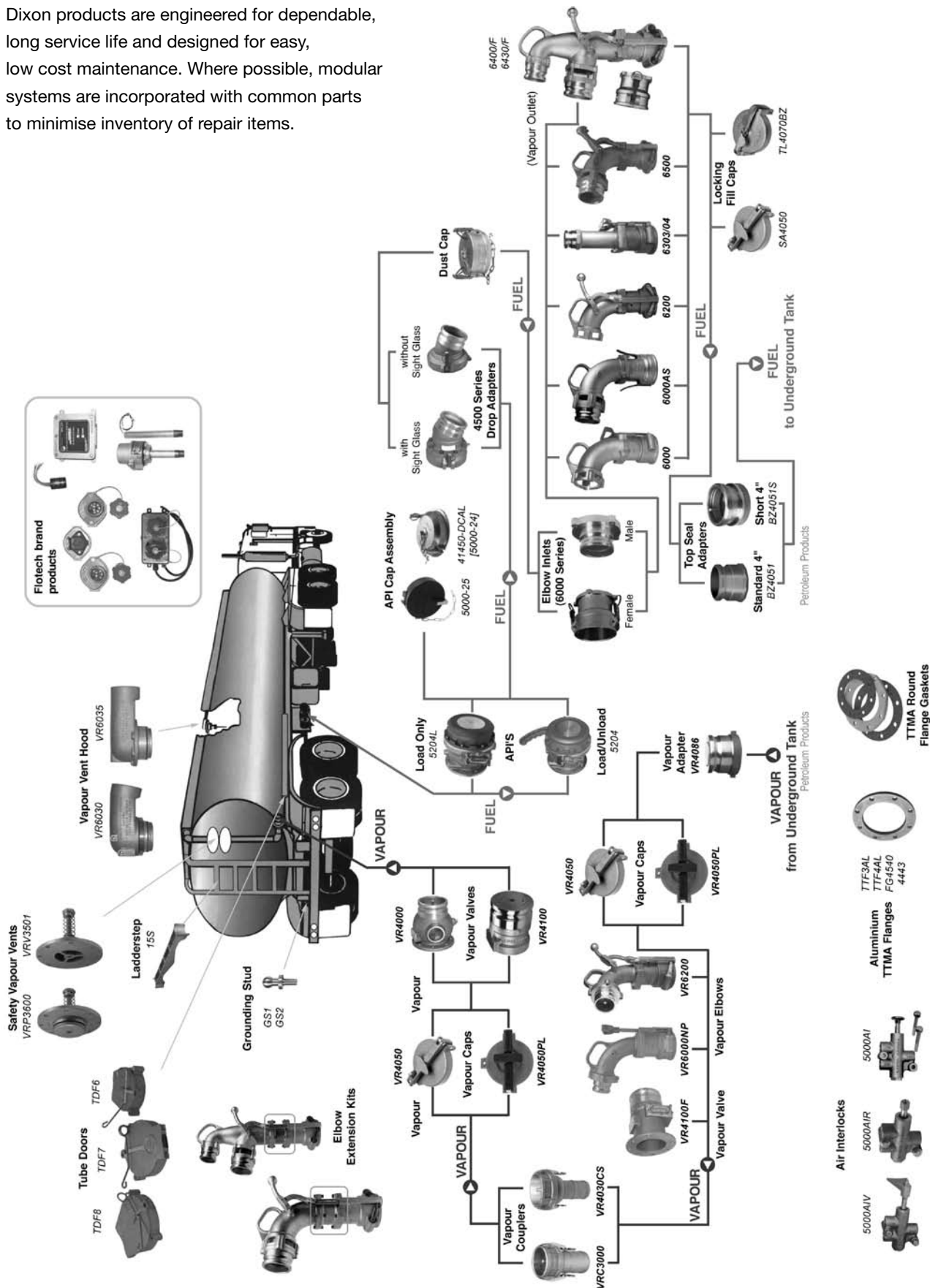


## Petroleum Tanker Products

Dixon products are engineered for dependable, long service life and designed for easy, low cost maintenance. Where possible, modular systems are incorporated with common parts to minimise inventory of repair items.



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## 4" API Valves

API Valves are used for bottom loading and unloading of petroleum tankers. Valve nose shape and opening comply with American Petroleum Institute standard (API RP-1004) enabling Dixon API valves to interchange with competitor items made to the same specification. Two styles are available; a load only model without handle and a load/unload model with a handle to allow manual opening.

- Unique flow and fluid level sight indicators are available
- Load/unload versions feature an ergonomically curved handle that opens with a short 62° stroke.  
Can be ordered with a fixed or removable handle
- Chemical resistant crank seals and poppet seal (PTFE seals optional)
- Any required maintenance is simplified, can be completely rebuilt without removing the valve from the tank
- The ALH (anodised aluminium hard coat) nose ring can be rotated to provide a fresh cam service to compensate for wear



API LOAD /UNLOAD VALVE	
PART NO.	DESCRIPTION
5204NG	Fixed handle, without sight glass, ALH nose ring, Baylast seal
5204	Fixed handle, sight glass, ALH nose ring, Baylast seal
5204C	Removable handle*, sight glass, ALH nose ring, Baylast seal
5204NGC	Removable handle*, without sight glass, ALH nose ring, Baylast seal
5204SNG	Fixed handle, without sight glass, ALH nose ring, stainless spring for crude oil, Baylast seal
5204TNG	Fixed handle, without sight glass, ALH nose ring, PTFE seals
5204NGV	Fixed handle, without sight glass, Viton® seals

\* Removable handle for Canadian market



API LOAD ONLY VALVE	
PART NO.	DESCRIPTION
5204L	Load only API valve with sight glass, ALH nose ring
5204LNG	Load only API valve without sight glass, ALH nose rings

## API Bottom Rack Loading Fitting

Dixon API coupler uses a snap on connection where the coupling action is automatic upon contact with the API adapter. The coupler is completely modular so it can be built with various face seal combinations to be compatible with different alternative fuel, performance levels and applications. Two models are available: bonded nose seal and replaceable nose seal.

### Material Specifications:

- Body: hard coated anodized AL 356 T6
- Shroud: hard coated anodized AL 356 T6, SS insert
- Link, shaft, pin and crank: hardened 17-4PH stainless steel
- Cam: CF8M stainless steel
- Poppet and bearing: ZA-12
- Seal options: Baylast, Viton-B®, Viton® GFLT

### Chemical Compatibility (Baylast seals):

- Gasoline
- Diesel
- Avgas
- 100% ethanol
- 100% methanol
- B2 to B20 biodiesel blends

### Technical Specifications:

- Weight: 9.1 kgs.
- Maximum working pressure: 150 PSI
- Peak surge pressure: 350 PSI
- Operating temperature:  
Viton® seals: -29°C (-20°F) to 204°C (+400°F)  
Baylast seals: -29°C (-20°F) to 121°C (+250°F)
- Maximum flow rate: 600 GPM
- Pressure drop: 3 to 4 PSI

### Chemical Compatibility (Viton-B® seals):

- Gasoline
- Diesel
- Jet fuel
- Avgas
- 100% ethanol
- 100% methanol
- 100% biodiesel
- Any blend of the above fluids

- 4" TTMA inlet mounting flange
- 5 cam design for easy alignment and tight connection
- Ball-end handle for easy, comfortable operation
- No special tools needed for maintenance
- Shaft seals can be changed without removing coupler from loading arm
- Fully compliant with API RP1004:2003 specifications
- Fully interlocked collar can not be opened when connected and can not be disconnected when opened
- One piece bonded nose seal ensures long life and cannot be washed out
- Optional replaceable nose seal for quick replacement without removal from loading arm



bonded nose seal  
model - 5300

API BOTTOM RACK LOADING FITTING		
BONDED NOSE SEAL NO.	REPLACEMENT NOSE SEAL NO.	SEAL MATERIAL
5300 5300B 5300G	5400 5400B 5400G	Baylast Viton-B® Viton GFLT

## API Dust Caps



API DUST CAPS	
PART NO.	DESCRIPTION
41450-DCAL	Aluminium API cap with flat gasket
5000-24	Aluminium API cap with O-ring gasket
5000-25	Nylon API cap with flat gasket, pad lockable arm

## Gravity Drop Adapters

Gravity drop adapters attach and seal directly against openable API's and allow drop hose with standard cam and groove couplers to clamp on and transfer petroleum from the API. Dixon manufactures two styles of gravity drop adapters: 1) standard one piece and, 2) a 2 piece bolt together design with sight glass. Both are Dixon quality cast construction with bronze cam arms and Buna O-Ring seals (Viton O-Rings available upon request).

- Quality cast aluminium body with inside lip to hang on API while clamping
- Inexpensive replacement of Buna O-Ring seal (Viton seal available)
- Bronze cam arms with stainless steel pins, finger rings

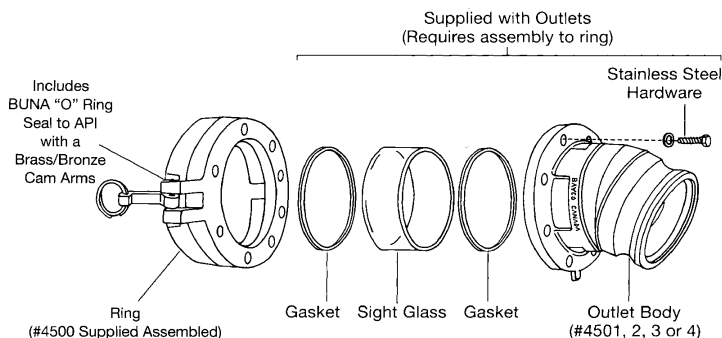


STANDARD ONE PIECE BODY	
PART NO.	DESCRIPTION
4530	3" outlet
4540	4" outlet
41450-DCAL	4" API Dust Cap (not shown)
31440-225AL	3" x 4" API Offloading 10° Angle Spout, Flat gasket (not shown)
41440-225AL	4" x 4" API Offloading 10° Angle Spout, Flat gasket (not shown)

- Consists of a 4500 ring assembly and an outlet which contains mounting bolts, sight glass and seals
- Customer assembly required (see sketch)
- Order 4500 ring and outlets separately



TWO PIECE DESIGN WITH SIGHT GLASS	
PART NO.	DESCRIPTION
4500	Ring only
4501	3" Male x 4" TTMA Flange x 22 1/2°
4502	4" Male x 4" TTMA Flange x 22 1/2°
4503	4" Male x 4" TTMA Flange Straight
4503SPECIAL	4" Male x 4" TTMA Flange Straight, no sight glass
4504	4" Female x 4" TTMA Flange x 22 1/2° Coupler
4501ASSM	3" Male Adapt. 22 1/2° x API Cplr. (4501 & 4500)
4502ASSM	4" Male Adapt. 22 1/2° x API Cplr. (4502 & 4500)
4503ASSM	4" Male Adapt. Straight x API Cplr. (4503 & 4500)
4504ASSM	4" Female Cplr. 22 1/2° x API Cplr. (4504 & 4500)



Sketch illustrates assembly of 2 piece drop adapter

## Vapour Valves

- Bulb design for maximum vapour flow (low resistance) for fast loading of tankers
- With angled acrylic sight glasses (2) and drain plug, allows viewing and drainage of fluids if in system
- Quality cast aluminium construction
- 4" TTMA flange
- With air interlock mount (use air interlock 5000AIV if required)



PART NO.	SIZE
VR4000	4"

- Features easy seal replacement while on tanker
- Heavy duty cast aluminium body
- 4" female NPT
- With air interlock mount (use air interlock 5000AI if required)
- Available as special order without poppet (VR4100NP)



PART NO.	SIZE
VR4100	4"

## Vapour Caps

- Lockable push/pull cap for vapour valves (VR4000 & VR4100) or vapour adapter (VR4086)
- Aluminium cap and arms with bronze locking cam and Buna gasket
- Painted orange



PART NO.	DESCRIPTION
VR4050AL VR4050ALC 400-G-BU	Aluminium cap Aluminium cap with chain Replacement gasket



PART NO.	DESCRIPTION
VR4050PL VR4050PLC 40018BN	Ultra lightweight nylon cap Ultra lightweight nylon cap with chain Replacement gasket

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## Vapour Hose Couplers

- For use with vapour hose
- Cast aluminium body
- Buna gasket
- VR4030CS-AL has Viton poppet seal



PART NO.	DESCRIPTION
VRC3000AL	3" coupler with probe x 3" hose shank
400-CVR-AL	4" coupler with probe x 4" hose shank
4030-CVR-AL	4" coupler with probe x 3" hose shank
VR4030CS-AL	4" coupler with poppet & probe x 3" hose shank
4030-DAVR-AL	4" coupler with poppet & probe x 3" adapter
4030-DVR-AL	4" coupler with probe x 3" female NPT
400-DVR-AL	4" coupler with probe x 4" female NPT

## Sequential Vapour Vents

Sequential vapour vents are used for venting tank vapours during the bottom loading and unloading of petroleum tankers. These pneumatically activated vapour vents can either be installed to open sequentially or to open independently. Vapour vents available to suit either 16" or 20" tank manholes.

- Highest flow vapour recovery vents on the market
- Baylast seals resist chemical attack from fuel additives and alcohol
- Floating piston design ensures long life and resists poppet sticking
- Can be used for both sequential and non-sequential operation
- Tested vapour tight to 36 psi, certification 49 CFR 178.345-5
- Sealed system eliminates common leak points and improves reliability
- Quick and easy to rebuild with simple hand tools



PART NO.	DESCRIPTION
VR6030SQ	For 16" manhole, mounting ring attachment
VR6035SQ	For 20" manhole, 3" TTMA flange attachment

## Air Interlocks

- Mounts to API's, vapor valves and safety bars
- Choice of standard piston end or paddle end (for bulb style vapor valve)
- Includes 1/4" x 1 3/4" stainless steel mounting bolts
- Rugged solid bayloy body for dependable service and superior corrosion resistance
- Adjustable stroke to accommodate length variations



PART NO.	DESCRIPTION
5000AI	Standard 1" button plunger pneumatic interlock
5000AIV	Paddle plunger pneumatic interlock, for use with VR4000 vapor valve
5000AIR	Roller ball plunger pneumatic interlock, ideal for use on cabinet doors
5000AIS	Standard 1" button plunger pneumatic interlock with electronic switch, ideal for connecting to electronic overfill systems
5000AIST	1 1/2" button plunger pneumatic interlock
5000S	Electronic switch kit, for adding electronic switching to Bayco brand pneumatic interlock valves
5000ST	Replacement 1 1/2" large button

Repair kits and replacement parts available.



## Ball Nozzles for Bulk Delivery

The Bayco brand ball nozzle uses a full port ball valve for high flow rate at a given inlet pressure. The internal flow path is computer designed to provide low pressure drop across the nozzle. Lower pressure drop permits higher flow rates at lower pressure, reducing foaming or backups.

Our unique swivel design permits low temperature operation without leakage around the O-ring seals. The swivel freely rotate seven at temperatures as low as -40°C (-40°F) and pressures as high as 100 PSI. Through-hardened chrome steel roller balls and hardened carbon steel ball race provide long service life.

- Standard nozzle uses a 3 PSI check valve. An optional 5 PSI check valve is available as a field replaceable kit
- Available with a field replaceable Scully compatible connector or tube spout



BALL NOZZLES FOR BULK DELIVERY	
PART NO.	DESCRIPTION
BL062	1¼" NPT swivel inlet x quick fi ll outlet
BL064	1½" NPT swivel inlet x quick fi ll outlet
BL066	1¼" NPT swivel inlet x 1¼" NPT with spout
BL066NS	1¼" NPT swivel inlet x 1¼" NPT without spout
BL068	1½" NPT swivel inlet x 1¼" NPT with spout
BL068NS	1½" NPT swivel inlet x 1¼" NPT without spout
BL072	1½" NPT swivel inlet x 1½" NPT with spout
BL072NS	1½" NPT inlet x 1½" NPT without spout
1143A	1¼" aluminum replacement spout
1125A	1½" aluminum replacement spout

## Swivel Nut Pipe Adapters for Ball Nozzles

Nozzle connectors are manufactured from rugged cast bronze. Short body reduces overall length of nozzle. Interchangeable with other manufacturers. For home fuel oil delivery.



SWIVEL NUT PIPE ADAPTERS FOR BALL NOZZLES	
PART NO.	DESCRIPTION
BL002	1¼" male NPT
BL001	1½" male NPT
BL005	fine thread

Note: Some fuel additives are not compatible with certain seal materials. Please contact the Factory for fuel additive compatibility.

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## Trigger Nozzles - MK2

- Sizes:** Standard 1" BSP Pl. inlet
- Materials:** Aluminium body  
Nitrile Seals
- Pressure:** Maximum working pressure 60 psi / 4 bar
- Details:**
- Ideal for Diesel fuel
  - For gravity or pumped use



TRIGGER NOZZLE MK 2	
PART NO.	DESCRIPTION
DATN	Basic
DATN/MS	Male Swivel Tail
DATNC/MS	With Trigger Catch
DATN/FS	With Female Swivel Tail
DATNC/FS	With Trigger Catch

## Automatic

- Sizes:** Available in 3/4" BSP Pl. Female
- Materials:** Aluminium
- Pressure:** 30 psi / 2 bar minimum working pressure
- Details:**
- For Diesel dispensing
- Low flow shut down
  - Robust, quality construction
  - Simple lever catch
  - Automatic flow shut-off



AUTOMATIC NOZZLE	
PART NO.	DESCRIPTION
M3700	Fuel dispensing nozzle

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## Tank Transport Equipment



PIPE CAPS WITH 12" CHAIN AND 'S' HOOK - BSPP THREAD	
ALUMINIUM PART NO.	SIZE
300PCALAP	3"



## Tank Transport Equipment - Intermodel



STAINLESS STEEL REDUCERS* FEMALE BSP X MALE BSP	
STAINLESS STEEL* PART NO.	SIZE
3020RDSSAP	3" x 2"

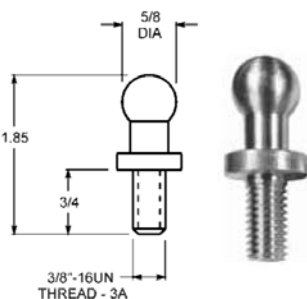
\* PTFE gaskets standard

## Gaskets & Washers

BUNA-N PART NO.	PTFE PART NO.	NEOPRENE PART NO.	VITON PART NO.	SIZE
-	150GPCTF	-	-	1 1/2"
200GPCBU	200GPCTF	KNW25	KVW25	2"
300GPCBU	300GPCTF	KNW35	KVW35	3"
-	400GPCTF	KNW40	-	4"

## Grounding Stud

- Solid brass, stainless steel or aluminium
- With 3/8"-16 UN-3A thread
- For static electric grounding and overfill protection systems



PART NO.	MATERIAL
GS1	Brass
GS2	Stainless Steel

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