



CANYON RIM TECHNOLOGIES

Fueling the Future

sales@CanyonRimTech.com
www.CanyonRimTech.com

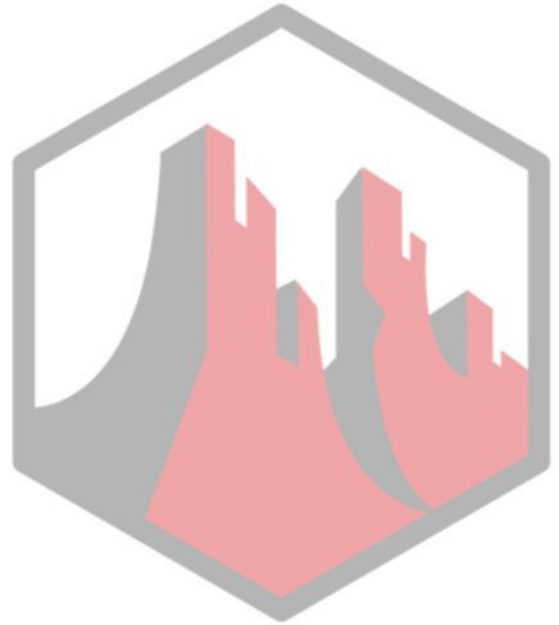


FLUID TRANSFER SYSTEMS

ADVANTAGES TO USING FLOMAX PRODUCTS

Top Advantages to Partnering with Canyon Rim Technologies and FloMAX

1. Premium raw materials: aluminum and stainless steel construction
2. High-quality anodizing and laser marking for durability and clarity
3. Superior seals and O-rings for reliable performance
4. Factory-approved O-ring lubricants used during assembly
5. Every product tested prior to shipment
6. Large inventory enables same-day shipping in most cases
7. Patented designs for increased durability and longer service life
8. Built to meet or exceed rated pressure and performance specifications
9. Fast response for emergency and custom requirements
10. Precision-machined components with tight tolerances
11. Fully staffed CNC facility with 28+ machines
12. Experienced, long-tenured workforce
13. Six Sigma / LEAN Master Black Belt on staff
14. Certified standard work procedures aligned with GMP
15. Engineering team with real-world experience across multiple industries
16. Strong focus on quality and customer satisfaction
17. Reliable, responsive customer service
18. Industry-leading innovation and product quality



FloMAX Flush Face Connectors

- *Flush Face Connector – US Patent #9708173*
- *Connect and disconnect under pressure while retaining push-to-connect functionality*
- *Stainless steel used in all critical components for long life and reliability*
- *Heat-treated stainless steel receiver nose enables higher pressure operation and extended service life*
- *Uniform connector size across all models for simplified system design*
- *Patented ball lock key technology enables consistent sizing and performance*
- *Standardized size simplifies service box layout and planning*
- *Patented color-coded, non-interchangeable system prevents cross-connection*
- *EVAC fitting features compact flush face design to reduce contamination and improve usability*
- *Consistent pressure ratings and temperature performance across all connectors*
- *Manufactured to high standards and 100% factory tested for reliability*
- *Can be connected and disconnected while holding any part of the nozzle, including pullback, base, or hose*
- *Grease fittings rated up to 5,000 PSI for high-pressure applications*
- *No need for additional valves or pressure reduction devices during connection/disconnection*
- *Designed for easy use even in dirty, grease-heavy environments*
- *Grease fittings available in two non-interchangeable sizes*

Competitor Flush Face Connectors

- *Cannot connect or disconnect under pressure; some require manual valve lockout*
- *Zinc-plated steel construction prone to chipping, corrosion, and seal damage over time*
- *No heat treatment on critical wear components, reducing durability*
- *Varying connector sizes used to achieve non-interchangeability, leading to inconsistent and bulky designs*
- *Competitor designs lack innovation and fall short in quality and ergonomics*
- *EVAC fittings are large, non-flush face designs that can trap debris and increase contamination risk*
- *Inconsistent pressure ratings across sizes; some require special “cold weather” variants*
- *Cannot connect while holding the pullback, making operation more difficult and less safe*
- *Grease fittings rated to ~2,900 PSI and require depressurization before disconnecting*
- *Additional valves and steps required to safely disconnect, increasing complexity and risk*
- *Testing has shown some competitor fittings fail well below their rated pressure limits*

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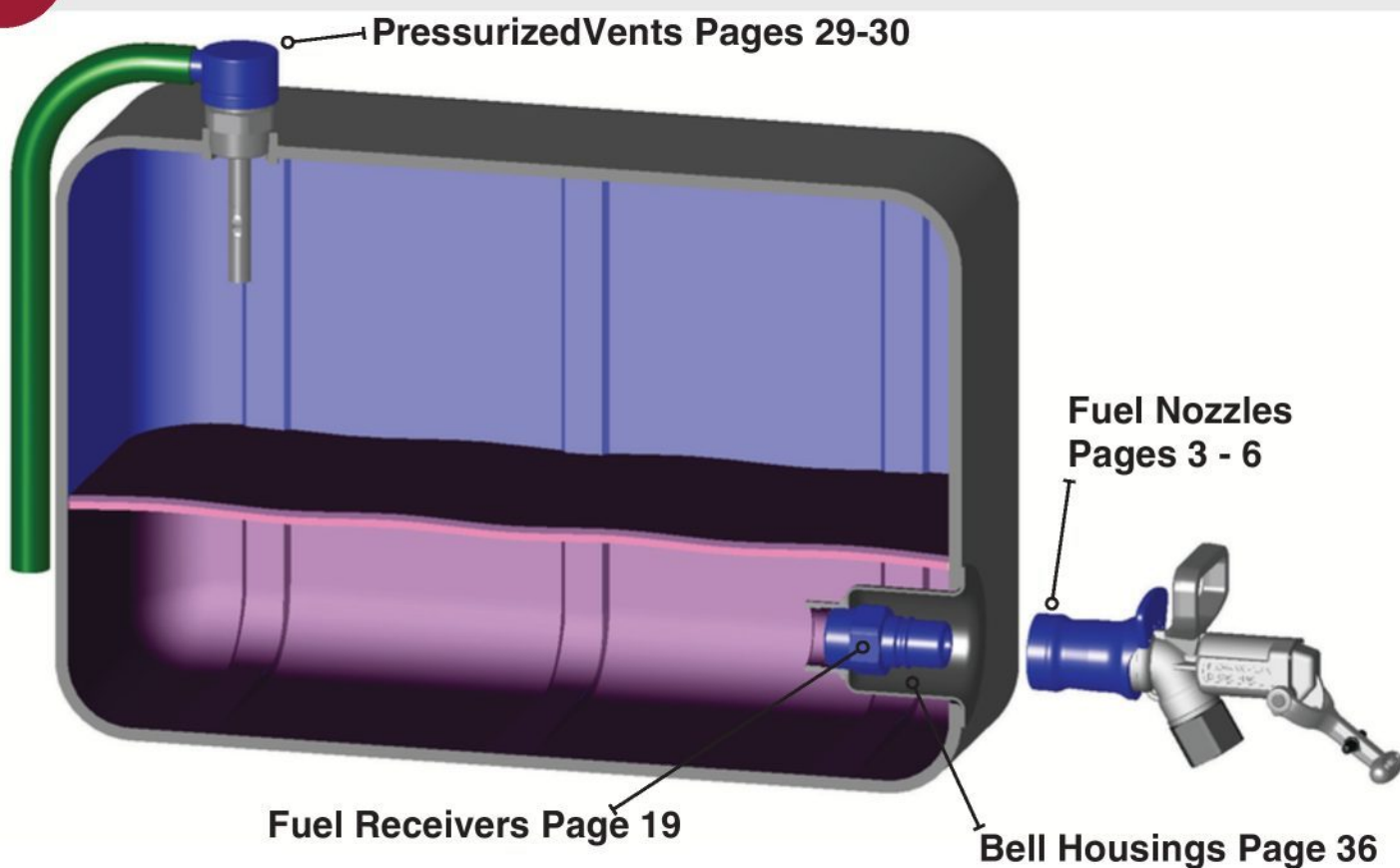
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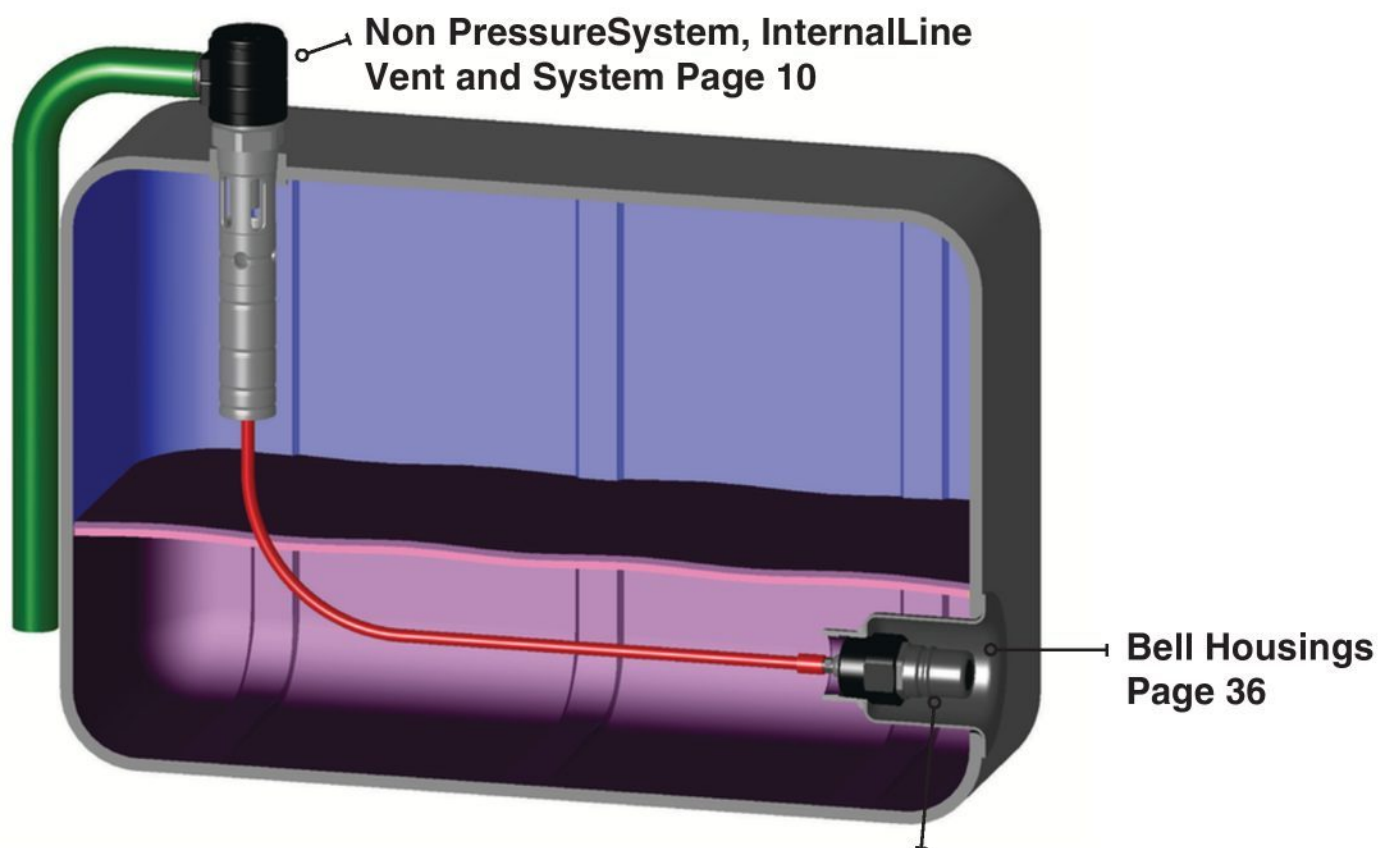
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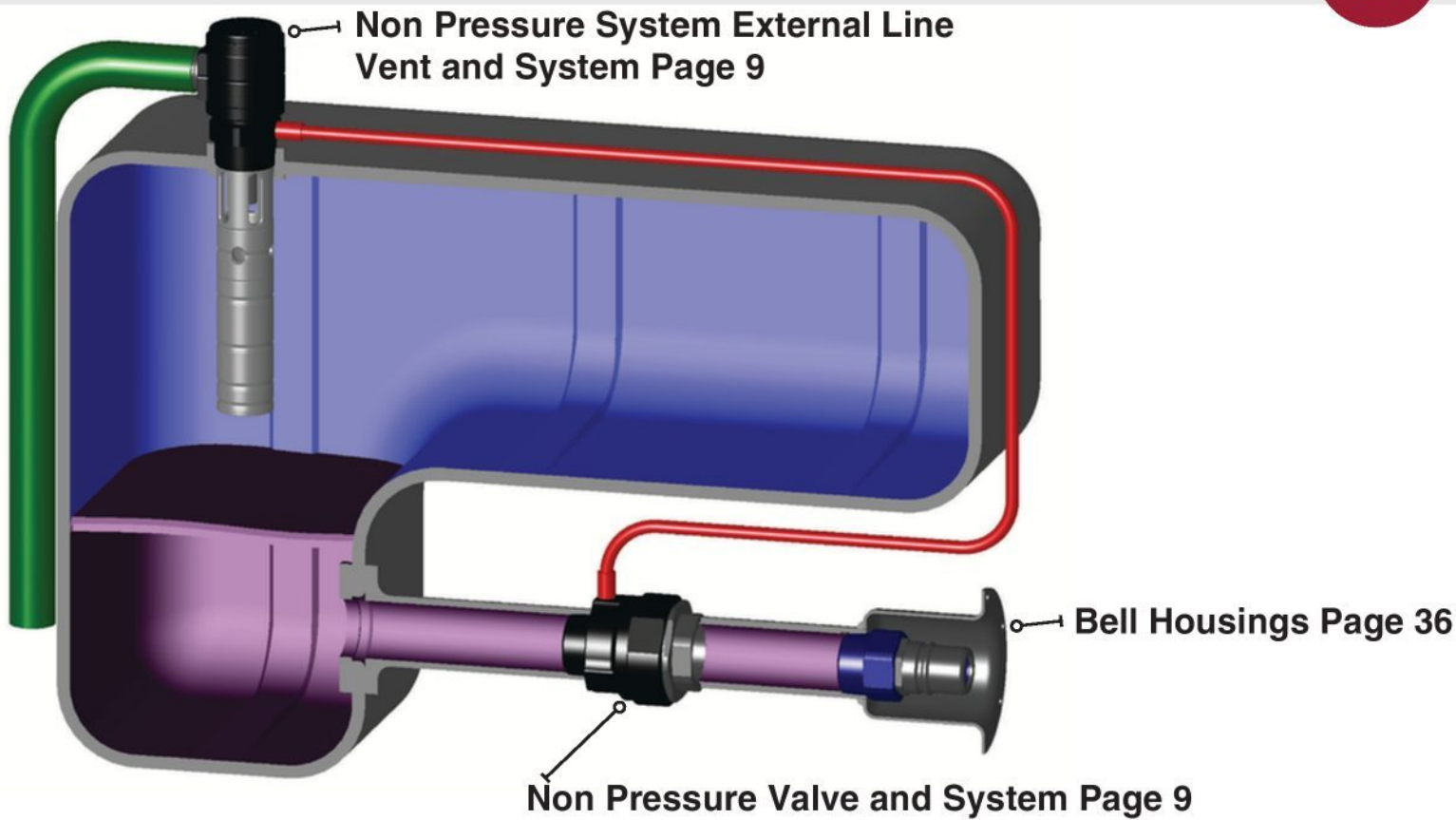
PRESSURIZED SYSTEM



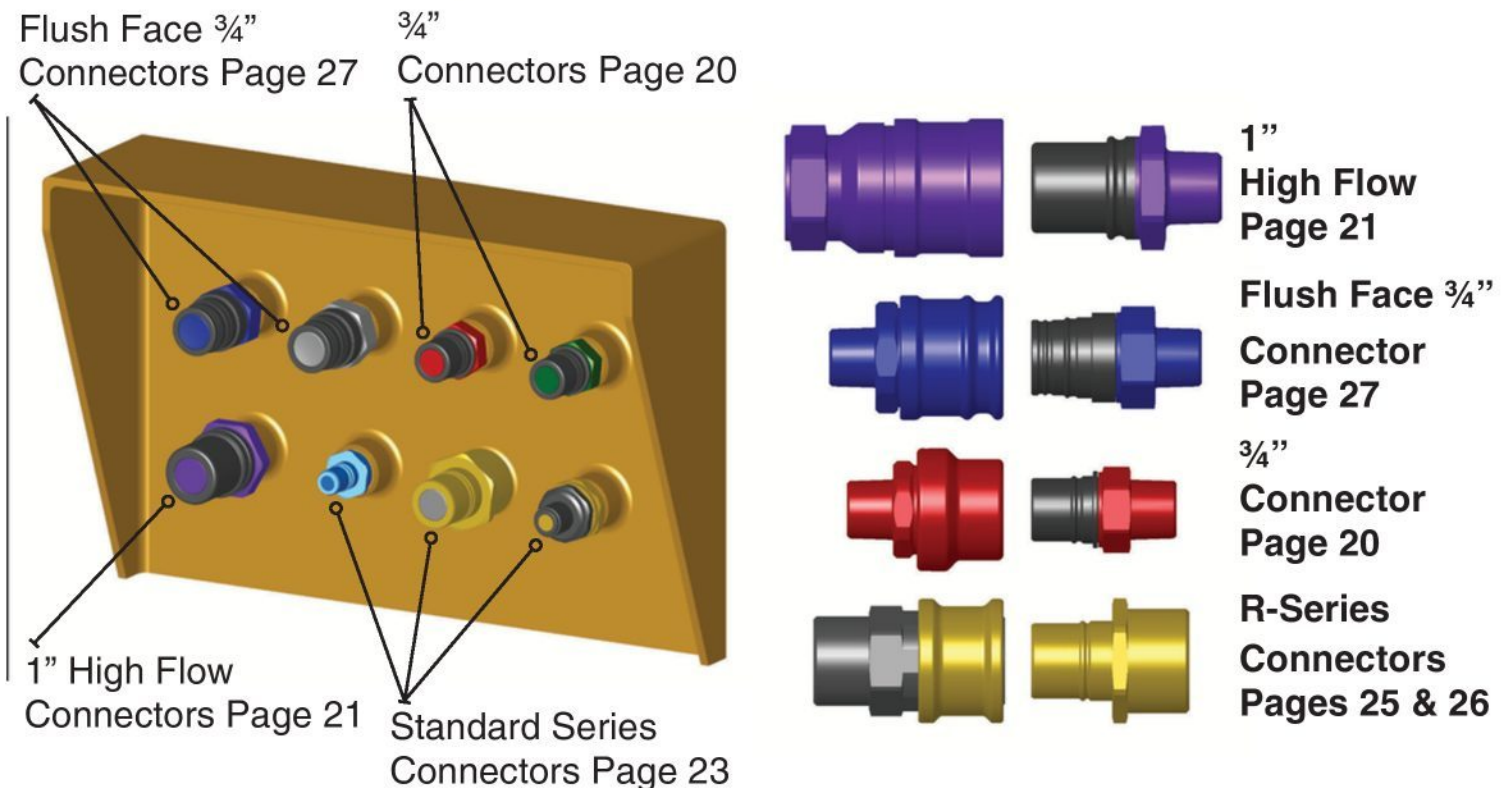
INTERNAL-LINE NON PRESSURE SYSTEM



Non Pressure Valve Internal and System Page 10



QUICK DISCONNECT LINEUP



FloMAX Fuel nozzles have our patented modular back pressure sensor for reliable and repeatable shut off results every time. Our all metal construction ensures a long and durable life for the nozzle. Our FNBL nozzle can flow over 180 GPM (682 LPM) with an 1 1/2" hose and over 211 GPM with a 2" feed hose and a high pressure nozzle shut off. That is the highest flowing 1 1/2" fuel nozzle in the industry. It is easily cleaned and serviced in the field with our easy to remove pullback assembly.

- **Highest flow rate of any 1 1/2" diesel nozzle with a 1 1/2" hose.**
- **All metal construction with stainless steel nose.**
- **Lightest diesel nozzle in industry 5 lbs 14 oz.**
- **Factory adjustable shutoff pressures.**
- **Will not flow when not connected to receiver**



FNBL

The FNBL has a "Ball Lock" system that attaches nozzle to receiver.

FNBL	
Part No.	Description
04025-01	Fuel Nozzle with Ball Lock with Swivel and Plug
04030-01	Fuel Nozzle with Ball Lock with Swivel No Plug
04032-01	Fuel Nozzle with Ball Lock with Plug No Swivel
04034-01	Fuel Nozzle with Ball Lock No Swivel No Plug
04046-01	Fuel Nozzle Repair

FN600	
Part No.	Description
04020-01	Fuel Nozzle with Swivel and Plug
04022-01	Fuel Nozzle with Plug No Swive
04024-01	Fuel Nozzle Sealing Plug
04026-01	Fuel Nozzle Repair

FNBL-NI-P*	
Part No.	Description
04036-01	Fuel Nozzle Non-Interchangeable w/ Swivel and Plug
04030-01	Fuel Nozzle Non-Interchangeable w/ Swivel No Plug
04032-01	Fuel Nozzle Non-Interchangeable w/ Plug No Swivel
04034-01	Fuel Nozzle Non-Interchangeable w/ No Swivel No Plug
04046-01	Fuel Nozzle Extended Hose w/ Swivel Plug
04034-01	Fuel Nozzle Extended Hose w/ Swivel No Plug

This non-interchangeable nozzle is used to help prevent theft or use with different bio diesel blends. Will not connect to standard fuel receivers.

*** Must be used w/ the FRA-NI-C fuel receiver**

FloMAX Fuel nozzles have our patented modular back pressure sensor for reliable and repeatable shut off results every time. Our all metal construction ensures a long and durable life for the nozzle. FN600 nozzle can flow up to 180 GPM (682 LPM) with an 1 1/2" hose and over 211 GPM with a 2" feed hose and a high pressure nozzle shut off. That is the highest flowing 1 1/2" fuel nozzle in the industry. It is easily cleaned and serviced in the field with our easy to remove pullback assembly.

- **Highest flow rate of any 1 1/2" diesel nozzle with a 1 1/2" hose.**
- **All metal construction with stainless steel nose.**
- **Lightest diesel nozzle in industry 5 lbs 14 oz.**
- **Factory adjustable shutoff pressures.**

FN600



The 04020-01 has a "Dog Lock" system to attach nozzle to receiver.

FNBL-EX Extended Nose Fuel nozzle.



04036-01

Non-Interchangeable fuel nozzle.
Only fits the FRA-NI-C fuel receiver.



Allows extra space between the pullback handle and the equipment. An industry first. Very popular in cold climates where the operator is wearing thick gloves.



04542-01

5 FUEL NOZZLES FN800

FloMAX FN800 fuel nozzles have our patented modular back pressure sensor for reliable and repeatable shut off results at all flows, every time. It is the highest flowing 1 ½" fuel nozzle in the industry with a 211+ GPM (800 LPM+) rating with a 2" inlet hose. It is easily cleaned and serviced in the field with our easy to remove pullback assembly. Factory adjustable shut off pressure. Will not flow when not connected to a receiver.

- **Highest flowing of any 1 ½" diesel nozzle, 211+ GPM.**
- **All metal construction with stainless steel.**
- **Simple upgrade from the standard FNBL or FN600 nozzle.**
- **Used with standard fuel receivers.**

FN800



FN800

Part No.	Description
07110-01	Fuel nozzle with ball lock, 2" inlet swivel and plug
07112-01	Fuel nozzle with ball lock, 2" inlet swivel, No Plug
07114-01	Fuel nozzle with ball lock, with Plug, No swivel
07116-01	Fuel nozzle w/ ball lock, No swivel, No Plug
07118-01	Fuel nozzle electronic mount

Electronic lock out fuel nozzle mount interfaces with all standard 1 ½" fuel nozzles. Helps prevent fuel nozzle and equipment damage due to non-stowage



FloMAX Fuel nozzles have our patented modular back pressure sensor for reliable and repeatable shut off results every time. Our all metal construction ensures a long and durable life for the nozzle. FN600 nozzle can flow up to 180 GPM (682 LPM) with an 1 ½" hose and over 211 GPM with a 2" feed hose and a high pressure nozzle shut off. That is the highest flowing 1 ½" fuel nozzle in the industry. It is easily cleaned and serviced in the field with our easy to remove pullback assembly.

- Highest flowing of any 2" diesel nozzle, 400 GPM.
- All metal construction with stainless steel nose.
- Simple upgrade from the 1 ½" system.
- Connects to our 2" FRX Fuel Receiver.
- Receiver mounts in 2" NPT Bung.

04126-01



04548-01

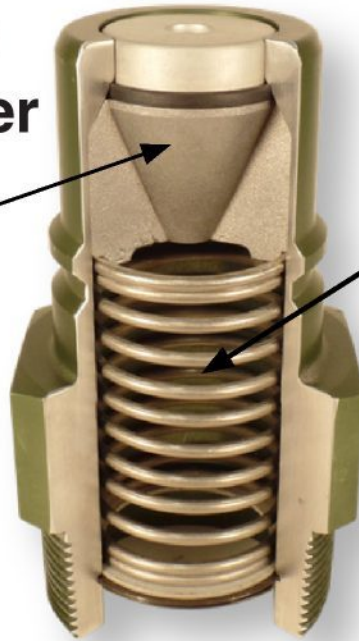


FN800

Part No.	Description
07110-01	Fuel nozzle with ball lock, 2" inlet swivel and plug
07112-01	Fuel nozzle with ball lock, 2" inlet swivel, No Plug
07114-01	Fuel nozzle with ball lock, with Plug, No swivel
07116-01	Fuel nozzle w/ ball lock, No swivel, No Plug
07118-01	Fuel nozzle electronic mount

Competition Fuel Receiver

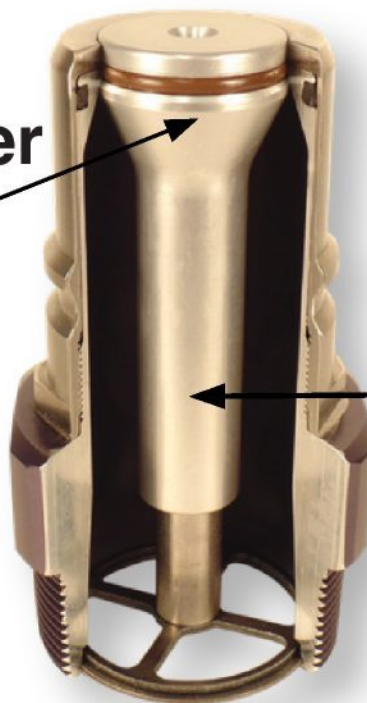
Highly restrictive poppet increases back pressure and decreases flow.



Spring in flow path creates turbulence, restriction and vibration. This causes pre-mature failure of the fuel nozzle poppet.

Flomax Fuel Receiver

Venturi design increases and smooths the flow of fuel.

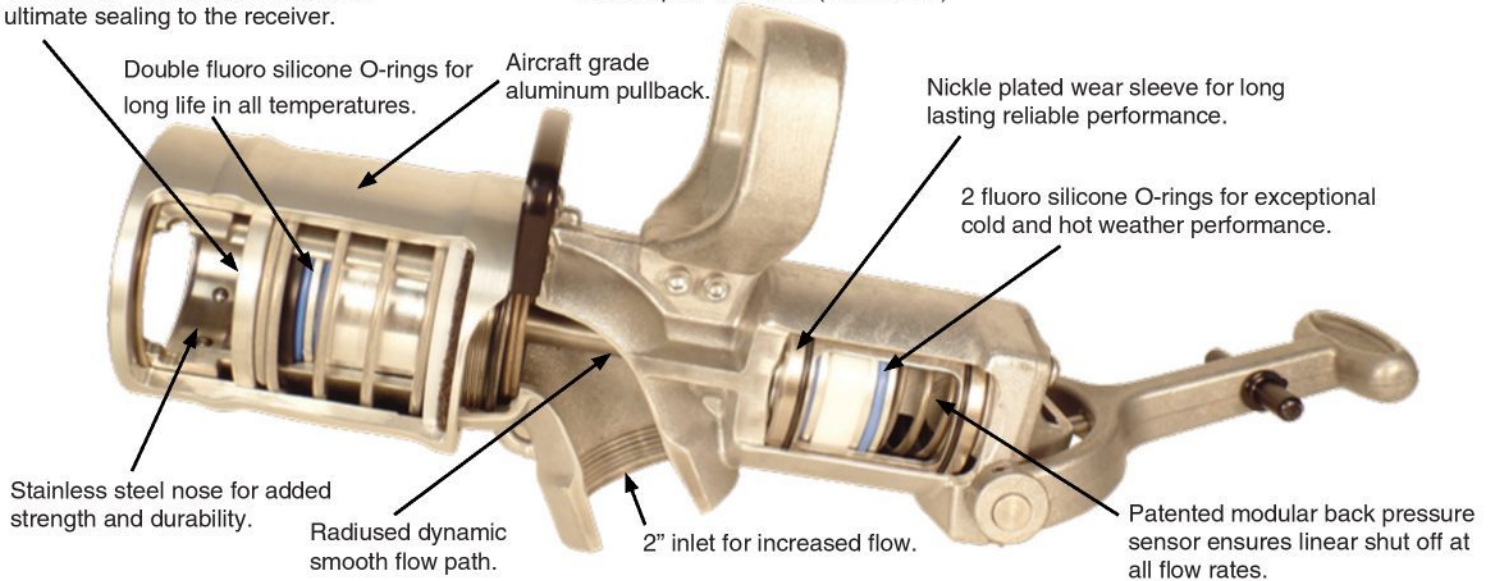


Patented internal spring creates a smooth flow path and less vibration.

FX1500

Vulcanized viton double rib seal for ultimate sealing to the receiver.

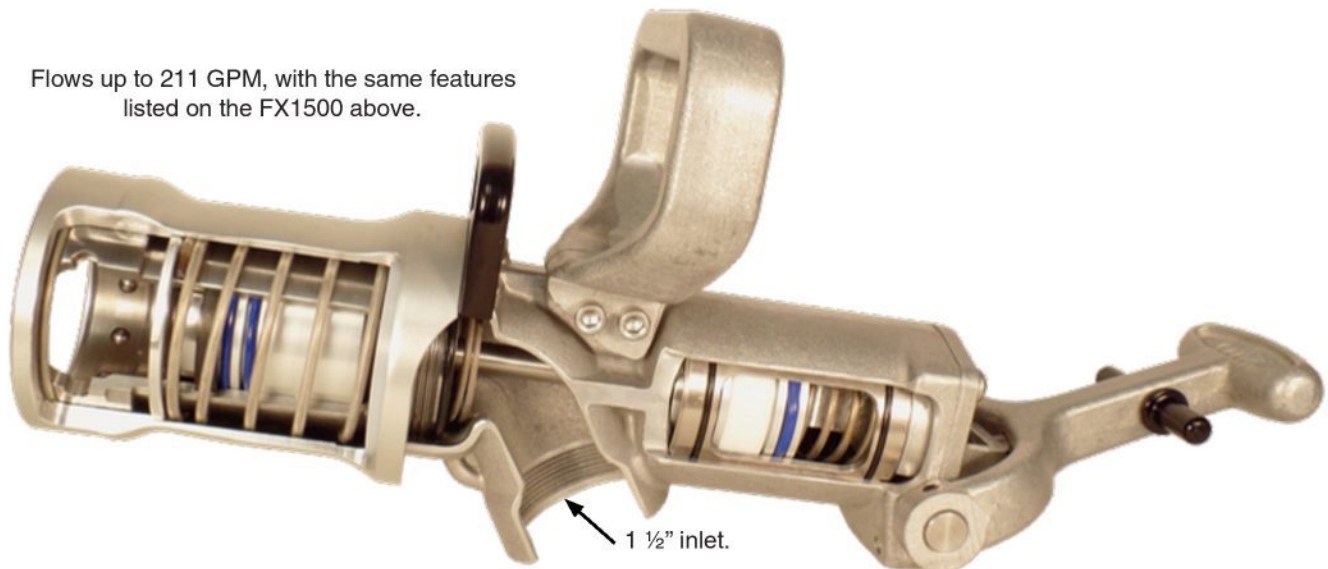
Flows up to 400 GPM (1500 LPM)



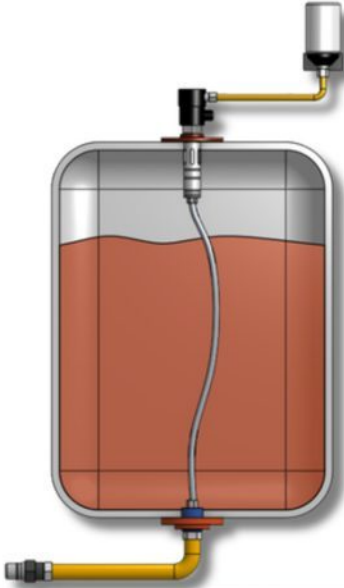
- **Highest flowing of any 2" diesel nozzle, 400 GPM.** • **All metal construction with stainless steel nose.**
- **Simple upgrade from the 1 ½" system.** • **Connects to our 2" FRX Fuel Receiver.** • **Receiver mounts in 2" NPT Bung.**

FNBL

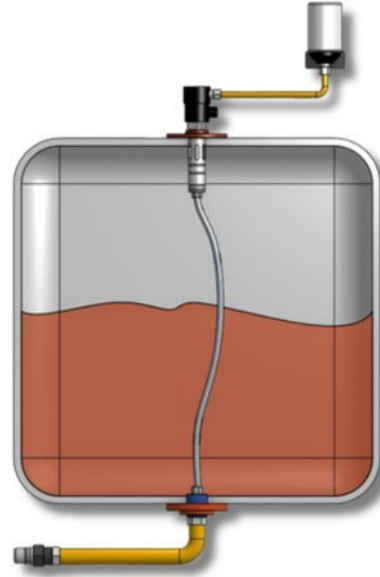
Flows up to 211 GPM, with the same features listed on the FX1500 above.



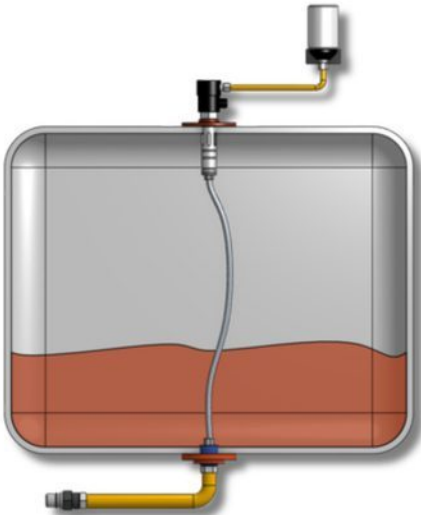
- **Highest flowing of any 1 ½" diesel nozzle, 211+ GPM.** • **All metal construction with stainless steel.**
- **Simple upgrade from the 1 ½" system.** • **Connects to our 1 ½" Fuel Receiver.** • **Receiver mounts in 2" NPT Bung.**

**3'x3' Footprint (1300 in²)**

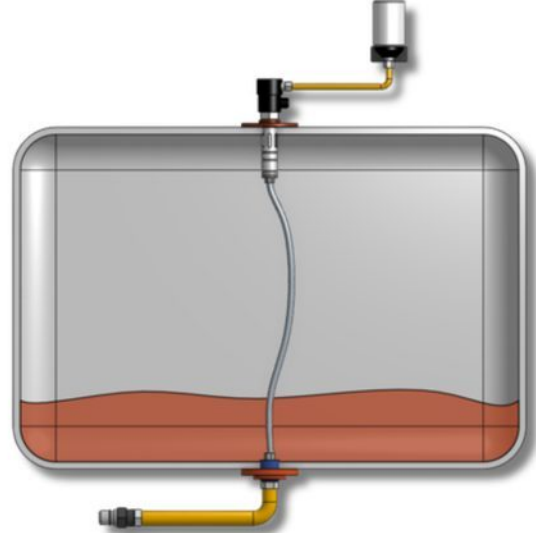
180 GPM	1.9 sec/in
150 GPM	2.2 sec/in
120 GPM	2.8 sec/in

**4'x4' Footprint (2300 in²)**

180 GPM	3.3 sec/in
150 GPM	4.0 sec/in
120 GPM	5.0 sec/in

**5'x5' Footprint (3600 in²)**

180 GPM	5.2 sec/in
150 GPM	6.2 sec/in
120 GPM	7.8 sec/in

**6'x6' Footprint (5200 in²)**

180 GPM	7.5 sec/in
150 GPM	9.0 sec/in
120 GPM	11.2 sec/in

Slim, narrow tanks fill faster than wide tanks

• Tank Filling Notes

- Fuel rises faster in a tall, narrow tank than shorter and wider tanks
- Enough ullage needs to be left at the top of the tank to accommodate for fill rate and tank size and shape
- Improper and inadequate venting is a common cause of filling problems when using high fill rate nozzles
- Make sure there is a free and unrestricted air path out of the tank. Restriction in flow path after receiver
- Low pressure nozzle not correct for tank configuration

• Factors that affect fuel nozzle shut off

- Tall, narrow tank which can increase head pressure on the receiver.
- Long or circuitous flow path of feed hose after receiver
- Inadequate venting of tank, causing pressurization while filling
- Restriction in flow path after receiver
- Low pressure nozzle not correct for tank configuration

• Factors that can cause fuel to spill out of vent

- Too short of an internal stem vent, not allowing proper pressurization prior to overfill
- Non-pressure system sensing line is broken or not hooked up
- Too slow of a fill rate to properly operate the nozzle. Needs to be 40+ GPM
- High pressure nozzle not correct for tank configuration and ullage

• Factors that can affect non-pressure fueling systems

- Most systems need a higher pressure shut-off nozzle to function correctly
- Filling at too low of a fill rate. Needs to be 40+ GPM
- Sensing line between vent and receiver is blocked or disconnected
- Inadequate venting of tank
- Restricted vent holes during installation

11 EXTERNAL LINE NON-PRESSURE FUELING SYSTEM

External system is rated at 400 GPM with out standard fuel nozzles. Our external line system fits into all standard 2" NPT openings

- **Patented design (patent #US10597284B2) reduces foaming and increases flow**
- **Only system with an unrestricted "straight through" flow path**
- **The external line system can flow over 400GPM - a higher flow rate than any competitor**
- **All non-pressure fueling systems are factory tested prior to shipping to ensure reliability**
- **Integrated roll-over spill protection**
- **Optional rotatable vent top**
- **Built to last with all stainless steel and aircraft-grade aluminum construction**
- **Compatible with both plastic and steel tank types**

06054-01



06046-01



06040-01



Fueling System Kits

Part No.	Description
06020-01	External Kit with Rec., hose, and fitting
06022-01	External Kit with Rec. no hose, fitting
06028-01	External Kit with vent top, hose, fittings
06030-01	External Kit with vent top, no hose, fittings
06040-01	NPS Filter Kit, bracket and filter
06022-01	External Kit with Rec. No Hose
06028-01	External Kit with vent top, hose, fittings

Vents and Filters

Part No.	Description
06042-01	NPS Filter Bracket Black anodized
06044-01	NPS Filter
06046-01	Non-Pressure 2" Vent external hose applications
06054-01	Non-Pressure Valve External
06050-01	Non-Pressure 2" Vent external hose applications w/ rotatable vent top

All stainless steel and aircraft grade aluminum construction means they are built to last. Our internal line system fits into all standard 2" NPT openings and the receiver is the same size as a STANDARD FUEL RECEIVER. All of your current safety enclosures and panel boxes will still work as designed with our internal non-pressure system.

- **Patented design (patent #US9772043B2) reduces foaming and increases flow**
- **Only system with an unrestricted "straight through" flow path**
- **Internal system is rated at 200 GPM with our standard fuel nozzles.**
- **All non-pressure fueling systems are factory tested prior to shipping to ensure reliability**
- **Integrated roll-over spill protection**
- **Optional rotatable vent top**
- **Compatible with both plastic and steel tank types**

**Rotatable Vent
06052-01**



Internal Kits	
Part No.	Description
06024-01	Internal Kit with hose and fittings
06026-01	Internal Kit, no hose, fittings
06036-01	Internal Kit with vent top, hose, fittings
06038-01	Internal Kit with vent top, no hose, fittings

Vent and Filter Kits	
Part No.	Description
06040-01	NPS Filter Kit, bracket and filter
06042-01	NPS Filter Bracket Black Anodized
06044-01	NPS Filter
06048-01	Non-Pressure 2" Vent Internal Hose Applications
06052-01	Non-Pressure 2" Vent Internal Hose Applications w/rotatable vent top
06056-01	Non-Pressure Valve Internal

13 NON-PRESSURE SYSTEM

All in one flanged Non-Pressure valve. Saves space and is more compact than any of our competitors. We have them in our massive 2" FRX receiver size as well as our standard 1 1/2 FR-RS configuration. Can be configured to an internal or external line configuration. NPS-1 Kit has all of the components necessary for a trouble free installation.

- *Optional rotatable vent top has one-way fluoro silicone check valves to only allow filtered ingress air into the tank*
- *Rotatable vent top available on both internal and external line systems*

06020-01

Everything that you need for a trouble free installation.

Flange-All-In-One non pressure valve 2" FRX Receiver.

NPV-F Flange-All-In-One Non-Pressure Valve Standard Receiver.

NPS Drain Kit

Allows draining of the tank while the Non-Pressure Valve is in place. Contains Metal Case, Diaphragm pump, BFN-P and hose.



All stainless steel and aircraft grade aluminum construction means they are built to last. Our internal line system fits into all standard 2"NPT openings and the receiver is the same size as a STANDARD FUEL RECEIVER! All of your current safety enclosures and panel boxes will still work as designed with our internal non-pressure system.

Patented design (patent #US9772043B2) reduces foaming and increases flow

- Only system with an unrestricted "straight through" flow path
- Flow is rated at 211 GPM

06036-01

Rotatable Vent Top
All in one kit for internal line applications with vent top.



06024-01

All in one kit for internal line applications.

15 NPV-I, FR-NP-EW

- NPV-I, One piece in-line non-pressure valve allows installing a non-pressure valve in any 2" NPT system
- Built with the same robust parts and quality as our standard non pressure systems.
- The FR-NP-EW fits the EMCO WHEATON® nozzle allowing a non pressure shut off system while using the EW nozzle.
- Made from aircraft grade aluminum and factory tested prior to shipping.

06064-01

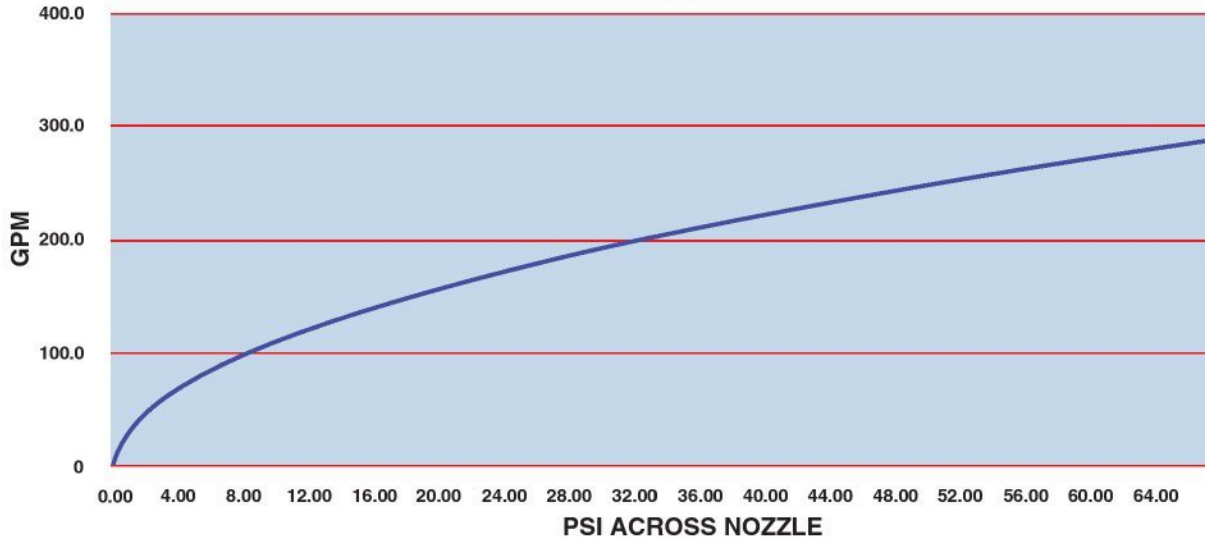


06066-01

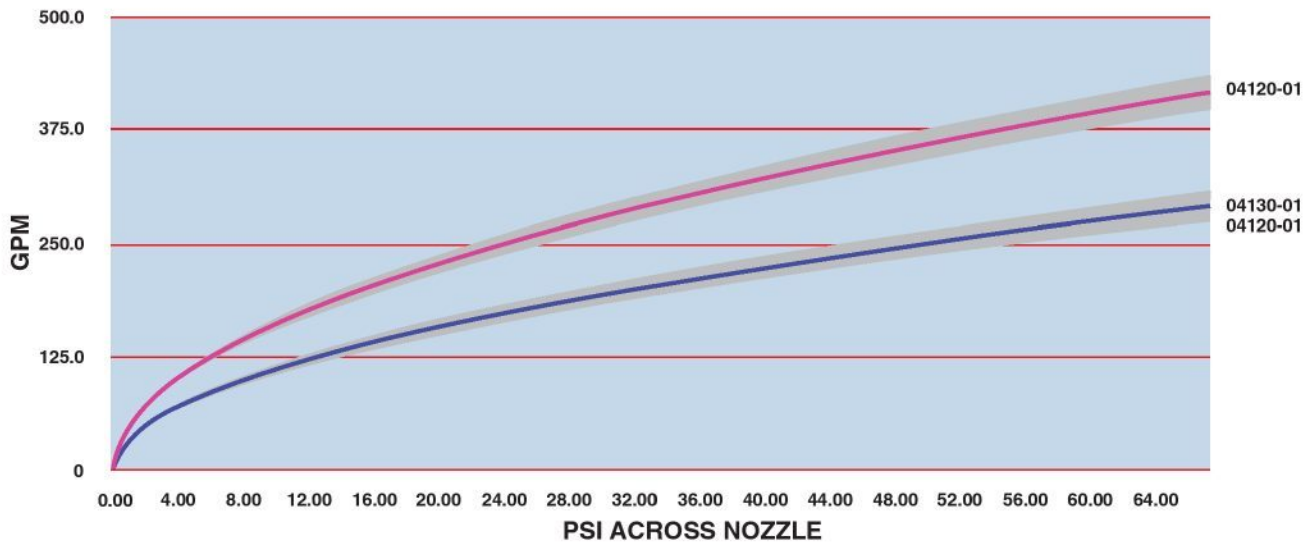
The FR-NP-EW fits the EMCO WHEATON® nozzle allowing a non-pressure shut off system while using the EW nozzle.



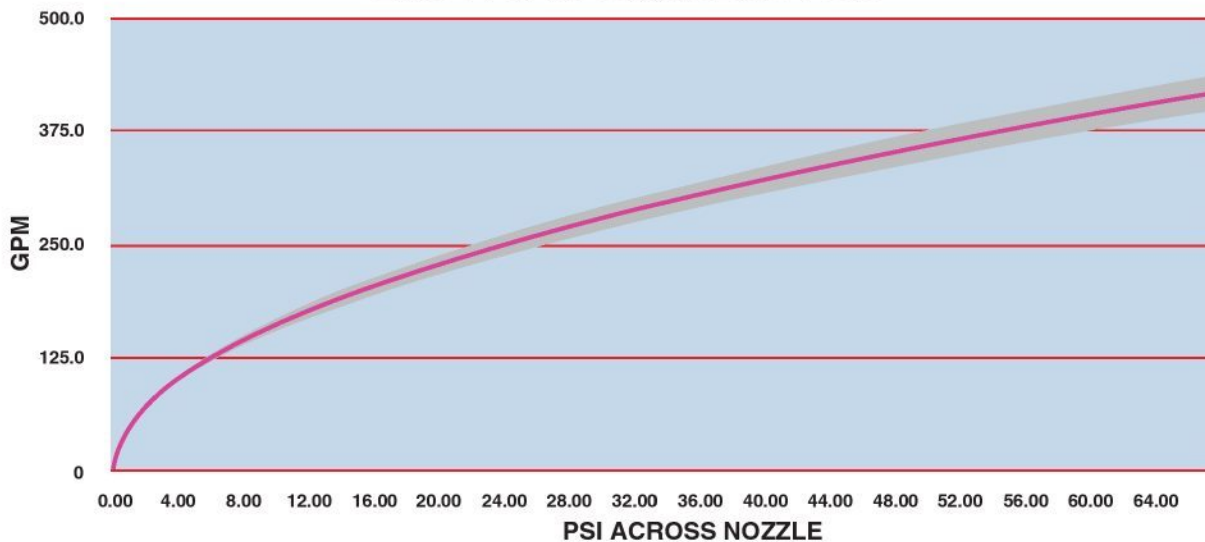
04030-01 / 04020-01 Supply PSI: Cv35.1



FLOW RATES



04120-01 GPM / Supply PSI: Cv 50.5



17 TOP FILL

- Top Fill Units allow filling and venting from the same single tank opening
- Non-Pressure application prevents overfilling of tanks greatly increasing safety and reducing hazardous spills
- Available in both straight and 90 degree configurations
- Fits a 2" NPT opening, has a flow rate of 70+ GPM and designed to accommodate remote receiver mounting
- Patent #US10597284B2

06112-01



06112-01



- Top Fill Units allow filling and venting from the same single tank opening
- Non-Pressure application prevents overfilling of tanks greatly increasing safety and reducing hazardous spills
- Available in both straight and 90 degree configurations
- Fits a 2" NPT opening, has a flow rate of 70+ GPM and designed to accommodate remote receiver mounting
- Patent #US10597284B2

06102-01



06102-01



19 NON-PRESSURE SYSTEM TANK CONFIGURATION

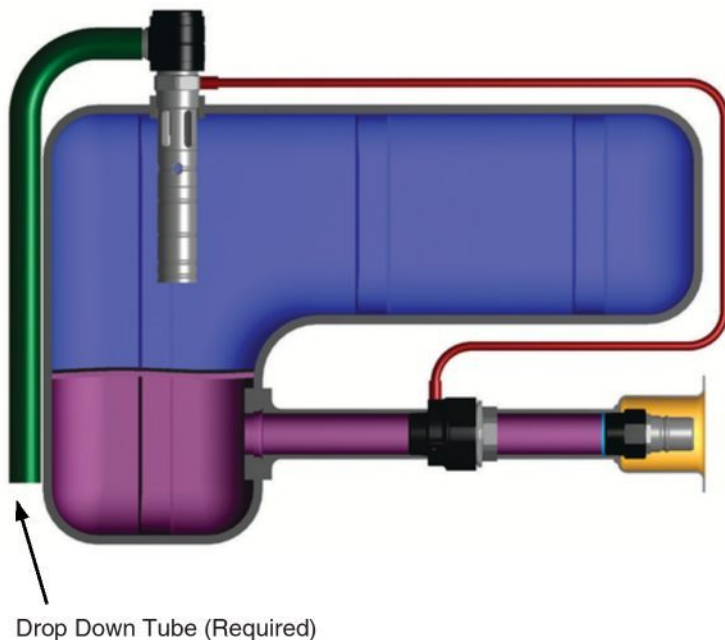
External System:

- 400 GPM Capable
- Drop down tube is required installation on both vent types
- Remove rubber cover and screen before installing drop hose
- NPV can be mounted to the tank

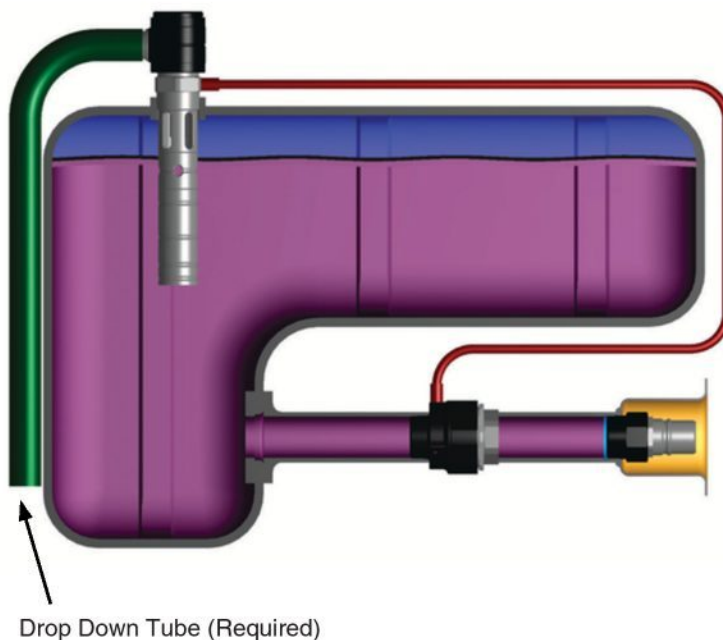
Internal System:

- Fits in standard enclosures
- 200 GPM capable
- Excellent slosh resistance

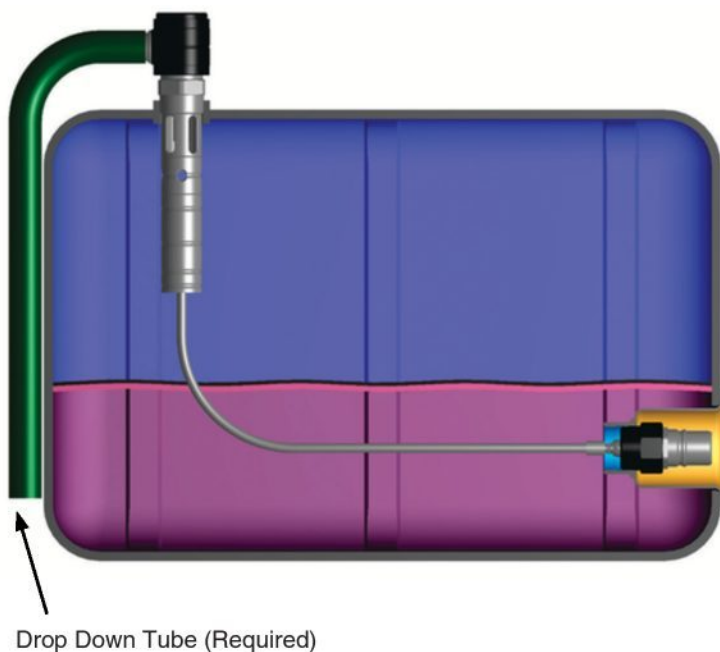
External Tank Empty



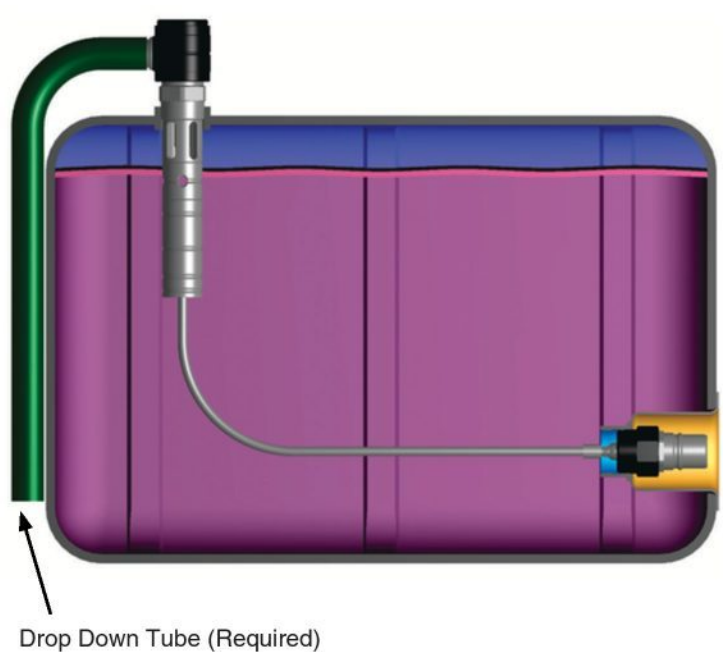
External Tank Full



Internal Tank Empty

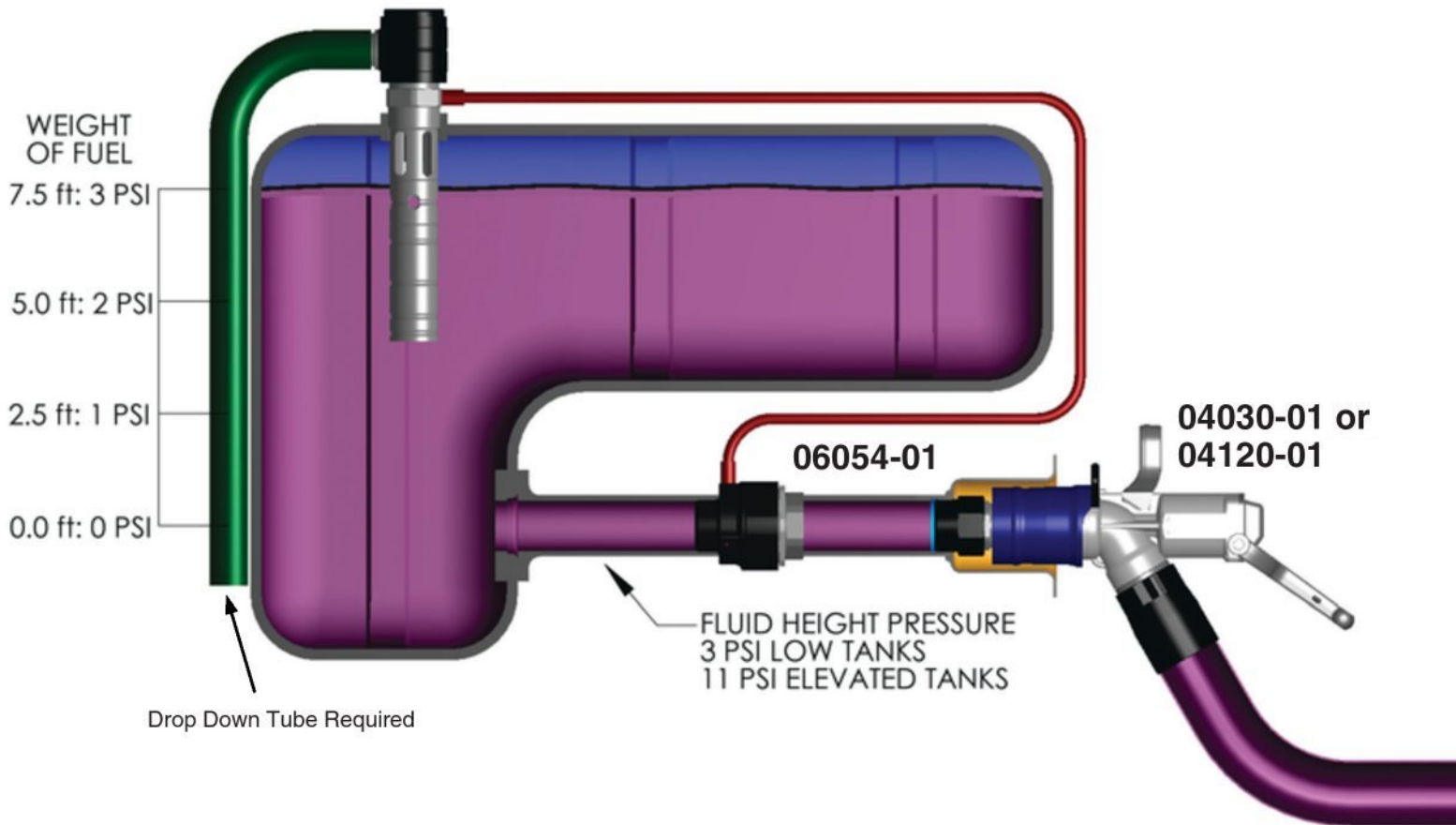


Internal Tank Full



Note: All tanks shown with green drop down tubes.

Always use a high pressure shut-off fuel nozzle for all non-pressure system installations.



Installation Tips:

- Keep the sensing line hose free of excessive bends; less than three 90° bends preferred. The external hose may need to be cut to length.
- The internal NPS hose connections are located on the bottom of the VENT and the rear of the Receiver.
- The external NPS hose connections are located above the threads where the VENT mounts to the tank and one of the three ports on the exterior of the 06054-01.
- For the external system, the 06054-01 mounts between the tank and a low pressure fuel receiver. 06054-01 has a specified flow direction that is indicated on the part
- For the internal system, the Receiver retains the same dimensions as a standard fuel receiver and mounts directly to the tank.

21 FUEL RECEIVERS

All FloMAX Fuel receivers have our patented enclosed poppet stem spring for a smooth and higher flowing fuel path. This greatly enhances the life of both the receiver and fuel nozzle due to the decrease in fuel restriction and vibration.

Our FR-RS series of fuel receivers have a patented removable stainless steel wear sleeve. This revolutionary patented concept allows the fuel receiver wear surface to be replaced very quickly and easily without removing the fuel receiver from the tank or the loss of any fuel. It uses the same internal spring concept that has been so successful in our other receivers.

- **Patented internal spring reduces vibration and increases flow**
- **Patented removable wear sleeve allows easy replacement without draining tank (FR-RS Only)**
- **Available in both standard and low pressure models**



Fuel Receivers	
Part No.	Description
04520-01	Fuel Receiver - Steel
04522-01	Fuel Receiver - Steel with Cap
04524-01	Fuel Receiver - Aluminum
04526-01	Fuel Receiver - Aluminum w/ Cap
04528-01	Fuel Receiver - Aluminum - Anti-Theft
04530-01	Fuel Receiver - Aluminum - Anti-Theft w/ Cap
04532-01	Fuel Receiver - w/ Removable Sleeve
04536-01	Fuel Receiver - Removable Sleeve - Anti-Theft
04538-01	Fuel Receiver - Rem. Sleeve - Anti-Theft w/ Cap
04540-01	Removable Sleeve - Replacement Sleeve
04542-01	Fuel Receiver - Non-interchangeable
04544-01	Fuel Receiver - Non-interchangeable w/Cap
04546-01	Fuel Receiver - 2"
04548-01	Fuel Receiver - 2" w/Cap
04550-01	Fuel Receiver - 2" Cap
04552-01	Fuel Receiver - 2" Cap Push-on Locking
04554-01	Fuel Receiver - Cap

04554-01



Spring Clip Option Available For All Fuel Receivers.

FR P Cap and FRX P Cap are a Flomax innovation for an easily installed and removed fuel receiver cap. The push to connect design allows easy installation in all weather conditions. The FR P cap fits all standard fuel receivers. The FRX P Cap fits our high flowing 2" FRX Fuel receivers.

Fuel Receivers (Cont.)	
Part No.	Description
04556-01	Fuel Receiver - Cap Push-on Locking
04558-01	Stainless Fuel Receiver Code 61 Flange
04524-01	Stainless Fuel Receiver Code 61 Flange w/Cap

*USE WITH FNBL-NI ONLY See Page 4

FloMAX Flush Face Grease Connectors set a new standard for safety, performance, and reliability in high-pressure applications. Designed to operate where others can't, these connectors combine advanced engineering with rugged construction for dependable performance in the field. US Patent #9708173

- **Connect and disconnect under pressure: an industry-first that improves efficiency and uptime**
- **Rated up to 5,000 PSI for demanding applications**
- **Patented internally sealed ball lock mechanism ensures reliable, trouble-free operation in harsh conditions**
- **All stainless steel construction for long life and repeatable performance**
- **Integrated check valve in receiver for added safety and system protection**
- **1" FNPT connections on both receiver and nozzle for maximum flow and adaptability**
- **High-flow, world-class performance across applications**
- **Fail-safe shutoff design enhances operator safety**
- **Flush face design helps maintain vehicle and system cleanliness**
- **Available in two sizes to fit your application needs**
- **Optional 3/4" BSPP thread configuration available**



Flush Face Grease Connectors

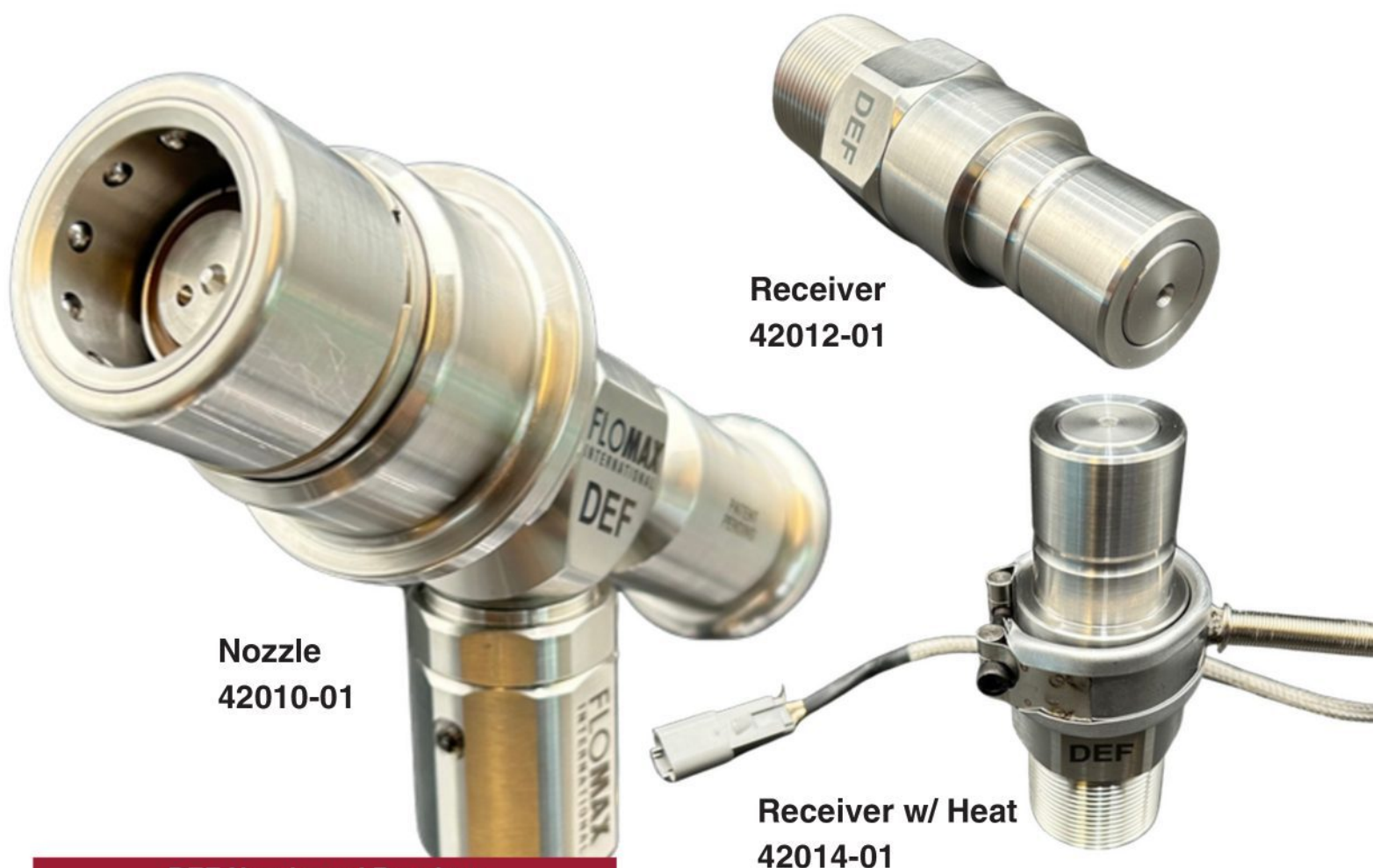
Part No.	Description
02620-01	Flush Face Grease Nozzle - Blue
02624-01	Flush Face Grease Nozzle - Orange
02622-01	Flush Face Grease Receiver - Blue
02626-01	Flush Face Grease Receiver - Orange

23 DEF NOZZLES AND RECEIVERS

DEF filling has never been easier. With flow rates up to 30 gpm and automatic shut-off, you will never have to worry about DEF again. Designed in stainless steel with specialized seals, it operates seamlessly all the way down to the DEF freezing point for maximum reliability. The DEF Nozzle is engineered for high-purity Diesel Exhaust Fluid (DEF) systems, with materials, design features, and performance tuned to the unique challenges of DEF handling.

- **Up to 30 GPM**
- **Designed to operate down to DEF Freezing point**
- **Stainless steel designed for maximum compatibility**

100% COMPATIBLE WITH WIGGINS DEFR RECEIVER SYSTEM



DEF Nozzle and Receiver

Part No.	Description
42010-01	DEF-W Nozzle Stainless Steel
42012-01	DEF-W Receiver Stainless Steel W/Out Heat
42014-01	DEF-W Receiver Stainless Steel W/Heat
42016-01	DEF-H Receiver Stainless Steel W/Out Heat
42018-01	DEF-H Nozzle Stainless Steel
42020-01	DEF-H Receiver Stainless Steel W/Heat

DEF Nozzle and Receiver (Cont.)

Part No.	Description
42022-01	DEF Receiver Heater
42030-01	Flush Face Receiver w/Cap DEF
42032-01	Flush Face Nozzle DEF
42034-01	DEF Nozzle Swivel 3/4" BSP X 1" FNPT

DEF Nozzle (Part No. 42010-01)

Product Overview

The DEF Nozzle is engineered for high-purity Diesel Exhaust Fluid (DEF) systems, with materials, design features, and performance tuned to the unique challenges of DEF handling.

Design & Performance Considerations

- Freeze mitigation: DEF freezes at -11°C ($+12^{\circ}\text{F}$). Receiver, tanks, hoses, and fittings must be heated or drained.
- Air exposure control: Vent lines include check valves to prevent backflow of ambient air.
- Self-sealing valves: Nozzle incorporates self-sealing valves that close automatically.

Ordering / Reference Information

- PartNumber: 40210-01
- Compatible with Wiggins DEFR Receiver
- Intended Use: DEF refueling/filling systems
- Flow Range: 38–114 lpm (10–30 gpm)

Application Notes & Best Practices

- Ensure all components are rated for DEF compatibility.
- Insulate or heat all lines to avoid freeze-blockage.
- Minimize air exposure during transfer and storage.
- Perform regular maintenance of seals, valves, and heaters.



DEF Nozzle and Receiver

Feature	Specification / Description
Flow Range	38-114 LPM (10-30 GPM)
Automatic Shut-off	Yes (self-sealing valve closes upon early disconnection)
Tank Pressurization	8 PSI tank shut-off if non-pressure system is not installed
Remote Fill Capability	Can be filled from remote fill point via heated/insulated piping
Material Construction	DEF-compatible stainless steel and plastic seals
Freeze Handling	Designed for DEF freezing point (-11°C / 12°F)

Disclaimer & Safety Notes

Always adhere to regulations when installing/operating DEF equipment. Use compatible materials only. Performance may vary depending on system design, environment, and installation quality.

25 3/4" CONNECTORS

FloMAX has a unique series of connectors designed for great and to help prevent cross contamination. Our Patented non- interchangeable feature means each color will only mate with its corresponding colored receiver or nozzle. All wear components are mad from stainless steel and non-wear components are aircraft grade anodized aluminum. The stainless steel latching mechanism ensures a long lasting and robust connection every time.

- *FloMAX invented the non-interchangeable series of connectors*
- *Eliminates cross contamination.*
- *All metal construction ensures longevity.*

- **50 GPM**
- **NPTM 3/4" Thread Size**
- **500 PSI Working Pressure**

Receiver
02042-01 (Teal)

JIC Ends
Available



JIC Receiver



Colors Available :	
Red	
Gold	
Teal	
Violet	
Navy	
Brown	

Nozzle
02036-01 (Teal)



Receiver w/Cap
02092-01 (Brown)



Receiver w/Cap
02012-01 (Red)



Nozzle w/ Plug
02070-01 (Navy)



FloMAX has a unique series of connectors designed for great and to help prevent cross contamination. Our Patented non- interchangeable feature means each color will only mate with its corresponding colored receiver or nozzle. All wear components are mad from stainless steel and non-wear components are aircraft grade anodized aluminum. The stainless steel latching mechanism ensures a long lasting and robust connection every time.

- **FloMAX invented the non-interchangeable series of connectors**
- **Eliminates cross contamination.**
- **All metal construction ensures longevity.**

- **50 GPM**
- **NPTM 3/4" Thread Size**
- **500 PSI Working Pressure**

Engine Nozzles and Receivers	
Part No.	Description
02004-01	Engine Nozzle Ball Lock #1 - Red
02006-01	Engine Nozzle Ball Lock w/ Plug #1 - Red
02008-01	Engine Nozzle Ball Lock Plug #1 - Red
02010-01	Engine Receiver #1 - Red
02012-01	Engine Receiver w/ Cap #1 - Red
02014-01	Engine Receiver Cap #1 - Red
02016-01	Engine Receiver with JIC Bulkhead Base #1 - Red
02018-01	Engine Receiver w/JIC Bulkhead Base w/ Cap #1 - Red
02020-01	Engine Nozzle Ball Lock #2 - Gold
02022-01	Engine Nozzle Ball Lock w/ Plug #2 - Gold
02024-01	Engine Nozzle Ball Lock Plug #2 - Gold
02026-01	Engine Receiver #2 - Gold
02028-01	Engine Receiver w/ Cap #2 - Gold
02030-01	Engine Receiver Cap #2 - Gold
02032-01	Engine Receiver with JIC Bulkhead Base #2 - Gold
02034-01	Engine Receiver w/ JIC Bulkhead Base w/ Cap #2 - Gold
02036-01	Engine Nozzle Ball Lock #3 - Teal
02038-01	Engine Nozzle Ball Lock w/ Plug #3 - Teal
02040-01	Engine Nozzle Ball Lock Plug #3 - Teal
02042-01	Engine Receiver #3 - Teal
02044-01	Engine Receiver w/ Cap #3 - Teal
02046-01	Engine Receiver Cap #3 - Teal
02048-01	Engine Receiver with JIC Bulkhead Base #3 - Teal
02050-01	Engine Receiver w/ JIC Bulkhead Base w/ Cap #3 - Teal

Engine Nozzles and Receivers (Cont.)	
Part No.	Description
02052-01	Engine Nozzle Ball Lock #4 - Violet
02054-01	Engine Nozzle Ball Lock w/ Plug #4 - Violet
02056-01	Engine Nozzle Ball Lock Plug #4 - Violet
02058-01	Engine Receiver #4 - Violet
02060-01	Engine Receiver w/ Cap #4 - Violet
02062-01	Engine Receiver Cap #4 - Violet
02064-01	Engine Receiver with JIC Bulkhead Base #4 - Violet
02066-01	Engine Receiver w/JIC Bulkhead Base w/ Cap #4 - Violet
02068-01	Engine Nozzle Ball Lock #5 - Navy
02070-01	Engine Nozzle Ball Lock w/ Plug #5 - Navy
02072-01	Engine Nozzle Ball Lock Plug #5 - Navy
02074-01	Engine Receiver #5 - Navy
02076-01	Engine Receiver w/ Cap #5 - Navy
02078-01	Engine Receiver Cap #5 - Navy
02080-01	Engine Receiver with JIC Bulkhead Base #5 - Navy
02082-01	Engine Receiver w/ JIC Bulkhead Base w/ Cap #5 - Navy
02084-01	Engine Nozzle Ball Lock #6 - Brown
02086-01	Engine Nozzle Ball Lock w/ Plug #6 - Brown
02088-01	Engine Nozzle Ball Lock Plug #6 - Brown
02090-01	Engine Receiver #6 - Brown
02092-01	Engine Receiver w/ Cap #6 - Brown
02094-01	Engine Receiver Cap #6 - Brown
02096-01	Engine Receiver with JIC Bulkhead Base #6 - Brown
02098-01	Engine Receiver w/ JIC Bulkhead Base w/ Cap #6 - Brown

27 HIGH FLOW 1" CONNECTORS

The High Flow series of connectors have the same non interchangeable feature as the ¾" series but are in a higher flowing 1" NPT size.

High Flow Nozzle



- 113 GPM
- Seven Non-Interchangeable Colors
- 1" NPT Base
- 500 PSI Working Pressure

Colors Available :	
Red	
Gold	
Teal	
Violet	
Navy	
Brown	
Blue/Grey	

High Flow Nozzles and Receivers

Part No.	Description
02404-01	High Flow Nozzle #1 - Red
02406-01	High Flow Nozzle w/ Plug #1 - Red
02408-01	High Flow Nozzle Plug #1 - Red
02410-01	High Flow Receiver #1 - Red
02412-01	High Flow Receiver w/ Cap #1 - Red
02414-01	High Flow Receiver Cap #1 - Red
02416-01	High Flow Nozzle #2 - Gold
02418-01	High Flow Nozzle w/ Plug #2 - Gold
02420-01	High Flow Nozzle Plug #2 - Gold
02422-01	High Flow Receiver #2 - Gold
02424-01	High Flow Receiver w/ Cap #2 - Gold
02426-01	High Flow Receiver Cap #2 - Gold
02428-01	High Flow Nozzle #3 - Teal
02430-01	High Flow Nozzle w/ Plug #3 - Teal
02432-01	High Flow Nozzle Plug #3 - Teal
02434-01	High Flow Receiver #3 - Teal
02436-01	High Flow Receiver w/ Cap #3 - Teal
02438-01	High Flow Receiver Cap #3 - Teal
02440-01	High Flow Nozzle #4 - Violet
02442-01	High Flow Nozzle w/ Plug #4 - Violet
02444-01	High Flow Nozzle Plug #4 - Violet
02446-01	High Flow Receiver #4 - Violet
02448-01	High Flow Receiver w/ Cap #4 - Violet
02450-01	High Flow Receiver Cap #4 - Violet



High Flow Receiver

High Flow Nozzles and Receivers

Part No.	Description
02452-01	High Flow Nozzle #5 - Navy
02454-01	High Flow Nozzle w/ Plug #5 - Navy
02456-01	High Flow Nozzle Plug #5 - Navy
02458-01	High Flow Receiver #5 - Navy
02460-01	High Flow Receiver w/ Cap #5 - Navy
02462-01	High Flow Receiver Cap #5 - Navy
02464-01	High Flow Nozzle #6 - Brown
02466-01	High Flow Nozzle w/ Plug #6 - Brown
02468-01	High Flow Nozzle Plug #6 - Brown
02470-01	High Flow Receiver #6 - Brown
02472-01	High Flow Receiver w/ Cap #6 - Brown
02474-01	High Flow Receiver Cap #6 - Brown
02476-01	High Flow Nozzle #7 - Blue/Grey
02748-01	High Flow Nozzle w/ Plug #7 - Blue/Grey
02480-01	High Flow Nozzle Plug #7 - Blue/Grey
02482-01	High Flow Receiver #7 - Blue/Grey
02484-01	High Flow Receiver w/ Cap #7 - Blue/Grey
02486-01	High Flow Receiver Cap #7 - Blue/Grey

The High Flow Nozzle (HFN) and High Flow Receiver (HFR) line of dry break fittings consist of seven sets of fittings with each pair offering a minimum flow area equivalent to 1" schedule 80 pipe. The fittings incorporate the following design features:

1. The receiver and nozzle of each set will only couple with each other offering complete protection against cross contamination of fluids.
2. Receiver and nozzle sets are color coded to simplify identification of matching component sets.
3. All wear parts are constructed of 416 stainless steel for long life and corrosion resistance.
4. All non-wear components are constructed of anodized 6061 alloy aluminum for high strength, light weight, and corrosion resistance.
5. All fittings have a 500 psi working pressure rating with 1500 psi minimum burst pressure rating.
6. The standard mounting is 1" male NPT for all receivers and 1" female NPT for all nozzles with optional mounting configurations available.
7. All fittings incorporate a "ball lock" mechanism with 7/32" 440-C grade stainless steel balls to insure smooth and reliable operation.
8. Maximum flow rate using ISO 46 hydraulic oil (third party tested) is 113 GPM (428 LPM).

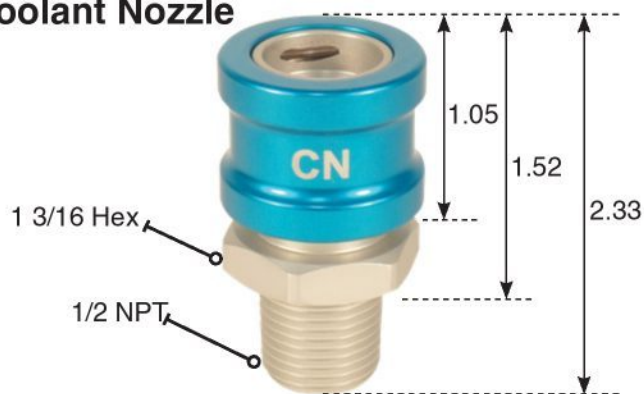
Physical Description				
Part	Length	Diameter	Hex Size	Weight
Nozzle	3.92" (100 mm)	2.50" (64 mm)	2.00" (51 mm)	1.30 lbs (640 g)
Receiver	3.40" (86 mm)	1.85" (47 mm)	2.00" (51 mm)	0.60 lbs (320 g)
Coupled Set	5.35" (136 mm)			1.90 lbs (960 g)

29 COOLANT AND ENGINE CONNECTORS-STANDARD SERIES

FloMAX Standard Series Connectors are fully compatible and interchangeable with industry-standard connections, making integration seamless. Built with 100% metal construction, they combine stainless steel durability with anodized aircraft-grade aluminum for long-lasting performance in demanding environments. Color-coded and clearly labeled mating components allow for fast, accurate connection every time—reducing errors and improving efficiency in the field.

- All metal construction ensures reliable performance.
- Fits all industry standard connectors.
- Color coded for quick and easy identification

Coolant Nozzle



Part No.	Description
01220-01	Coolant Nozzle
01222-01	Coolant Nozzle w/Plug
01224-01	Coolant Nozzle Plug

Coolant Receiver



Part No.	Description
01226-01	Coolant Receiver
01228-01	Coolant Nozzle w/Cap
01230-01	Coolant Nozzle Cap

Engine Nozzle



Part No.	Description
01020-01	Engine Nozzle Ball Lock
01022-01	Engine Nozzle Ball Lock w/ Plug
01024-01	Engine Nozzle Ball Lock Plug

Engine Receiver



Part No.	Description
01026-01	Engine Receiver
01028-01	Engine Receiver w/Cap
01030-01	Engine Receiver Cap
01032-01	Engine Receiver w/JIC Bulkhead Base
01034-01	Engine Receiver w/JIC Bulkhead Base w/Cap
01050-01	Universal 3/4" Series Draining Nozzle
01052-01	Universal 3/4" Series Draining Nozzle w/Plug



01050-01 and 01052-01 Universal extraction nozzles fit all ERS 3/4 Series receivers for easy evacuation and draining of tanks

FloMAX Standard Series Connectors are fully compatible and interchangeable with industry-standard connections, making integration seamless. Built with 100% metal construction, they combine stainless steel durability with anodized aircraft-grade aluminum for long-lasting performance in demanding environments. Color-coded and clearly labeled mating components allow for fast, accurate connection every time—reducing errors and improving efficiency in the field.

- All metal construction ensures reliable performance.
- Fits all industry standard connectors.
- Color coded for quick and easy identification

Hydraulic Nozzle



Part No.	Description
01420-01	Hydraulic Nozzle
01422-01	Hydraulic Nozzle w/Plug
01424-01	Hydraulic Nozzle Plug

Hydraulic Receiver



Part No.	Description
01426-01	Hydraulic Receiver
01428-01	Hydraulic Nozzle w/Cap
01430-01	Hydraulic Nozzle Cap

Transmission Nozzle



Part No.	Description
01620-01	Transmission Nozzle
01622-01	Transmission Nozzle w/ Plug
01624-01	Transmission Nozzle Plug

Transmission Receiver



Part No.	Description
01626-01	Transmission Receiver
01628-01	Transmission Receiver w/ Cap
01630-01	Transmission Receiver Cap

31 R-SERIES COOLANT AND ENGINE CONNECTORS

FloMAX R-Series Connectors are fully compatible and interchangeable with industry-standard R-Series connections, ensuring easy integration with existing systems. Built with 100% metal construction, they feature stainless steel components paired with anodized aircraft-grade aluminum for strength, corrosion resistance, and long service life. Color-coded and clearly labeled mating components enable fast, accurate identification for helping reduce connection errors and improve efficiency in the field.

- All metal construction ensures reliable performance.
- Fits all industry R-Series connectors.
- Color coded for quick and easy identification

Coolant Nozzle



Part No.	Description
01232-01	R-Series Coolant Nozzle
01234-01	R-Series Coolant Nozzle w/Plug
01236-01	R-Series Coolant Nozzle Plug

Coolant Receiver



Part No.	Description
01238-01	R-Series Coolant Receiver
01240-01	R-Series Coolant Nozzle w/Cap
01242-01	R-Series Coolant Nozzle Cap

Engine Nozzle



Part No.	Description
01036-01	R- Series Engine Nozzle
01038-01	R- Series Engine Nozzle w/ Plug
01040-01	R- Series Engine Nozzle Plug

Engine Receiver



Part No.	Description
01044-01	R- Series Engine Receiver
01046-01	R- Series Engine Receiver w/ Cap
01048-01	R- Series Engine Receiver Cap

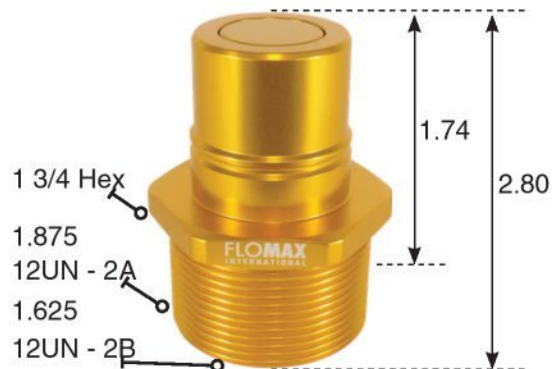
FloMAX R-Series Connectors are fully compatible and interchangeable with industry-standard R-Series connections, ensuring easy integration with existing systems. Built with 100% metal construction, they feature stainless steel components paired with anodized aircraft-grade aluminum for strength, corrosion resistance, and long service life. Color-coded and clearly labeled mating components enable fast, accurate identification for helping reduce connection errors and improve efficiency in the field.

- All metal construction ensures reliable performance.
- Fits all industry R-Series connectors.
- Color coded for quick and easy identification

Hydraulic Nozzle



Hydraulic Receiver



Part No.	Description
01432-01	R-Series Hydraulic Nozzle
01434-01	R-Series Hydraulic Nozzle w/Plug
01436-01	R-Series Hydraulic Nozzle Plug

Part No.	Description
01438-01	R-Series Hydraulic Receiver
01440-01	R-Series Hydraulic Nozzle w/Cap
01442-01	R-Series Hydraulic Nozzle Cap

Transmission Nozzle



Transmission Receiver



Part No.	Description
01632-01	R- Series Transmission Nozzle
01634-01	R- Series Transmission Nozzle w/ Plug
01636-01	R- Series Transmission Nozzle Plug

Part No.	Description
01638-01	R- Series Transmission Receiver
01640-01	R- Series Transmission Receiver w/ Cap
01642-01	R- Series Transmission Receiver Cap

33 FLUSH FACE CONNECTORS PUSH-TO-CONNECT

FloMAX Flush Face Connectors are engineered for performance, safety, and reliability in demanding environments. Featuring a patented internally sealed ball lock mechanism, these connectors deliver consistent, trouble-free operation, even in harsh conditions.

The versatile system offers 12 color options and multiple sizes, along with a universal evacuation nozzle. Additional custom sizes and colors are available to meet specific application needs. A hardened stainless steel receiver nose allows for higher pressure operation compared to many standard dry break connectors.

Designed for top efficiency, all Flush Face connectors share identical external dimensions, simplifying installation and system design. They can be connected or disconnected under pressure and without pulling back the nozzle sleeve, reducing operator effort and improving speed in the field.

For added safety, FloMAX's patented non-interchangeable design ensures that each connector will only mate with its corresponding color, effectively eliminating cross-contamination risks.

Flush Face Nozzle*



- 50 GPM Flow Rate
- Seven Non-Interchangeable Colors
- 3/4" FNPT or JIC Base
- 500 PSI Working Pressure

Flush Face Receiver



Colors Available:	
Red	
Gold	
Teal	
Violet	
Navy	
Brown	
Blue/Grey	
Clear	
Green	
Grey	
Bronze	
Orange	

Flush Face Nozzles

Part No.	Description
02820-01	Flush Face Nozzle - Red
02824-01	Flush Face Nozzle - Gold
02828-01	Flush Face Nozzle - Teal
02832-01	Flush Face Nozzle - Violet
02836-01	Flush Face Nozzle - Navy
02840-01	Flush Face Nozzle - Brown
02844-01	Flush Face Nozzle - Blue/Gray
02848-01	Flush Face Nozzle - Clear
02852-01	Flush Face Nozzle - Dark Green
02856-01	Flush Face Nozzle - Gray NI
02860-01	Flush Face Nozzle - Bronze
02864-01	Flush Face Nozzle - Orange
02868-01	Flush Face Evacuation Nozzle - Black

Flush Face Receivers

Part No.	Description
02822-01	Flush Face Receiver - Red
02826-01	Flush Face Receiver - Gold
02830-01	Flush Face Receiver - Teal
02834-01	Flush Face Receiver - Violet
02838-01	Flush Face Receiver - Navy
02842-01	Flush Face Receiver - Brown
02846-01	Flush Face Receiver - Blue/Gray
02850-01	Flush Face Receiver - Clear
02854-01	Flush Face Receiver - Dark Green
02858-01	Flush Face Receiver - Gray NI
02862-01	Flush Face Receiver - Bronze
02866-01	Flush Face Receiver - Orange

- 12 non-interchangeable colors available
- Non-interchangeability Ensures no cross-contamination
- Saves time, cost, and money when servicing equipment

02850-01
Clear Receiver



02824-01
Gold Nozzle



02852-01
Dark Green Nozzle

- Colors Available:
- Red
 - Gold
 - Teal
 - Violet
 - Navy
 - Brown
 - Blue/Grey
 - Clear
 - Green
 - Grey
 - Bronze
 - Orange



02858-01
Grey Receiver

02866-01
Orange Receiver



02868-01
Universal Drain Nozzle Fits All Flush Face Receivers.



02862-01
Bronze Receiver

35 FUEL VENTS

FloMAX Fuel Vents are built with all-metal components for durability and long-term reliability. A precision-machined billet aircraft-grade aluminum cap delivers superior strength and impact resistance compared to plastic or cast alternatives. Inside, the float and sealing balls are contained within a rigid aluminum ball tube, ensuring a consistent, positive seal and repeatable performance over time. Stem tubes are available in standard lengths of 5", 7", 9", and 11", with custom lengths offered to meet specific application requirements. Multiple configurations are available, including threaded outlets, a rotatable vent top, anti-vandalism features, and half couplings for direct welding into tanks.

- *Captured ball design ensures repeatable performance*
- *Robust all-billet aluminum construction*
- *Variety of lengths and configurations available*



Standard Fuel Vents	
Part No.	Description
05020-01	Fuel Vent - Standard (5" stem)
05024-01	Fuel Vent - Ext Stem (7" stem)
05026-01	Fuel Vent - Ext Stem (9" stem)
05028-01	Fuel Vent - Ext Stem (11" stem)
05030-01	Fuel Vent - w/Half Coupling (5" stem)
05032-01	Fuel Vent - w/Half Coupling (7" stem)
05034-01	Fuel Vent - w/Half Coupling (9" stem)
05036-01	Fuel Vent - w/Half Coupling (11" stem)
05038-01	Fuel Vent - Anti-Vandalism Sleeve
05040-01	Fuel Vent - Anti-Vandalism (7" stem)
05042-01	Fuel Vent - Anti-Vandalism (9" stem)
05044-01	Fuel Vent - Anti-Vandalism (11" stem)
05046-01	Fuel Vent - Male Threaded Outlet (5" stem)
05048-01	Fuel Vent - Male Threaded Outlet (7" stem)
05050-01	Fuel Vent - Male Threaded Outlet (9" stem)
05052-01	Fuel Vent - Male Threaded Outlet (11" stem)

Standard Fuel Vents (Cont.)	
Part No.	Description
05054-01	Fuel Vent - Female Threaded Outlet (5" stem)
05056-01	Fuel Vent - Female Threaded Outlet (7" stem)
05058-01	Fuel Vent - Female Threaded Outlet (9" stem)
05060-01	Fuel Vent - Female Threaded Outlet (11" stem)
05062-01	Fuel Vent w/Filter - Standard (5" stem)
05068-01	Fuel Vent w/Filter - Standard (7" stem)
05070-01	Fuel Vent w/Filter - Standard (9" stem)
05072-01	Fuel Vent w/Filter - Standard (11" stem)
05074-01	Fuel Vent w/Filter - Male Threaded Outlet (5" stem)
05076-01	Fuel Vent w/Filter - Male Threaded Outlet (7" stem)
05078-01	Fuel Vent w/Filter - Male Threaded Outlet (9" stem)
05080-01	Fuel Vent w/Filter - Male Threaded Outlet (11" stem)
05082-01	Fuel Vent w/Filter - Female Threaded Outlet (5" stem)
05084-01	Fuel Vent w/Filter - Female Threaded Outlet (7" stem)
05086-01	Fuel Vent w/Filter - Female Threaded Outlet (9" stem)
05088-01	Fuel Vent w/Filter - Female Threaded Outlet (11" stem)

FloMAX Fuel Vents are built with all-metal components for durability and long-term reliability. A precision-machined billet aircraft-grade aluminum cap delivers superior strength and impact resistance compared to plastic or cast alternatives. Inside, the float and sealing balls are contained within a rigid aluminum ball tube, ensuring a consistent, positive seal and repeatable performance over time. Stem tubes are available in standard lengths of 5", 7", 9", and 11", with custom lengths offered to meet specific application requirements. Multiple configurations are available, including threaded outlets, a rotatable vent top, anti-vandalism features, and half couplings for direct welding into tanks.



05244-01 High Flow Vent - Filter Capable Rotatable Top

High Flow Fuel Vents

Part No.	Description
05220-01	High Flow Vent - Standard (5" stem)
05022-01	High Flow Vent - Ext Stem (7" stem)
05224-01	High Flow Vent - Ext Stem (9" stem)
05226-01	High Flow Vent - Ext Stem (11" stem)
05228-01	High Flow Vent - w/Half Coupling (5" stem)
05230-01	High Flow Vent - w/Half Coupling (7" stem)
05232-01	High Flow Vent - w/Half Coupling (9" stem)
05234-01	High Flow Vent - w/Half Coupling (11" stem)
05236-01	High Flow Vent - Anti-Vandalism Sleeve
05238-01	High Flow Vent - Anti-Vandalism (7" stem)
05240-01	High Flow Vent - Anti-Vandalism (9" stem)
05242-01	High Flow Vent - Anti-Vandalism (11" stem)
05244-01	High Flow Vent - Filter Capable Rotatable Top (5" stem)
05246-01	High Flow Vent - Filter Capable Rotatable Top (7" stem)
05248-01	High Flow Vent - Filter Capable Rotatable Top (9" stem)

- **Robust billet aluminum construction for strength and durability**
- **Available in multiple lengths and flow rate options**
- **Industry-leading high-flow performance**
- **Handles fluid flow rates exceeding 400 GPM**
- **Fits standard 2" NPT openings for easy integration**

The FloMAX VTX Vent is engineered for maximum performance in high-demand pressure fill applications, delivering industry-leading flow rates exceeding 400 GPM. Designed to pair seamlessly with the FX1500 Fuel Nozzle, it provides the capacity needed to support fast, efficient fueling operations without restriction. A precision-machined ball cage enhances durability and reliability, standing up to harsh environments where traditional spring-style cages are prone to failure.

37 SWIVELS

FloMAX Swivels are built with a durable combination of stainless steel and aircraft-grade aluminum, delivering strength, corrosion resistance, and long service life. Engineered for performance, they provide up to 37% greater flow than typical industry swivels, helping maximize efficiency in demanding applications. High-quality fluoro silicone O-rings ensure reliable sealing and consistent performance across a wide range of weather conditions. Available in multiple sizes and configurations, FloMAX swivels are designed to integrate seamlessly with standard nozzles and hose systems.

- 32 stainless steel ball bearings for smooth, reliable operation
- Durable stainless steel and aluminum construction
- Available in a wide range of sizes and configurations



07030-01 2" NPT Male to 2" FNPT
07036-01 FNBL thread to 2" NPT
FNS-SP 1 1/2" NPTM to 2" NPTF
07024-01 2.5" Hose to FX1500 Inline Double Thread
07034-01 1 1/2" NPTF Swivel



07020-01 FNBL thread to 1 1/2" NPT
07022-01 FX1500 thread to 2" NPTF
07026-01 1 1/2" NPTM to 1 1/2" NPTF
07028-01 2" NPTM to 1 1/2" NPTF

FN600	
Part No.	Description
07020-01	1-1/2" Nozzle Swivel
07036-01	FNBL Nozzle thread to 2" NPT Female
07022-01	2" High Flow Nozzle Swivel
07024-01	FX1500 Nozzle Thread 2-1/2" FNPT

FN600	
Part No.	Description
07026-01	Standard Fuel Swivel 1-1/2" NPT x 1-1/2" NPT
07028-01	Standard Fuel Swivel 2" NPT x 1-1/2" NPT
07030-01	Swivel 2" NPT x 2" NPT
07034-01	Inline Double Nut Swivel 1-1/2" NPT x 1-1/2" NPT

FloMAX 2" and 3" Breakaway Valves are engineered for strength, safety, and reliable protection in fueling systems. Constructed from zinc-plated steel and anodized aircraft-grade aluminum, these valves are built to withstand demanding conditions. Each unit is designed with three precision shear studs that separate at a controlled force when properly installed using a factory-approved mount. This controlled separation helps protect critical equipment from damage while minimizing the risk of catastrophic fuel spills.

- Prevents costly equipment damage
- Reduces risk of catastrophic spills
- Rated for 250 PSI operating pressure
- Constructed from aircraft-grade aluminum and stainless steel
- 1" inline breakaway valve can be reassembled after separation without tools or additional parts



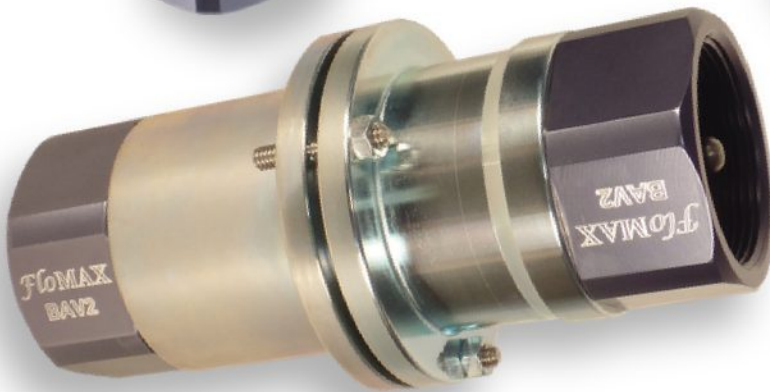
BAV's 2" and 3" must be used with FloMAX mounting brackets



07051-01
Inline Break Away valve



07044-01 3" NPT Valve



07040-01 2" NPT Valve



07042-01

Break Away Valves

Part No.	Description
07040-01	Break Away Valve 2 Inch
07042-01	Break Away Valve Mount 2 Inch
07044-01	Break Away Valve 3 Inch
07046-01	Break Away Valve Mount 3 Inch
07048-01	Break Away Valve Replacement Kit
07051-01	Inline Break Away Valve

39 3" FUEL NOZZLES AND RECEIVERS

FloMAX 3" Fuel Nozzles and Receivers are designed for high-volume fueling with a focus on performance and ease of use. Engineered as a compact alternative to standard API 5" systems, they deliver efficient flow in a more streamlined form factor. Poppets feature a vulcanized Viton seal for reliable sealing and long service life. Constructed from aircraft-grade aluminum and stainless steel, both the nozzle and receiver offer durability in demanding environments. Capable of flow rates up to 1,200 GPM at 100 PSI, these connectors are built to keep operations moving.



04154-01



04152-01



04150-01

- Ultra-high flow for demanding fueling applications
- Robust billet aluminum construction for durability
- Delivers up to 1,200 GPM at 100 PSI



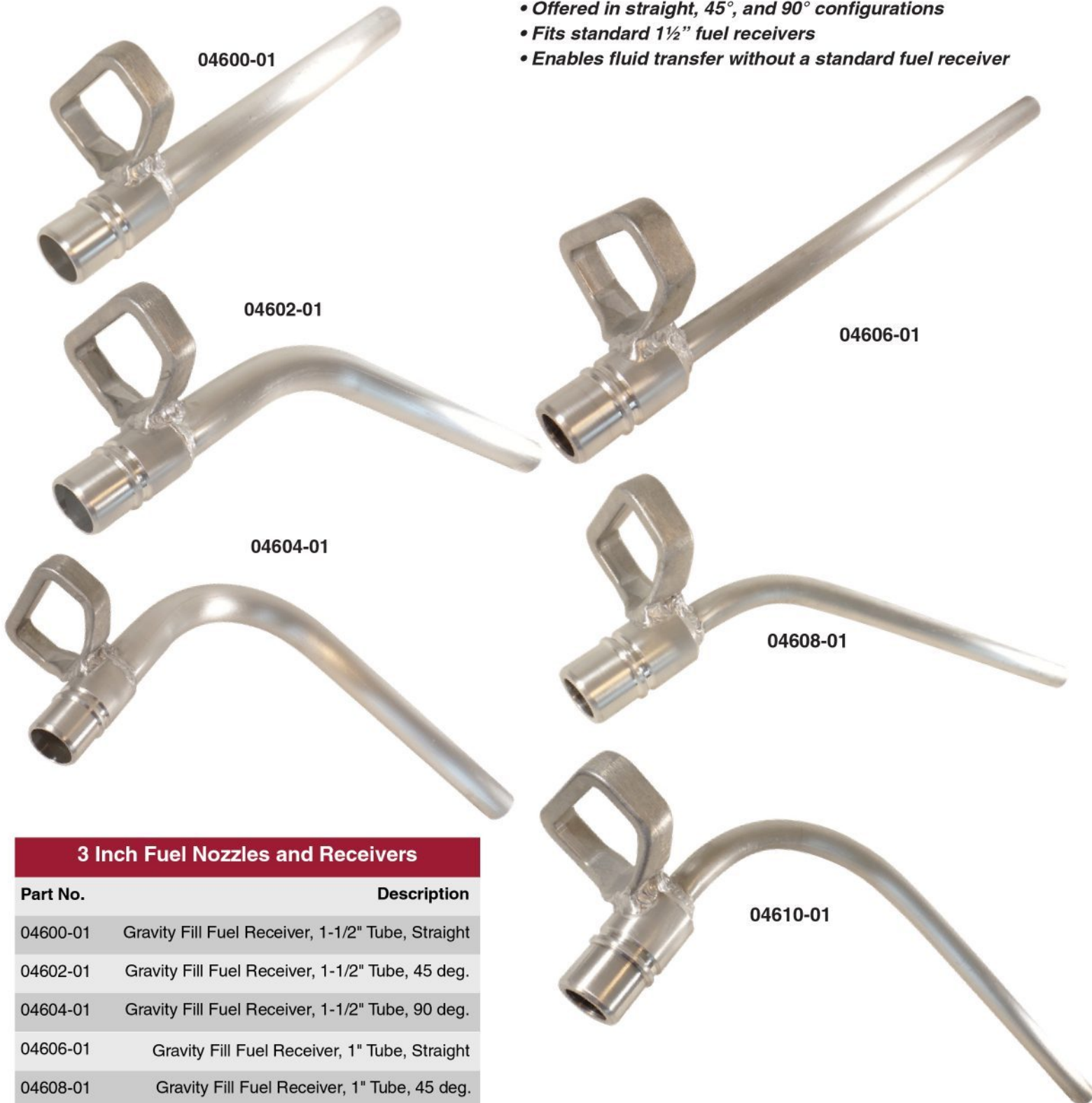
04160-01

3 Inch Fuel Nozzles and Receivers

Part No.	Description
04150-01	Fuel Nozzle 3 Inch
04152-01	Fuel Receiver 3 Inch with 3" NPT Base
04154-01	Fuel Receiver 3 Inch with Flange Base
04020-01	Fuel Receiver 3 Inch with 4" NPT Base
04022-01	Fuel Receiver 3 Inch w/ Non-Pressure Valve - 4" NPT
04024-01	3 Inch Non-Pressure Valve with 4" NPT Front End

FloMAX Gravity Fill Receivers are built from aircraft-grade aluminum for strength, durability, and long service life. A welded cast aluminum handle provides added strength and ease of use in the field. Available in both 1½" standard and 1" reduced-size options, these receivers are ideal for a range of tank sizes and applications. Multiple configurations—including straight, 45°, and 90° bends—offer flexibility for installation across various system layouts.

- Available in 1" and 1½" sizes
- Offered in straight, 45°, and 90° configurations
- Fits standard 1½" fuel receivers
- Enables fluid transfer without a standard fuel receiver



3 Inch Fuel Nozzles and Receivers

Part No.	Description
04600-01	Gravity Fill Fuel Receiver, 1-1/2" Tube, Straight
04602-01	Gravity Fill Fuel Receiver, 1-1/2" Tube, 45 deg.
04604-01	Gravity Fill Fuel Receiver, 1-1/2" Tube, 90 deg.
04606-01	Gravity Fill Fuel Receiver, 1" Tube, Straight
04608-01	Gravity Fill Fuel Receiver, 1" Tube, 45 deg.
04610-01	Gravity Fill Fuel Receiver, 1" Tube, 90 deg.



07120-01



07122-01



07124-01



07132-01



07126-01



07128-01



07130-01

07050-01

Weld On



07051-01
Bolt On

Tools

Part No.	Description
07118-01	FNBL-100, FNBL-102, FNBL-104
FX1500-KO Kit	FX1500-100, FX1500-102, FX1500-04
07120-01	Poppet Spanner Wrench
07122-01	Poppet Insertion Tool
07124-01	Swivel Wrench
07126-01	Fuel Receiver Socket Extended Length
07128-01	Fuel Receiver Socket
07130-01	FN600 Nose Spanner Wrench
07132-01	Fuel Nozzle Mount
07134-01	FX1500 Fuel Nozzle Poppet Spanner Wrench
07136-01	FX1500 Fuel Nozzle Popet Insertion Tool
07138-01	FX1500 Fuel Nozzle Swivel Spanner Wrench
BH-W	Bell Housing Weld-on Attachment
BH-F	Bell Housing Bolt-on Attachment

FX1500-KO KIT

FX1500-100

FX1500-104

FX1500-102

07118-01

07122-01

07124-01

07120-01

FloMAX NPS-1-SS External Non-Pressure System is constructed entirely from 300 series stainless steel, delivering long service life in harsh and corrosive environments. Designed for durability and reliability, all external components are built to withstand demanding field conditions.

The HFRE Evacuation Receiver is a specialized EVAC fitting designed for use in oil pans on Komatsu equipment and similar applications. It features an integrated one-way check valve that allows fluid to be safely withdrawn while preventing backflow. This design helps eliminate issues with thread damage caused by repeated oil drain cycles, extending the life of the equipment and improving serviceability.



• Non-Pressure sending unit (No Venting)

Electronic lock out fuel nozzle mount interfaces with all standard 1 1/2" fuel nozzles. Helps prevent fuel nozzle and equipment damage due to non-stowage

Tools	
Part No.	Description
02494-01	Fits Komatsu Oil Pans For Quick Drain
06058-01	Non-Pressure System Low-Profile Sending Unit
ERS-12C	Engine Receiver Green 1/2" NPT
02102-01	Engine Nozzle Green 1/2" NPT
R-HR-C1 NPT	R-HR-C with 1" NPT

Tools	
Part No.	Description
R-HR-C	With 1" NPTM
NPS-1-SS	All External Components 300 Stainless Steel
FN-E Mount	Fuel Nozzle Mount 24V
FLR DEF	Flush Face Receiver for DEF
FLN DEF	Flush Face Nozzle for DEF

07220-01

Small Diameter 2"NPT to 6 Bolt.

**07222-01**

Large Diameter 2" NPT to 6 Bolt.

**07224-01**

2" NPT Male to Female 2" Long.

**07226-01**

2" NPT Male to Female 3" Long.

**07228-01**

2" NPT Male to Female 4.5" Long.

**07230-01**

Face Sea lto 2"NPT 2" Long.

**07234-01**

2" NPT 8 Bolt Adapter.

**07236-01**

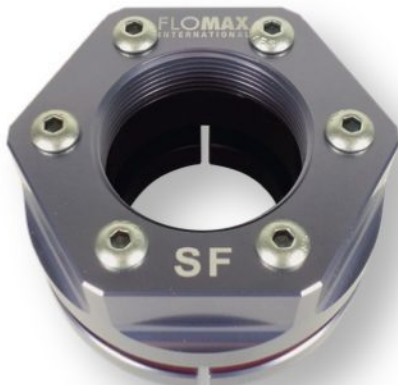
VR300 to 2" NPT

**07232-01**

Face Seal to 2"NPT 4.5" Long.

**SFA**

Add a 2" NPTF to plastic or metal tanks.



FR-P and FRX-P Cap Spring Clip Options provide a fast, reliable solution for securing fuel receiver caps. Designed with a push-to-connect mechanism, these caps allow for quick installation and removal—even in challenging weather conditions. The FR-P Cap is compatible with standard fuel receivers, while the FRX-P Cap is specifically designed for FloMAX high-flow 2" FRX receivers. Built for ease of use and durability, these caps simplify maintenance while ensuring a secure fit in the field.

04140-01



04556-01



04548-01



2" NPT

04553-01



04132-01



BFN Bulk Transfer Nozzle

- Push-to-connect design for fast, easy operation
- Fits standard 1½" and 2" FRX fuel receivers
- Enables fluid transfer without a traditional fuel nozzle

Bulk Transfer Nozzles

Part No.	Description
04132-01	Bulk Fuel Nozzle
04134-01	Bulk Fuel Nozzle with Plug
04136-01	Bulk Fuel Nozzle Plug
04533-01	Push to Connect Cap for FRX Receivers
04566-01	Push to Connect Cap for 1-1/2" Receivers
04138-01	Bulk Fuel Nozzle for FRX Fuel Receivers
04140-01	Bulk Fuel Nozzle for FRX Fuel Receivers with Cap

Lined area for notes.



www.CanyonRimTech.com

sales@canyonrimtech.com

CRT260404-01