Railcar Unloading Assemblies and Accessories

dixonvalve.com • Customer Service: 877.963.4966
Application:
• Easy connect / disconnect solutions for loading and unloading crude oil from rail cars.

Features:
• Productivity - multiple designs available to achieve efficient and safe unloading
• Flexibility - various product options meet challenges requiring customized assemblies
• Reliability - dry disconnect valves that will not open unless connections are properly mated

Below are a few of the many configurations available. If you don’t see one that meets your requirements then "Build It Your Way". On pages 4-6 we show some of the assembly components. Pick the parts for your specific application and you can either assemble it, or we can put it together for you. Call Dixon for help in the design of an assembly that will meet your needs.
Transfer Hose Connection Examples

Transfer Hose with API Coupler

- API Coupler x TTMA Flange with Locking Handle
  5300BCL
- TTMA Flange x King Crimp Style
  King Comb. Nipple
  TTFST40CS
- King Crimp Ferrule
  CF400-XXCS
- 150# Fixed Flange x Hose Shank
  FST40CS

Transfer Hoses with Dry Disconnect Couplers

- Dry Disconnect Coupler x 4\" Female NPT
  DDC400AL
- Heavy Duty Sch 80 King Comb.
  Nipple (male NPT x hose shank)
  STC40CS
- King Crimp Ferrule
  CF400-XXCS
- 150# Fixed Flange x Hose Shank
  FST40CS

- Dry Disconnect Coupler x TTMA Flange
  DDC400AL164TTMA
- TTMA Flange x King Crimp Style
  King Comb. Nipple
  TTFST40CS
- King Crimp Ferrule
  CF400-XXCS
- 150# Fixed Flange x Hose Shank
  FST40CS

1 Ferrule part numbers shown are for placement purposes only, the actual part number depends on the hose OD.

* Other TTMA Flange Adapter configurations are available, contact Dixon for additional information.
**Railcar Unloading Components**

### Mates to a Tank Car

- 110° elbow with tank car threaded swivel nut x TTMA flange
  - ATCF40
- 90° elbow with cam and groove x TTMA flange
  - ATCGF40-90
- 110° elbow with tank car threaded swivel nut x TTMA flange with 1/2” FNPT port
  - ATCF40FP50
- 110° elbow with cam and groove x TTMA flange
  - ATCGF40

### Spacer with Port

- TTMA Spacer with 1/4” FNPT port
  - TTFS4AL-FP50
- Ball Valve
  - BMV50
- Spring Return Ball Valve
  - BBV50SR

### Flange Extension

- TTMA Flange, 6” extension
  - TETF4AL

**1/2 Female NPT Port Options**

- 1/2 Female NPT Port Options
  - Ball Valve
  - Spring Return Ball Valve

**Handle Option**

- Handle

---

1. Ball and check valves are also available in stainless steel
### Railcar Unloading Components

#### TTMA Flanged Sight Glasses
- Sight glass (3¾” wide)
  - 5201-SFI
- Narrow sight glass (1¾” wide)
  - 5200-SFI
- Acrylic sight glass (1¾” wide)
  - TT4ASG
- Acrylic ethanol sight glass (1¾” wide)
  - TT4ASG-ETH

#### TTMA Flange Screen / Gasket
- Screen with 1” square holes
  - TTFS4SS
- PTFE envelope gasket with Baylast™ core
  - 40322TF

#### Dry Disconnect Adapter
- Dry disconnect adapter x TTMA flange
  - DDA400AL164TTMA

#### API Adapters
- API adapter
  - (poppet opens with API coupler engagement only)
  - 5204LSNG
- API adapter with fixed handle
  - (poppet can open with API coupler engagement or by using the handle)
  - 5204NG

#### Cam and Groove Adapter
- Cam & groove adapter x TTMA flange
  - 400-ALT-AL
Accessories

Plugs

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5MTCP</td>
<td>Threaded plug for tank car nut</td>
</tr>
<tr>
<td>5354P1</td>
<td>API coupler plug</td>
</tr>
<tr>
<td>DDDP400</td>
<td>Dry disconnect dust plug</td>
</tr>
</tbody>
</table>

Caps

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DDDC400</td>
<td>Dry disconnect dust cap</td>
</tr>
<tr>
<td>5000-25</td>
<td>Nylon API dust cap / chain</td>
</tr>
</tbody>
</table>

Parking Adapters

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOOL504-1</td>
<td>Dry disconnect parking adapter</td>
</tr>
<tr>
<td>5204H</td>
<td>API parking adapter</td>
</tr>
<tr>
<td>5204H-SPEC</td>
<td>Low profile hanger for rack coupler, unassembled</td>
</tr>
</tbody>
</table>

Hardware Kits

Features:
- For use on one assembly end only
- Kits include: 8 each nuts, lock washers and bolts

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCABK-1.5</td>
<td>Replacement bolt kit, 1½&quot; bolt length</td>
</tr>
<tr>
<td>TCABK-3</td>
<td>Replacement bolt kit, 3&quot; bolt length</td>
</tr>
<tr>
<td>TCABK-3.5</td>
<td>Replacement bolt kit, 3½&quot; bolt length</td>
</tr>
</tbody>
</table>

Spanner Wrench

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G10</td>
<td>Iron, used on aluminum and iron railcar nuts</td>
</tr>
</tbody>
</table>
Steam Hose Connections

GJ Boss™ Ground Joint Seal

Features:
• Easy, positive metal-to-polymer seal
• Leakproof seal forms when the metal head of the stem makes contact with the patented polymer seat in the spud
• Non-metallic polymer seat resists most chemicals found in manufacturing facilities; visit dixonvalve.com for corrosion resistance information
• Recommended for steam service up to 450°F (232°C)
• Works with existing fittings
• Configurations: stem, nuts, spuds

Materials:
• Plated steel and / or iron

Sizes:
• ¾", 1", 1½", 2"

Warning: Do Not Disconnect Under Pressure!

Steam Quick Disconnect Couplings

Application:
• Designed exclusively for steam applications

Features:
• Coupler sleeve designed for easier gripping with gloves
• Two ethylene propylene O-rings in the coupler and one ethylene propylene O-ring in the plug provide double protection against leaks
• Rated to 200 PSI gauge saturated steam 388°F (198°C)
• Configurations: poppet valve couplers and plugs

Materials:
• Coupler and plug are solid brass with stainless steel springs and locking balls
• Coupler has a plated steel sleeve

Sizes:
• ¾", 1", 1½"

Warning: Do Not Disconnect Under Pressure!

Dry Disconnect Fittings for Steam Service

Application:
• Designed for steam hoses used for heating viscous products in tank car applications.

Features:
• Eliminates unintentional separation preventing accidents and avoiding unintended down time
• Performance unaffected by surface rust
• Maximum operating: 150 PSI
• Maximum temperature rating: 350°F (177°C)
• Lockable versions are available, contact Dixon for information
• Configurations: coupler x female NPT, adapter x female NPT

Materials:
• Coupling house and all inner parts: stainless steel
• EPDM seals standard, other materials available contact Dixon for information

Sizes:
• 1½", 2"

Note: Can be safely disconnected while in service.
Dixon, founded in 1916, is a premier manufacturer and supplier of hose couplings, valves, dry-disconnects, swivels, and other fluid transfer and control products. The company’s global reach includes a wide range of products for numerous industries including petroleum exploration, refining, transportation, chemical processing, food & beverage, steel, fire protection, construction, mining and manufacturing. Dixon’s strategic objective is to create solutions that make products safer, leak-free, longer lasting, and always available.