/-6.

Air Relief Valve Flow Rates

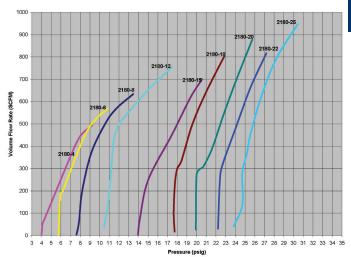




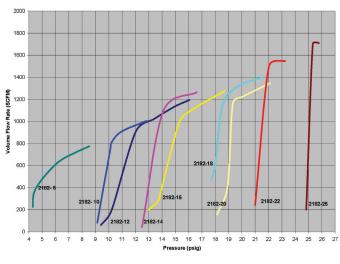
Flow Rate vs Vacuum



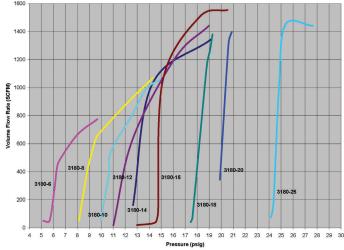
Flow Rate vs Pressure



Flow Rate vs Pressure



Flow Rate vs Pressure



Blower Mounted - Swing Check/Air Relief Manifold

Application:	Designed specifically for use on tractor mounted air blowers and to replace the multiple pipe connections typically used to connect the blower to a swing check and air relief valve.
Standards:	Manufactured with a 4" TTMA flange connection for fastening directly to the blower All "White" EPDM & Silicone seals are FDA compliant.
Materials:	Aluminum body, silicone flapper and lid seal 400°F (204°C) stainless hardware
Features & Benefits:	 Compact unit includes high flow swing check, port for air relief valve and inlet / outlet ports Fastens directly to blower using available TTMA thread adapters 2" FNPT port for air relief valve Interchangeable inlet / outlet ports in 3" and 4" cam and groove and 4" female NPT





Part #	Description	Manifold Outlet Connection	Overall Length	Weight
3090F	swing check manifold with white silicone spring loaded flapper	4" female NPT	11½"	8.7
3090M	swing check manifold with white silicone spring loaded flapper	not included	95/8"	6.2
3090MS	swing check manifold with white silicone spring loaded flapper and security seal	not included	95/8"	6.6
3090MA	swing check manifold with white silicone spring loaded flapper	3" cam and groove adapter	12½"	7.5
3090MA-DC	swing check manifold with white silicone spring loaded flapper with dust cap and chain	3" cam and groove adapter	14½"	8.6
3090MADC-82/18	swing check manifold with white silicone spring loaded flapper with dust cap and chain, with 2182/18 air relief valve	3" cam and groove adapter	201/16"	16.45
3090MADC-82/18A	swing check manifold with white silicone spring loaded flapper with dust cap and chain, with 2182/18A air relief valve	4" cam and groove adapter	201/16"	16.45
3090MADC-82/20	swing check manifold with white silicone spring loaded flapper with dust cap and chain, with 2182/20 air relief valve	3" cam and groove adapter	201/16"	16.45
3090MADC-82/20A	swing check manifold with white silicone spring loaded flapper with dust cap and chain, with 2182/20A air relief valve	4" cam and groove adapter	201/16"	16.45
3090MAS	swing check manifold with white silicone spring loaded flapper and security kit installed	3" cam and groove adapter	12½"	7.9
3090MB	swing check manifold with white silicone spring loaded flapper	4" cam and groove adapter	121/2"	7.6
3090MBS	swing check manifold with white silicone spring loaded flapper and security kit installed	4" cam and groove adapter	12½"	8.1
3091MA	swing check manifold with metal spring loaded flapper	3" cam and groove adapter	12½"	7.4
3091MB	swing check manifold with metal spring loaded flapper	4" cam and groove adapter	12½"	7.5
3091MBS	swing check manifold with metal spring loaded flapper and security kit installed	4" cam and groove adapter	12½"	7.6
Swing Check Manife	old Inlets / Outlets and Options			
Part #	Description			

Part #	Description
6000-16	3" cam and groove adapter manifold outlet, requires one 3090RK1 O-ring kit
6000-17	4" cam and groove adapter manifold outlet, requires one 3090RK1 O-ring kit
6000-20	4" female NPT manifold outlet, requires one 3090RK1 O-ring kit
3090RK1	O-ring kit
TTF4AL-3EMT	3" male NPT blower to manifold inlet adapter, requires 4" TTMA gasket
TTF4AL-4EMT	4" male NPT blower to manifold inlet adapter, requires 4" TTMA gasket

• See page 26 for repair kits and replacement parts.

TTMA Series Flange Adapters

Application:	Provides a simple and easy way to convert threaded components to standard TTMA flange configurations. TTMA flange adapters have a round TTMA flange on one end with either a male or female NPT thread on the other.
Standards:	Flange connections are manufactured to connect with the TTMA (Tank Truck Manufacturers Association) flange pattern, see below for flange dimensions.
Material:	Machined one-piece cast aluminum
Features & Benefits:	 Solid cast aluminum is more durable than welded fabrications Compact size reduces the overall space needed for installation 3" or 4" round TTMA flange pattern with either 3" or 4" male or female NPT







AL-4MT	TTF4AL-3EN

-3EMT T	T	F	-4	A	L-4	4F	
---------	---	---	----	---	-----	----	--

Description	
3" TTMA flange x 3" male NPT, 21/2" overall length	
4" TTMA flange x 3" male NPT, 2½" overall length	
4" TTMA flange x 3" male NPT, 21/2" overall length, hardcoated	
4" TTMA flange x 3" male NPT, 5½" overall length	
4" TTMA flange x 3" female NPT, 2½" overall length	
4" TTMA flange x 4" male NPT, 2½" overall length	
4" TTMA flange x 4" male NPT, 21/2" overall length, hardcoated	
4" TTMA flange x 4" male NPT, 51/2" overall length	
4" TTMA flange x 4" female NPT, 2½" overall length	
	3" TTMA flange x 3" male NPT, 2½" overall length 4" TTMA flange x 3" male NPT, 2½" overall length 4" TTMA flange x 3" male NPT, 2½" overall length, hardcoated 4" TTMA flange x 3" male NPT, 5½" overall length 4" TTMA flange x 3" female NPT, 2½" overall length 4" TTMA flange x 4" male NPT, 2½" overall length 4" TTMA flange x 4" male NPT, 2½" overall length 4" TTMA flange x 4" male NPT, 2½" overall length, hardcoated 4" TTMA flange x 4" male NPT, 5½" overall length

Flange Gaskets

Application:	Creates a leak-tight connection between two bolted together flange faces.
Standards:	TTMA flange gaskets are manufactured to seal with flanges produced to the 3" or 4" TTMA (Tank Truck Manufacturers Association) flange pattern.
Materials:	PTFE, Klingersil® or Cork/Buna



Part #	Size	Description	OD	ID	Thickness	Bolt Circle		
Round TTMA Fla	Round TTMA Flange Gaskets							
300GTTFCB	3"	TTMA - Cork/Buna	55%"	3½"	1/8"	47/8"		
300GTTFTK	3"	PTFE envelope with Klingersil® filler	5%"	3½"	¹ / ₁₆ "	47/8"		
300GTTFK	3"	Klingersil® nylon	55%"	31/2"	1/8"	47/8"		
40321TF	3"	TTMA - PTFE with soft fiber core	5 ²⁹ / ₃₂ "	3½"	³ / ₃₂ "	47/8"		
400GTTFCB	4"	TTMA - Cork/Buna	65/8"	4 ⁹ / ₁₆ "	1/8"	51/8"		
400GTTFTK	4"	PTFE envelope with Klingersil® filler	65/8"	4 ⁹ / ₁₆ "	¹ / ₁₆ "	51/8"		
400GTTFK	4"	Klingersil® nylon	65%"	4 ⁹ / ₁₆ "	1/8"	51/8"		
40322TF	4"	TTMA - PTFE with soft fiber core	6%"	45/8"	3/32"	51/8"		
Square TTMA FI	ange G	askets						
300GDBSQCB	3"	Square TTMA - cork/Buna	41/2"	3%"	1/8"			
300GDBSQK	3"	Square TTMA - Klingersil® nylon	41/2"	3%"	¹ / ₁₆ "			
300GDBSQE	3"	Square TTMA - white EPDM	41/2"	3%"	1/8"			

Round	TTMA	Flange	Dimensi	ons

Nominal Pipe Size	Flange OD	Aluminum Flange Thickness	Diameter of Bolt Circle	Number of Bolts	Diameter of Bolt Holes	Diameter of Bolts Used
3"	5%"	3/8"	47/8"	8	⁷ / ₁₆ "	3/8"
4"	65%"	3/8"	5½"	8	⁷ / ₁₆ "	3/8"
6"	87/8"	3/8"	81/8"	12	⁷ / ₁₆ "	3/8"





Swing Check Valves

Bayco High Flow Series

Application:	Often used on both the blower and trailer, designed to prevent product backflow if a product line should become plugged.
Standards:	Bayco High Flow series swing check valves have 2", 3" or 4" connection choices: female NPT, round TTMA flange or square TTMA flange. All white EPDM & silicone seals are FDA compliant.
Materials:	Aluminum body and inspection lid, stainless-steel hardware, metal-to-metal, EPDM 250°F (121°C) or silicone seals 400°F (204°C) are available (seal availability is dependent upon the model, see chart below for more information).
Features & Benefits:	 Choice of seals: metal-to metal, Buna or silicone Choice of connections female NPT, round TTMA flange or square TTMA flange Flapper return springs are standard Huck bolted flapper assembly prevents loose parts from contaminating the product Inspection lids can be removed to facilitate routine flapper assembly inspections (system must not be in service during inspections or repair) Complete repairs can easily be carried out on all high flow swing check valves without removing from the tank When in use the flapper can swing completely out of the air path, resulting in improved air flow and subsequently increased product flow









3031SQ-SSP 3031TE 3031VIC 4040RD

Part #	Connection Type	Seal Type	Flapper Return Springs ?	Overall Length	
Female NPT					
3020TE	2" female NPT both ends	white EPDM seal	yes	51/8"	
3030TE-SSP	3" female NPT both ends	white silicone seal	yes	71/8"	
3031TE	3" female NPT both ends	metal-to-metal seal	yes	71/8"	
4040TE	4" female NPT both ends	white EPDM seal	yes	9"	
4041TE	4" female NPT both ends	metal-to-metal seal	yes	9"	
4042TE	4" female NPT both ends	white silicone seal	yes	9"	
Square TTMA	Flange				
3020SQ	2" square TTMA flange	white EPDM seal	yes	51/8"	
3030SQ-SSP	3" square TTMA flange	white silicone seal	yes	67/8"	
3031SQ	3" square TTMA flange	metal-to-metal seal	yes	67/8"	
Round TTMA Flange					
3030RD-SSP	3" round TTMA flange	white silicone seal	yes	67/8"	
3031RD	3" round TTMA flange	metal-to-metal seal	yes	67/8"	
4040RD	4" round TTMA flange	white EPDM seal	yes	9"	
4041RD	4" round TTMA flange	metal-to-metal seal	yes	9"	
4042RD	4" round TTMA flange	white silicone seal	yes	9"	
Grooved Pipe	Grooved Pipe				
3030VIC-SSP	3" grooved end both ends	white silicone seal	yes	8"	
3031VIC	3" grooved end both ends	metal-to-metal seal	yes	8"	

- See pages 31, 32, 33 for repair kits and replacement parts
- · See page 9 for TTMA flange gaskets

Swing Check Valves

Bayco Classic 3000 Series

Application:	The classic 3000 series of swing check valves are often used on both the blower and trailer.
Standards:	All Bayco 3000 series swing check valves have 3" connection choices: female NPT, round TTMA flange or square TTMA flange.
Materials:	Aluminum body, Bayloy inspection caps and flapper valve assembly. Buna 250°F (121°C) or silicone seals 400°F (204°C) are optional.
Features & Benefits:	 Choice of seals: metal-to metal, Buna or silicone Choice of connections female NPT, round TTMA flange or square TTMA flange Available with or without flapper return springs Huck bolted flapper assembly prevents loose parts from contaminating the product Inspection lids can be removed to facilitate routine flapper assembly inspections (system must not be in service during inspections or repair) Limited repairs can be carried out on both threaded and square flanged units without removing from the tank, round flange units must be removed from the tank to facilitate repairs For swing check valves that can be completely repaired on the tank see the Bayco High Flow 3030 Series on page 10







3000TE

3001SQ-N

3000-N

Part #	Connection Type	Seal Type	Flapper Return Springs	Overall Length
3000TE	3" female NPT both ends	metal-to-metal seal	no	71/8"
3000TE-SP	3" female NPT both ends	metal-to-metal seal	yes	71/8"
3000TE-B	3" female NPT both ends	black Buna seal	no	71/8"
3000TE-BSP	3" female NPT both ends	black Buna seal	yes	71/8"
3000TE-S	3" female NPT both ends	white silicone seal	no	71/8"
3000TE-SSP	3" female NPT both ends	white silicone seal	yes	71/8"
3001SQ-N	3" square TTMA flange	metal-to-metal seal	no	67/8"
3001SQ-SP	3" square TTMA flange	metal-to-metal seal	yes	67/8"
3001SQ-B	3" square TTMA flange	black Buna seal	no	67/8"
3001SQ-BSP	3" square TTMA flange	black Buna seal	yes	67/8"
3001SQ-S	3" square TTMA flange	white silicone seal	no	67/8"
3001SQ-SSP	3" square TTMA flange	white silicone seal	yes	67/8"
3000-N	3" round TTMA flange	metal-to-metal seal	no	55%"
3000-SP	3" round TTMA flange	metal-to-metal seal	yes	55%"
3000-B	3" round TTMA flange	black Buna seal	no	55%"
3000-BSP	3" round TTMA flange	black Buna seal	yes	55%"
3000-S	3" round TTMA flange	white silicone seal	no	55%"
3000-SSP	3" round TTMA flange	white silicone seal	yes	55%"

- See pages 31, 32 for repair kits and replacement parts
- · See page 9 for TTMA flange gaskets

Pneuclean™ Pneumatic Filtration System

Application:	Designed to remove microscopic particles generated by blowers during pneumatic conveying of contaminant-sensitive dry bulk products. Contaminants such as iron and hydrocarbons are produced by air blowers and can adversely affect dry products such as plastic pellets and food materials. These filter units are typically mounted on dry bulk tanker trailers, but can also be mounted on the tractor. Units are placed after the blower and before the bulk storage tanker. This in-line pneumatic system is also suitable for industrial applications or wherever microscopic filtration (up to 4 microns) of impurities is required.
Standards:	Standard units employ 4" inlets and outlets, choose from schedule 40 pipe, grooved pipe, TTMA flange or 4" cam and groove adapter connections (3" plumbing can be used with available weld-on 4" x 3" cam and groove adapters). Maximum working pressure is 50 PSI with a MERV rating of 8.
Materials:	Aluminum canister and lid, stainless V-clamp. Polyester filter material.
Features & Benefits:	 Variety of connection types (see chart below for details) Canister is heavy duty aluminum Overall weight is 26 lbs. Maximum air flow is 1000 CFM Special cartridge-style filter element has a typical life expectancy of approximately 12 months or 2000 hours of service Noise reduction filter reduces noise by 13.8 db at 600 CFM FDA medium with 99.99% maximum efficiency at 4 microns Back pressure 0.05 PSI Quick release V clamp for easy inspection and servicing





PC5000 PC5000TTTE

Part #	Description
PC5000	complete Pneuclean™ filtration system with 4" schedule 40 pipe inlet and outlet
PC5000-002	complete Pneuclean™ filtration system with 4" schedule 40 pipe inlet and outlet with Outer Perf Element
PC5000AA	complete Pneuclean™ filtration system with 4" cam and groove adapter inlet and outlet
PC5000VV	complete Pneuclean™ filtration system with 4" grooved pipe inlet and outlet
PC5000TTTE	complete Pneuclean™ filtration system with 4" TTMA flange inlet and 90° 4" male NPT outlet
PC5003	mounting bracket (sold separately, 2 required)

Replacement Parts





PC5001 PC5001-002

Part #	Description
PC5001	replacement Pneuclean™ filter element, rated to 400°F (204°C)
PC5001-002	complete Pneuclean filtration system with 4" schedule 40 pipe inlet and outlet with PC5001-002 element with outer perf
PC5004	replacement V-clamp for securing lid to body
PC5005	replacement lid O-ring seal
PC5006	replacement canister bottom gasket
PC5007	replacement lid

Clump Buster

Application:	Designed to be used in-line for dry bulk applications where dry material may tend to clump during off-loading.
Standards:	Manufactured with cam and groove end configurations.
Materials:	Aluminum body, stainless-steel screen and V-band clamp
Features & Benefits:	 4" cam and groove ends Two piece housing design with V-band clamp (DB1000) Stainless screen hole diameter is 7/16" Seals are Buna-N Bell shaped housing provides maximum flow (DB1000) DB1000-SFI comes with sight glass







Inside View DB1000

DB1000 DB1000-SFI

Part #	Description
DB1000	clump buster
DB1000-SFI	clump buster with sight glass

Cam & Groove In-Line Sight Glasses

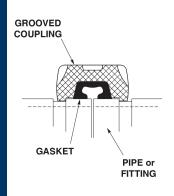
Application:	The cam and groove sight glasses are often connected to the dry bulk tanker's product outlet allowing the operator to visually confirm that product is flowing out of the tank.
Standards:	Interchanges with all product produced to commercial Item description A-A-59326B.
Materials:	Aluminum, acrylic sight glass, brass cam arms, Buna gaskets
Features & Benefits:	 Allows the operator to see product flow Precision machined to rigid tolerances. Durable stainless-steel cam arm pins will not rust or bind, providing strength and safety Recess holds gasket firmly in place - ensures proper placement Intended for dry goods only

Part #	Description				
Coupler x Adapt	Coupler x Adapter				
3544CA	4" cam and groove coupler x 4" cam and groove adapter				
3543CA	4" cam and groove coupler x 3" cam and groove adapter				
3534CA	3" cam and groove coupler x 4" cam and groove adapter				
3533CA	3" cam and groove coupler x 3" cam and groove adapter				
Coupler x Coup	ler				
3544CC	cam and groove coupler x 4" cam and groove coupler				
3543CC	t" cam and groove coupler x 3" cam and groove coupler				
3533CC	3" cam and groove coupler x 3" cam and groove coupler				
Adapter x Adapter					
3544AA	4" cam and groove adapter x 4" cam and groove adapter				
3534AA	3" cam and groove adapter x 4" cam and groove adapter				
3533AA	B" cam and groove adapter x 3" cam and groove adapter				



3543CA

Grooved Pipe Connections



Application:	Designed to join two pieces of pipe together. The two pipes are butted to one another each pipe has a groove that runs the circumference of the pipe exterior. The grooved clamp has ridges that lock into the two pipe grooves and a gasket is compressed to the pipes to create a leak-tight seal. Grooved clamps are often used on pipe connections on dry bulk tankers in place of welding offering the ability to adjust, change or replace pipe sections without the need for a permanent joint such as a weld.
Standards:	Manufactured to fit new and existing grooved pipe connections
Materials:	Aluminum or coated ductile iron bodies with steel bolts/nuts, Buna seals
Features & Benefits:	 Constructed of rugged cast aluminum or iron Maintenance is easy to perform

Aluminum Bolt Clamps

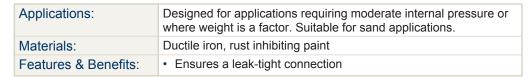


DBV-WB400

	<u>-</u>
Features & Benefits:	 Lightweight yet rugged Unlike steel groove clamps that secure the pipe ends with high clamping force against the tubing/piping walls, the Dixon® aluminum bolted clamp takes the full bolt force and locks into the groove of the tube/pipe, preventing distortion of the tube/pipe diameter Precision casting and machined dimensions provide an exact fit and great appearance
	 Lock nuts prevent loosening in applications with vibration White Buna seal for food applications

Size	Seal	Part #	Maximum PSI	Approximate Weight (lbs)	Bolt Torque (ft lbs)
4"	White Buna	DBV-WB400	120	1.5	50

Painted Iron Groove x Groove Bolt Clamps





Size	Description	Part #
2"	painted iron groove x groove clamp with Buna seal	L02BU
3"	painted iron groove x groove clamp with Buna seal	L03BU
4"	painted iron groove x groove clamp with Buna seal	L04BU
5"	painted iron groove x groove clamp with Buna seal	L05BU

Replacement Gaskets



Size	Description	Part #
2"	Buna grooved coupling replacement gasket G200T	
3"	Buna grooved coupling replacement gasket	G300T
4"	Buna grooved coupling replacement gasket	G400T
4"	white Buna N gasket	G400N
5"	Buna grooved coupling replacement gasket	G500T



Grooved Pipe Connections

Groove x Groove Painted Iron Clamps with Baylast™ Gasket

Features & Benefits:	•	Painted red
	•	Baylast™ rated for biodiesel, Ethanol, diesel, gas and ULSD
	•	Groove x groove

Size	Seal	Maximum PSI	Part #
2"	Baylast™	500	L02BL
3"	Baylast™	300	L03BL
4"	Baylast™	300	L04BL



L02BL

Replacement Clamp Gaskets

Clamp Size	Part #	Seal	Fuel Compatibility
2"	G200BL	Baylast™ (2 orange stripes)	
3"	G300BL	Baylast™ (2 orange stripes)	Gasoline and diesel, up to E100 & B100 Biofuels
4"	G400BL	Baylast™ (2 orange stripes)	up to £100 a B100 Biolacis

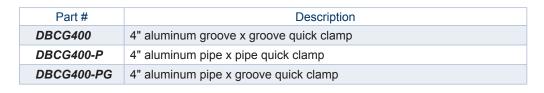


G400BL

Aluminum Quick Connect Clamps

Application:	Quick line clamp designed to couple groove to groove connections in dry bulk applications.
Materials:	White Buna-N split gasket, heavy duty composite handle, forged aluminum body, stainless-steel locking mechanism
Features & Benefits:	 4" dry bulk line clamp Adjustable locking mechanism Safety locking clip is included 50 PSI working pressure

	THE
6	
4	





DBCG400

Pipe Band Clamps

Applications:	Suitable for both Food Grade and non Food Grade applications where pipe and hopper tee outlets are joined. Typically used on dry bulk cargo tank pipe connections.
Materials:	Stainless-steel band and clamps, white Buna FDA approved seals
Features & Benefits:	 Works with both groove and straight pipe connections Static conductive strap build into clamp Heavy duty worm gear clamps Stainless-steel support wrap improves strength Band clamp retainers align clamp position

Part #	Size	Description
DBPCB400	4"	stainless steel band clamp with white Buna seal

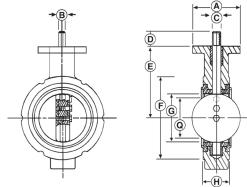


DBPCB400

Butterfly Valves

Application:	Butterfly valves are commonly used on dry bulk tankers to control the flow of product; designed to be placed between 2 ASME/ANSI 125 or 150 lb. flanges.
Materials:	Aluminum bodies with iron or stainless-steel disc, polymer bushings, Buna-N (Nitrile) seals and seats, spring, stem and locking lever pin are stainless-steel, aluminum handle and throttling plate.
Features & Benefits:	 Rugged cast aluminum Flange gaskets are not required; the valves elastomer seat also doubles as the flange gasket. Handles are high strength 713 aluminum, with a retrogressive re-aging process which creates as stronger handle than the cast iron handle which are commonly used in the industry Iron or stainless discs are standard for superior wear resistance FDA approved black or white Buna-N seals, -20°F to 275°F (-29°C to 135°C)

Butterfly Valve Dimensions



						_				
Size	Α	В	С	D	Е	F	G	Н	Q	Weight (lbs.)
2"	4.000	0.375	0.563	1.250	3.938	4.125	2.125	1.625	1.688	3
3"	4.000	0.375	0.563	1.250	4.875	5.375	3.125	1.750	2.875	5
4"	4.000	0.438	0.625	1.250	6.000	6.875	4.125	2.000	3.875	8
5"	4.000	0.438	0.625	1.250	6.000	7.625	5.188	2.125	5.000	9
6"	4.000	0.438	0.625	1.250	6.625	8.750	6.125	2.125	6.000	9
8"	6.000	0.500	0.750	1.250	8.313	11.000	8.125	2.500	8.000	
10"	6.000	0.625	0.875	1.250	9.125	13.375	10.125	2.500	10.000	

- · All dimensions are given in inches
- "Q" dimension is the minimum allowable inside diameter of the pipe or mating flange

One-Piece Aluminum Body with Iron Disc and Black Buna-N Seals



DB4-400-1500





With Integrated Notch Plate

Size	Description	Complete Valve Part # 1
4"	125/150# flange	4-480-1500
4"	TTMA	4A-480-1500
5"	125/150# flange	5-480-1500
6"	125/150# flange	6-480-1500

¹ Handle kits are sold separately on Page 17.

Butterfly Valves

One-Piece Aluminum Body with Stainless-Steel Disc and White Buna-N Seal



DB-400-3501



4-480-3501 with integrated notch plate

Size	Description	Complete Valve Part # 1
3"	125/150# flange	DB3-400-3501
4"	125/150# flange	DB4-400-3501
4"	TTMA	4A-400-3501
5"	125/150# flange	DB5-400-3501
6"	125/150# flange	6-400-3501

1	Handla	Lite	aro	cold	separately.	
	Handle	KITS	are	sola	separately.	

Valve Size	Description	Complete Valve Part # 1
4"	125/150# flange	4-480-3501
4"	TTMA	4A-480-3501
5"	125/150# flange	5-480-3501
6"	125/150# flange	6-480-3501

Two-Piece Aluminum Body with Stainless-Steel Disc and White Buna-N Seal

Features & Benefits:

- Designed specifically for pneumatic conveying and abrasive applications
- Seat ID matches the ID of Schedule 40 pipe, resulting in smoother product flow
- Two-piece split body design simplifies field maintenance by eliminating the need for special tools

Size	Description	Complete Valve Part # ¹
3"	125/150# flange	3-380-828501
4"	125/150# flange	4-380-828U501
5"	125/150# flange	5-380-828U501
6"	125/150# flange	6-380-828U501

¹ Handle kits are sold separately.



3-380-828501

Aluminum Butterfly Valve Handle Kits

Size	Description	Material	Part #
2-3"	10 position handle and throttle plate	steel	DB237-23-10
3-6"	5 position handle and throttle plate	aluminum	DB206-46-5
4-6"	10 position handle and throttle plate	steel	DB237-46-10
8"	10 position handle and throttle plate	aluminum	DB206-810
10"	10 position handle and throttle plate	aluminum	DB206-1010

Butterfly Valves

Application:	Composite butterfly valves are commonly used on dry bulk cargo tankers to control the flow of product.
Materials:	Composite bodies with iron, aluminum or stainless-steel discs and white Baylast™ rubber seats.
Features:	 Reinforced composite body valves are a rugged lightweight alternative to the heavier, more expensive aluminum valves Bayco proven field reliability and corrosion free design Drop in replacement to upgrade existing aluminum valves Weight reduction allows for increased payload
Specifications:	Handle kits are sold separately, choose aluminum or iron.

Composite Butterfly Valves









DB3-900-501

DB5-900-301

DB5-900-501

DB6-900-501

Part #	Connection Type	Disc Material	Baylast™ Seat Color
DB3-900-150	3" composite butterfly valve	iron	black
DB3-900-301	3" composite butterfly valve	aluminum	white
DB3-900-501	3" composite butterfly valve	stainless-steel	white
DB4-900-150	4" composite butterfly valve	iron	black
DB4-900-301	4" composite butterfly valve	aluminum	white
DB4-900-501	4" composite butterfly valve	stainless-steel	white
DB5-900-150	5" composite butterfly valve	iron	black
DB5-900-301	5" composite butterfly valve	aluminum	white
DB5-900-501	5" composite butterfly valve	stainless-steel	white
DB6-900-150	6" composite butterfly valve	iron	black
DB6-900-301	6" composite butterfly valve	aluminum	white
DB6-900-501	6" composite butterfly valve	stainless-steel	white

Composite Butterfly Valve Handle Kits

Part #	Size	Description	Material
DB206-23-5	2-3"	5 position handle and throttle plate	aluminum
DB206-46-5	4-6"	5 position handle and throttle plate	aluminum

Hopper Tees

Application:	Straight and bottom drop tees are used at the base of dry bulk tank hoppers. With straight tees the dry bulk product is unloaded utilizing a blower generated pneumatic flow through the tee and air pressure on top of the hopper. The bottom drop tee can be utilized like the straight tee by using pneumatic conveyance or can be used for gravity unloading of the dry goods by opening the drop door on the base of the tee.
Standards:	Dimensionally interchangeable with industry standard offerings. Flanged to the tank hopper and grooved or pipe connection ends.
Materials:	Aluminum or Baycast Iron Alloy
Features & Benefits:	Straight tees are cast as one-piece High unloading rates and reduced flow turbulence Bottom drop tees have easy to use swing out bottom drop door









DB500TA

DB500LTA

DB600TA

DB600LTA









DB605LTA

DB510TI-VXP

DB510TI-PXC

DB510TI-PXP

Part #	Connection Type	Low	Mate	rial	Overall	Overall
Pail #	Connection Type	Profile	Aluminium	Iron	Height	Length
	Straight Tees					
DB500TA	5" x 4" straight tee - groove x groove		✓		6.438	13.875
DB600TA	6" x 6" straight tee - groove x groove		✓		7.000	13.875
DB500TI	5" x 4" straight tee - pipe x pipe			✓	6.5625	13.875
DB500TI-PXV	5" x 4" straight tee - pipe x groove			✓	6.5625	13.875
DB500TI-VXV	5" x 4" straight tee - groove x groove			✓	6.5625	13.875
DB500LTA	5" x 4" straight tee - groove x groove low profile	✓	✓		6.187	13.875
DB600LTA	6" x 6" straight tee - groove x groove low profile	✓	✓		5.063	13.875
DB605LTA	6" x 5" straight tee - groove x groove low profile	✓	✓		6.094	13.875
	Bottom Drop Tee	S				
DB510TA	5" x 4" drop tee - groove x groove		✓		7.625	13.875
DB510TI	5" x 4" drop tee - groove x groove			✓	7.639	13.875
DB510TI-PXP	5" x 4" drop tee - pipe x pipe			✓	7.639	13.875
DB510TI-PXT	5" x 4" drop tee - pipe to NPI 4" male thread			✓	7.639	13.875
DB510TI-PXV	5" x 4" drop tee - pipe x groove			✓	7.639	13.875
DB510TI-VXP	5" x 4" drop tee - groove x pipe			✓	7.639	13.875
DB510TI-VXC	5" x 4" drop tee - groove x cam & groove coupler			✓	7.623	15.593
DB510TI-PXC	5" x 4" drop tee - pipe x cam & groove coupler			✓	7.623	15.593
DB510TI-VXT	5" x 4" drop tee - groove to NPI 4" male thread			✓	7.639	13.875
DB610TI-PXP	6" x 4" drop tee - pipe to pipe			✓	7.265	13.975
DB610TI-PXT	6" X 4" drop tee - pipe x thread			✓	7.265	13.975
DB610TI-PXV	6" x 4" drop tee - pipe to groove			✓	7.265	13.975
DB610TI-VXP	6" x 4" drop tee - groove to pipe			✓	7.265	13.975
DB610TI-VXT	6" x 4" drop tee - groove x thread			✓	7.265	13.975
DB610TI-VXV	6" x 4" drop tee - groove to groove			✓	7.265	13.975

Disk Fluidizer

of bulk trailers, allowing more airflow, less back pressure and higher unloading rates. Features & Benefits: • Seals completely to hopper or wear plate to stop the back flow of product into the aeration lin		
	Application:	Designed to provide the optimum amount of air volume needed for efficient pneumatic unloading of bulk trailers, allowing more airflow, less back pressure and higher unloading rates.
Durable, food grade silicone resists hardening, cracking or tearing	Features & Benefits:	Robust design does not have snap retention legs that can break off or flimsy disks that crack and wear prematurely

Commonly Used Fluidizer Kits			
Part #	Description		
Typical kits for aluminum trailers. If used to haul abrasive products like sand or cement use hopper savers to protect from wear on the aluminum hopper.			
111111	1-port assembly, includes blue silicone disk, grey stem hopper saver, blue silicone manifold gasket, 1-port grey manifold, tee handle		
111131	3-port assembly, includes blue silicone disk, grey stem hopper saver, blue silicone manifold gasket, 3-port grey manifold, tee handle		
These	are typical kits used in steel trailers. (Do not include hopper savers)		
113111	1-port assembly, includes blue silicone disk, grey stem, blue silicone manifold gasket, 1-port grey manifold, tee handle		
113131	3-port assembly, includes blue silicone disk, grey stem, blue silicone manifold gasket, 3-port grey manifold, tee handle		
These	These are standard kits used in Heil trailers		
111141	1-port assembly, includes blue silicone disk, grey stem hopper saver, blue silicone manifold gasket, 1-port clear manifold, tee handle		
111161	3-port assembly, includes blue silicone disk, grey stem hopper saver, blue silicone manifold gasket, 3-port clear manifold, tee handle		

Fluidizer Components



Part #	Description
4124	blue silicone fluidizer disk (food grade)
4134	white silicone fluidizer disk (food grade)
4125	grey stem with brass insert
4135	natural stem with stainless-steel insert
4155	aluminum stem
4157	carbon steel stem
4126B	11/2" stain. steel hopper saver, white silicone backing
4127	blue silicone manifold gasket (food grade)
4137	white silicone manifold gasket (food grade)
5050	20" stainless-steel, 3 disk fluidizer plate (16" ID)
5052	20" carbon steel, 3 disk fluidizer plate (16" ID)
5012	20" neoprene gasket
4121	manifold, 1 port grey
4122	manifold, 2 port grey
4123	manifold, 3 port grey
4621	manifold, 1 port clear
4622	manifold, 2 port clear
4623	manifold, 3 port clear
4129	tee handle assembly - stainless-steel
4130	raised tee handle assembly
4139	hex bolt assembly - stainless-steel
4149	internal hex bolt assembly - stainless-steel
4159	bolt assembly T.I.R. stainless-steel
4111	13/8" hopper plug with gasket
4167	11/2" hopper plug with gasket

Tube Doors

Hose Tube Doors

Application:	When not in use fuel delivery hoses are often stored in tubes that run the length of the tanker. A welded cap on one end and a hinged tube door welded on the other end keep the hoses in the storage tubes.
Standards:	Manufactured to weld to 6", 7" or 8" hose tubes.
Materials:	Aluminum body, Buna seals, stainless-steel door closure spring and hardware, nylon bushings
Features & Benefits:	 Pad-lockable Keeps fuel delivery hoses neatly and safely stored in the designated storage tubes Protects expensive delivery hoses and fittings from road dirt, salt and other environmental factors







TDF6

TDF8

Part #	Description
TDF6	6" hose tube door
TDF7	7" hose tube door
TDF8	8" hose tube door

Air Relief Valve Testing Equipment

Application:	In order to properly test air relief valves, enough air volume (SCFM) needs to be available directly to the air relief valve, or early blow offs will be falsely observed. The air relief starts to open slightly before the set pressure, and if there is not enough air volume to fully open the valve the tester may mistakenly take this to be an early blow off. Dixon® developed two pieces of equipment designed to provide enough air volume to properly test the valves: • DB9000 - with its own 20 gallon air tank which can be charged from most air compressors • DB9001 - mounted directly to a blower
Standards:	 ASME approved pressure vessel (DB9000) Use shop air supply to test Dixon Bayco air relief valves ASME approved 20 gallon tank with safety pop off High flow pressure regulator
Material:	Mainly steel construction
Features & Benefits:	 Allows fleets to properly and safely test air relief valves Provided with a test platform to safely hold the air relief valve in the test stand allowing for the safe disassembly and reassembly of valves for internal inspection, cleaning and repair

Stationary Air Relief Tester

Part #	
DB9000	



TTMA Reducing Flange Adapters

Application:	Used in applications where 3" and 4" TTMA flanges need to be connected.
Standards:	Flange connections are manufactured to connect with the TTMA (Tank Truck Manufacturers Association) flange pattern, see page 9 flange dimensions.
Material:	Aluminum
Features & Benefits:	 Both sides machined to create smooth gasket sealing surfaces ¾" thick 4" TTMA hole pattern sized for (8) ¾" socket head cap screws 3" TTMA hole pattern is blind threaded with ¾"-16 thread to a depth of ⁹/₁₆", supplied with (8) ¾"-16 x 1" socket head cap screws Easily connects with any item that has a 3" or 4" TTMA flange



Part #	Description
4443	4" TTMA x 3" TTMA reducer flange

See page 9 for TTMA flange gaskets.

TTMA Weldable Flanges

Application:	Used in applications where a device such as a valve or sight flow with a TTMA flange needs to be connected to a pipe; the TTMA weldable flange is welded to the pipe and the desired device is bolted on.
Standards:	Flange connections are manufactured to connect with the TTMA (Tank Truck Manufacturers Association) flange pattern, see page 9 for flange dimensions.
Material:	Aluminum
Features & Benefits:	 Butt weld version: the ID on side A is beveled to aid with butt welding., the flange face of side B is machined to create an even surface for the gasket seal. Socket weld version: the ID on side A has a machined socket to allow the pipe to slide in to be socket welded Flange face of side B is machined to create an even surface for the gasket seal. Flanges are 3/8" thick Easily connect with any item that has a 3" or 4" TTMA flange





TTF3AL

TTF400SP

Part #	Description
TTF3AL	3" TTMA buttweld on flange
TTF4AL	4" TTMA buttweld on flange
TTF400SP	4" TTMA socket weld on flange

• See page 9 for TTMA flange gaskets.

Cam & Groove Couplings x TTMA Flange

Application:	Used to connect dry bulk product hoses; the TTMA flange x cam and groove allows product hoses to be connected directly to the dry bulk tanker piping system.
Standards:	Interchanges with all product produced to commercial item description A-A-59326B. Flange connections are manufactured to connect with the TTMA (Tank Truck Manufacturers Association) flange pattern, see page 9 for flange dimensions.
Materials:	Aluminum, Buna cam and groove gaskets
Features & Benefits:	 Precision machined to rigid tolerances Durable stainless-steel cam arm pins will not rust or bind, for greater strength and safety Recess holds gasket firmly in place - ensures proper placement



300-ALT-AL



300-DLT-AL



40022ALTAL



40022DLTAL

Part #	Description	
300-ALT-AL ¹	3" cam and groove adapter (straight) x 3" TTMA flange	
3040ALTAL	4" cam and groove adapter (straight) x 3" TTMA flange	
400-ALT-AL 1	4" cam and groove adapter (straight) x 4" TTMA flange	
40022ALTAL	4" cam and groove adapter (22½°) x 4" TTMA flange	
600-ALT-AL	6" cam and groove adapter (straight) x 6" TTMA flange	
300-DLT-AL	3" cam and groove coupler (straight) x 3" TTMA flange	
3040DLTAL	4" cam and groove coupler (straight) x 3" TTMA flange	
400-DLT-AL	4" cam and groove coupler (straight) x 4" TTMA flange	
40022DLTAL	4" cam and groove coupler (22½°) x 4" TTMA flange	
600-DLT-AL	6" cam and groove coupler (straight) x 6" TTMA flange	

¹ 300-ALT-AL and 400-ALT-AL are also available in 316 stainless-steel

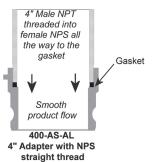
[•] See page 9 for TTMA flange gaskets.

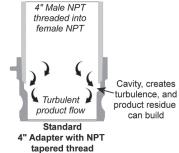
Cam & Groove with Straight Thread (NPSM)

Application:	Used to connect dry bulk product hoses. Standard threaded cam and groove fittings have a tapered thread, which when threaded to another tapered thread, leaves exposed thread within the product flow path. The cavity left by the exposed thread not only causes product turbulence, but it also is a place where product can build up. When the Dixon® cam and groove with female straight threads is threaded onto a male tapered thread (NPT), the male tapered thread threads all the way to the bottom of the thread cavity, creating a smooth product path. This reduces product turbulence and build-up.
Standards:	Interchanges with all product produced to commercial Item description A-A-59326B. Threads are machined to the NPSM standard.
Materials:	Aluminum, cork/Buna adapter gasket, Buna coupler gasket
Features & Benefits:	 No exposed threads within the product flow, reduces product turbulence and product build up Precision machined to rigid tolerances Durable stainless-steel cam arm pins will not rust or bind, for greater strength and safety Recess holds coupler gasket firmly in place - ensures proper placement









	·
Part #	Description
400-AS-AL	4" cam and groove adapter with female NPSM (straight thread)
400GAGFI	replacement cork/Buna thread gasket for 400-AS-AL
ADS400	4" cam and groove coupler with female NPSM (straight thread)
400-G-BU ¹	replacement Buna coupler gasket for ADS400

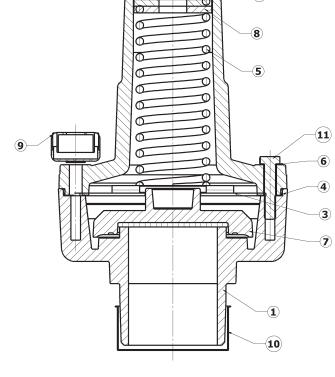
- ¹ Other material coupler gaskets are available, please contact Dixon[®].
- Please contact Dixon® for other materials and configurations.

Products for Blowers

2182 Blower 2" Air Relief Valves

Bill of Materials

Item #	Description	Qty
1	vent cowl	1
2	top body	1
3	valve seat	1
4	diaphragm	1
5	spring	1
6	lock washer	4
7	valve plate	1
8	spacer	
9	cup seal	1
10	сар	1
11	body bolt	4



Repair Kits

Part #	Part # Description	
2182RK15	2182 repair kit, 15 PSI spring (+2/-0 PSI tolerance), spring seat, diaphragm, valve plate, bolts, lockwashers, tamper proof seal and valve label	3, 4, 5, 6, 8, 9, 10
2182RK18	2180/18 repair kit, 18 PSI spring (+2/-0 PSI tolerance), spring seat, diaphragm, valve plate, bolts, lockwashers, tamper proof seal and valve label	3, 4, 5, 6, 8, 9, 10

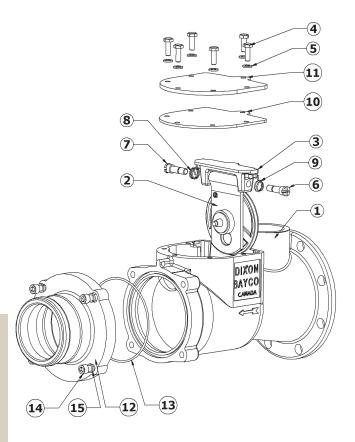


Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.

Dry Bulk

Products for Blowers

High Flow Blower Swing Check Manifold Valves 3090 Series TTMA Flange x Adapter



Bill of Materials

Item #	Description	Part No.	Qty
1	swing check manifold body		1
2A	valve flapper assembly silicone seal (3090M, 3090MA, 3090MB and 3090F)	use kit 3090RK2	1
2B	valve flapper assembly metal seal (3091MA)	use kit 3091RK2	1
3	flapper valve yoke	341595	1
4	bolt	use kit 3030HK	6
5	lock washer	use kit 3030HK	6
6	left hand shaft	390799	1
7	right hand shaft	390798	1
8	right hand spring	use kit 3030RK3	1
9	left hand spring	use kit 3030RK3	1
10	cover gasket silicone	112257	1
11	cover	341611	1
12A	3" adapter outlet (for 3090MA, 3090MAS and 3091MA, includes items 14 and 15)	6000-16	1
12B	4" adapter outlet (for 3090MB, and 3090MBS, includes items 14 and 15)	6000-17	1
12C	4" FNPT outlet (for 3090F)	6000-20	1
13	adapter outlet O-ring	3090RK1	1
14	adapter outlet hex bolt	use kit 6000NPHK	4
15	adapter outlet lock washer	use kit 6000NPHK	4

5	Part #	Description	Includes Item #
	3090RK1	3090RK1 adapter outlet O-ring	
	3091RK2	replacement metal seal flapper kit, flapper assembly, yoke, springs, shafts, cover gasket (for 3091MA)	2B, 3, 6, 7, 8, 9, 10
	3090RK2	complete rebuild kit, silicone flapper assembly, yoke, springs, shafts, cover gasket, bolts and lock washers (for 3090M, 3090MA, 3090MB and 3090F)	2A, 3, 4, 5, 6, 7, 8, 9, 10
	3091RK1	complete rebuild kit, metal seat flapper assembly, yoke, springs, shafts, cover gasket, bolts and lock washers (for 3091MA)	2B, 3, 4, 5, 6, 7, 8, 9, 10
	3030HK	replacement cover bolts and lock washers	4, 5
	3030RK3	replacement left and right springs	8, 9
	6000NPHK	outlet bolts and lock washers	14, 15

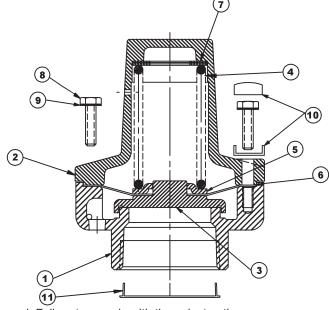
Products for Blowers

2180 Series 2" Air Relief Valves models 2180 and A2180

Bill of Materials

Item #	Description	Qty
1	vent cowl	1
2	top body	1
3	valve	1
4	spring	1
5	valve seat	1
6	diaphragm	1
7	spacers	
8	body bolt	4
9	body bolt washer	4
10	cup seal	1
11	plug	1

 Only 15 PSI and 18 PSI repair kits are available (below), all valves of other pressure settings must be returned to Dixon[®] for rebuilding.



The detailed instructions enclosed with each repair kit must be followed. Failure to comply with these instructions including disassembly, tampering or modifications using processes and parts not described in these instructions or supplied with this rebuild kit will void the product warranty and could result in personal injury or death and extensive property damage.



Repair Kits

Part #	Part # Description	
2180RK15	2182 repair kit, 15 PSI spring (+2/-0 PSI tolerance), spring seat, diaphragm, valve plate, bolts, lockwashers, tamper proof seal and valve label	3, 4, 5, 6, 8, 9, 10
2180RK18	2180/18 repair kit 18 PSI spring (+2/-0 PSI tolerance) spring seat diaphragm valve	

Repair kits fit the 2180 series (non adjustable) relief valves with female NPT, grooved and cam and groove adapter ends (not for use in the adjustable 2180 series).

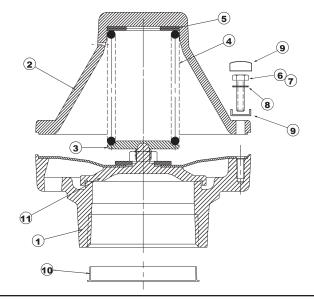
3180 Series 3" Air Relief Valves

Bill of Materials

Item #	Description	Qty
1	bottom cowl	1
2	cover	1
3	spring seat	1
4	spring	1
5	set washer	1
6	hex screw	2
7	drilled screw	2
8	lock washer	4
9	cup seal	1
10	plug	1
11	valve sub-assembly	1

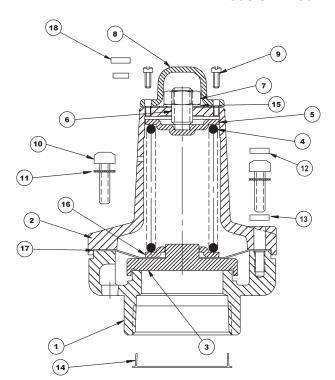
- Repair kits are not available. All 3180 and A3180 relief valves must be returned to Dixon® for rebuilding.
- Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.





Products for Blowers

2" and 3" Adjustable Air Relief Valves models A2180ADJ and A3180ADJ



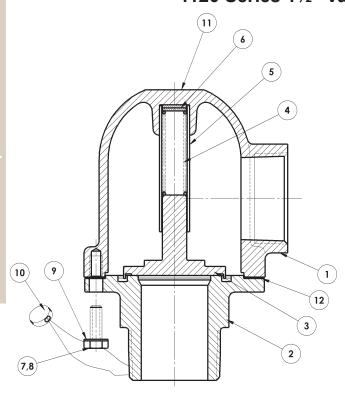
Bill of Materials

Item #	Description	Qty
1	vent cowl	1
2	top body	1
3	valve	1
4	spring	1
5	spring plate	1
6	adjustable screw	1
7	lock nut	1
8	adjustment cap	1
9	cap screw	2
10	body screw	4
11	body screw lock washer	4
12	cup seal top	1
13	cup seal bottom	1
14	plug	1
15	lock washer	1
16	spring seat	1
17	diaphragm	1
18	cap screw cup seal	1

- Repair kits are not available. All adjustable relief valves must be returned to Dixon[®] for rebuilding.
- Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.



1120 Series 11/2" Vacuum Relief Valves



Bill of Materials

Item #	Description	Qty
1	cover	1
2	bottom	1
3	valve	1
4	spring	1
5	stem guide	1
6	spacer	2
7	drilled screw	2
8	screw	2
9	lock washer	4
10	cup seal	1
11	label	1
12	gasket	1

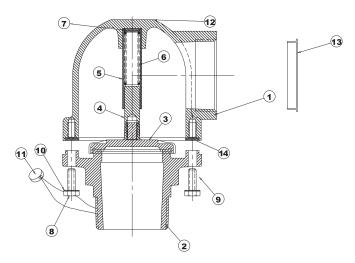
- Repair kits are not available. All 1120 relief valves must be returned to Dixon® for rebuilding.
- Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.



2120 Series 2" Vacuum Relief Valves

Bill of Materials

Item #	Description	Qty
1	cover	1
2	bottom	1
3	valve	1
4	valve stem	1
5	valve guide	1
6	spring	1
7	set washer	2
8	drilled screw	2
9	screw	2
10	lock washer	4
11	cup seal	1
12	label	1
13	thread plug	1
14	gasket	1



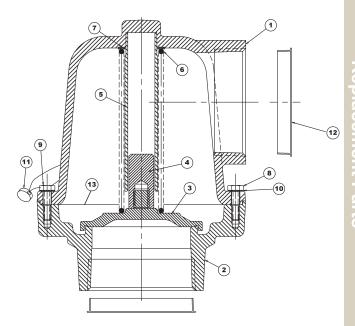
- Repair kits are not available. All 2120 relief valves must be returned to Dixon® for rebuilding.
- Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.



3120 Series 3" Vacuum Relief Valves

Bill of Materials

Item #	Description	Qty
1	top cover	1
2	bottom body	1
3	valve	1
4	valve stem	1
5	stem guide	1
6	spring	1
7	set washer	3
8	screw	4
9	drilled screw	2
10	lock washer	6
11	cup seal	1
12	thread plug	2
13	gasket	1



- Repair kits are not available. All 3120 relief valves must be returned to Dixon® for rebuilding.
- Disassembly, tampering or modifications will void the product warranty and could result in personal injury or death and extensive property damage.



Dry Bulk

Cam & Groove In-Line Sight Glass

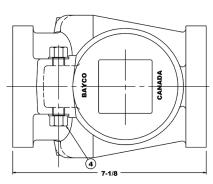
Replacement Parts

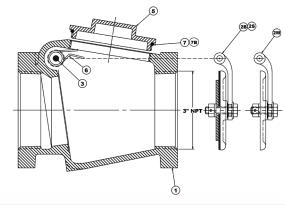
,C	P _O	` <u>,</u> c'	P CP	٠ ,رر	ري ر	ی ر	JA, CE	Rg.	Ago -
35ALK	35ASS	Son	Son Son	SSALK	Solve	agos .	35ALK	353K	35330

Part #	Description										
6000-24	3" adapter end	N/A	1	N/A	1	N/A	N/A	N/A	N/A	N/A	1
341351	3" adapter end with threaded bolt holes	N/A	1	1							
6000-18	4" adapter end	1	N/A	1	N/A	N/A	N/A	N/A	2	1	N/A
6000-23	3" coupler end	N/A	N/A	1	1	N/A	1	2	N/A	N/A	N/A
6000-19	4" coupler end	1	1	N/A	N/A	2	1	N/A	N/A	N/A	N/A
6400SGK	replacement sight glass kit (2 Buna O-rings and acrylic sight glass)	1	1	1	1	1	1	1	1	1	1
6544CA-1	sight glass spacers	4	4	4	4	4	4	4	4	4	4
AS156	Buna O-ring for sight glass	2	2	2	2	2	2	2	2	2	2
SC5-16-18X2.5P	bolts ⁵ / ₁₆ " x 2½"	N/A	4	4	4						
SC5-16-18X2.75P	bolts ⁵ / ₁₆ " x 2 ³ / ₄ "	4	4	4	4	4	4	4	N/A	N/A	N/A
110978	hex nut 5/16"	4	4	4	4	4	4	4	N/A	N/A	N/A
111430	helicoil nut 5/16"	N/A	4	N/A	N/A						
110977	lock washer (for nut end of bolt)	4	4	4	4	4	4	4	N/A	N/A	N/A

Swing Check Valves

Bayco Classic 3000 Series 3" Swing Check Valves 3000 Threaded and 3001 Square Flange Units





Bill of Materials

Item #	Description	Part #	Qty
1	swing check body		1
2M	valve flapper assembly with metal seal	use kit 300-SPK	1
2B	valve flapper assembly with Buna seal	use kit 300-BSPK	1
28	valve flapper assembly with silicone seal	use kit 300-SSPK	1
3	shaft	3000-4	1
4	shaft nut	3000-5	2
5	clean out cap	341131	1
6	spring (for units with spring return flapper)	SPRG/L4603	1
7	clean out cap O-ring seal	O-RINGAS238	1
7B	clean out cap O-ring silicone	112254	1

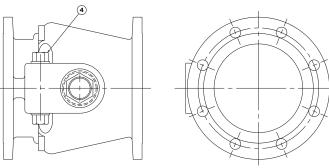
Part #	Description	Includes Item #
300-SSPK	silicone seal flapper assembly, shaft, nuts, flapper spring and clean out cap O-ring seal	2S, 3, 4, 6, 7B
300-SK	silicone seal flapper assembly, shaft, nuts and clean out cap O-ring seal	2S, 3, 4, 7B
300-BSPK	Buna seal flapper assembly, shaft, nuts, flapper spring and clean out cap O-ring seal	2B, 3, 4, 6, 7B
300-BK	Buna seal flapper assembly, shaft, nuts and clean out cap O-ring seal	2B, 3, 4, 7B
300-SPK	metal seal flapper assembly, shaft, nuts, flapper spring and clean out cap O-ring seal	2M, 3, 4, 6, 7B
300-K	metal seal flapper assembly, shaft, nuts and clean out cap O-ring seal	2M, 3, 4, 7B

Swing Check Valves

Bayco Classic 3000 Series 3" Swing Check Valves 3000 Round Flange Units

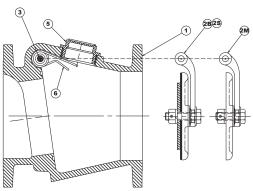
Bill of Materials

Item #	Description	Part #	Qty
1	swing check body		1
2M	valve flapper assembly with metal seal	use kit 300-SPK	1
2B	valve flapper assembly with Buna seal	use kit 300-BSPK	1
2S	valve flapper assembly with silicone seal	use kit 300-SSPK	1
3	shaft	3000-4	1
4	shaft nut	3000-5	2
5	clean out cap	3000CAP	1
6	spring (for units with spring return flapper)	SPRG/L4603	1



Repair Kits

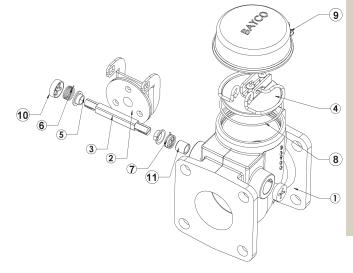
Part #	Description	Includes Item #
300-SSPK	silicone seal flapper assembly, shaft, nuts, flapper spring	2S, 3, 4, 6
300-SK	silicone seal flapper assembly, shaft, nuts	2S, 3, 4
300-BSPK	Buna seal flapper assembly, shaft, nuts, flapper spring	2B, 3, 4, 6
300-BK	Buna seal flapper assembly, shaft, nuts	2B, 3, 4
300-SPK	metal seal flapper assembly, shaft, nuts, flapper spring	2M, 3, 4, 6
300-K	metal seal flapper assembly, shaft, nuts	2M, 3, 4



Bayco High Flow 3020 Series 2" Swing Check Valves

Bill of Materials

Item #	Description	Part #	Qty
1	swing check body		1
2	valve flapper assembly, white EPDM	use kit 3020-FA	1
3	shaft	390777	1
4	cover plate & retaining ring	use kit 3020-CS	1
5	shaft bearing	111321	2
6	right spring	111324	1
7	left spring	111325	1
8	cover O-ring	111326	1
9	cap	3020-C	1
10	threaded shaft plug	111443	2
11	shaft bushing	390784	2
**	flange close clearance nuts (2 provided with 3020SQ, due to close clearance between flange and body)	111485	2



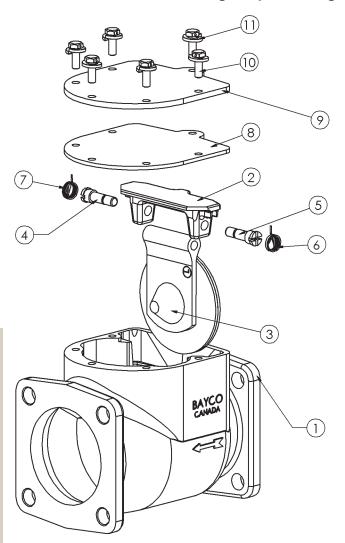
Part #	Description	Includes Item #
3020-CS	top cover plate kit, cover plate, spring clip assembly and O-ring seal	4, 8
3020-FA	replacement white EPDM flapper kit, flapper assembly, shaft, shaft bearings, springs and shaft plugs	2, 3, 5, 6, 7, 10

^{**} not illustrated

Dry Bulk

Swing Check Valves

Bayco High Flow 3030 Series 3" Swing Check Valves Round Flange, Square Flange, Threaded and Grooved Ends



Bill of Materials

Item #	Description	Part #	Qty
1	swing check body		1
2	flapper valve yoke	341595	1
3	valve flapper assembly with metal seal	use kit 3091RK1	1
4	right hand shaft	390798	1
5	left hand shaft	390799	1
6	left hand spring	use kit 3030RK3	1
7	right hand spring	use kit 3030RK3	1
8	cover gasket silicone	112257	1
9	cover	341611	1
10	bolt	use kit 3030HK	6
11	lock washer	use kit 3030HK	6

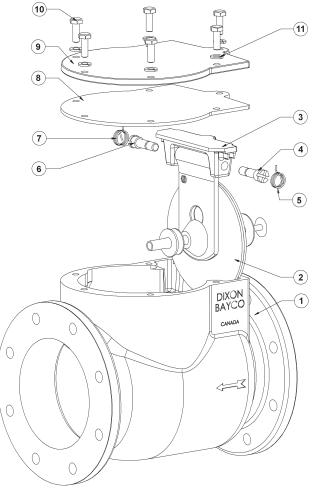
Part #	Description	Includes Item #
3090RK2	complete rebuild kit, silicone flapper assembly, yoke, springs, shafts, cover gasket, bolts and lock washers (for 3030RD-SSP, 3030SQ-SSP, 3030TE-SSP and 3030VIC-SSP)	2, 3A, 4, 5, 6, 7, 8, 10, 11
3091RK1	complete rebuild kit, metal seal flapper assembly, yoke, springs, shafts, cover gasket, bolts and lockwashers (for 3031RD, 3031SQ, 3031TE and 3031VIC)	2, 3B, 4, 5, 6, 7, 8, 10, 11
3030HK	replacement bolts and lockwashers	10, 11
3030RK3	replacement left and right springs	6, 7

Swing Check Valves

Bayco High Flow 4040 Series 4" Swing Check Valves Round Flange and Threaded Units

Bill of Materials

Item #	Description	Part #	Qty
1	swing check body		1
2A	valve flapper assembly white EPDM (4040RD and 4040TE)	use kit 4040RK1	1
3	flapper valve yoke	341595	1
4A	left hand shaft (4040RD and 4040TE)	390799	1
4B	left hand shaft (4041RD, 4042RD, 4041TE, 4042TE)	390846	1
5A	left hand spring (4040RD and 4040TE)	use kit 3030RK3	1
5B	left hand spring (4041RD, 4042RD, 4041TE and 4042TE)	use kit 4041RK3	1
6A	right hand shaft (4040RD and 4040TE)	390798	1
6B	right hand shaft (4041RD, 4042RD,4041TE and 4042TE)	390847	1
7A	right hand spring (4040RD and 4040TE)	use kit 3030RK3	1
7B	right hand spring (4041RD, 4042RD, 4041TE and 4042TE)	use kit 4041RK3	1
8	cover gasket	111215	1
9	cover	340039	1
10	bolt	use kit 3030HK	6
11	lock washer	use kit 3030HK	6



Repair Kits

Part #	Description	Includes Item #
4040RK1	replacement white EPDM flapper kit, flapper assembly, yoke, springs, shafts, cover gasket (for 4040RD and 4040TE)	2A, 3, 4A, 5A, 6A, 7A, 8
4041RK1 ¹	complete rebuild kit, metal seat flapper assembly, yoke, springs, shafts, cover gasket, bolts and lock washers (for 4041RD and 4041TE)	2B, 3, 4B, 5B, 6B, 7B, 8, 10, 11
4042RK1 ¹	complete rebuild kit, red silicone flapper assembly, yoke, springs, shafts, cover gasket, bolts and lock washers (for 4042RD and 4042TE)	2C, 3, 4A, 5A, 6A, 7A, 8, 10, 11
3030HK	replacement bolts and lock washers	10, 11
3030RK3	replacement left and right springs (for 4040RD and 4040TE)	5A, 7A
4041RK3	replacement left and right springs (for 4041RD, 4041TE, 4042RD and 4042TE)	5B, 7B

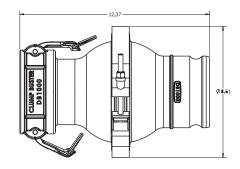
¹ Kits 4041RK1 and 4042RK1 contain 2 sets of shafts and springs. Swing check valves manufactured after March 2007 should use the larger axial shafts and larger torsion springs. Swing check valves manufactured prior to March 2007 will require the use of the shorter axial shafts and the smaller torsion springs.

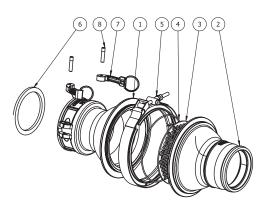
The smaller torsion springs will not return the flappers contained in the 4041RK1 and 4042RK1 kits to a fully closed position if the valve is mounted vertically or upside down. Ensure that these mounting positions are avoided if the smaller springs are used with the 4041RK1 and 4042RK1 kits.



Clump Buster

Clump Buster - DB1000

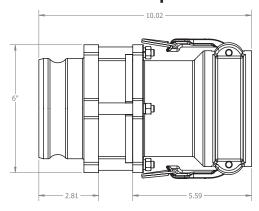


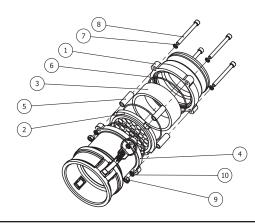


Bill of Materials - DB1000

Item #	Description	Part #	Qty
1	coupler - machining	341841	1
2	adapter - machining	341842	1
3	screen	391862	1
4	O-ring 2-166	112293	1
5	clamp	112291	1
6	gasket 4"	400-G-BU	1
7	cam arm with ring	300-HR-BR	2
8	pin	325-P	2

Clump Buster With Sight Glass - DB1000-SFI





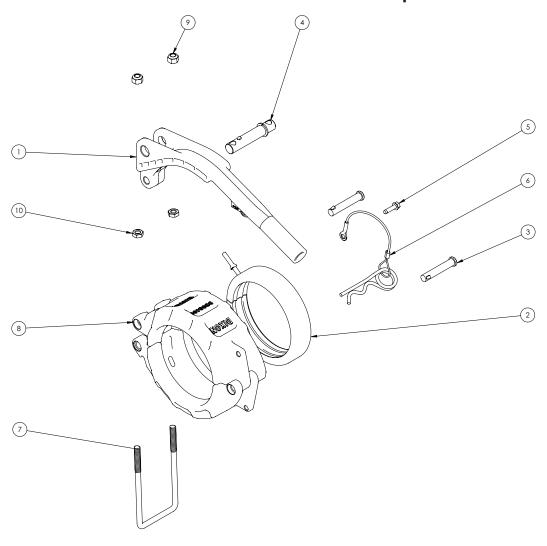
Bill of Materials - DB1000SFI

Item #	Description	Part #	Qty
1	4" adapter for SG (AL)	341228	1
2	clump buster screen	112295	1
3	sight glass	6000-10 (390114)	1
4	coupler assembly 4"	6000-19	1
5	spacer	390911 spacer	4
6	O-ring 3¾" x 0.093" Buna-N	AS156 (110177)	3
7	lock washer	111723	4
8	screw socket head 0.3125- 18NC x 3"	112296	4
9	nut	110978	4
10	lock washer	110977	4

eplacement Par

Grooved Pipe Connections

Aluminum Quick Connect Clamps



Bill of Materials - DBCG400

Item #	Description	Part #	Material	Qty
1	4" pipe coupler handle	40396NY	nylon	1
2	4" pipe coupler split gasket	40398BN	Buna-N / EPDM	1
3	small quick assembly pin	40431SS	stainless-steel	2
4	large quick assembly pin	40430SS	stainless-steel	1
5	screw	10765SS	stainless-steel	1
6	lanyard and cotter pin assembly	40432		1
7	coupler, bail latch	40429SS	stainless-steel	1
8	4" pipe coupler half	40397AL	aluminum	2
9	5/16-18 nut, nylon insert	40427SS	stainless-steel	2
10	5/15-18 jam nut	40428SS	stainless-steel	2

Dry Bulk Replacement Par

Butterfly Valves

Butterfly Valve Replacement Parts

Part #	Description
2-400-422240	replacement stainless-steel valve stem for 2" valve
3-400-422240	replacement stainless-steel valve stem for 3" valve
4-400-422240	replacement stainless-steel valve stem for 4" valve
5-400-422240	replacement stainless-steel valve stem for 5" valve
6-400-422240	replacement stainless-steel valve stem for 6" valve
2-3-400-99BPKIT	bushing and packing kit for 2" and 3" valves
4-6-400-99BPKIT	bushing and packing kit for 4", 5" and 6" valves (not for 6" 2-piece valve 6-390-828U501)
6-99-400BPKIT	bushing and packing kit for 6" (6-390-828U501)
2-3-213	stainless screw sets for 2" and 3" valves
4-5-6-213	stainless screw sets for 4", 5" and 6" valves

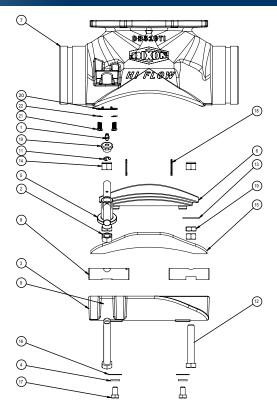
Complete Valve	Replaceme	nt Handle Kits	Replacement Disc		Replacement Seats	
Part # 1	Aluminum Part #	Iron Part #	Iron Part #	Stainless Steel	Black Buna Seat Part #	White Buna Seat Part #
2-400-1500	DD000 00 5	DB227 22 40	2-400-422237F		2-400-422500	
3-380-828501	DB206-23-5	DB237-23-10				3-400-422501
3-480-1500	DD206 22 F	DB237-23-10	3-400-422237F		3-400-422500	
3-480-3501	DB206-23-5	DB237-23-10	3-400-422209F		3-400-422501	
4-380-828U501	DB206-46-5	DB237-46-10				4-400-422501
4-480-1500	DB206-46-5	DB237-46-10	4-400-422237U		4-400-422500	
4-480-3501	DB206-23-5	DB237-23-10	4-400-422209U		4-400-422501	
4A-400-1500			4A-400-422237U		4A-400-422500	
4A-400-3501	DD000 40 5	DD007.40.40	4A-400-422209U		4A-400-422501	
4A-480-1500	DB206-46-5	DB237-46-10	4A-400-422237U		4A-400-422500	
4A-480-3501			4A-400-422209U		4A-400-422501	
5-380-828U501	DB206-46-5	DB237-46-10				5-400-422501
5-480-1500	DD000 40 F	DD007.40.40	5-400-422237U		5-400-422500	
5-480-3501	DB206-46-5	DB237-46-10	5-400-422209U		5-400-422501	
6-380-828U501	DB400-206-65	DB400-237-610				6-390-393501
6-400-3501			6-400-422209U		6-400-422501	
6-480-1500	DB206-46-5	DB237-46-10	6-400-422237U		6-400-422500	
6-480-3501			6-400-422209U		6-400-422501	
8-400-1500			8-400-4222370		8-400-422500	
10-400-1500			10-400-4222370		10-400-422500	
DB3-400-1500	DB206 22 5	DB227 22 40	112366		112363	
DB3-400-3501	DB206-23-5	DB237-23-10		112365		112364
DB4-400-1500	DB206-46-5	DB237-46-10	112356		112354	
DB4-400-3501	DB206-23-5	DB237-23-10		112357		112355
DB5-400-1500	DB206 46 5	DD227 46 46	112321R		112318	
DB5-400-3501	DB206-46-5	DB237-46-10		112353		112352

¹ Handle kits are sold separately, choose aluminum or iron (2" thru 6" aluminum handles have 5 open positions, 8" and 10" aluminum and all iron handles have 10 open positions)

Hopper Tees

Bill of Materials - DB510TI / DB510TA / DB610TI

Item #	Description	Part #	Qty
1	grease fitting	40158ST	1
2	nut - ground bolt 1/2"-13	10224	3
3	5" bottom drop tee fitting door	40394AL	1
4	lockwasher	40263SS	2
5	bottom drop hopper tee clamp handle	40402SS	1
6	5" bottom drop hopper tee door insert	404031	1
7	5 x 4 bottom drop hopper tee- xv		1
8	bottom drop hopper tee pivot/clamp rod	40436SS	3
9	½"-13 x 3 l hhcs	40443SS	1
10	bottom drop tee fitting handle cap	40444BR	1
11	e-clip 13.8mm x 5.84mm x .9mm	40442SS	1
12	½"-13 x 3 l hhcs	40437SS	2
13	½" washer (0.531 ID x 1.125 OD)	40440SS	2
14	½"-13 lock nut w/nylon insert	40435SS	2
15	5" bottom drop tee fitting door gasket	40441BN	1
16	3/8" washer (0.406 ID x 1.000 OD)	40438SS	2
17	%"-16 x 0.625l hhcs	40439SS	2
18	cotter pin 3/32 x 11/4"	40445SS	2
19	jam nut, 1/2"-13	40456SS	2
20	retain plate	40453SS	1
21	8-32 screw	40454SS	4
22	#8 split washer	40455SS	4



Replacement Parts

Part # Description		
40394AL 5" drop tee fitting door		
40436SS	bottom drop tee pivot/clamp rod	

Ultraflo Bottom Tee Replacement Parts

Part #	Description
4X4-BD-DOOR	4" bottom drop door only
8X4BD DOOR	8" bottom drop door only
4X4-BDGASKET	4" bottom drop door gasket only
6X4-BDGASKET	6" bottom drop door gasket only
8X4-BDGASKET	8" bottom drop door gasket only
4X4BDDOORASM	4" bottom drop door assembly with gasket
5X4-BDDOORASM	5" bottom drop door assembly with gasket
6X4-BDDOORASM	6" bottom drop door assembly with gasket
8X4-BDDOORASM	8" bottom drop door assembly with gasket
3/8T-BOLT	4" bottom drop door T-bolt
3/8INSERT	4" bottom drop door threaded insert for T-bolt
BDBOLTS	5", 6" and 8" bottom drop door bolt
GASKETRETAINER	gasket retainer - all sizes
3/8RETAINBOLT	%" gasket retainer bolt and lock nut - all sizes
5-RF	retention flange for low profile tees

Part #	Page #	Part #	Page #	Part #	Page #
10-400-1500	16	2180/xx	4	300GDBSQK	9
10-400-4222370		2180B/15	4	300GTTFCB	9
10-400-422500	36	2180RK15	27	300GTTFK	9
10224	37	2180RK18	27	300GTTFTK	9
10765SS		2180V/15	4	3020-C	31
110977	30, 34	2182	6	3020-CS	31
110978	30, 34	2182/xx	3	3020-FA	31
111111	20	2182F/xx	3	3020SQ	10
111131	20	2182RK15	25	3020TE	10
111141	20	2182RK18	25	3030HK	26, 32, 33
111161	20	3-380-828501	17	3030RD-SSP	10
111215	33	3-400-422209F	36	3030RK3	26, 32, 33
111321	31	3-400-422237F	36	3030SQ-SSP	10
111324	31	3-400-422240	36	3030TE-SSP	10
111325	31	3-400-422500	36	3030VIC-SSP	10
111326	31	3-400-422501	36	3031RD	10
111430	30	3/8INSERT	37	3031SQ	10
111443	31	3/8RETAINBOLT	37	3031TE	10
111485	31	3/8T-BOLT	37	3031VIC	10
111723	34	300-ALT-AL	23	3040ALTAL	23
1120	6	300-BK	30, 31	3040DLTAL	23
1120/xx	6	300-BSPK	30, 31	3090F	8
112254	30	300-DLT-AL	23	3090M	8
112257	26. 32	300-HR-BR		3090MA	8
112291		300-K		3090MA-DC	8
112293	34	300-SK	,	3090MADC-82/18	8
112295		300-SPK	30, 31	3090MADC-82/18A	
112296		300-SSPK	30. 31	3090MADC-82/20	
112318		3000-4	/ -	3090MADC-82/20A	
112321R	36	3000-5	,	3090MAS	
112352		3000-B	,	3090MB	
112353		3000-BSP		3090MBS	
112354		3000-N		3090MS	
112355		3000-S		3090RK1	
112356		3000-SP		3090RK2	•
112357		3000-SSP		3091MA	•
112363		3000CAP		3091MB	
112364		3000CAI		3091MBS	
112365		3000TE-B		3091RK1	
112366		3000TE-BSP		3091RK2	•
113111		3000TE-BSF		3120	
113131		3000TE-SP		3120ADJ/XX	
2-3-213		3000TE-SP		3120/xx	
2-3-400-99BPKIT		3001SQ-B		3180	
2-400-1500		3001SQ-BSP		3180	
2-400-422237F		3001SQ-N		325-P340039	
2-400-422240		3001SQ-S			
2-400-422500		3001SQ-SP		341131	
2120		3001SQ-SSP		341228	
2120/xx		300GDBSQCB		341351	
2180	6	300GDBSQE	9	341595	26, 32, 33

Part #	Page #	Part #	Page #	Part #	Page #
341611	-, -	4040RD		4621	
341841		4040RK1		4622	
341842		4040TE	•	4623	
3533AA		4041RD		4A-400-1500	
3533CA		4041RK1		4A-400-3501	
3533CC		4041RK3		4A-400-422209U	
3534AA		4041TE		4A-400-422237U	
3534CA		40427SS		4A-400-422500	
3543CA		40428SS		4A-400-422501	
3543CC		40429SS		4A-480-1500 4A-480-3501	
3544AA 3544CA		4042RD		4X4-BD-DOOR	
3544CC		4042RK1 4042TE		4X4-BDGASKET	
390777		40421E	•	4X4BDDOORASM	
••••		40431SS			
390784				5-380-828U501 5-400-422209U	
390798		40432			
390799	, ,	40435SS		5-400-422237U	
390846		40436SS	•	5-400-422240	
390847		40437SS		5-400-422500	
390911 spacer		40438SS		5-400-422501	
391862		40439SS		5-480-1500	
4-380-828U501		40440SS		5-480-3501	
4-400-422209U		40441BN		5-RF	
4-400-422237U		40442SS		5012	
4-400-422240		40443SS		5050	
4-400-422500		40444BR		5052	
4-400-422501		40445SS		5X4-BDDOORASM	
4-480-1500		40453SS		6-380-828U501	
4-480-3501		40454SS	•	6-390-393501	
4-5-6-213		40455SS		6-400-3501	
4-6-400-99BPKIT		40456SS		6-400-422209U	
400-ALT-AL		4111		6-400-422237U	
400-AS-AL		7121	20	6-400-422240	
400-DLT-AL		4122		6-400-422500	
400-G-BU		4123		6-400-422501	
40022ALTAL		4124		6-480-1500	
40022DLTAL		4125		6-480-3501	
400GAGFI		4126B		6-99-400BPKIT	
400GTTFCB		4127		600-ALT-AL	
400GTTFK		4129		600-DLT-AL	
400GTTFTK	•	4130		6000-10	
40158ST		4134		6000-16	•
40263SS		4135		6000-17	
40321TF		4137		6000-18	
40322TF		4139		6000-19	•
40394AL		4149		6000-20	•
40396NY		4155		6000-23	
40397AL		4157		6000-24	
40398BN	35 37	4159 4167		6000NPHK6400SGK	

Part #	Page #	Part #	Page #
6X4-BDDOORASM	37	DB510TI-PXC	19
6X4-BDGASKET	37	DB510TI-PXP	19
8-400-1500	16	DB510TI-PXT	19
8-400-4222370	36	DB510TI-PXV	19
8-400-422500	36	DB510TI-VXC	19
8X4-BDDOORASM	37	DB510TI-VXP	19
8X4-BDGASKET	37	DB510TI-VXT	19
8X4BD DOOR	37	DB6-400-1500	16
A2180/xxADJ	5	DB6-900-150	18
A2180ADJ	6	DB6-900-301	18
A2182	6	DB6-900-501	18
A3180/xxADJ	5	DB600LTA	
A3180ADJ	6	DB600TA	19
AC200TUBE	5	DB605LTA	19
ADS400	24	DB610TI-PXP	
AS156		DB610TI-PXT	19
BDBOLTS	37	DB610TI-PXV	
CAL15		DB610TI-VXP	
CAL25		DB610TI-VXT	
DB1000		DB610TI-VXV	
DB1000-SFI	13	DB9000	
DB206-1010		DBCG400	
DB206-46-5		DBCG400-P	
DB206-810		DBCG400-PG	
DB237-23-10		DBPCB400	
DB237-46-10	•	DBV-WB400	
DB3-400-1500		G200BL	
DB3-400-3501		G200T	
DB3-900-150		G300BL	
DB3-900-301		G300T	
DB3-900-501		G400BL	
DB4-400-1500		G400N	
DB4-400-3501		G400T	
DB4-900-150		G500T	
DB4-900-301		GASKETRETAINER	
DB4-900-501		L02BL	
DB400-206-65		L02BU	
DB400-237-610		L03BL	
DB5-400-1500		L03BU	
DB5-400-3501		L04BL	
DB5-900-150		L04BU	
DB5-900-301		L05BU	
DB5-900-501		O-RINGAS238	
DB500LTA		PC5000	
DB500TA		PC5000-002	
DB500TI		PC5000AA	
DB510TI		PC5000TTTE	
DB500TI-PXV		PC5000VV	
DB500TI-VXV		PC5001	
DB510RK		PC5001-002	
DB510TA		PC5003	

Part #	Page #
PC5004	12
PC5005	12
PC5006	12
PC5007	12
SC5-16-18X2.5P	30
SC5-16-18X2.75P	30
SPRG/L4603	30, 31
TDF6	21
TDF7	21
TDF8	21
TTF3AL	22
TTF3AL-3MT	9
TTF400SP	22
TTF4AL	22
TTF4AL-3EMT	8, 9
TTF4AL-3FT	9
TTF4AL-3MT	9
TTF4AL-4EMT	8, 9
TTF4AL-4FT	9
TTF4AL-4MT	9
TTF4ALHC-3MT	9
TTEANI HC AMT	0

Limited Warranty

DIXON VALVE & COUPLING COMPANY, LLC (herein called "Dixon") warrants the products described herein, and manufactured by Dixon to be free from defects in material and workmanship for a period of one (1) year from date of shipment by Dixon under normal use and service. It's sole obligation under this warranty being limited to repairing or replacing, as hereinafter provided, at its option any product found to Dixon's satisfaction to be defective upon examination by it, provided that such product shall be returned for inspection to Dixon's factory within three (3) months after discovery of the defect. The repair or replacement of defective products will be made without charge for parts or labor. This warranty shall not apply to: (a) parts or products not manufactured by Dixon, the warranty of such items being limited to the actual warranty extended to Dixon by its supplier; (b) any product that has been subject to abuse, negligence, accident, or misapplication; (c) any product altered or repaired by others than Dixon; and (d) to normal maintenance services and the replacement of service items (such as washers, gaskets and lubricants) made in connection with such services. To the extent permitted by law, this limited warranty shall extend only to the buyer and any other person reasonably expected to use or consume the goods who is injured in person by any breach of the warranty. No action may be brought against Dixon for an alleged breach of warranty unless such action is instituted within one (1) year from the date the cause of action accrues. This limited warranty shall be construed and enforced to the fullest extent allowable by applicable law.

Other than the obligation of Dixon set forth herein, Dixon disclaims all warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and any other obligation or liability. The foregoing constitutes Dixon's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Some products and sizes may be discontinued when stock is depleted, or may require a minimum quantity for ordering.

Limits of Liability

This catalog is intended as a product offering. It is not intended to be a user or technical manual. Information in this catalog is subject to change without notice. All users and distributors of products sold through this catalog should contact Dixon® with questions of use, compatibilities, coupling procedures and life of product. Our full-time engineering and test staff is always available to recommend uses and to assist distributors and users with any questions.



Safety



Safety logos, which appear throughout our catalog, are used as a reminder that the user should carefully review for the appropriateness of the product for the media, application and environment in which it will be used.

NOTE: Because of the health hazards associated with contamination and lead content in drinking water systems, Dixon® couplings, unless otherwise specifically approved, are not recommended for potable water service and should not be used in applications where drinking water will contact the wetted surfaces of the coupling.

Warning: Dixon® products may contain chemicals known to the State of California to cause cancer, birth defects, or other reproduction harm.

Copyright

Copyright © 2019 by Dixon Valve & Coupling, LLC

All rights reserved. This book is copyrighted material. Use, reproduction or copying of it by anyone other than Dixon® is strictly forbidden without its express written consent.

Dixon[®]

ph 877.963.4966 fx 800.283.4966 dixonvalve.com

DBD518 INDEX

Dry Bulk Products pages 2 - 24

Dry Bulk Replacement **Parts**

Pages 25 - 37

Dry Bulk Index pages 38 - 40

United States

Albany, NY ph 518.725.0998 178A Corporate Drive Gloversville, NY 12078 nysales@dixonvalve.com

Atlanta, GA ph 770.486.9619 101 T.D.K. Boulevard Suite A Peachtree City, GA 30269 gasales@dixonvalve.com

Dallas, NC ph 704.376.5755 2925 Chief Court Dallas, NC 28034 ncsales@dixonvalve.com

Chestertown, MD ph 800.355.1991 800 High Street Chestertown, MD 21620 sales@dixonvalve.com

Chicago, IL ph 630.323.4442 1011 N. Hilltop Drive Itasca, IL 60143 chsales@dixonvalve.com

Cleveland, OH ph 330.425.3000 1900 Enterprise Parkway Twinsburg, OH 44087 ohsales@dixonvalve.com Houston, TX ph 713.678.4291

6525 Homestead Road Houston, TX 77028 txsales@dixonvalve.com

Kansas City, MO

ph 816.221.0064 1244 Saline Street N. Kansas City, MO 64116 kcsales@dixonvalve.com

Los Angeles, CA ph 909.605.6400 8840 Flower Road Suites 150/160 Rancho Cucamonga, CA 91730 casales@dixonvalve.com

Portland, OR ph 503.289.0400 2642 North Marine Drive Portland, OR 97217 plsales@dixonvalve.com

Salt Lake City, UT ph 801.972.1180 McGillis Ind. Pk. Suite A 1972 South 4370 West Salt Lake City, UT 84104 utsales@dixonvalve.com

Tampa, FL ph 813.247.3500 5120 Adamo Drive Suite E Tampa, FL 33619 flsales@dixonvalve.com

International

Wingfield SA, Australia ph 61.8.8202.6000 fx 61.8.8202.6099

Edmonton, Alberta, Canada ph 780.469.5444 fx 780.463.9205

Innisfil, Ontario, Canada ph 705.436.1125 fx 705.436.6251

Montreal, Quebec, Canada ph 514.422.9292 fx 514.422.0166

Preston, England ph 44.1772.323529 fx 44.1772.314664

Paris. France ph 33.171.841016 fx 33.171.841019

Troisdorf-Spich, Germany ph 49.2241.84406.0 fx 49.2241.8440679

Monterrey, Mexico ph 52.81.8354.5649 fx 52.81.8354.8197

St. Petersburg, Russia ph 7.812.677.5447 fx 7.812.956.4782

Singapore ph 65 6232 5272 fx 65 6232 5270

Sharjah, **United Arab Emirates** ph 971.657.41488 fx 971.657.41484

The Right Connection®

Dixon Bayco

800 High Street Chestertown, MD 21620 Tech Hot Line: 877-582-3569 ph 410.778.2002 • 800.355.1991 fx 410.778.4702 • 800.283.4966 dixonvalve.com











Uncommon Excellence

Uncommon Excellence

Uncommo