# 5500-Series API Coupler



#### **Application**

• Combined with API adapters, these couplers are suitable for railcar and tank truck loading or unloading

#### **Features**

- Locking five-cam design provides easy alignment and tight connection
- Modular design allows various face seal combinations to be compatible with different alternative fuels, performance levels, and applications
- · Shaft seals can be changed without removing coupler from the loading arm
- Fully interlocked collar cannot be opened when connected and cannot be disconnected when opened
- · Replaceable seal design while coupler is on loading arm
- · 4" TTMA inlet mounting flange connection
- · Ball-end handle for easy and comfortable operation
- · No special tools needed for maintenance
- Reference canada.dixonvalve.com for bill of materials and a complete list of repair kits

#### **Materials**

- · Body: hard coated anodized 356T6 aluminum
- Shroud: hard coated anodized 356T6 aluminum with stainless steel insert
- · Link, shaft, pin, and crank: hardened 17-4PH stainless steel
- · Cam: CF8M stainless steel
- · Poppet and bearing: Bayloy
- · Seals: Baylast, EPDM, FFKM, FKM-B, FKM-GFLT, fluorosilicone, and Hifluor

#### Specifications

- Seal operating temperature:
  - Baylast™: -35°F to 212°F (-37°C to 100°C)
  - EPDM: -60°F to 250°F (-50°C to 121°C)
  - FFKM: -15°F to 600°F (-26°C to 315°C)
  - FKM-B: -15°F to 400°F (-26°C to 204°C)
  - FKM-GFLT: -35°F to 400°F (-37°C to 204°C)
  - Fluorosilicone: -50°F to 350°F (-45°C to 176°C)
  - HiFluor. -15°F to 400°F (-26°C to 204°C)
- Flow rate: 600 GPM at 3 PSI pressure drop, maximum flow rate: 1,000 GPM
- · Fully compliant with API RP1004:2003 specifications
- Burst tested: 450 PSI

Description	Part #
5500 API rack coupler FKM-GFLT aluminum handle	5500G
5500 API load coupler FKM-B seals with aluminum handle	5500B
5500 API rack coupler Baylast aluminum handle	5500BL
5500 API rack coupler EPDM aluminum handle	5500E
5500 API rack coupler Fluorosilicone aluminum handle	5500F
5500 API rack coupler HiFluor with aluminum handle	5500H

<sup>\*</sup>Normal wear and tear items (including seals) not covered.





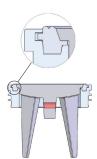
## **Design Features**

### Seal Design

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#### The Right Connection®

#### 5500-Series



## Coiled Inconel® Springs

#### **Improvement**

**Benefits** 

 10 Inconel coiled springs have been added. Coiled springs put more pressure on the nose seal-to-truck API adapter to help prevent leaks.

The burst pressure of the new nose seal is **450 PSI**, which is greater than that of the bonded nose seal at

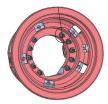
Removable seal design is keyed in place and tested to

450 PSI without seal ejection.

#### **Benefit**

This will solve the occasional rusting and breaking issues.





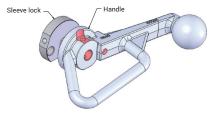
#### **Two-Piece Handle**

#### **Improvement**

 Two-piece handle is attached to the coupler with two separate cross pins.

#### **Benefit**

 Should the handle cross pins be sheared away, the interlock will remain operational, preventing the coupler from opening.



#### **Accessories**

#### Part #: 5501

API coupler drain valve

#### **Benefits**

- Allows the operator to drain a loading arm easily and safely.
- Fits all API bottom loading couplers



#### Part #: 5204H

Hanger for API rack coupler parking brake

#### **Benefit**

Neatly store and secure loading arms while not in use





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