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<td>24</td>
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</table>
**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.

---

### Technical Specifications

<table>
<thead>
<tr>
<th>Max Operating Pressure</th>
<th>Max Flow Rate</th>
<th>Min Flow Rate</th>
<th>Fuel Inlet Port</th>
<th>Weight</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.17 BAR</td>
<td>567 LPM</td>
<td>94.5 LPM</td>
<td>38.1 MM</td>
<td>3.515 KG</td>
<td>Metal Latching Dogs</td>
</tr>
<tr>
<td>75 PSI</td>
<td>150 GPM</td>
<td>25 GPM</td>
<td>1-1/2 IN</td>
<td>7.75 LBS</td>
<td></td>
</tr>
</tbody>
</table>

---

Body Length: 356 MM (14 IN)

Nozzle Width: 209 MM (8.25 IN)

Actuator Width: 76 MM (3 IN)

Extended Length: 445 MM (17.5 IN)
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: N150PB
- Underground mining: N150PBU
- Brine Resistant: N150PB-BR

### Specifications

<table>
<thead>
<tr>
<th>Max Operating Pressure</th>
<th>Max Flow Rate</th>
<th>Min Flow Rate</th>
<th>Fuel Inlet Port</th>
<th>Weight</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.17 BAR 75 PSI</td>
<td>567 LPM</td>
<td>94.5 LPM</td>
<td>38.1 MM</td>
<td>2.948 KG</td>
<td>Elastodog Clips</td>
</tr>
<tr>
<td>75</td>
<td>150 GPM</td>
<td>25 GPM</td>
<td>1-1/2 IN</td>
<td>6.5 LBS</td>
<td></td>
</tr>
</tbody>
</table>

### Dimensions

- **Extended Length**: 445 MM / 17.5 IN
- **Actuator Width**: 76 MM / 3 IN
- **Nozzle Width**: 209 MM / 8.25 IN
- **Body Length**: 356 MM / 14 IN

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www.nozzletechusa.com | +1.801.491.3600
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 tough to handle the harshest conditions.
- Ball bearing latching for a secure connection.
- Withstands extreme temperatures.

**Variations**

- N150PSLp
- N150SL* Diaphragm Driven
- 2" Fuel Inlet
- 2" High Flow 800 LPM / 211 GPM
- PSL Arctic Nozzle
- N150PSL800
- N150SL800**
- N150ARTCp

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

### N150Tp

| Body Length | 292 MM (11.5 IN) |
| Actuator Width | 76 MM (3 IN) |
| Extended Length | 394 MM (15.5 IN) |

### Cartridge

- In field repair cartridge
- N150TRC

### Diesel Fuel Nozzles

- **Body Length**: 292 MM (11.5 IN)
- **Actuator Width**: 76 MM (3 IN)
- **Extended Length**: 394 MM (15.5 IN)

### Key Specifications

| Max Operating Pressure | 5.17 BAR (75 PSI) |
| Max Flow Rate | 567 LPM (150 GPM) |
| Min Flow Rate | 94.5 LPM (25 GPM) |
| Fuel Inlet Port | 38.1 MM (1-1/2 IN) |
| Weight | 2.645 KG (5.65 LBS) |
| Latching Mechanism | Elastodog Clips |
N1000PSL

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
Fast Fill Pressureless System Advantages

- Automatic shut-off without inducing pressure into the tank.
- Positive shut-off system senses the fluid 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**

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**

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

<table>
<thead>
<tr>
<th>Max Operating Pressure</th>
<th>Min Operating Pressure</th>
<th>Min Flow Rate</th>
<th>Max Flow Rate</th>
<th>Diesel Fuel Nozzle Shut-Off Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>517 kPa</td>
<td>35 kPa*</td>
<td>95 LPM</td>
<td>568 kPa</td>
<td>48 kPa*</td>
</tr>
<tr>
<td>75 PSI</td>
<td>5 PSI</td>
<td>25 GPM</td>
<td>800 LPM</td>
<td>7 PSI</td>
</tr>
</tbody>
</table>

*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
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 maintains 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.

PLA1000-M SV

This high flow receiver 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 environments. The new enclosed spring design smooths fluid flow to prevent vibrations caused by high flow rates.

Max Operating Pressure

<table>
<thead>
<tr>
<th>Max Operating Pressure</th>
<th>Safety</th>
<th>Construction</th>
<th>Time Saving</th>
<th>Economic</th>
</tr>
</thead>
</table>

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

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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.

<table>
<thead>
<tr>
<th>Max Operating Temperature</th>
<th>Min Operating Temperature</th>
<th>Min Operating Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>150° F</td>
<td>-30° F</td>
<td>125 PSI</td>
</tr>
<tr>
<td>65.6° C</td>
<td>-34.4° C</td>
<td></td>
</tr>
</tbody>
</table>

Max High Flow Rate | Min High Flow Rate | Max Standard Flow Rate | Min Standard Flow Rate | Max Operating Temperature | Min Operating Temperature |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>302 LPM</td>
<td>151 LPM</td>
<td>151 LPM</td>
<td>94.5 LPM</td>
<td>150° F</td>
<td>-30° F</td>
</tr>
<tr>
<td>80 GPM</td>
<td>40 GPM</td>
<td>40 GPM</td>
<td>20 GPM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>65.6° C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>-34.4° C</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Flange mounted shutoff valve with 6 bolt pattern designed to replace the FFF5C bolt-on bellhousing. External #6 JIC signal line connection.

**PLA150-M SVEBH**

**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 SV61-E**

**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 SVFE**

**Inlet Shut-off Valve**

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 EP**

**Evac Port**

CAT 120mm 6-bolt vent flange

**PLA150-M VF**

**Receiver Flange**

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

**PLA150-M RF**

**Receiver Flange**

2" JIC Adaptor

**AD150J**

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

**AD150**

2" NPT Adaptor

**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.
**S150, S512, S200, S215**  
Straight hose swivels with all aluminum construction.

**A150A, A150B, A150C**  
Used to splash fill a tank with any fast fill nozzle.

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

**AB2**  
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 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 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**  
Boxes can be configured to house any number or type of receivers. By consolidating the location of couplers, speed and safety are increased.
**R150CVc**

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.

**R150CVSW**

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.

**Max Operating Pressure**

<table>
<thead>
<tr>
<th>Receiver Type</th>
<th>Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>R150CVc</td>
<td>5.17 BAR 75 PSI</td>
</tr>
<tr>
<td>R150CVSW</td>
<td>5.17 BAR 75 PSI</td>
</tr>
</tbody>
</table>

**Compatibility**

- R150CVc: Compatible with all major fuel nozzle manufacturers.
- R150CVSW: Custom shut off pressures available.

**Construction**

- R150CVSW: Aluminum poppets instead of plastic.

**Time Saving**

- R150CVc: Replace receiver without draining tank.
- R150CVSW: Prevents fuel theft.

**Economic**

- R150CVc: Reduces overall costs and maintenance.
- R150CVSW: Cost-effective installation solution.

**Replacement Receiver**

- R150CVc: R150CVRc
- R150CVSW: R150CVRc

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.
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 shut off. 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**

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

**V150SR**

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 15 PSI.

**V150A**

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.

**V150B**

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.

**V150D**

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.

**V150W**

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

**V150C**

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.

**V150H**

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**

1” NPT direct mount configuration of our filter vent.

**FFV150-LP**

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

**FFV150**

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

**FFV150-HV VB**

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.
**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.

**Crankcase**

<table>
<thead>
<tr>
<th>Type</th>
<th>Operating Pressure</th>
<th>Burst Pressure</th>
<th>Flow Area</th>
<th>Nozzle Thread</th>
<th>Receiver Thread</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>N100p</td>
<td>34.5 BAR 500 PSI</td>
<td>103.4 BAR 1500 PSI</td>
<td>.3051 SQ IN</td>
<td>3/4” MNPT</td>
<td>3/4” MNPT</td>
<td>Pin latching</td>
</tr>
<tr>
<td>R100c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R100Jc</td>
<td>#12 JIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Coolant**

<table>
<thead>
<tr>
<th>Type</th>
<th>Max Operating Pressure</th>
<th>Burst Pressure</th>
<th>Flow Area</th>
<th>Nozzle Thread</th>
<th>Receiver Thread</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>N200p</td>
<td>34.5 BAR 500 PSI</td>
<td>103.4 BAR 1500 PSI</td>
<td>.1122 SQ IN</td>
<td>1/2” MNPT</td>
<td>1/2” MNPT</td>
<td>Pin latching</td>
</tr>
<tr>
<td>R200c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R200Jc</td>
<td>#12 JIC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OS100**

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

**Oil Sampling Valve**

<table>
<thead>
<tr>
<th>Type</th>
<th>Visible Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS100</td>
<td>43.7 MM 1.72 IN</td>
</tr>
</tbody>
</table>

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#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

- **Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.2212 SQ IN
- **Nozzle Thread**: 3/4” MNPT
- **Receiver Thread**: 3/4” MNPT
- **Visible Height**: 57.9 MM 2.25 IN
- **Height**: 69.4 MM 2.73 IN

**R300c**

- **Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.2212 SQ IN
- **Nozzle Thread**: 3/4” MNPT
- **Receiver Thread**: 3/4” MNPT
- **Visible Height**: 48.4 MM 1.9 IN
- **Height**: 107 MM 4.21 IN

**R300Jc**

- **Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.2212 SQ IN
- **Nozzle Thread**: 3/4” MNPT
- **Receiver Thread**: 3/4” MNPT
- **Visible Height**: 48.4 MM 1.9 IN
- **Height**: 107 MM 4.21 IN

**Transmission**

N400p

- **Max Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.1136 SQ IN
- **Nozzle Thread**: 1/2” MNPT
- **Receiver Thread**: 1/2” MNPT
- **Visible Height**: 43.6 MM 1.72 IN
- **Height**: 49.1 MM 1.93 IN

**R400c**

- **Max Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.1136 SQ IN
- **Nozzle Thread**: 1/2” MNPT
- **Receiver Thread**: 1/2” MNPT
- **Visible Height**: 29.7 MM 1.17 IN
- **Height**: 49.1 MM 1.93 IN

**R400Jc**

- **Max Operating Pressure**: 34.5 BAR 500 PSI
- **Burst Pressure**: 103.4 BAR 1500 PSI
- **Flow Area**: 0.1136 SQ IN
- **Nozzle Thread**: 1/2” MNPT
- **Receiver Thread**: 1/2” MNPT
- **Visible Height**: 108.8 MM 4.28 IN
- **Height**: 108.8 MM 4.28 IN

Transmission Mechanism:
- **Dog Teeth**
R Series Couplers

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

<table>
<thead>
<tr>
<th>N100Rp</th>
<th>R100Rc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Height</strong></td>
<td>76.9 MM 3.03 IN</td>
</tr>
<tr>
<td><strong>Visible Height</strong></td>
<td>56.7 MM 2.23 IN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating Pressure</th>
<th>Burst Pressure</th>
<th>Flow Area</th>
<th>Nozzle Thread</th>
<th>Receiver Thread</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.5 500 BAR PSI</td>
<td>103.4 1500 BAR PSI</td>
<td>.3640 SQ IN</td>
<td>3/4” FNPT</td>
<td>3/4” FNPT</td>
<td>Ball Latching</td>
</tr>
</tbody>
</table>

Coolant

<table>
<thead>
<tr>
<th>N200Rp</th>
<th>R200Rc</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Height</strong></td>
<td>66.4 MM 2.61 IN</td>
</tr>
<tr>
<td><strong>Visible Height</strong></td>
<td>46.2 MM 1.82 IN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Max Operating Pressure</th>
<th>Burst Pressure</th>
<th>Flow Area</th>
<th>Nozzle Thread</th>
<th>Receiver Thread</th>
<th>Latching Mechanism</th>
</tr>
</thead>
<tbody>
<tr>
<td>34.5 500 BAR PSI</td>
<td>103.4 1500 BAR PSI</td>
<td>.1361 SQ IN</td>
<td>1/2” FNPT</td>
<td>1-3/16” OD 7/8” ID 12 TPI 14 TPI</td>
<td>Ball Latching</td>
</tr>
</tbody>
</table>
Universal Couplers

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

Hydraulic

<table>
<thead>
<tr>
<th>N300Rp</th>
<th>R300Rc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Pressure</td>
<td>Burst Pressure</td>
</tr>
<tr>
<td>34.5 BAR</td>
<td>103.4 BAR</td>
</tr>
<tr>
<td>500 PSI</td>
<td>1500 PSI</td>
</tr>
</tbody>
</table>

Transmission

<table>
<thead>
<tr>
<th>N400Rp</th>
<th>R400Rc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Operating Pressure</td>
<td>Burst Pressure</td>
</tr>
<tr>
<td>34.5 BAR</td>
<td>103.4 BAR</td>
</tr>
<tr>
<td>500 PSI</td>
<td>1500 PSI</td>
</tr>
</tbody>
</table>

Visible Height
- N300Rp: 68.1 MM, 2.68 IN
- R300Rc: 42.9 MM, 1.69 IN

Visible Height
- N400Rp: 57.9 MM, 2.28 IN
- R400Rc: 39.9 MM, 1.57 IN
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.

Matrix

FFET 290

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

Operating Pressure

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>103</td>
<td>BAR</td>
</tr>
<tr>
<td>1500</td>
<td>PSI</td>
</tr>
</tbody>
</table>

3/4” Thread

<table>
<thead>
<tr>
<th>Thread Type</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nozzle</td>
<td>FNPT</td>
</tr>
<tr>
<td>Receiver</td>
<td>MNPT</td>
</tr>
</tbody>
</table>

Construction


JIC

All receivers are capable of a JIC fitting.

Height

<table>
<thead>
<tr>
<th>Component</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuator</td>
<td>95.4 MM</td>
</tr>
<tr>
<td></td>
<td>3.76 IN</td>
</tr>
<tr>
<td></td>
<td>*94 MM</td>
</tr>
<tr>
<td></td>
<td>*3.69 IN</td>
</tr>
<tr>
<td>Hex</td>
<td>56.4 MM</td>
</tr>
<tr>
<td></td>
<td>2.22 IN</td>
</tr>
<tr>
<td></td>
<td>*62 MM</td>
</tr>
<tr>
<td></td>
<td>*2.44 IN</td>
</tr>
<tr>
<td>Height</td>
<td>86 MM</td>
</tr>
<tr>
<td></td>
<td>3.39 IN</td>
</tr>
<tr>
<td></td>
<td>*68.2 MM</td>
</tr>
<tr>
<td></td>
<td>*2.68 IN</td>
</tr>
</tbody>
</table>

* Items marked are slightly different in size. Please refer to the measurements above for their sizes.
Matrix 300 Series

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.

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.

Operating Pressure

- 103
- 1500

3/4: Thread

- Nozzle: FNPT
- Receiver: MNPT

Construction


JIC

All receivers are capable of a JIC fitting.

Caps & Plugs Recommended

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

Matrix

www.nozzletechusa.com | +1.801.491.3600
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!

Matrix MX High Flow Series

MXET-1

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

Matrix MX High Flow Couplers

Operating Pressure

| 34.5 BAR | 500 PSI |

1” Threads

| Nozzle | FNPT |
| Receiver | MNPT |

Construction


Compatibility

Compatible with competitor 1” high flow connectors.

Caps & Plugs Recommended

www.fastfillsystems.com | +1.801.491.3600
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.

<table>
<thead>
<tr>
<th>Operating Pressure</th>
<th>3/4&quot; Thread</th>
<th>Construction</th>
<th>Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>345 BAR 5000 PSI</td>
<td>Nozzle Receiver FNPT MNPT</td>
<td>Nickel plated steel, Anodized aluminum.</td>
<td>Connects and disconnects under line pressure.</td>
</tr>
</tbody>
</table>

**Grease Matrix Couplers**

GN210 | GR210
--- | ---
Height 123.6 MM 4.87 IN
Hex Width 77.7 MM 3.06 IN
Hex Width 57.4 MM 2.26 IN
Actuator Width 58.7 MM 2.31 IN
Visible Height 110.2 MM 4.34 IN

*Not for use with pressurized or auto-shutoff systems.*
DIESEL FLOWS THROUGH OUR VEINS AT 265 GPM
(Soon flowing at over 300 GPM)

Nozzle Rebuilds

Nozzle Tech’s rebuild service is more than cleaning parts and lubing seals. Our trained technicians inspect nozzles inside and out. After troubleshooting, the nozzle is rebuilt with new parts, polished, and powder coated. Some say our refurbished nozzles work better than new ones. Send us your used nozzles today.

Phone +1.801.491.3600
Fax +1.801.489.5976
Email contact@nozzletechusa.com