



FAST FILL SYSTEMS CATALOGUE



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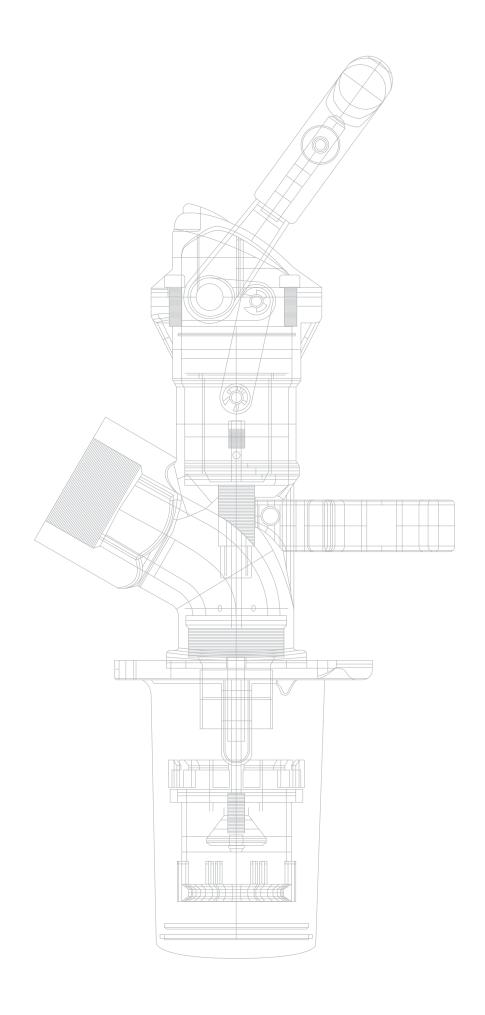
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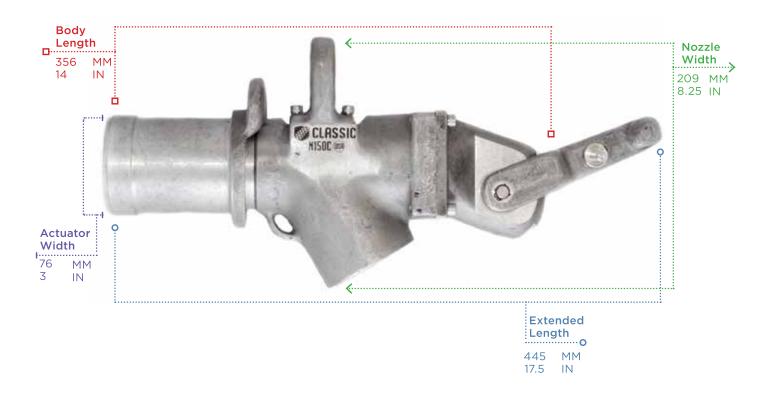






FS-N150Cp

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 Op Pressure	_	Max Flow R	ate	Min Flow Ra	ate	Fuel Inl	et Port	Weight		Latching Mechanism	Minimu Operati	m ng Temp
5.17	BAR	567	LPM	94.5	LPM	38.1	MM	3.515	KG	Metal Latching	-30	°C
75	PSI	150	GPM	25	GPM	1-1/2	IN	7.75	LBS	Dogs		

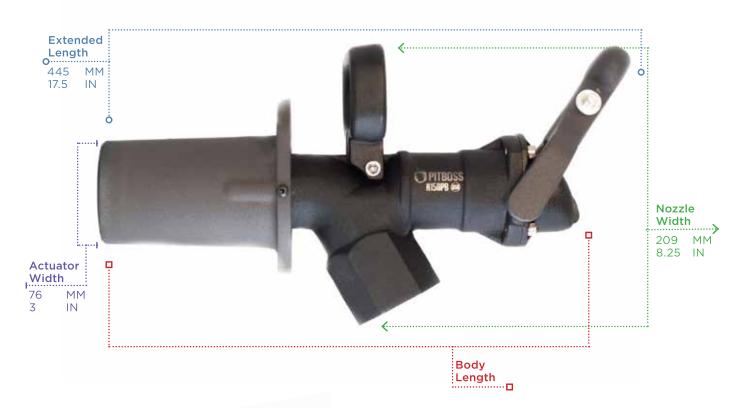
FS-N150PBp

The Pitboss diesel fuel nozzle (FS-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 shut off 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 Underground mining Brine Resistant FS-N150PBp FS-N150PBU FS-N150PB-BR







Max O Pressu	perating re	Max Flow R	ate	Min Flow R	ate	Fuel Inl	et Port	Weight		Latching Mechanism	Minin Oper Temp	ating
5.17	BAR	567	LPM	94.5	LPM	38.1	MM	2.948	KG	Elastodog	-30	°C
75	PSI	150	GPM	25	GPM	1-1/2	IN	6.5	LBS	Clips		

FS-N150PSLp

The Sureloc diesel fuel nozzle has proven reliable even in the harshest environments. It is customisable to meet specific needs. Its durable, allmetal 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.
- Sturdy build for greatly increased lifespan.
- Ball bearing latching for secure connection.
- Withstands extreme temperatures.

Variations

Standard with plug FS-N150SLp Diaphragm Driven 2" Fuel Inlet

FS-N150SL FS-N150SL-2 FS-N150SL800 FS-PSL800

Nozzle

Width

2" High Flow 800 LPM/ 211 GPM





	-	0			+	
Fuel Inle	et Port*	Weight		Latching Mechanism	Minimum Operatin	
38.1 1-1/2	MM IN	3.6 7.9	KG LBS	Ball Bearing	-30	°C

Length 445

MM IN

* Also available in 2" inlet

800 Se	ries	800 Se	ries	800 Series	
800	LPM	567	LPM	50.1	MM
211	GPM	150	GPM	2	IN



FS-A150A, FS-A150B, FS-A150C

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





FS-S150, FS-S200, FS-S215

Straight Hose Swivel Straight hose swivels with all aluminium construction.







FS-N150Tp

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 shut off, the field replaceable piston cartridge allows the end-user to

Cartridge

In field repair cartridge FS-N150TRC

- Powder coated non-slip finish for better grip.
- Compact, light weight design.
- Elastodog latching.
- All metal construction.





FS-R150SW

Deep Socket Tool The FS-R150SW, 2-1/2" deep socket tool is used to install new and remove worn down or damaged receivers



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FS-AB2

Breakaway Coupler Hose safety breakaway coupler with female NPT threads. Available in

Available in following sizes: 1", 1.25", 1.5", 2", 3", and 3.25".



FS-N150Rp

The Raptor combines the best features of our nozzles. It has an Elastodog latch for dirty conditions. It has a sturdy build for better durability.

- Pitboss's latching for easier coupling, even in dirty conditions.
- Sureloc's sturdy build for better durability.

Width
209 MM

Nozzle





Max Operatii Pressure	_	Max Flow Ra	ate	Min Flow R	ate	Fuel Inle	et Port	Weight		Latching Mechanism	Minimun Operatir	n ng Temp
5.17 75	BAR PSI	567 150	LPM GPM	94.5 25	LPM GPM	38.1 1-1/2	MM IN	3.629 8	KG LBS	Elastodog Clips	-30	°C
		800 Se	ries	800 Se	ries	800 Sei	ries					



FS-FFF4C

800

211

LPM

GPM

567

150

Weld-On Flange

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



LPM

GPM

50.1

þ

MM

IN

FS-FFF5C

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







FS-R150CVc

A 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. Fuel theft is minimised. The Check Valve Receiver is compatible with all major manufacturers' nozzles.



Safety Constr	
•	uctio

Eliminates potential fuel aluminium. spray.



FS-R150CVSW

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







Max Operating Pressure

5.17 BAR 75 PSI

on

Nickel plated steel. Anodised

Engineering

Replace receiver without draining tank.

Engineering

Prevents fuel theft.

Thread Size

2" NPT





FS-R150CVRc



FS-R150Sc

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 shut off options: 7, 9, 11, and 12 PSI.



Max	O	ре	ra	tii	ng
Pres	su	re			

5.17 75 PSI

Compatible with all major fuel nozzle

manufacturers.

Compatibility

Nickel plated steel. Anodised

aluminium.

Construction

Aluminium poppets instead of plastic.

Engineering

Engineering

Custom shut off pressures available.

Thread Size

2" NPT

Available in **Aluminium**



FS-R150SAc

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.



FS0-V150

Standard

The basic fuel vent. Fuel Available with a Vent standard 5" stem, available with 7" (FS-V150L7) and 12" (FS-V150L12) stems as well.





FS-V150D

Reduces fuel theft and Vandalism tank vandalism.

Flange Under-side is threaded with bolt pattern on top. This locks the vent in place. Bolts not included. Not compatible with FS-V150W.





FS-V150SR

Safety Used with the FS-V150

Relief where additional over-fill relief is Fuel needed. Has a safety relief valve to Vent protect tank from over filling if a nozzle fails. Opens up tank when pressure hits over 13 PSI.



FS-V150W

Adaptor

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





FS-V150A

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



FS-V150C

NPT 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.





FS-V150H

Designed for fuel Flow rates exceeding 150 GPM,

Vent capable of reaching 300 GPM.

Compatible with all vent configurations.



FS-V150B

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

Filter 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.



FS-FFV150-PL

Direct 1" NPT direct mount Mount configuration of our Filter filter vent.







FS-FFV150-LP

Direct Mount Filter Vent

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





FS-FFV150

Remote Mount Filter Vent

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





FS-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.

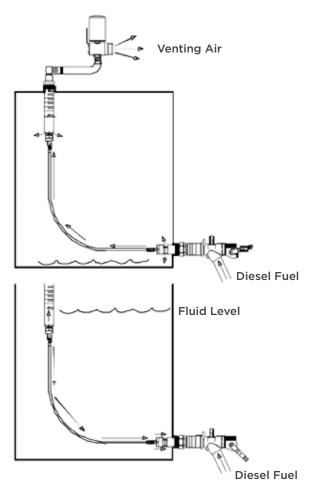






Pressureless Application

The Fast Fill Systems Pressureless Diesel Fueling System allows automatic shutoff without introducing pressure to the tank. This is a positive shut off system, which closes the shut off valve by sensing the fluid level in the tank.



This system was designed to be used with pressure sensitive nozzles such as the Fast Fill Systems Pitboss and Sureloc. For use with non-pressure sensitive nozzles such as our FS-N150SB bulk transfer nozzle, a pressure switch and time-delay relay on the pump system is recommended. The pressure switch and time-delay relay act as a safeguard against dead-head conditions when the shut off valve closes.



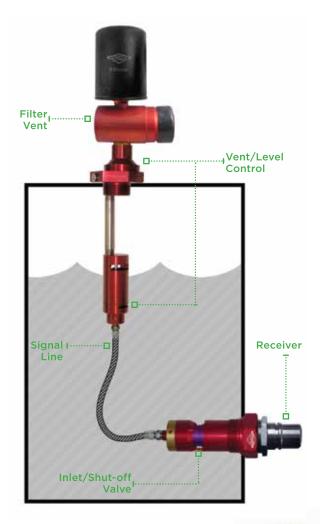
FS-PLP-6

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		Min Op	perating	Min Flow Rate		
Pressure		Pressu	re			
517	kPa	35	kPa*	95	LPM	
75	PSI	5		25	GPM	

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





FS-PLA150-M VLCE

Level Control

Vent/ 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. 5" length pipe can be extended by cutting and threading a 1/2" pipe to reach the desired shut off level. 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.

Max Flo	w Rate	Diesel Fu Shut off	iel Nozzle Pressure
568	LPM	48	kPa
150	GPM	7	PSI
800	LPM*		
200	GPM*		

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



FS-PLA150-M SV

Inlet Shut off Valve

The typical inlet/shut off 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. A receiver may be mounted directly or remotely to the valve (see FS-AD150 and FS-AD150J).

FS-PLA150-M SVEBH

Flange mounted shut off valve with

6 bolt pattern designed to replace

the FFF5C bolt-on bellhousing. External #6 JIC signal line

connection.



FS-AD150J

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





FS-AD150

2" NPT Adaptor

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





FS-N150SB

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





Inlet

Valve

Shut off

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

FS-PLA150-M RRM2





FS-R150-TL70-J

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





Flange mounted shut off valve with 6 bolt 5-3/4" pattern with 2" Code 61 hose mount for remote mounted receiver. External #6 JIC signal line connection.

FS-PLA150-M SV61-E





FS-PLA150-M PTF

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





Inlet

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

FS-PLA150-M EP

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 FS-N150SB bulk

FS-PLA150-M SV FE



FS-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.





Evac

Port

FS-PLA150-M VF

transfer nozzle.

Receiver CAT 120mm 6-bolt vent Flange flange.





FS-PLA150-M RF

Flange

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









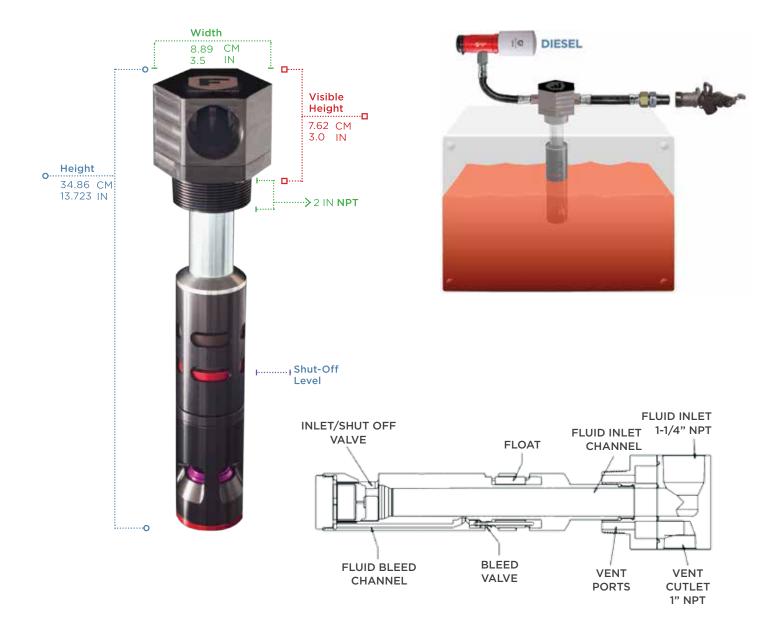
FS-PLA80-SVLC

Small Tank Pressureless

The FS-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 shut off 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

- System easily monitored
- Fills and vents through the same unit
- Completely pressureless operation
- Automatic independent tank shut off
- 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



Max High Flow Rat		Max Sta Flow R		Min Flow F	Rate*	Max Ope Tempera	_	Min Ope Tempera	_
302	LPM	151	LPM	19	LPM	150	F	-30	F
80	GPM	40	GPM	5	GPM	65.6	°C	-34.4	°C

^{*} Check Minimum flow rate for nozzle.



150º

65.6º

FS-PLA80 Hydraulic Application

Hydraulic Pressureless

The same FS-PLA80 that we developed for small tank diesel applications has been tested and configured for use with hydraulic fluid and diaphragm pumps. Using the FS-R150Sc and FS-SB150, hydraulic tanks can be reliably filled with pressureless shut off up to 125 psi pump pressure. Flow rate will vary depending on the viscosity of the fluid.



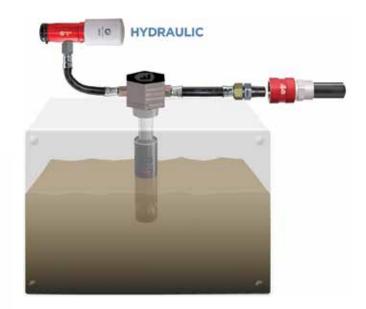
 $^{\circ}C$

	Michigan III	
Max Operating	Min Operating	Max Hydraulic
Temperature	Temperature	Operating Pres

-30

-34.4

rating Pressure 125 PSI





FS-OS100

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



Standard Couplers

F

 $^{\circ}C$

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 colour.





Operating Pressure		Burst Pressure		Flow Area		Nozzle Thread		Receiver Thread		Latching Mechanism	
34.5 500	BAR PSI	103.4 1500	BAR PSI	.3051	SQ IN	3/4"	MNPT	3/4"	MNPT	Pin latching	





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





FS-N200p FS-R200c FS-R200Jc #12 JIC

Max Operating Pressure		Burst Pressure		Flow Area		Nozzle Thread		Receiver Thread		Latching Mechanism
34.5 500	BAR PSI	103.4 1500	BAR PSI	.1122	SQ IN	1/2"	MNPT	1/2"	MNPT	Pin latching



FS-N400p



									#12 JIC		
Max Operating Pressure		Burst Pressure		Flow Area		Nozzle Thread		Receiver Thread		Latching Mechanism	
34.5 500	BAR PSI	103.4 1500	BAR PSI	.1136	SQ IN	1/2"	MNPT	1/2"	MNPT	Dog Teeth	

FS-R400c

FS-R400Jc

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.

Universal Couplers

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





Crankcase





FS-R100Rc

Operating Pressure		Burst Pressure		Flow Area Nozzle Thro		e Thread	Receiver Thread	Latching Mechanism
34.5 500	BAR PSI	103.4 1500	BAR PSI	.3640 SQ IN	3/4"	FNPT	OD 1-5/8" 12 TPI ID 1-5/16" 12 TPI	Ball Latching



Hydraulic





Operating Pressure		Burst Pressure		Flow Area	Nozzlo	e Thread	Receiver Thread		Latching Mechanism	
34.5 500	BAR PSI	103.4 1500	BAR PSI	.4207 SQ IN	3/4"	FNPT	OD 1-7/8" ID 1-5/8"		Ball Latching	



FS-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.







FS-N200Rp



FS-R200Rc

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

Transmission



FS-N400Rp



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

Flat Face Matrix 200 Series

The Matrix Flat Face coupling line is the ultimate solution in nohassle, 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 colour-coded nozzles and receivers designed to physically interlock with only their respective matching colour.

FS-FFET 290

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







Operating Pressure		3/4" Thread	Construction	JIC	Caps Recommended
103 1500	BAR PSI	Nozzle FNPT ReceiverMNPT	Anodised aluminium. Nickel plated steel. Colour coded and keyed to prevent cross contamination.	All receivers are capable of a JIC fitting.	





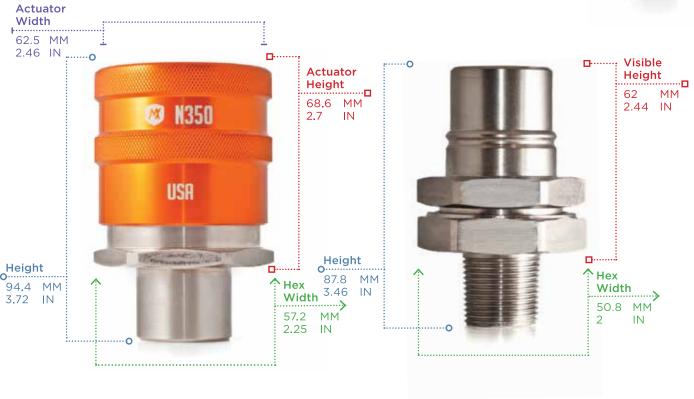
Matrix 300 Series

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 colour-coded and designed to physically interlock with only its matching colour.

FS-ET 290

One way evac tool acts as a master key to drain all 300 series receivers.







Operating Pressure		3/4: Thread		Construction	JIC	Caps & Plugs Recommended	
103 1500	BAR PSI	Nozzle Receiver	FNPT MNPT	Anodised aluminium. Nickel plated steel. Colour coded and keyed to prevent cross contamination.	All receivers are capable of a JIC fitting.		

MX High Flow Series

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 colours, eliminating any possibility of cross-contamination. With a robust, grip enhancing actuating ring and solid aluminium caps and plugs, these 1" Dry-Break connectors have been engineered for more than just high flow rates - they are engineered to last!

FS-MXET-1

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







 FS-MXN1-1
 FS-MXN2-1
 FS-MXN3-1
 FS-MXN4-FS-MXN5-1
 FS-MXN6-1
 FS-MXN7-1

 FS-MXR1-1
 FS-MXR2-1
 FS-MXR3-1
 FS-MXR4-FS-MXR5-1
 FS-MXR6-1
 FS-MXR7-1

 RED
 YELLOW
 TEAL
 PURPLE BLUE
 COPPER
 GREY

Operating Pressure

34.5 BAR Nozzle FNPT 500 PSI Receiver MNPT

1" Threads

Construction

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

Caps & Plugs Recommended







FS-GN210 | FS-GR210

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 pressurised or auto-shut off systems.







FS-GR210





FS-GN210 ORANGE

ORANGE

FS-GN220

FS-GR220 GREY

Operating **Pressure**

345 BAR PSI 5000

3/4" Thread

FNPT Nozzle Receiver MNPT

Construction

Nickel plated steel. Anodised Aluminium.

Engineering

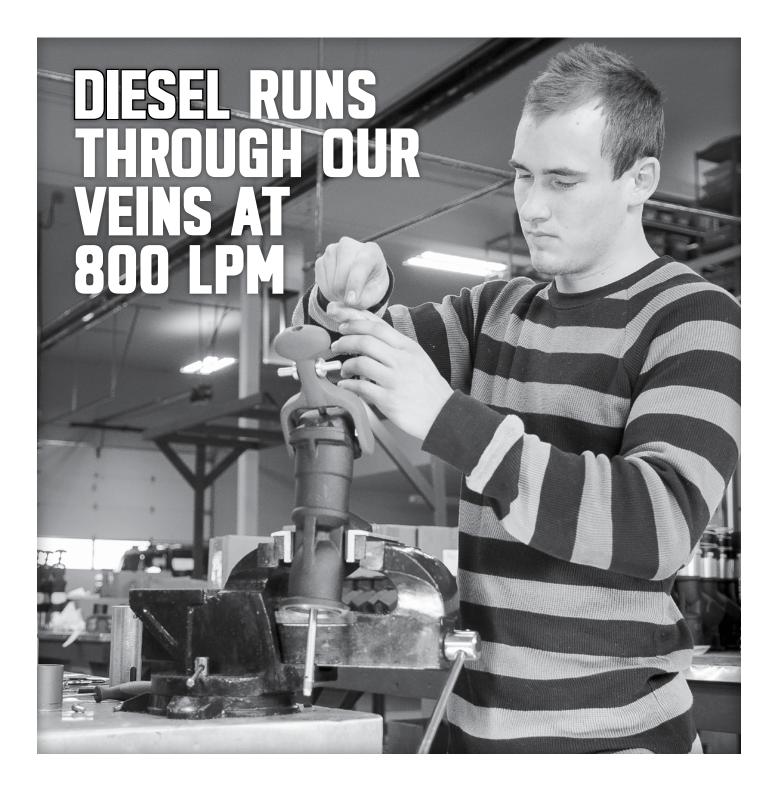
Dimple & groove guide system.

Engineering

Connects and disconnects under line pressure.

Caps & Plugs Recommended





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 a refurbished nozzle works even better than a new one. Send us your used nozzles today.









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