


Fuel Tanker

API Couplers



¹ Normal wear & tear items (including seals) not covered

Application:	API couplers are used at the petroleum loading rack for bottom loading of petroleum tankers. They are mounted to the rack loading arm, using the built in 4" TTMA flange connection. When the empty Petroleum tanker pulls into the loading rack to load, the API couplers are connected to the API valves on the tanker. The connection interface consists of a poppet and a plunger, which ensures a positive spill free connection.
Standards:	Manufactured to American Petroleum Institute standard API RP-1004, which allows for positive connection to API valves such as the Dixon Bayco 5204 series API valves
Materials:	356 T6 aluminum anodized hard coat body, aluminum handle, stainless steel hardware, buna, FKM-B and FKM GFLT seals.
Features & Benefits:	<ul style="list-style-type: none"> • Modular design, allows various face seal combinations, and very easy no special tools required maintenance • Shaft seals can be changed without removing coupler from loading arm • Locking 5 cam design for easy alignment and tight connection and safety interlock to help ensure coupler properly attached before valve opens. • 5300BCL is for use in railcar applications with investment cast stainless steel locking handle. • Ball-end handle for easy, comfortable operation • Choice of either a bonded nose seal, which offers a long life and cannot be washed out, or replaceable nose seal, which allows quick seal replacement without removal from the loading arm. • Link, shaft, pin and crank: hardened 17-4PH stainless steel • Maximum working pressure 150 PSI to include 5300, 5300B, 5300BC, 5300BCL. 5300G maximum working pressure 100 PSI. Maximum flow 1000 GPM, (3785 LPM). Pressure drop of only 3 to 4 PSI. 5400 series maximum working pressure 75 PSI • FKM-B: -10°F to 400°F (-23°C to 204°C), FKM-GFLT: -20°F to 400°F (-28°C to 204°C), Buna seals: -20°F to 250°F (-28°C to 121°C) • Biofuel compatible up to E100 (100% Ethanol) and B100 (100% bio diesel) dependent upon part #, see part number list below for more details For detailed fuel compatibility, refer to page 4. • FKM - Brown dot, FKM B - Yellow dot, FKM GFLT - Green dot 

API Coupler with Bonded Nose Seal



API Coupler

Part #	Seal Material	Fuel Compatibility
5300	Buna seals	Gasoline and diesel, up to E100 and B20 biofuels
5300B	FKM-B	Gasoline and diesel, up to E100 and B100 biofuels
5300G	FKM GFLT	
5300GC	FKM GFLT	
5300BC	FKM-B	Gasoline and diesel, up to E100 and B100 biofuels, crude oil
5300BCL	FKM-B	

API Coupler with Replaceable Nose Seal



5354P1

Part #	Seal Material	Fuel Compatibility
5400	Buna seals	Gasoline and diesel, up to E100 and B20 biofuels
5400B	FKM-B	Gasoline and diesel, up to E100 and B100 biofuels
5400G	FKM GFLT	
Part #	Description	
5354P1	plug for API rack couplers	
5204H	rack coupler hanger	

See pages 78-80 for repair kits and replacement parts
See page 12 for TTMA flange gaskets