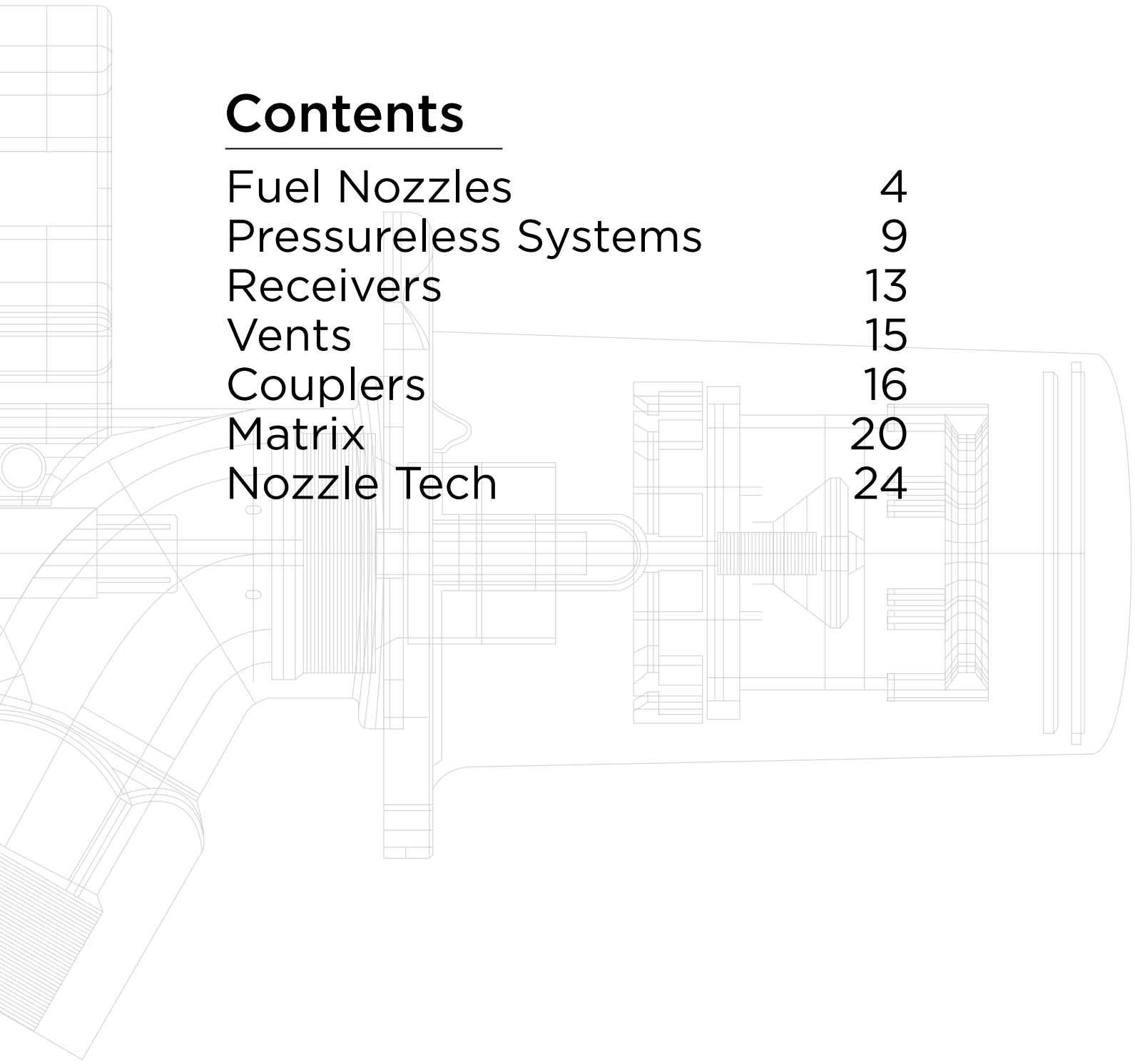
# FAST FILL SYSTEMS

# Technical Catalog

2016

# Contents

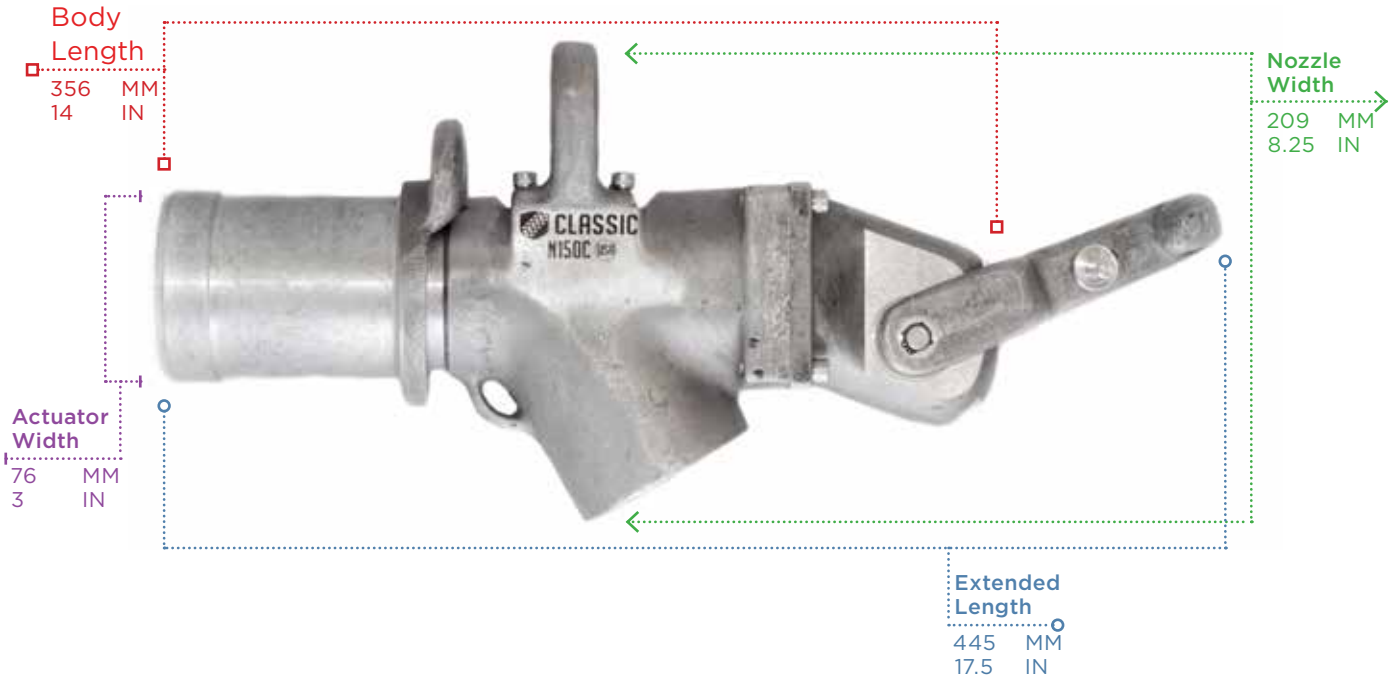




# N150Cp

**Classic Diesel Fuel Nozzle**

The Classic nozzle contains traditional components that have been in use for decades. This all-metal nozzle provides the operator with a familiar, proven piece of quality equipment that has a long history of being the standard nozzle of the heavy equipment industry.




| Max Operating Pressure | | Max Flow Rate | | Min Flow Rate | | Fuel Inlet Port | | Weight | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.17 | BAR | 567 | LPM | 94.5 | LPM | 38.1 | MM | 3.515 | KG | Metal Latching |
| 75 | PSI | 150 | GPM | 25 | GPM | 1-1/2 | IN | 7.75 | LBS | Dogs |

# N150PBp

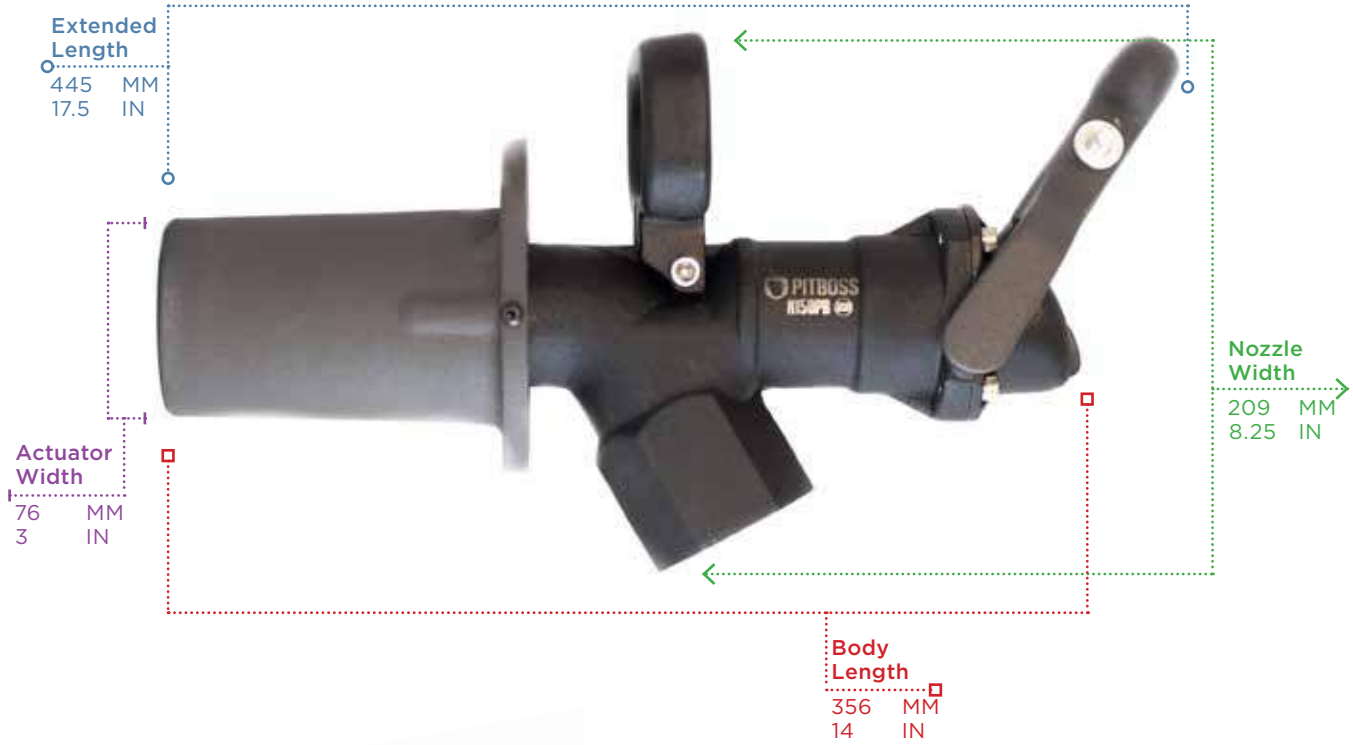
**Pitboss Diesel Fuel Nozzle**

The PitBoss diesel fuel nozzle (N150PB) is perfect for users looking for a durable and forgiving diesel fueling solution.
The Elastodog latching mechanism improves latching under harsh conditions and the piston-driven shutoff engagement improves longevity.

- Powder coated non-slip finish for better grip.
- All-metal construction and fewer internal components.
- Plugs are available and strongly recommended.

## Variations

| | |
|---|---|
| Standard with plug | N150PBp |
| Underground mining | N150PBU |
| Brine Resistant | N150PB-BR |




| Max Operating Pressure | | Max Flow Rate | | Min Flow Rate | | Fuel Inlet Port | | Weight | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.17 | BAR | 567 | LPM | 94.5 | LPM | 38.1 | MM | 2.948 | KG | Elastodog |
| 75 | PSI | 150 | GPM | 25 | GPM | 1-1/2 | IN | 6.5 | LBS | Clips |

# N150PSLp

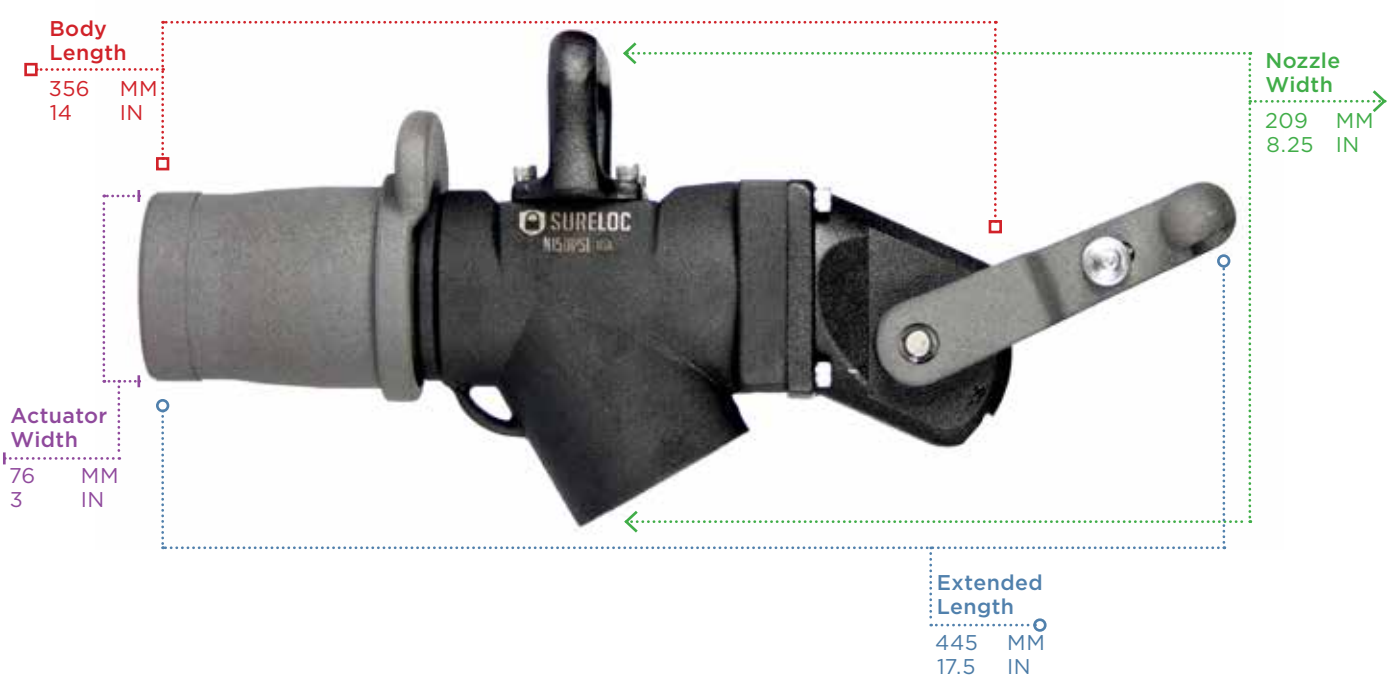
**Piston Sureloc Diesel Fuel Nozzle**

The SureLoc diesel fuel nozzle has proven reliable even in the harshest environments and is customizable to meet specific needs. Its durable, all-metal construction and thick wall main housing makes it optimal for heavy duty operations. The latching mechanism consists of twelve stainless steel ball bearings for a secure latch. Available with either piston or diaphragm control shut-off and two flow rate and inlet options, it is our most versatile nozzle.

- Powder coated non-slip finish for better grip.
- Built tought to handle the harshest conditions.
- Ball bearing latching for a secure connection.
- Withstands extreme temperatures.

## Variations

| | |
|---|---|
| Standard with plug | N150SLp |
| Diaphragm Driven | N150SL* |
| 2” Fuel Inlet | N150SL-2* |
| 2” High Flow 800 LPM/ 211 GPM | N150SL800** |
| PSL Arctic Nozzle | N150PSL800 |
| | N150ARTCp |




| Max Operating Pressure | | Max Flow Rate | | Min Flow Rate | | Fuel Inlet Port | | Weight | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.17 | BAR | 567 | LPM | 94.5 | LPM | 38.1 | MM | 3.6 | KG | Ball Bearing |
| 75 | PSI | 150 | GPM | 25 | GPM | 1-1/2 | IN | 7.9 | LBS | |
| | | **800 Series | | **800 Series | | **800 Series | | | | |
| | | 800 | LPM | 567 | LPM | 50.1 | MM | | | |
| | | 211 | GPM | 150 | GPM | 2 | IN | | | |

* The diaphragm driven models are now only offered on rebuilt models. They are no longer sold new.

# N150Tp

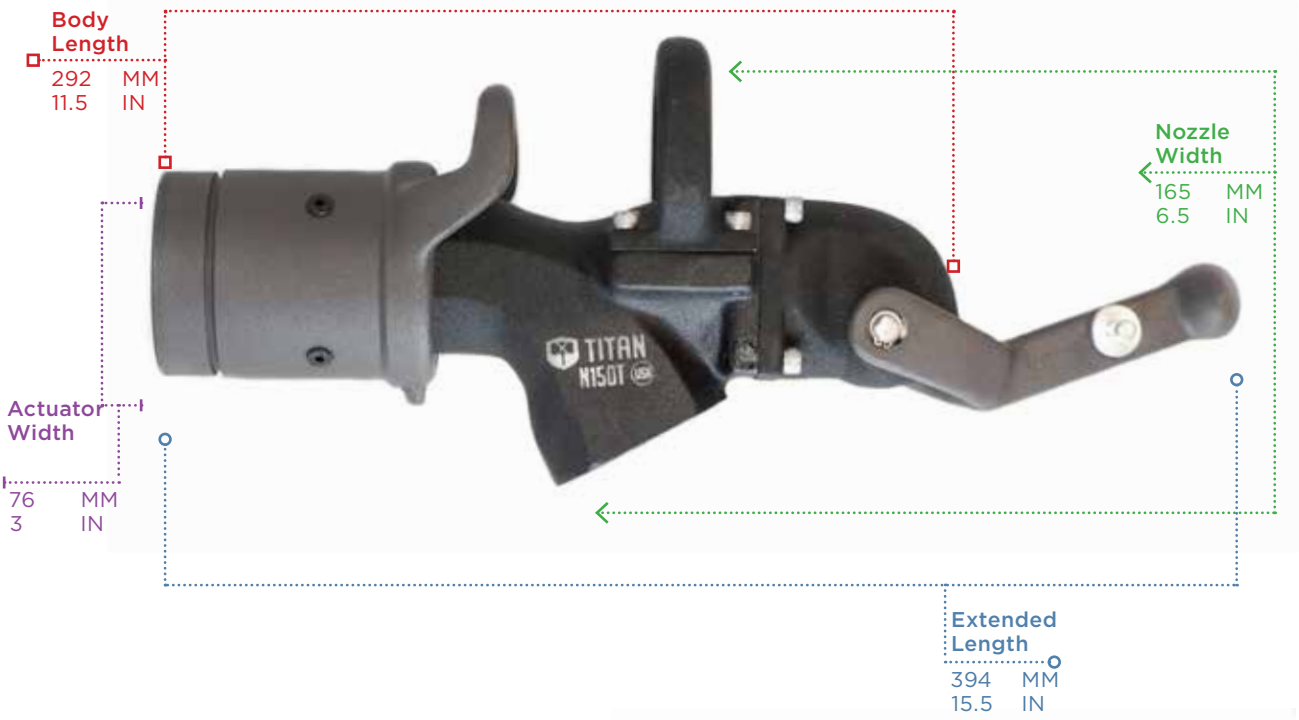
**Titan Diesel Fuel Nozzle**

The Titan diesel fuel nozzle blends elements from our Pitboss fuel nozzle with a compact design to create the most compact, lightest diesel fuel nozzle in the industry. In addition to the Elastodog latching mechanism and piston-driven shutoff, the field replaceable piston cartridge allows the end-user to bring a worn nozzle back to life.

- Powder coated non-slip finish for better grip.
- Sturdy build for greatly increased lifespan.
- Elastodog latching mechanism.
- Withstands extreme temperatures

## Cartridge

| | |
|---|---|
| In field repair cartridge | N150TRC |



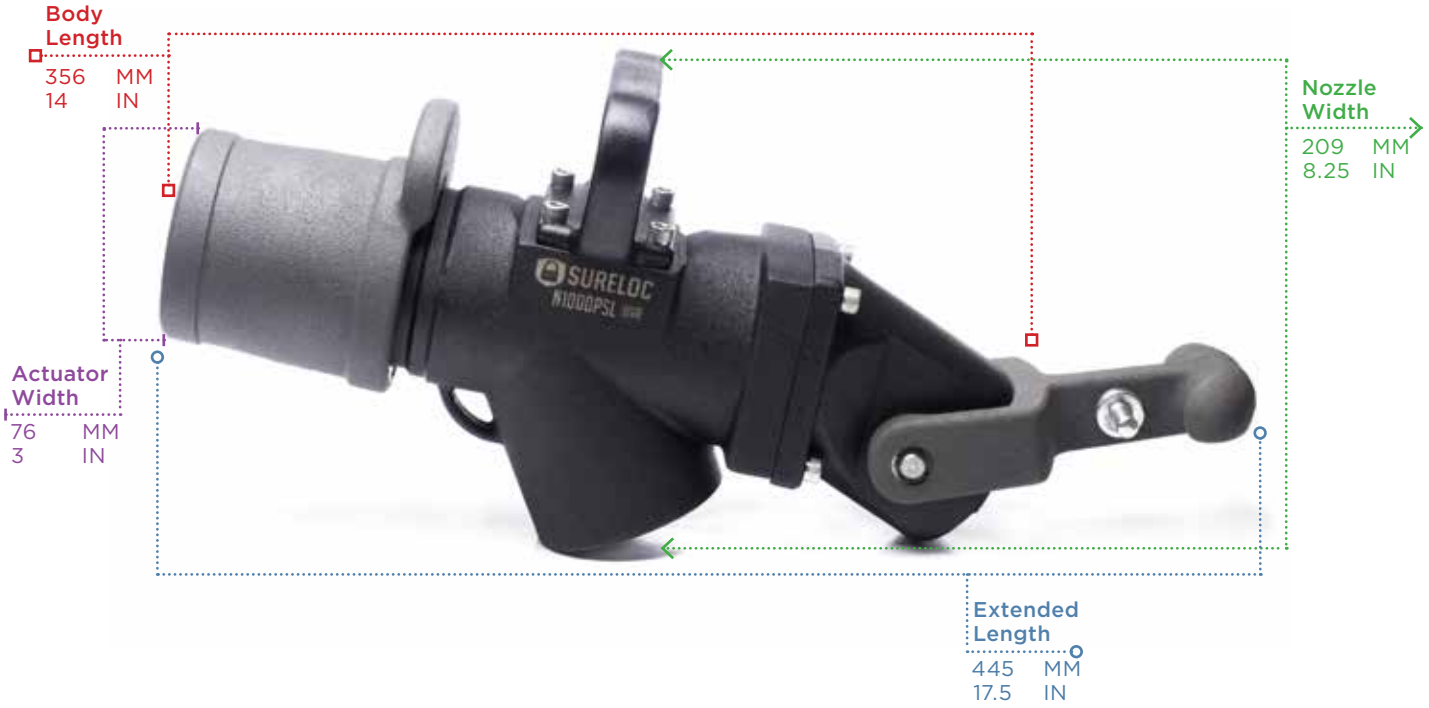

| Max Operating Pressure | | Max Flow Rate | | Min Flow Rate | | Fuel Inlet Port | | Weight | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.17 | BAR | 567 | LPM | 94.5 | LPM | 38.1 | MM | 2.645 | KG | Elastodog |
| 75 | PSI | 150 | GPM | 25 | GPM | 1-1/2 | IN | 5.65 | LBS | Clips |

# N1000PSL

**Piston Sureloc Diesel Fuel Nozzle**

Our latest, state of the art nozzle is rated for flow rates up to 1000 LPM (265 GPM), includes 2" NPT threads for an easy retrofit for exiting traditional fueling receivers and vents. Utilizing our robust Piston Sureloc design the N1000PSL uses a 12-ball stainless ball-bearing latching mechanism ensuring a secure latch to the receiver.

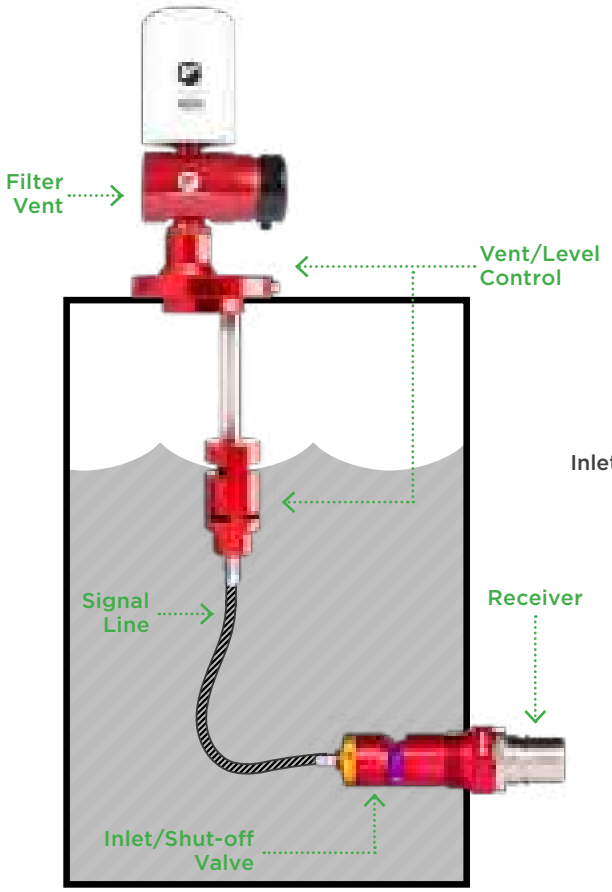
- Powder coated non-slip finish for better grip.
- Sturdy build for greatly increased lifespan.
- Ball bearing latching for secure connection.
- Withstands extreme temperatures




| Max Operating Pressure | | Max Flow Rate | | Min Flow Rate | | Fuel Inlet Port | | Weight | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 5.17 | BAR | 1000 | LPM | 94.5 | LPM | 38.1 | MM | 3.6 | KG | Ball Bearing |
| 75 | PSI | 263 | GPM | 25 | GPM | 1-1/2 | IN | 7.9 | LBS | |

# Fast Fill Pressureless System Advantages

- Automatic shut-off without inducing pressure into the tank.
- Positive shut-off system senses the fulid level in the tank.
- Designed to work best with our SureLoc and PitBoss pressure sensitive nozzles.
- Can be fitted with a pressure switch and time-delay relay to operate with non-pressure sensitive nozzles.
- Pressure switch and time-delay relay act as a safeguard against dead-head conditions once the shut-off valve closes.




## PLA150-M VLCE

Inlet Shut-Off Valve

The vent/level control system operates using 5" long, 1/2"NPT piping, allowing for compatibility with more than 80% of heavy equipment used worldwide. The 5" length pipe can also be extended by changing the length of the stem pipe to reach the desired shut off level. They can be ordered with a 5", 7" or 12", or can be custom made to suit your needs. The VLCE includes extra 1/2" pipe nipples that comes in 2" and 3" lengths and the necessary Loctite thread lock to secure your pipe.

Other features include external and internal signal line ports and integrated roll over spill protection. The VLCE is precisely engineered to function on the largest tanks with only 4" of operating space. 16" of clearance required for installation.

## PL-P-6

Signal Line

Our Teflon and stainless steel braided signal line can be used both internally and externally. Standard length of 10'. Custom sizes available.

| Max Operating Pressure | | Min Operating Pressure | | Min Flow Rate | | Max Flow Rate | | Diesel Fuel Nozzle Shut-Off Pressure | |
|---|---|---|---|---|---|---|---|---|---|
| 517 | kPa | 35 | kPa* | 95 | LPM | 568 | LPM | 48 | kPa |
| 75 | PSI | 5 | PSI | 25 | GPM | 150 | GPM | 7 | PSI |
| | | | | | | 800 | LPM* | | |
| | | | | | | 200 | GMP* | | |

* Requirement at the nozzle. Additional plumbing between the pump and the diesel fuel nozzle will add additional pressure drop to the system.

*Flow rates of 200 GPM/ 800 LPM possible when used with diesel fuel nozzles rated for such, e.g. N150SL800


High Flow
Pressureless

## PLA1000-M VLCE

When combined with the N1000PSLP nozzle, and our PLA1000-M SV, flow rates of up to 1000 LPM are achievable. With pressureless operation, this system provides your operators a clean & safe way to refuel high volume applications. With increased flow around the closed-cell encapsulated foam float, our system mantains reliability at higher flow rates. Other features include external and internal signal line ports and integrated roll over spill protection. The VLCE is precisely engineered to function on the largest tanks with only 4" of operating head space. (16" of clearance required for installation.)

## Features

- Automatic shut-off without inducing pressure into the tank.
- Positive shut-off system senses the fluid level in the tank.
- Diesel-resistant closed-cell foam float for shut-off.
- 2" NPT easily fits most tank applications.

High Flow
Pressureless

## PLA1000-M SV

This high flow reciever can handle the most demanding high volume applications. When paired with an N100PSLP nozzle and our PLA1000-M VLCE. Made of extremely durable nickel-plated steel, this receiver will last in the harshest evironments. The new enclosed spring design smooths fluid flow to prevent vibrations caused by high flow rates.

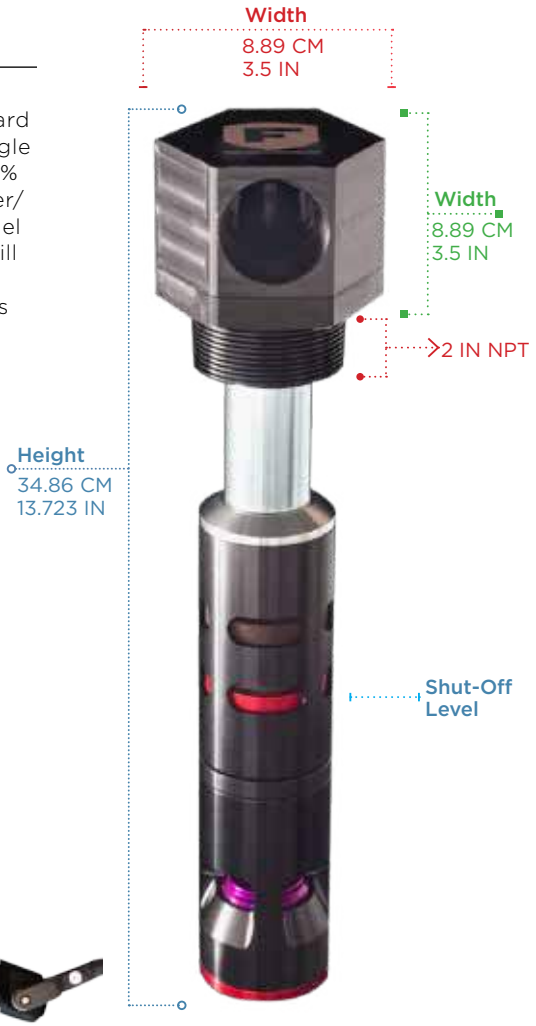

| Max Operating Pressure | | Safety | Construction | Time Saving | Economic |
|---|---|---|---|---|---|
| 5.17<br>75 | BAR<br>PSI | Eliminates potential fuel spray. | Nickel plated steel. Anodized aluminum. | Replace receiver without draining tank. | Prevents fuel theft. |

**These items must be used with the N1000PSLP Nozzle to achieve the 1000LPM flow rate.**

# PLA80-SVLC

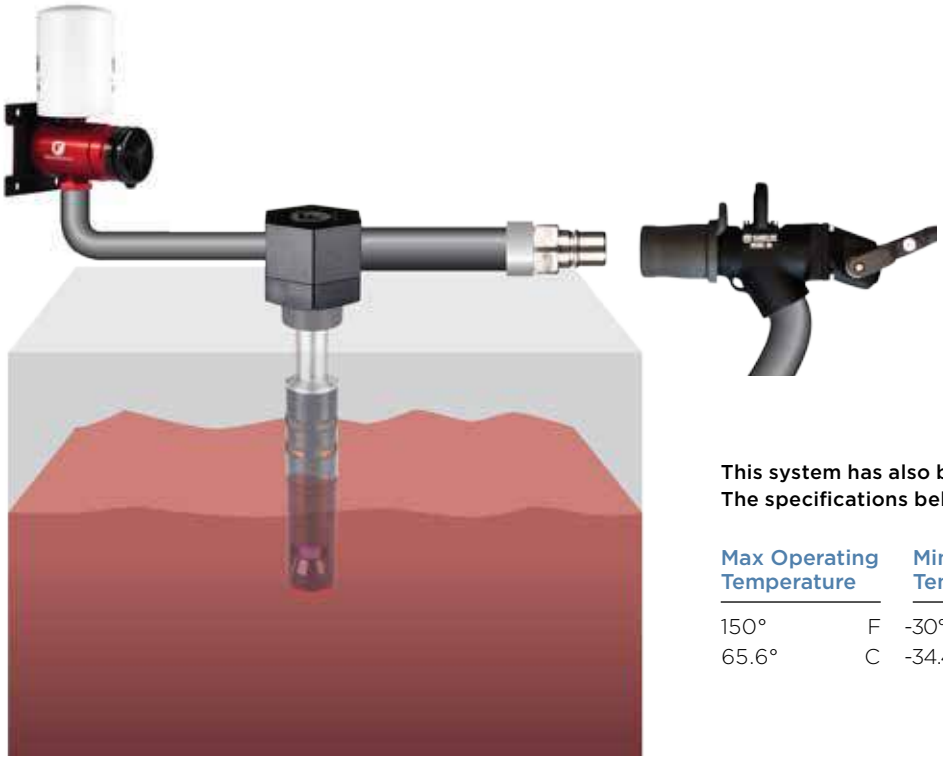
**Small Tank Pressureless**

The PLA80 brings Pressureless fueling to applications where it was once unavailable. This all-in-one drop-in system fits standard 2" NPT inlets and enables individual tank fill and shutoff for single or multi tank configurations. Once the fuel level reaches 90-95% capacity, each tank will automatically shut off, eliminating under/over filling. The auto shut-off feature works with all standard fuel nozzles (up to 80 GPM). With filtered venting and a dry break fill point, contamination is dramatically decreased. This product is ideal for agriculture, small construction, oil extraction and mass transit equipment because of its compact design and ease of installation.




## Features

- Fills and vents through the same unit
- Completely pressureless operation
- Automatic independent tank shutoff
- Remote receiver mounting
- Remote or direct filter vent mounting
- 1-1/4" FNPT fuel inlet threads
- 1" FNPT vent port threads
- Standard weight: 3.92 lbs | 1.78 kg



**This system has also been adapted to work with hydraulic fluid. The specifications below are for the PLA80 Hydraulic Application.**

| Max Operating Temperature | | Min Operating Temperature | | Min Operating Pressure | |
|---|---|---|---|---|---|
| 150° | F | -30° | F | 125 | PSI |
| 65.6° | C | -34.4° | C | | |

| Max High Flow Rate | | Min High Flow Rate | | Max Standard Flow Rate | | Min Standard Flow Rate | | Max Operating Temperature | | Min Operating Temperature | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 302 | LPM | 151 | LPM | 151 | LPM | 94.5 | LPM | 150º | F | -30º | F |
| 80 | GPM | 40 | GPM | 40 | GPM | 20 | GPM | 65.6º | C | -34.4º | C |

## PLA150-M SV

**Inlet Shut-Off Valve**

The typical inlet/shutoff valve for a Pressureless system. Designed to be mounted directly to the tank. Requires 2" NPT on the tank and 8-10" of space for installation. 211 GPM max flow rate. A receiver may be mounted directly or remotely to the valve (see AD150 and AD150J).

## PLA150-M SVEBH

**Inlet Shut-Off Valve**

Flange mounted shutoff valve with 6 bolt pattern designed to replace the FFF5C bolt-on bellhousing. External #6 JIC signal line connection.

## PLA150-M RRM2

**Remote Mount Can**

Designed to remotely mount the entire shutoff valve and receiver. Receiver (R150CVRc-J) is included. External #6 JIC signal line connection.

## PLA150-M SV61-E

**Inlet Shut-Off Valve**

Flange mounted shutoff valve with 6 bolt 5-3/4" tank mounting pattern. and 2" Code 61 hose connection for remote mounted receiver. External #6 JIC signal line connection.

## PLA150-M SVFE

**Inlet Shut-off Valve**

Flange mounted shutoff valve with 6 bolt 5-3/4" pattern. Includes 2-Piece direct mount receiver and external #6 JIC signal line connection.

## PLA150-M EP

**Evac Port**

Receiver replacement evacuation port allows draining of the fuel tank from the standard fill point using a Fast Fill Systems diesel fuel nozzle or our N150SB bulk transfer nozzle.

## PLA150-M VF

**Receiver Flange**

CAT 120mm 6-bolt vent flange

## AD150J

**2" JIC Adaptor**

Used to adapt from the proprietary thread in our shutoff and check valves to a 2" Male JIC.

## AD150

**2" NPT Adaptor**

Used to adapt from the proprietary thread in our shutoff and check valves to a 2" Female NPT.

## N150SB

**Bulk Nozzle**

Provides a higher flow rate than conventional high-flow nozzles for bulk filling. Constructed from aluminum. 12 stainless steel latching balls, 2 wiper seals, and actuating ring with non-slip knurled surface.

## R150-TL70-J

**Twist Lock Receiver**

2 Piece .70mm "Twist Lock" receiver for pressureless applications.

## PLA150-M PTF

**Plastic Tank Adaptor**

2" NPT adaptor is designed for plastic fuel tanks. Provides the 2" NPT necessary for Pressureless systems.

## PLA150-M PTSF

**Plastic Tank Adaptor**

2" NPT adaptor for plastic fuel tanks. Works well with CAT plastic tanks and fits most CAT splash fill caps.

## PLA150-M RF

**Receiver Flange**

2" NPT 6-bolt pattern receiver flange fits CAT 5 3/4" PT#221-5303

## S150, S512, S200, S215

**Straight Hose Swivel**

Straight hose swivels with all aluminum construction.

## A150A, A150B, A150C

**Fuel Adapter**

Used to splash fill a tank with any fast fill nozzle.

## R150SW

**Deep Socket Tool**

The R150SW, 2-1/2" deep socket tool is used to install new recievers and remove worn down or damaged receivers.

## AB2

**Breakaway Coupler**

Hose safety breakaway coupler with female NPT threads. Available in following sizes: 1", 1.25", 1.5", 2", 3", and 3.25"

## FFF4C

**Weld-On Flange**

Weld-on flange which provides a recessed, protected fill point. The flange has 2" female threads and accepts the R150S standard fuel receivers, R150CV, or PLA 150-M SV.

## FFF5C

**Bolt-On Flange**

Bolt-on flange which provides a recessed, protected fill point. The flange has 2" female threads and accepts the R150S standard fuel receivers, R150CV, or PLA 150-M SV. 5-5/16" x 7/16" bolt pattern.

## SB100

**Service Box**

Boxes can be configured to house any number or type of receivers. By consolidating the location of couplers, speed and safety are increased.

## R150CVc

**Check Valve Receiver**

Our patented Check Valve Receiver allows fuel to flow in only one direction. Once installed, receivers can be replaced without draining the tank, spray back from poppet malfunction is eliminated, and fuel theft is minimized. The Check Valve Receiver is compatible with all major manufacturers' nozzles.

| Max Operating Pressure | | Safety | Construction | Time Saving | Economic | Replacement Receiver |
|---|---|---|---|---|---|---|
| 5.17<br>75 | BAR<br>PSI | Eliminates potential fuel spray. | Nickel plated steel. Anodized aluminum. | Replace receiver without draining tank. | Prevents fuel theft. |  R150CVRc |

## R150CVSW

**Check Valve Wrench**

This Check Valve Installation wrench facilitates installation or removal of the R150CV. The open back design also allows it to be used with R150SW to install or remove the R150CVR.

## R150Sc

**Standard Receiver**

Our standard diesel fuel receiver is made from solid steel and is nickel-plated to ensure a long service life. Designed to accommodate flow rates up to 800 LPM (211 GPM), Fast Fill Systems fuel receivers are completely compatible with all major manufacturers' diesel fuel nozzles. Available shutoff options: 7, 9, 11, and 12 PSI.


| Max Operating Pressure | | Compatibility | Construction | Durability | Customizable | Available in Aluminum |
|---|---|---|---|---|---|---|
| 5.17<br>75 | BAR<br>PSI | Compatible with all major fuel nozzle manufacturers. | Nickel plated steel. Anodized aluminum. | Aluminum poppets instead of plastic. | Custom shut off pressures available. |  |

# Fuel Vents

Standard diesel fuel vents are crucial to the performance of your fuel nozzle. A standard fuel system needs tank pressure to cause the nozzle to shutoff. Our all-metal construction fuel vents provide excellent durability and versatility with more than 100 different configurations available. A 2 " NPT port on top of tank is required.

## V150

**Standard Fuel Vent**

The basic fuel vent available with a standard 5", 7" (V150L7), and 12"(V150L12) stems.

## V150D

**Anti Vandalism Flange**

Reduces fuel theft and tank vandalism. The under-side is threaded with bolt pattern on top which locks the vent in place. Bolts not included. Not compatible with V150W.

## V150SR

**Safety Relief Fuel Vent**

Used with the V150 where additional over-fill relief is needed. A safety relief valve protects the tank from over filling if a nozzle fails. Opens tank when pressure hits over 13 PSI.

## V150W

**Whistle Adaptor**

Whistles when tank reaches internal pressures of 5-7 PSI. This creates a clear signal to operator that nozzle should be shutting off.

## V150A

**Half Coupling**

This vent is commonly used in retrofit applications where the required 2" NPT port did not exist (Requires welding). 2" FNPT steel half coupling included.

## V150C

**NPT Adaptor**

Allows for easy hose attachment with a 1" FNPT swivel adapter on the opening of the vent cap. This method is more durable and seals tighter than the hose barb attachment.

## V150B

**Bolt-on Flange**

Commonly used where 2" NPT ports are not available. Drill and tapping is required. Bolt on 2" NPT flange included. Nitrile seal included, bolts are not.

## V150H

**High Flow Vent**

Designed for fuel rates exceeding 150 GPM, capable of reaching 300 GPM. Compatible with all vent configurations.

# Check Valve Filtered Fuel Vents

Protect your tank from atmospheric dust accumulation. The dual check valve system allows air to freely vent from the tank through the large vent check valve at rates up to 300 GPM, and directs all air entering the tank through the 3 micron filter media.

## FFV150-PL

**Direct Mount Filter Vent**

1" NPT direct mount configuration of our filter vent.

## FFV150-LP

**Direct Mount Filter Vent**

Low profile 1" NPT direct mount configuration of our filter vent.

## FFV150

**Remote Mount Filter Vent**

Universal mounting bracket for easy installation. Used for remote mounting.

## FFV150-HV VB

**High Volume Vacuum Break**

Vacuum break check valve for implosion protection. Discharges air at over 300 GPM. 2" Female NPT Inlet port. Vacuum break crack pressure: 1.5 PSI. Exhaust and breather check valve crack pressure: 0.25 PSI.

Crankcase
Coolant
Hydraulic
Transmission

## Standard Couplers

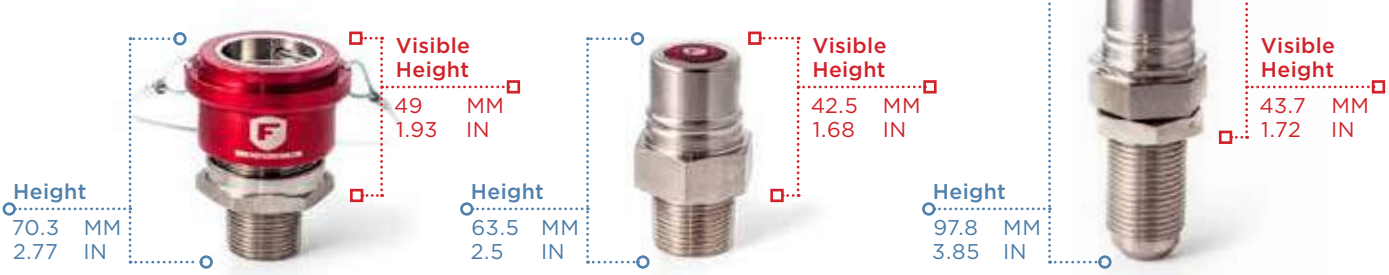
Four widely used couplers have been the industry standard for decades. They were designed for transferring the primary fluids used on heavy equipment: Crankcase, Coolant, Hydraulic and Transmission fluids. Nozzle and receiver pairs only connect with their corresponding size and color.

Oil Sampling Valve

## OS100

The oil sampling valve is used with an existing crankcase line to allow oil samples to be drawn.

## Crankcase



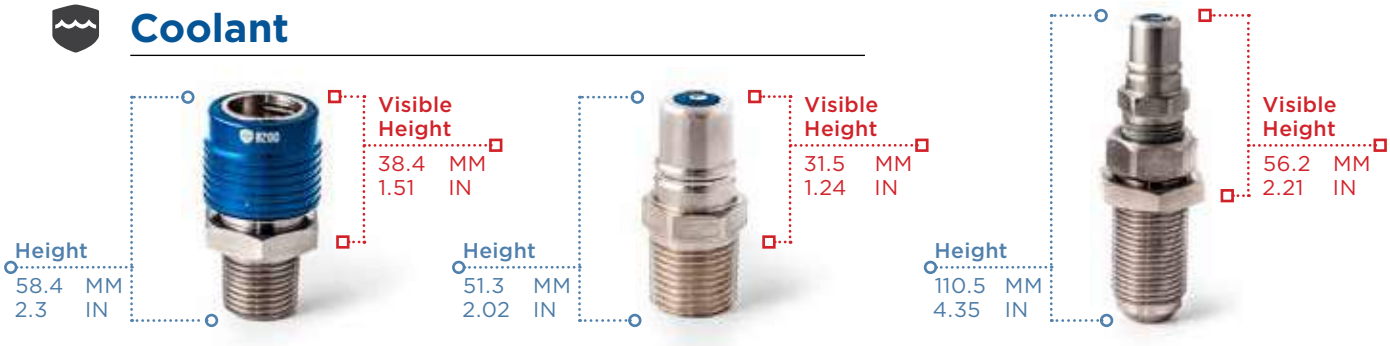

### N100p

### R100c

### R100Jc
#12 JIC

| Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5<br>500 | BAR<br>PSI | 103.4<br>1500 | BAR<br>PSI | .3051 | SQ IN | 3/4” | MNPT | 3/4” | MNPT | Pin latching |

## Coolant




### N200p

### R200c

### R200Jc
#12 JIC

| Max Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5<br>500 | BAR<br>PSI | 103.4<br>1500 | BAR<br>PSI | .1122 | SQ IN | 1/2” | MNPT | 1/2” | MNPT | Pin latching |

## #12 JIC Receivers

The bases on these receivers have extended JIC threads that can be fitted into a bulkhead. A female JIC hose can then be attached on the other side of the bulkhead.

## Hydraulic


**N300p**
***N300Bp**


**R300c**


**R300Jc**
#12 JIC

| Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .2212 | SQ IN | 3/4” | MNPT | 3/4” | MNPT | Dog Teeth |
| 500 | PSI | 1500 | PSI | *.3051 | SQ IN | | | | | *Ball Bearing |

## Transmission


**N400p**


**R400c**


**R400Jc**
#12 JIC

| Max Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .1136 | SQ IN | 1/2” | MNPT | 1/2” | MNPT | Dog Teeth |
| 500 | PSI | 1500 | PSI | | | | | | | |

# R Series Couplers

Crankcase
Coolant
Hydraulic
Transmission

Used for remote bulk-head mounting for common fluids. The receiver's dual threads are designed to allow bulk-head mounting using the male thread and connection of a hose to the leak-free female ORB thread. R series couplers DO NOT connect with Standard couplers.

## Crankcase


**N100Rp**


**R100Rc**

| Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .3640 | SQ IN | 3/4" | FNPT | 3/4" | FNPT | Ball Latching |
| 500 | PSI | 1500 | PSI | | | | | | | |

## Coolant


**N200Rp**


**R200Rc**

| Max Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .1361 | SQ IN | 1/2" | FNPT | OD | 1-3/16" | 12 TPI | Ball Latching |
| 500 | PSI | 1500 | PSI | | | | | ID | 7/8" | 14 TPI | |

# Universal Couplers

Crankcase
Coolant
Hydraulic
Transmission

For both Crankcase and Coolant, these Universal Nozzles fit Standard and R-Series Crankcase and Coolant Receivers.

## Hydraulic


**N300Rp**


**R300Rc**

| Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .4207 | SQ IN | 3/4” | FNPT | 3/4” | FNPT | Ball Latching |
| 500 | PSI | 1500 | PSI | | | | | | | |

## Transmission


**N400Rp**


**R400Rc**

| Max Operating Pressure | | Burst Pressure | | Flow Area | | Nozzle Thread | | Receiver Thread | | | Latching Mechanism |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 34.5 | BAR | 103.4 | BAR | .2285 | SQ IN | 3/4” | FNPT | OD | 1-5/16” | 12 TPI | Ball Latching |
| 500 | PSI | 1500 | PSI | | | | | ID | 1-1/16” | 12 TPI | |

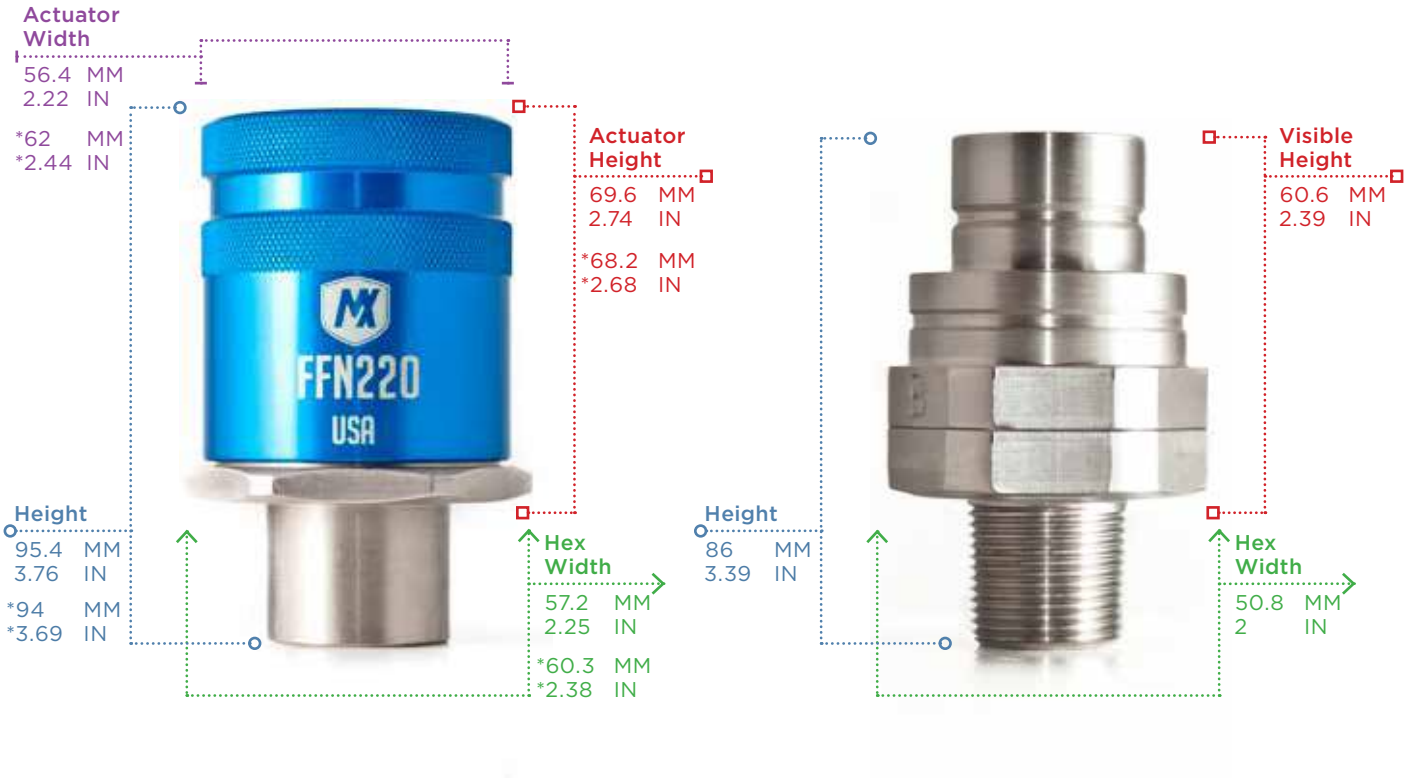
**Matrix Flat Face Couplers**

# Flat Face Matrix 200 Series

The Matrix Flat Face coupling line is the ultimate solution in no-hassle, contaminate-free filling. The “Flat Face” surface on the nozzle allows ease in wiping the dust and dirt from the front end of the nozzle, before coupling, to ensure contaminant-free fluid delivery. The “Flat Face” series includes 13 color-coded nozzles and receivers designed to physically interlock with only their respective matching color.


## FFET 290

One way evac tool acts as a master key to drain all receivers in Flat Face series.




| FFN210 FFR210 | FFN220 FFR220 | FFN230 FFR230 | FFN240 FFR240 | FFN250 FFR250 | *FFN255 FFR255 | FFN260 FFR260 | *FFN265 FFR265 | FFN270 FFR270 | *FFN275 FFR275 | FFN280 FFR280 | *FFN285 FFR285 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| GREEN | BLUE | PURPLE | GRAY | ORANGE | CLEAR | YELLOW | BROWN | RED | PINK | GOLD | GUNMETAL BLUE |

### Operating Pressure

103 BAR
1500 PSI

### 3/4” Thread

Nozzle FNPT
Receiver MNPT

### Construction

Anodized aluminum. Nickel plated steel. Color coded and keyed to prevent cross contamination.

### JIC

All receivers are capable of a JIC fitting.

### Caps Recommended

* Items marked are slightly different in size. Please refer to the measurements above for their sizes.

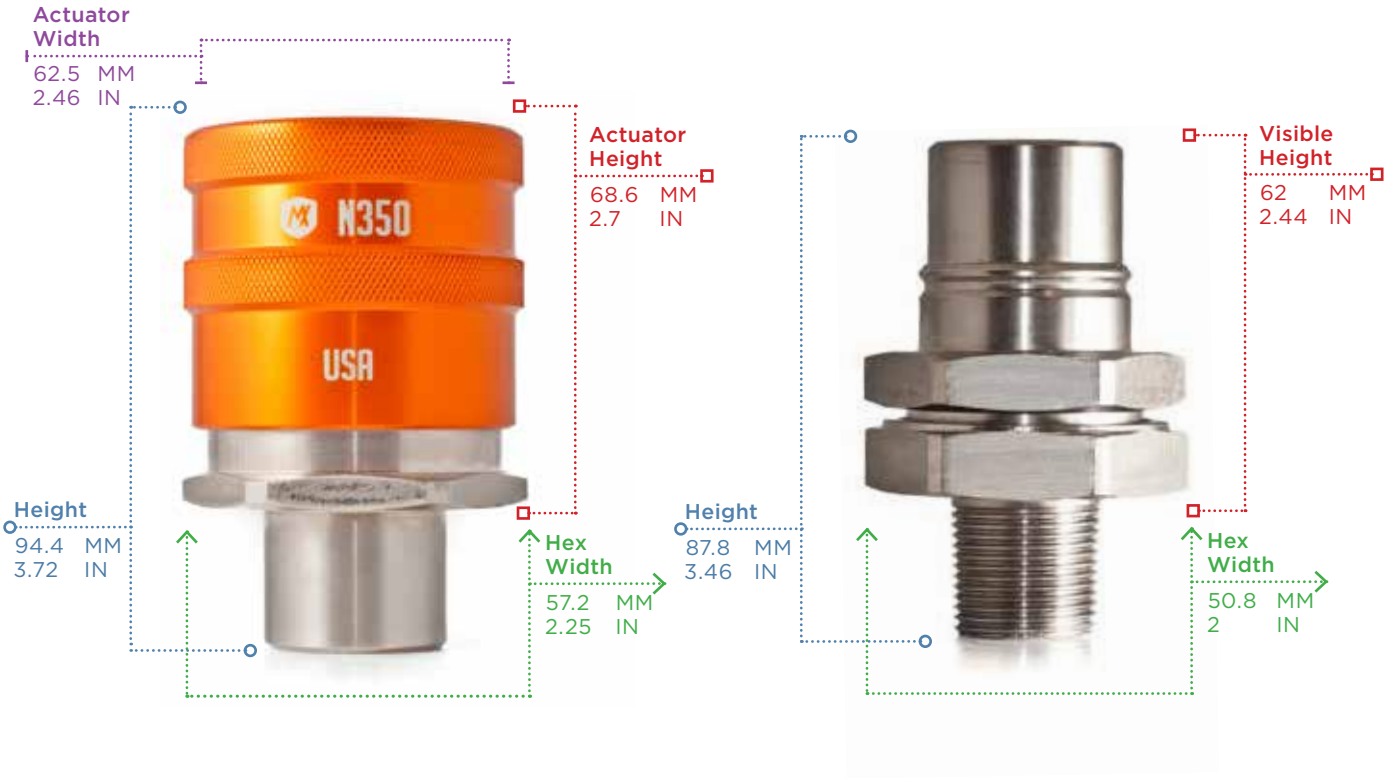
# Matrix 300 Series

**Matrix 34 Standard Couplers**

Matrix 34 is a series of proprietary couplers designed to prevent cross-contamination of fluids. Matrix couplers work at a higher pressure and flow rate than standard couplers. Each of the 10 nozzles and receivers in the matrix line is color-coded and designed to physically interlock with only its matching color.

## ET 290


One-way evac tool acts as a master key to drain all receivers in standard series.




| N305 R305 | N307 R307 | N310 R310 | N320 R320 | N330 R330 | N340 R340 | N350 R350 | N360 R360 | N370 R370 | N380 R380 |
|---|---|---|---|---|---|---|---|---|---|
| PINK | BROWN | GREEN | BLUE | PURPLE | GRAY | ORANGE | YELLOW | RED | GOLD |

### Operating Pressure

103
1500

### 3/4: Thread

Nozzle FNPT
Receiver MNPT

### Construction

Anodized aluminum. Nickel plated steel. Color coded and keyed to prevent cross contamination.

### JIC

All receivers are capable of a JIC fitting.

### Caps & Plugs Recommended

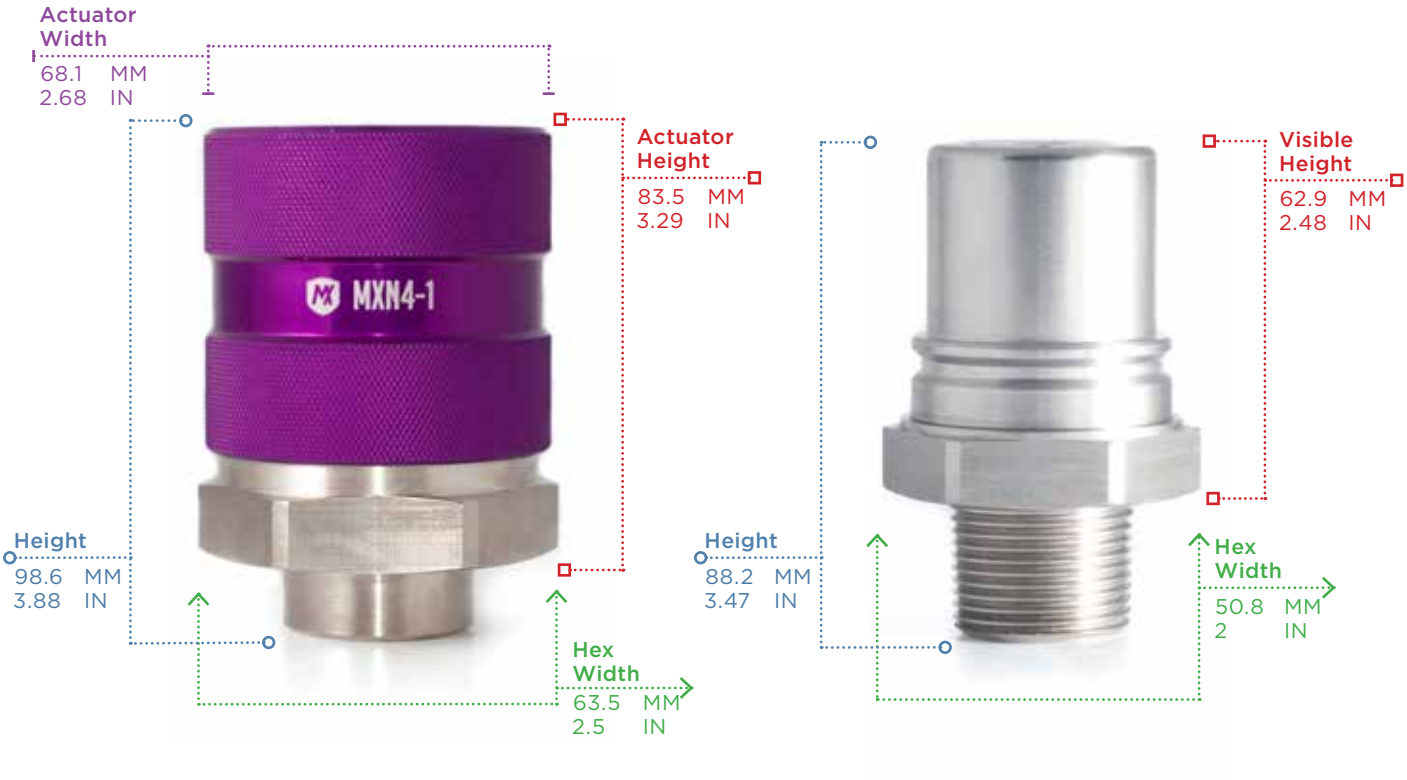
# MX High Flow Series

**Matrix MX High Flow Couplers**

Fast Fill Systems now offers the next generation of High Flow Dry-Break Couplers. Constructed from steel for sure latching and durability, the MX-Series comes in 7 different Nozzle-Receiver pairs that can only be connected to their matching colors, eliminating any possibility of cross-contamination. With a robust, grip enhancing actuating ring and solid aluminum caps and plugs, these 1" Dry- Break connectors have been engineered for more than just high flow rates; they are engineered to last!


## MXET-1

Evac tool acts as a master key to drain all receivers in MX series.




| MXN1-1 MXR1-1 | MXN2-1 MXR2-1 | MXN3-1 MXR3-1 | MXN4-1 MXR4-1 | MXN5-1 MXR5-1 | MXN6-1 MXR6-1 | MXN7-1 MXR7-1 |
|---|---|---|---|---|---|---|
| RED | YELLOW | TEAL | PURPLE | BLUE | COPPER | GREY |

### Operating Pressure

34.5 BAR
500 PSI

### 1" Threads

Nozzle FNPT
Receiver MNPT

### Construction

Anodized aluminum. Nickel plated steel. Color coded and keyed to prevent cross contamination.

### Compatibility

Compatible with competitor 1" high flow connectors.

### Caps & Plugs Recommended

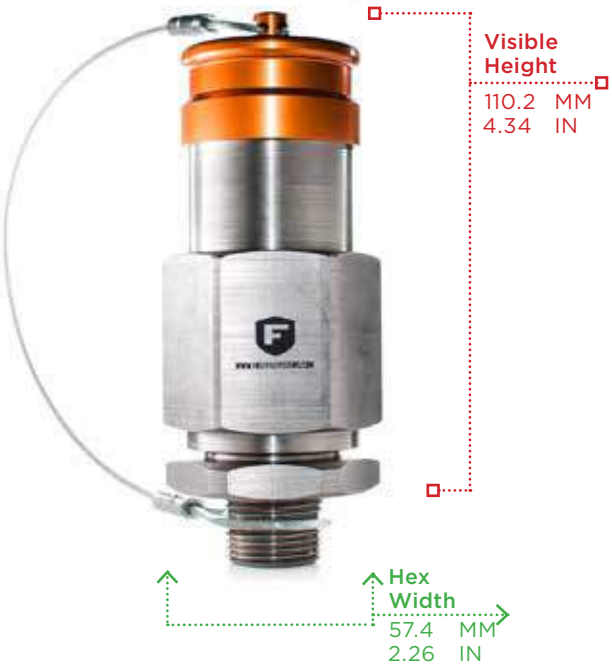
# GN210 | GR210

**Grease Matrix Couplers**

The Grease Matrix is a revolutionary patent pending product. This is the first flat-face dry break coupler that will connect and disconnect while maintaining supply pressure. This bulk filling grease coupler will perform with greater efficiency and safety. The system will not allow grease transfer until the couplers are connected properly. This coupler is available in 3/4", with a maximum deadhead pressure of 5,000 PSI at the integrated ball valve.

***Not for use with pressurized or auto-shutoff systems.**






| GN210 | GR210 | GN220 | GR220 |
|---|---|---|---|
| ORANGE | ORANGE | GREY | GREY |

| Operating Pressure | 3/4" Thread | Construction | Engineering | Engineering | Caps & Plugs Recommended |
|---|---|---|---|---|---|
| 345 BAR<br>5000 PSI | Nozzle FNPT<br>Receiver MNPT | Nickel plated steel. Anodized aluminum. | Dimple & groove guide system. | Connects and disconnects under line pressure. |  |