



## Petrochemical Life Cycle Exploration and Production

The content in this phase of the Petrochemical Life Cycle (see pages 22-23) is focused on the numerous transfer applications in the oil and gas field. Featured are the Dixon® products used within the Exploration / Production segment.

Please refer to the Dixon Product List or [dixonvalve.com](http://dixonvalve.com) for specific part numbers and various other products used in the transfer and control of liquids, gases and dry materials.

### Table of Contents

Boss® low pressure system products introduction.....	3
Water supply fittings.....	4
Frac fittings .....	5-6
One-piece and two-piece hammer union nuts, caps, and plugs.....	7-8
Flange adapters .....	9-10
Positive displacement pumps.....	11
Butterfly valves.....	12
Intake manifolds and assemblies .....	13
Cam & groove and abrasion resistant inserts .....	14
Vent-Lock® safety cam & groove.....	15
EZ Boss-Lock and King Crimp® couplers.....	15
GSM armored hose and King safety cables .....	16
Dry disconnects .....	17
Safety break-aways.....	17
Hydraulic quick-disconnects .....	18-20
Hydraulic adapters.....	21
Air and water utilities.....	21
Petro-chemical lifecycle .....	22-23

### Safety

Dixon's couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon recommends that all hose assemblies be tested in accordance with the Association for Rubber Products Manufacturers (ARPM) recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit [ARPMINC.com](http://ARPMINC.com) for more information.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended.

If any problem is detected, couplings must be removed from service immediately.

Dixon is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon's testing and recommendation services. Call 877.963.4966 or click [dixonvalve.com](http://dixonvalve.com) to learn more.

# BOSS® LPS Products

## Low Pressure Systems

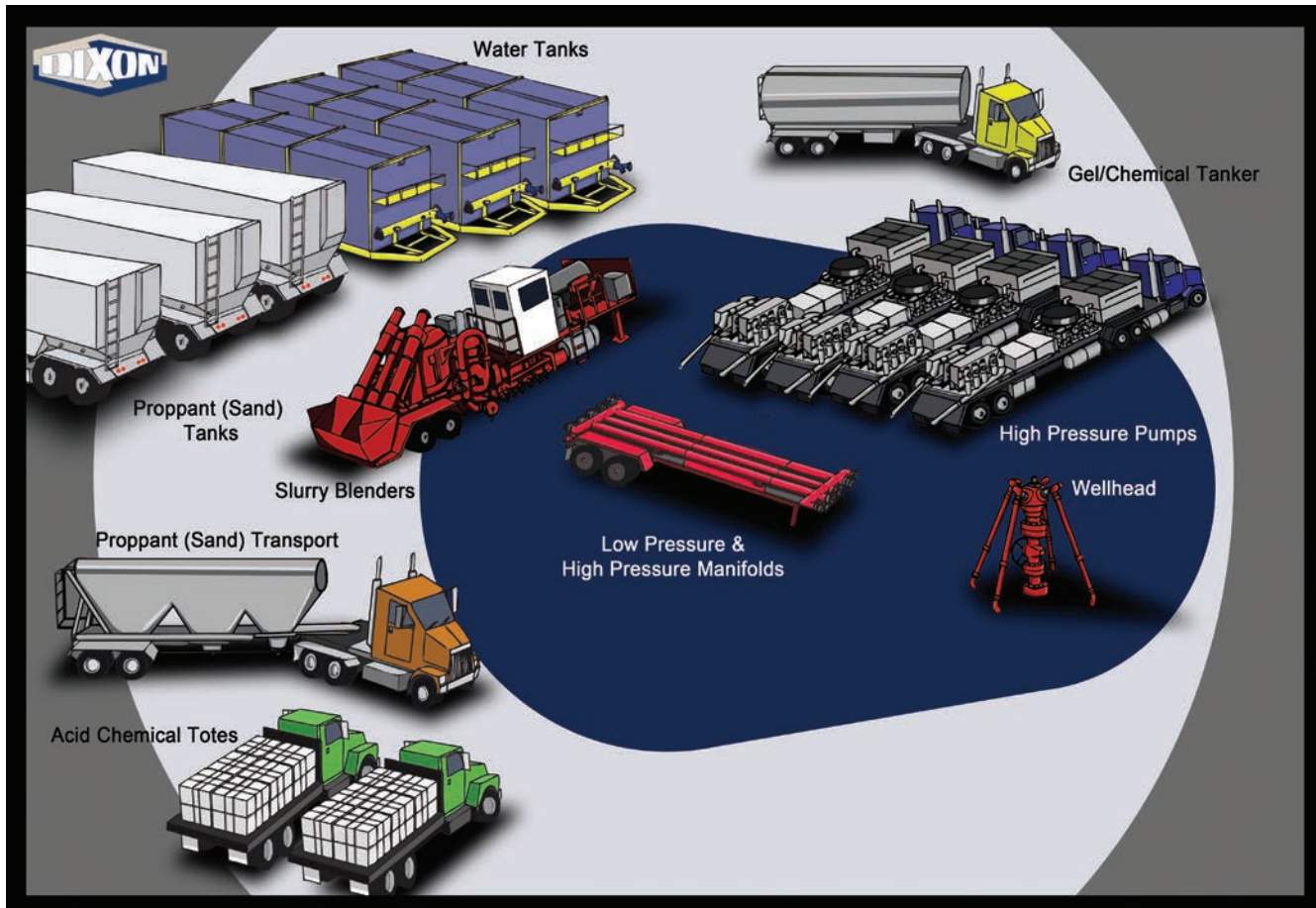
Dixon is committed to understanding customer challenges and developing solutions. Key to achieving these objectives is Dixon's Innovation Center, an engineering, research and training facility integral in the development of the Boss LPS products defined in this brochure.



Visit [dixonvalve.com/history](http://dixonvalve.com/history) to learn more.

## Hydraulic Fracturing Site

Boss LPS (Low Pressure System) products are used in many of the applications found at hydraulic fracturing sites from the water source up to high pressure pumps. Please refer to the following pages for detailed information on Dixon's expanding product line.



## King Crimp® Style Short Combination Nipples, Ferrules, and Sleeves



STC80CS  
S900X400X120CS  
CFS800-1CS

### Application

- Recommended for low-pressure discharge and suction service for compatible liquids

### Size

- 8"

### Features

- Short combination nipples, ferrules, and sleeves

### Material

- Schedule 40 plated carbon steel to ASTM standards

### Approval

- Materials meet ASTM standards

## Grooved and NPT Threaded End King Combination Nipples



STV100



STC120

### Application

- Recommended for low-pressure transfer and suction service for compatible liquids

### Sizes

- 1/2" through 12"

### Features

- Crimp sleeves are available and recommended for reliable assemblies
- Compatible sleeve recommendations are available, call 877.963.4966

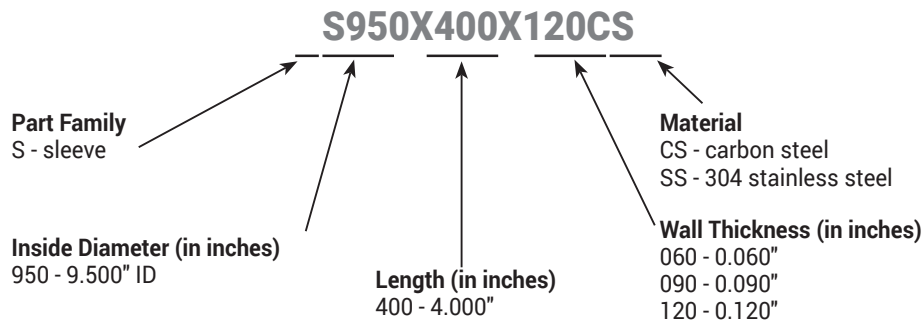
### Materials

- Unplated steel and plated steel

### Specification

- Grooved ends, NPT threaded end

## Special Sleeve and Ferrule Part Numbering System





# One-Piece Dixon® Frac Fittings

## Application

- Used in the transfer of water, chemicals, and sand slurry at hydraulic fracturing sites

## Sizes

- 1", 2", 3", 4", 6", and 8"

## Features

- One-piece stem design eliminates leak path experienced with two-piece threaded systems
- Interchangeable with reliable brands

## Materials

- Frac fittings: machined iron to ASTM standards; all stems zinc plated
- Male 3", 4", and 6" NPT steel fittings are schedule 80 pipe; 8" NPT fittings are schedule 40 pipe
- O-rings Buna-N

## Specifications

- **400 PSI (28 bar)** working pressure at **70°F (21°C)** for 3" and 4" sizes; 4:1 safety factor (SF)<sup>1</sup>
- **150 PSI (10 bar)** working pressure at **70°F (21°C)** for 6" size; 4:1 safety factor (SF)
- **150 PSI (10 bar)** working pressure at **70°F (21°C)** for 8" size; 3:1 safety factor (SF)
- Buna-N O-ring temperature rating **-40°F (-40°C) to 250°F (121°C)**
- Figure 100 and 206 female and male frac fittings, male NPT fittings



## Approvals

- All sizes meet ASTM standards

- <sup>1</sup> **400 PSI (28 bar)** working pressure with a minimum 4:1 safety factor (*hose burst: hose working pressure*) is only achieved with:
- 3" size uses standard crimp ferrules
  - 4" size requires heavy duty (HD) crimp ferrules, CF400-6CSHD through CF400-16CSHD

NOTE: Water and petroleum transfer hoses rated from **100 to 300 PSI (7 to 21 bar)** WP (4:1 SF) have excellent test results with the standard King Crimp® ferrules CF400-xxCS.



HUF206400CS



HUM206400CS



STC40CSHD

## Figure 206 Frac Fittings (316 stainless steel)

## Application

- Used in the transfer of water, chemicals, and sand slurry at hydraulic fracturing sites

## Sizes

- 1", 2", and 4"

## Features

- One-piece stem design eliminates leak path experienced with two-piece threaded systems
- Interchangeable with reliable brands

## Materials

- Frac fittings: 316 stainless steel
- O-rings: 1" and 2" with FKM; 4" with Buna-N

## Specifications

- **400 PSI (28 bar)** working pressure at **70°F (21°C)**; 4:1 safety factor (SF)<sup>1</sup>
- Figure 206 female and male



- <sup>1</sup> **400 PSI (28 bar)** working pressure with a minimum 4:1 safety factor (*hose burst: hose working pressure*) is only achieved with: 4" size requires heavy duty (HD) crimp ferrules, CF400-6CSHD through CF400-16CSHD, heavy duty stainless steel are not available



RHUM206100CS-1



RHUF206100CS

## Suction Service Fittings



HUSF500SW



HUSM500SW1



beveled end  
STB50

### Application

- Used in the transfer of dry cement, and in mud system suction lines

### Size

- 5"

### Features

- Socket weld male and female unions for attaching to hose fittings or pipe
- Weld ready hose fittings available from Dixon®
- 2-piece nut is pinned and bolted for easy service and repair
- Figure 50 suction hose fittings

### Materials

- Unions and hose fittings: carbon steel
- Nuts: 2-piece forged steel, figure 50 split nuts located on opposite page

### Specifications

- Available configurations: socket weld x suction male hammer union, socket weld x suction female hammer union, King combination nipple, figure 50 suction hammer union split nut (includes bolts)

### Approval

- Nuts meet AISI standards

## Hammer Unions



HU100400



HU206200

### Application

- Used in the transfer of water, chemicals, and sand slurry at drilling and hydraulic fracturing sites

### Sizes

- 100 series: 2", 2-1/2", 3", 4", 6", and 8"
- 200 / 206 series: 1", 1-1/2", 2", 2-1/2", 3", 4", 6", and 8"

### Features

- 100 series: threaded and buttweld ends available
- 200 / 206 series: nitrile O-ring mounted fitting body
- Visit [dixonvalve.com](http://dixonvalve.com) for availability of other HU series hammer unions

### Materials

- 100 series: steel
- 200/206 series: forged steel

### Specifications

- 100 series: used on low pressure manifolds and lines in applications running air, water, oil or gas up to **1,000 PSI (69 bar)** non-shock cold working pressure
- 200 series: used in general service applications running air, water, oil or gas up to **2,000 PSI (138 bar)** non-shock cold working pressure

## One-Piece Hammer Union Nuts

### Application

- Used with any hammer union fittings requiring reliable nuts

### Sizes

- 1", 2", 3", 4", 6", and 8"

### Features

- Long lasting and dependable nut
- All nuts are interchangeable with reliable brands
- 6" and 8" sizes have a 4 lug design for more surface area to hammer

### Material

- Forged steel meeting AISI standards

### Specifications

- **2,000 PSI (138 bar)** cold working pressure
- Available configurations: figure 100 forged wing nut, figure 206 forged wing nut

### Approval

- Nuts meet AISI standards



HU206400N



HU206800N

## Two-Piece Hammer Union Nuts

### Applications

- Replacement for damaged hammer union nuts
- Used with male one-piece flange adapters

### Sizes

- 4", 5", 6", and 8" (bolts included)

### Features

- Lug design provides enlarged surface area to hammer
- Repair nut is pinned and bolted for perfect alignment
- All split nuts have chamfer for welding
- Nut can be installed on pre-existing hammer union assembly
- 4" Figure 200/206 nut is interchangeable with reliable brands
- 5" Figure 50 nut is interchangeable with reliable brands
- 6" and 8" Figure 100/200/206 nuts are interchangeable with reliable brands

### Material

- Forged steel meeting AISI standards

### Specifications

- **2,000 PSI (138 bar)** cold working pressure
- Available configurations: figure 200/206 split nut (in blue or black), suction hammer split nut, and other configurations available

### Approval

- Nuts meet AISI standards



HU200800RN



HUS500RN

Dixon® recommends using Loctite® Threadlocker Red 271™ when bolting together two-piece hammer union nuts to ensure that bolts do not loosen when in service. Option two is to weld the seams of the split nut. Bolt torque recommendation is 60 foot pounds.



## Figure 206 Caps



HUC206400

### Application

- Prevents leakage of hydraulic fracturing fluids from hammer union connections used on manifolds and hose assemblies; equipment can be in pressurized service or in transit to an alternate location

### Sizes

- 2", 4"
- 5" available with 2-piece nut

### Features

- Low profile design for tight applications
- Designed with reusable bull plug to rebuild cap
- Includes a threaded bolt hole for attaching chain or cable
- Chain: welded Grade 30 steel is zinc plated for longer life

### Materials

- Bull plug: iron to ASTM standards
- Nut: forged steel meeting AISI standards
- Bolt: Grade 8 carbon steel

### Specification

- Bull plug style cap assembly contains: figure 206 nut, bull plug body, and retaining ring

### Approvals

- Bull plug meets ASTM standards
- Nut meets AISI standards

## Figure 207 Caps and Plugs



HUC207400



HUP207400

### Application

- Prevents leakage of hydraulic fracturing fluids from hammer union connections used on manifolds and hose assemblies; the fracking equipment can be in pressurized service or in transit to an alternate location

### Size

- 4"

### Features

- Caps and plugs are produced of forged steel to ensure longevity, reliability, and performance
- Cap is designed with larger lugs for easier installation and disassembling
- Cap design includes a threaded bolt hole for attaching chain or cable
- Plug is designed with larger handle for easier installation and disassembling
- O-ring clevis for plug is 316 stainless steel
- Plug design includes a handle hole to attach chain or cable
- Optional chain made of welded grade 30 steel and zinc plated for longer life

### Materials

- Caps and plugs: forged steel meeting AISI standards
- Bolt: grade 8 carbon steel

### Approvals

- Caps and plugs meet AISI standards



# One-Piece Flange Adapters

## Application

- Used in the transfer of water, brine, water-based chemicals, water-based acids, and gelatinous proppant (sand) slurry at hydraulic fracturing sites

## Sizes

- 4" and 8" with 125 lb. flanges (150 lb. bolt hole pattern)
- 4" and 8" with butterfly valve flange dimensions

## Features

- No welds or pipe threads to deteriorate causing premature leakage
- Two-piece nut is pinned and bolted for perfect alignment
- All 4" and 8" Figure 206 threads are interchangeable with other reliable brands
- All 4" and 8" flanges are compatible with other reliable brands with 150 lb. or butterfly flange bolt hole patterns

## Materials

- Adapters: iron meets ASTM standards
- Nuts: forged steel to AISI standards

## Specifications

- Flange x female or male hammer union straights (standard or short length)
- 45° elbows in female and male (flange x hammer union)
- 60° and 80° elbows with two-piece nuts (male x female)

## Approvals

- Adapters meet ASTM standards
- Nuts meet AISI standards



HUF206400FLG



HUM206400FLG



HUM206400FLG-1



HUF206400FLG-45

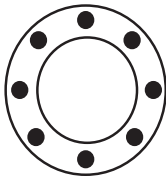


HUMF20640060

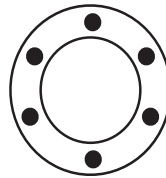


HUMF20640080

150 lb. Flange



Butterfly Valve Flange



HUHA-4



HUHA-5



4FAMT



4HFAV  
flange x groove

## One-Piece 150 Lb. Flange to Weld Adapters

### Application

- Used on a 12" pipe manifold to transfer water, brine, water-based chemicals, water-based acids, or gelatinous proppant (sand) slurry at hydraulic fracturing sites

### Sizes

- 7-1/2" and 10-1/2" standard lengths

### Features

- No welds or pipe threads to deteriorate causing premature leakage
- Easy to weld to 12" pipe manifolds
- Formed butt weld provides accurate alignment

### Material

- Weldable cast steel, grade A

### Specification

- Available pattern: 1-hole, 2-hole

### Approvals

- Adapters meet ASTM standards



WA4FL12X750-1

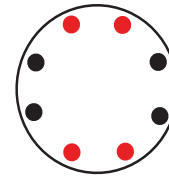


WA4FL12X1050-1

1-Hole Pattern



2-Hole Pattern



## Figure 206 Female Port Adapters



HUC206200



HUF206200MT

### Application

- Adapter and cap used with 3-port and 5-port intake manifolds that feed proppant slurry to HHP pumps used in hydraulic fracturing

### Size

- 2"

### Features

- Low profile design for tight applications
- Designed with reusable bull plug to rebuild cap
- Female adapter with wrench flats for ease of installation
- Optional cable is galvanized carbon steel with aluminum ferrules for longer life

### Materials

- Nut: forged steel nut meeting AISI standards
- Female adapter: iron
- Bull plug: iron
- Bolt: Grade 2 carbon steel

### Approvals

- Steel adapters meet AISI standards
- Iron bull plug meets ASTM standards

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

# Positive Displacement Pumps

## Application

- Accurately transfer liquid additives to the blender that produces slurry used in hydraulic fracturing operations

## Features

- Front loading seals allow for fast and easy maintenance
- Stainless steel gear box standard
- Male NPT port connections standard
- Base plate adapters available to mate with OEM pump foot print
- Hydraulic motor adapter housing that can be used multiple times when replacing pump
- Other adapter mounting plates available to fit unique applications
- One pump that handles various flow rates

## Materials

- All wetted parts: 316L stainless steel
- Elastomer seals: EPDM, Buna-N, FKM



Size	Part #	Description
1-1/2"	RZL115-FRAC2-A	Pump with adapter housing to connect with SAE-A hydraulic motors
	RZL115-FRAC2-B	Pump with adapter housing to connect with SAE-B hydraulic motors



## Dixon® Butterfly Valves

### Applications

- Low pressure transfer of water, acids, chemicals, slurries, and other liquids
- Designed for all low pressure hydraulic fracturing applications

### Size

- 4"



4BF416DITF-NBR

### Features

- Locators around the outer edge of the body allow the valve to easily line up at center
- Thicker stems compared to other brands delivers a more durable and reliable performance
- 10 position throttling handle for control accuracy
- For use between two butterfly valve flanges

### Materials

- Body: ductile iron
- Bushings: PTFE
- O-rings: buna N
- Stems: 416 stainless steel
- Retainer pins: 302 stainless steel

### Specification

- Typical gauge pressures in transfer applications range from **50 to 200 PSI** working pressure (MSS SP-67 spec)
- Disc: ductile iron with buna-N seat (-20°F -28°C to 93°C 200°F), or FKM seat (0°F -17°C to 93°C 200°F)

## Ductile Iron Butterfly Valves

### Application

- Controls flow of water, chemicals and sand slurry

### Sizes

- 2", 3", 4", 6", and 8"

### Features

- Will lock "open" or "closed"
- For use between two 150 lb. flanges
- Number of holes on the valve depends on the body size

### Materials

- Body: ductile iron, ASTM A536
- Disc: nickel plated ductile iron
- Top and bottom stems: 416 stainless steel
- Seal and stem seals: buna-N
- Bushing: PTFE

### Specification

- Rated to **200 PSI**



IBFVW400



*NOT RECOMMENDED FOR STEAM SERVICE*

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## 3 and 5 Port Intake Manifolds

### Application

- Used in the transfer of water, brine, water-based chemicals, water-based acids, and gelatinous proppant (sand) slurry used at hydraulic fracturing sites

### Size

- 6" intake

### Features

- Manifold designed for efficient fluid flows and reduction of pump cavitation caused by sand fallout
- Single cast unit with no welds to deteriorate causing premature leakage/failure
- Side ports designed for easy pump cylinder inspection
- Reduced height for ease of installation
- Bolt hole pattern on manifold base plate available for the Weir SPM and Gardner Denver stimulation frac pumps

### Materials

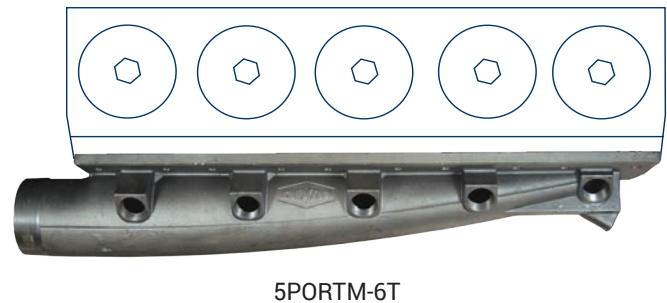
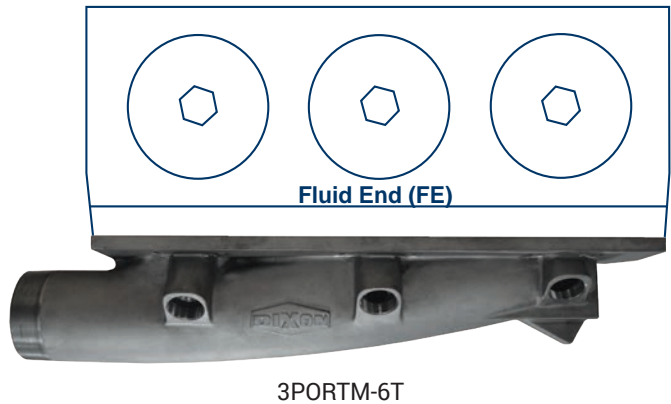
- Iron meeting ASTM standards
- O-rings: buna-N

### Specifications

- 6" male NPT manifold with six 2" female NPT ports, one 1" NPT port
- 6" grooved manifold with six 2" female NPT ports, one 1" NPT port
- O-rings and screws included with all configurations
- Weight: 3 port - 162 lbs.  
5 port - 187 lbs.
- Patented

### Approval

- Iron meets ASTM standards



## 5 Port Intake Manifold Assemblies

### Specifications

- Bill of materials for assembly 5PM6T-S7:
  - 1 5PORTM-6T manifold
  - 5 HUF206200MT 2" figure 206 female hammer union adapter, sealed
  - 5 HUC206200 2" figure 206 bull plug style cap
  - 5 HUBT716X100 bolt 7/16"-14 by 1/2" long, grade 8
  - 5 WSR1 has cable length of 20-1/4"
  - 1 HU206600 6" steel hammer union, threaded, sealed
  - 1 SHP100FS 1" MNPT square head plug, 3000# forged steel, sealed
  - 1 SHP200FS 2" MNPT square head plug, 3000# forged steel, sealed
  - 20 HHBT875X175 bolt 7/8" - 9 by 1-3/4" long, grade 8
  - 5 O439BU buna-N O-ring



Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)



## Cam & Groove



400-C-MI



400-E-MI

### Application

- Used as fittings for sand and ceramic proppants (material that keeps an induced hydraulic fracture open following a fracturing treatment)

### Sizes

- 1-1/2", 2", 3", 4", and 6"

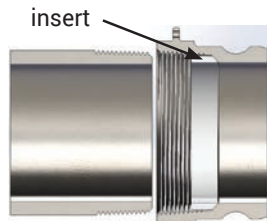
### Materials

- Unplated, plated malleable iron, or ductile iron

### Specification

- Adapters also available, visit [dixonvalve.com](http://dixonvalve.com) for more information

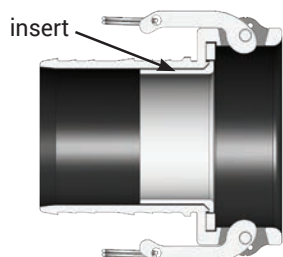
## Abrasion Resistant Inserts



400-A-BRINSERT



400-C-MIINSERT



### Application

- Extends the life of adapters and couplers when transferring proppant to storage tanks

### Size:

- 4"

### Features

- Abrasion resistance extends service life
- Available for multiple adapter materials including aluminum, brass, malleable iron, and stainless steel
- Available for multiple coupler materials including aluminum and malleable iron

### Materials

- Insert: UHMW polyethylene
- Adapter: aluminum, brass, iron, and stainless steel
- Coupler: aluminum and malleable iron

### Specifications

- Adapter x female NPT with insert, coupler x hose shank with insert

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## Vent-Lock® Safety Cam & Groove

### Application

- Transfer of fluids and solids, with a safer disconnection


### Sizes

- 1", 1-1/2", 2", and 3"

### Materials

- 316 stainless steel
- Other materials to be available, contact Dixon®

### Features

- Permits the release of static pressure when disconnecting hose assemblies
- Venting system protects operator from being sprayed with hazardous or non-hazardous fluids or solids
- Does not interchange with standard cam and groove products, use only with Dixon L-style fittings 
- Safety orange cam arms
- Attachment options: ferrules, sleeves, bands, and other reliable options

### Specifications

- Rated to **250 PSI**, recommendation based on the use of mating Dixon L-style fittings at ambient temperature **70°F (21°C)** with standard buna-N seal installed, for use at elevated temperature or other unusual operating conditions, consult Dixon
  - 1", 1-1/2", and 2" sizes have a maximum working pressure of **250 PSI**
  - 3" maximum working pressure **150 PSI** with King Crimp ferrules, crimp sleeves and bands at **125 PSI**
- Adapter x female NPT, coupler x hose shank, adapter x hose shank, dust cap, and dust plug



## EZ Boss-Lock Cam & Groove

### Applications

- Suitable for water, chemical, acid, and crude transfer as well as other petrochemical applications

### Sizes

- 1"- 6"



### Material

- 316 stainless steel

### Features

- Positive lock handles - prevent accidental uncoupling
- Handles lock automatically when closed

### Specifications

- Working pressures are available, call Dixon or visit [dixonvalve.com](http://dixonvalve.com) for information
- Coupler x male NPT, coupler x hose shank, coupler x female NPT, and dust cap
- Not recommended for compressed gas, air, or steam 
- Under no circumstances should the EZ Boss-Lock cam arms be used on any fitting not specifically designed for their use 



NOTE: Our complete line of cam and groove products can be viewed at [dixonvalve.com](http://dixonvalve.com).

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## GSM Armored Hose

Ball-joint armor protects against extreme heat, abrasion and kinking



Armor enlargement, no interlocking parts to restrict bending



Multiple layers of **1000°F (538°C)** fiberglass insulation are applied for extreme heat resistance

Inner hoses, engineered for the application, are specialty industrial rubber, hydraulic, corrugated stainless steel or PTFE

### Applications

- Fluid transfer and hydraulic hose assemblies on drilling platforms, blenders and mobile off-highway equipment for supporting oil and gas services in the field

### Sizes

- 1/4" through 16" bore with lengths to 120'

### Materials

- Armor: galvanized steel or stainless steel

### Features

- Extremely flexible armor protects from heat and harsh environments in applications for steam, water, gases, hydraulic fluids, grease and abrasives
- Wide selection of inner hoses specific to the demands of the application are industrial, hydraulic, stainless steel, or PTFE

### Specifications

- Heat resistant insulation to **1000°F (538°C)**
- Temperature rating depends on specific applications, consult Dixon
- A variety of end connections are available

## King Safety Whipsocks

### Applications

- Ideally suited for applications where the media being transferred is under higher working pressures such as air, water, hydraulic, and slurry

### Sizes

- 3/8" through 6"

### Materials

- Wire rope: galvanized carbon steel
- Ferrules: aluminum

### Features

- Keep the hose under control in the event of a high-pressure hose assembly failure
- Dual anchor points secured beyond the fittings eliminate hose whip
- Galvanized steel woven stockings extend down the hose to grip securely over a larger area preventing whip, abrasion, and wear
- Securing both eye-to-rigid or eye-to-eye anchor points reduce whip in the event of a hose connection failure



### Specifications

- Contact Dixon at 877.963.4966 with questions regarding working pressure, available options or custom configurations
- King safety shackles are available to anchor the Whipsocks
- Be sure the anchoring points are rated for the application



KSW40

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## Dixon® Mann-Tek Dry Disconnects

### Application

- Ensures a quick and spill-free connection in the bulk transfer of hazardous and non-hazardous fluids

### Sizes

- 1" through 6"

### Materials

- Stainless steel and aluminum
- Rollers: aluminum-bronze on stainless steel shaft
- Ball bearings: stainless steel
- Protective ring is a specially formulated, weather resistant and electrically conductive rubber compound

### Features

- Coupler has built-in swivel
- Shaft journal in stainless steel embedded in PTFE eliminates seizure
- Riveted piston pin minimizes the risk for failure under extreme pressure conditions



DDC200SS

## Bayloc® Dry Disconnects

### Sizes

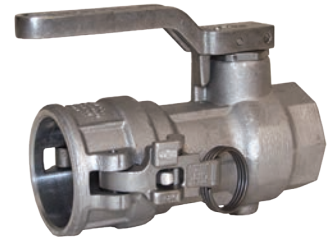
- 1-1/2", 2", and 3" couplers and adapters, additional sizes available

### Materials

- Stainless steel or aluminum
- For information on chemical compatibility and material selection call Dixon at 877.963.4966 or visit [dixonvalve.com](http://dixonvalve.com)

### Features

- Compatible with most cam and groove style dry disconnects, fully interchangeable with Kamvalok® style fittings
- Spring loaded sealing device "snaps" closed should the valve become disconnected with the poppet open
- Two-piece adapter design allows easy rebuilding of adapters
- EZ Boss-Lock cam arms provide security against accidental opening
- Automatic closing poppet assembly
- Stainless steel handle allows product exposure to corrosive chemicals or wash down service



DBC72-200



DBA72-200

## Safety Breakaway Couplings

### Application

- Used most commonly on tank trucks, railcars and barges to limit the possibility of environmental impact and loss of product resulting from a break in a connection

### Sizes

- 2", 3", 4", 5", 6", and 8"

### Materials

- Industrial version: 316 stainless steel or aluminum
- Marine version: 316 stainless steel
- Seal: FKM (FPM) standard

### Features

- Industrial version - fixed point to hose
- Marine version - hose to hose
- Coupling automatically senses an excessive load, closes the valves and disconnects
- High flow rate / low pressure drop

### Specifications

- Working pressure: stainless steel **360 PSI** and aluminum (industrial version) **230 PSI** at ambient temperature **70°F (21°C)**
- Available configurations: female NPT, male NPT and 150# flange

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)



SBC200SS

## VEP and VEP-BOP Series

### Thread To Connect Flush Face



VEP-Series



VEP-BOP-Series

#### Application

- Used in a variety of drilling rig applications and hydraulic power units where the ability to connect and disconnect under pressure is necessary

#### Sizes

- 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2", and 2"

#### Materials

- Coupler and nipple: steel
- Dust cap and plug: aluminum body with steel cable lanyard

#### Features

- Threaded, no spill design provides the ideal solution for high pressure, high impulse applications
- Connect and disconnect under pressure
- Patented valve retention system minimizes pressure drop and maximizes connection and pressure performance
- Zinc nickel chrome plating provides superior corrosion resistance

#### Specification

- Interchanges with Stucchi VEP/VEP-HD, DNP PST4/FSI, Holmbury HFT, and Parker FET

#### Approval

- Blow-out prevention (BOP) version available, fire tested and Lloyd's certified in accordance with API 16D

## WS and WS-BOP Series

### Heavy Duty Thread To Connect



WS-Series



WS-BOP-Series

#### Application

- Extensively used in a variety of oilfield applications

#### Sizes

- 3/4", 1", 1-1/4", 1-1/2", and 2"

#### Materials

- Coupler and nipple: steel or 316 stainless
- Dust cap and plug: aluminum body with steel cable lanyard

#### Features

- Connect under residual pressure
- Durable sleeve is cast using a process that provides improved surface finishes, tighter tolerances, and excellent repeatability
- Heavy duty "spider" valve holder withstands surge flow and pressurized connections
- Seals are easily field replaceable

#### Specification

- Interchanges with Snap-Tite 75, Hydraulics Inc 5TV, Stucchi VOF, DNP VFF-HD, Faster OGV, and Eaton FD85

#### Approval

- Blow-out prevention (BOP) version available, fire tested and Lloyd's certified in accordance with API 16D

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)



---

## W-Series 7800 Wingstyle Interchange

### Application

- Used to connect hydraulic lines on oilfield equipment such as tongs, swivels, and other drill rig applications

### Sizes

- 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", and 1-1/2"

### Materials

- Coupler and nipple: brass, steel wing nut
- Dust cap and plug: steel body with steel cable lanyard
- Nipple mounting flange: steel

### Features

- Threaded wing or hex sleeves enable easy connection and disconnection while under residual pressure
- O-ring connected marker is highly visible during connection and helps keep contaminants out of the threads while connected
- Coupler has a improved hybrid valve design to reduce pressure drop and turbulence while improving flow performance
- Bulkhead mounting kits available
- Flanged bonded seal prolongs coupling life and is integral in the reduction of spillage and air inclusion
- Couplers and nipples have a full hex body for easy installation

### Specifications

- Interchanges with Eaton 5100, Parker 6100, Snap-Tite 78, Safeway S51, and Stucchi W



## HT-Series ISO 16028 Flush Face Interchange

### Application

- No-spill coupling used to connect hydraulic lines on construction equipment, hydraulic tools, and other hydraulic systems

### Sizes

- 1/4", 3/8", 1/2", 5/8", 3/4", 1", 1-1/2", and 2"

### Materials

- Coupler and nipple: steel or 316 stainless
- Dust cap and plug: nitrite

### Features

- Patented coupler retention system prevents valve stem ejection during surge flow and pressure spike conditions while maximizing flow performance
- High strength laser-cut valve guide in nipple improves valve stability while minimizing flow restriction
- Designed to exceed 1,000,000 impulse cycles both connected and disconnect
- Bulkhead mountable grooved sleeve for breakaway, multi-plate or blindmate installations
- Zinc nickle plating provides superior corrosion resistance

### Specifications

- Interchanges with Parker FEM, Eaton FD89, Stucchi FIRG/Series A, Faster FFH, and Safeway FF49



Part numbers and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## ST-Series Flush Face 71 Interchange



### Application

- Use in hydraulic applications where a no-spill coupling with higher working pressures and rugged design is required

### Sizes

- 1/4", 3/8", 1/2", 3/4", 1", and 2"

### Materials

- Coupler and nipple: steel or 316 stainless
- Dust cap & plug: aluminum body with steel cable lanyard

### Features

- Flush face valve design minimizes air inclusion during connection and spillage during disconnection
- Heavy duty construction for abusive applications
- Bulkhead mountable grooved sleeve for breakaway, multi-plate or blindmate installations

### Specification

- Interchanges with Snap-Tite 71-Series

## T-Series 3000 High Pressure Thread To Connect Interchange



### Application

- Designed for high pressure applications such as hydraulic rams and pumps where pressure up to 10,000 PSI is possible

### Sizes

- 1/4" and 3/8"

### Materials

- Coupler and nipple: steel or 316 stainless
- Dust cap: steel body with steel cable lanyard
- Dust plug: steel body with nitrile lanyard
- O-ring: nitrile with TPC-ET back up ring

### Features

- Threaded sleeve allows connection and disconnection while coupler and/or nipple are under pressure
- Ball valve and poppet valve styles available

### Specifications

- Interchanges with Parker/Pioneer 3000, Enerpac C604, Stucchi IVHP, and DNP PVM

NOTE: Enerpac® is a registered trademark of the Enerpac Company

Part numbers and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

---

## Hydraulic Adapters

### Feature

- Additional adapters and configurations available, call 877.963.4966 or visit [dixonvalve.com](http://dixonvalve.com) for more information



45° male NPTF x  
female NPSM swivel



JIC male 37° flare x  
male NPTF



Male 37° flare x  
male SAE O-ring



Female NPTF x  
male NPTF branch tee



SAE 61 x  
male JIC



Male flat face x  
male NPTF

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)

## Air and Water Utilities

### Feature

- Additional adapters and configurations available, call 877.963.4966 or visit [dixonvalve.com](http://dixonvalve.com) for more information



Air King Couplings  
couplers, ferrules, and clamps



Pneumatic Couplers  
air supply, testing equipment, and blow guns



Filters, Regulators, and Lubricators  
combination units and repair kits



Gauges  
digital, liquid filled, and dry

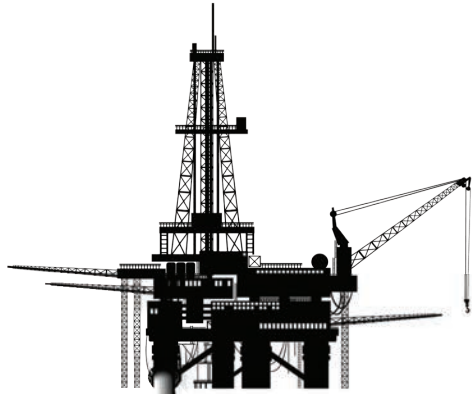


Fire Hose and Reels  
nozzles, racks, and safety equipment

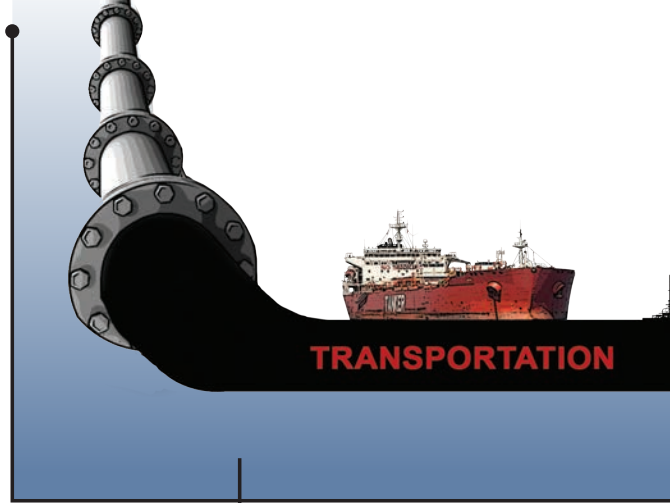


PTFE Assemblies  
hose, couplings, and fittings

Part numbers, 2D drawings and additional information can be found at [dixonvalve.com](http://dixonvalve.com)



## EXPLORATION/ PRODUCTION



## TRANSPORTATION

### Pet•ro•chem•i•cal

*noun*

Any chemical derived from petroleum or natural gas.

Many countries, many cultures, but the same Petrochemical Life Cycle applications using DIXON products for safe and reliable fluid transfer.

Popular brands include... Boss, Bayco, Holedall, King, and more...



## REFINING



## TRANSPORTATION

1



### Exploration and Production

2



### Refining

- Boss® Low Pressure System Products
- Frac Fittings
- King Crimp® System
- Hammer Unions
- Control Valves
- Holedall® Couplings
- Tank Truck and Rail Car/API Fittings & Assemblies

- Dry Break Couplings
- Cam & Groove
- Dry Disconnects
- Ground Joint Systems
- Valves
- API Fittings



# The Petrochemical Life Cycle



- Overfill Protection
- Loading/Unloading
- Adapters
- Vapor Elbows
- Swivels
- Tank Truck and Rack Fittings
- Nozzles



## Limited Warranty

DIXON VALVE AND 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. Its 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 are 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 reproductive harm.

## Trademark

Kamvalok<sup>®</sup> is a registered trademark of OPW Engineered Systems.

## Copyright

Copyright © 2021 by Dixon Valve and Coupling Company, LLC

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

NOTE: Reasonable care has been taken in preparing this catalog. Dixon Valve & Coupling Company, LLC reserves the right to make corrections.

