

PRODUCT CATALOG

The Leader in
Fueling Systems Since 1967

WORK FASTER, CLEANER, SAFER

Wiggins

Storage Systems



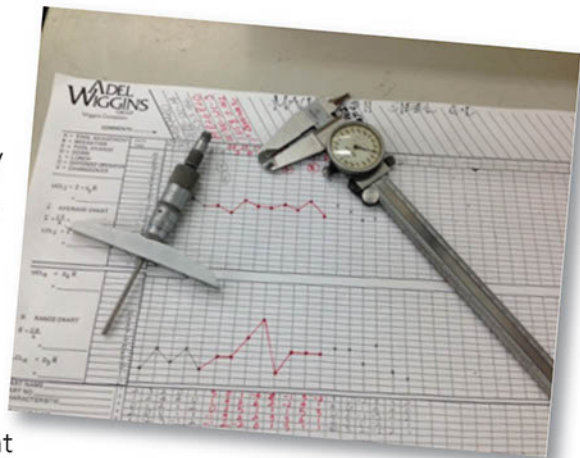
TRANSDIGM
GROUP INC.

ADEL
WIGGINS
GROUP



History & Innovation

By 1967, when we entered the off highway market, Wiggins connectors was already recognized throughout the aerospace industry as an innovator in fueling systems. With over 45 years of experience in high quality refueling systems, AdelWiggins Group has the connectors, nozzles, receivers and vents to make your fleet as efficient and safe as possible.



As a leader in the field of highly engineered aerospace components, we have leveraged our knowledge to successfully develop high quality parts to support the mining and construction industry. Leading the way with new products, in 1972 we introduced the ZZ9A nozzle, part of the fast, clean and efficient refueling which has become virtually an industry standard today. Following up on that success, we made a more reliable, lighter and faster fueling nozzle, the ZZ9A1. And now, we are introducing the new Wiggins nozzle, ZZ9A2 and the new JNX receiver with the JVX vent; the industry's safest and most reliable refueling system.



Contact Us

Wiggins Service Systems

5000 Triggs Street, Los Angeles, CA 90022

323.269.9181 ■ Fax: 323.269.3759

www.fastfueling.com

Sales Administrator | **Katrina Ureno**, kuren@adelwiggins.com, 323.881.7601

Distribution Manager | **Dave Martin**, dmartin@adelwiggins.com, 323.881.7646

Product Line Manager | **Paolo Mercado**, pmercado@adelwiggins.com, 323.881.7619

Technical Support | **Chris Quang**, cquang@adelwiggins.com, 323.881.7667



323.881.7601 • Fax: 323.981.7301

The JNX Series Non-Pressurizing Fast Fueling System

Fast, Clean, and ULTRA SAFE

Introduction

The Wiggins JNX non pressurizing system allows for automatic diesel refueling at up to 211 gpm (800 lpm) with existing Wiggins nozzles and does not pressurize the fuel tank. Shutoff is automatic, fully self contained, and **cannot be overridden**. JNX offers top line quality, performance, and reliability at a competitive price.

Competitors' Non Pressurizing Systems

Competitors' non pressurizing systems use float valves and are FAIL OPEN systems. They will overfill and pressurize the fuel tank if fueling is carried out with a faulty float valve or bleed hose. (Competitors' systems commonly make use of an internal bleed hose, which is vulnerable to fatigue due to fuel slosh.) In this situation, fuel continues to bleed through the faulty float valve or hose even when the fuel level has passed the required shutoff point, preventing pressure from equalizing across the shutoff piston. The pressure imbalance keeps the piston open, and fuel continues to flow into the tank unchecked. Consequently, the tank overfills and is pressurized in proportion to the flow rate – the higher the flow rate, the greater the spillage and pressure build up – creating a potentially severe safety and environmental hazard.

The Wiggins ULTRA SAFE JNX System

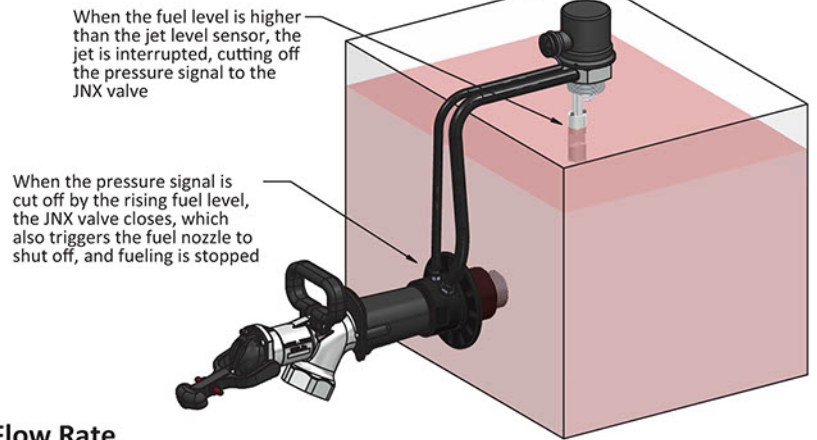
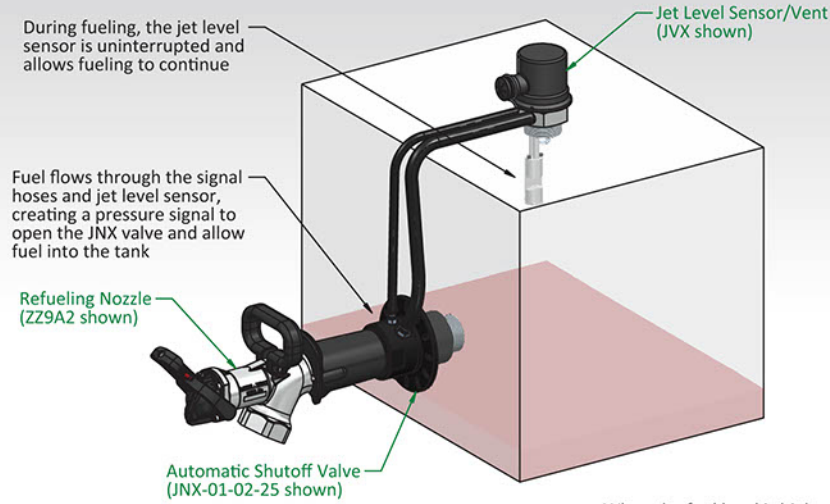
The Wiggins JNX system represents a technological leap forward in non pressurizing automatic diesel refueling systems. The JNX system uses conventional pressure sensitive fuel nozzles such as the Wiggins ZZ9A1 and ZZ9A2 while providing users with unique FAIL SHUT and OVERFILL RESISTANT features not matched by the competition.

The Wiggins JNX shutoff valve is FAIL SHUT: the spring closed main valve can only be opened by a pressure signal from the jet level sensor – if for any reason the pressure signal is lost, the main valve will close, shutting off the flow of fuel into the tank. This ensures that overfilling the tank is not possible even if any part of the jet level sensor or signal hose were to fail.

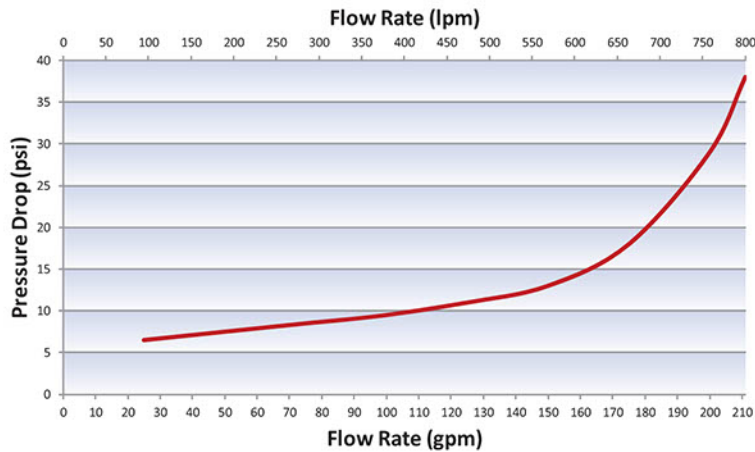
The unique Wiggins jet level sensor does not have any moving parts to wear out and is thus extremely reliable. The Wiggins non pressurizing system uses only external signal hoses, making JNX easy to install and maintain. The JNX system is available in both direct and remote fill configurations.



How It Works



JNX System Pressure Drop vs. Flow Rate
(ZZ9A2 nozzle connected to JNX-01-02)



*Note: actual pressure drop will vary based on fluid density and viscosity.

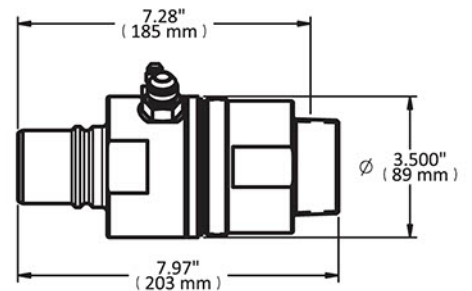
Automatic Shutoff Valves

JNX-01-02



- Standard automatic shutoff valve
- ZN2 style receiver interface to mate with ZZ9A1 or ZZ9A2 nozzle
- 2" NPT male thread for mounting to tank
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	3.33 lbs (1.51 kg)

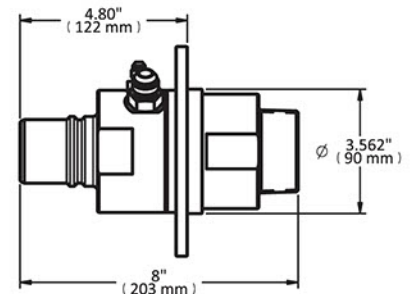
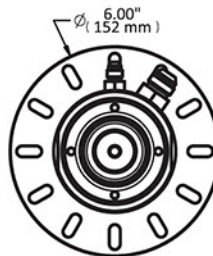


JNX-01-02-25



- Standard automatic shutoff valve
- ZN2-style receiver interface to mate with ZZ9A1 or ZZ9A2 nozzle
- Bolt-on mounting flange
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	3.94 lbs (1.79 kg)

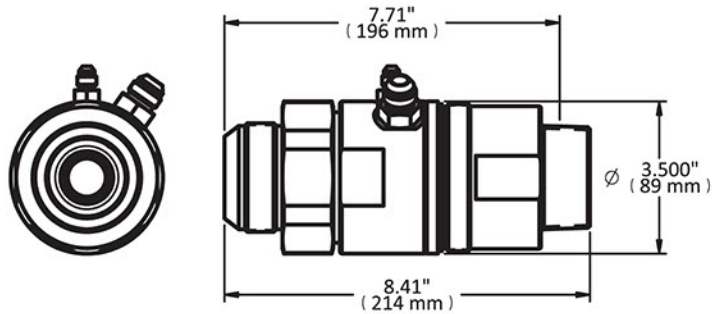


JNX-01-64

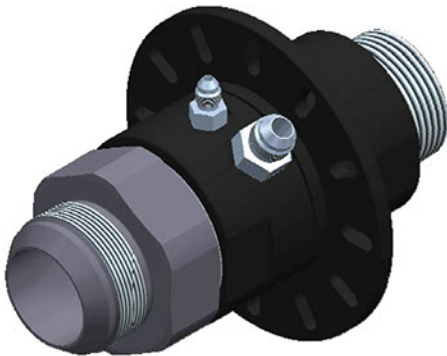


- Standard automatic shutoff valve
- 2" JIC Adapter for fuel transfer hose
- 2" NPT male thread for mounting to tank
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	3.74 lbs (1.70 kg)

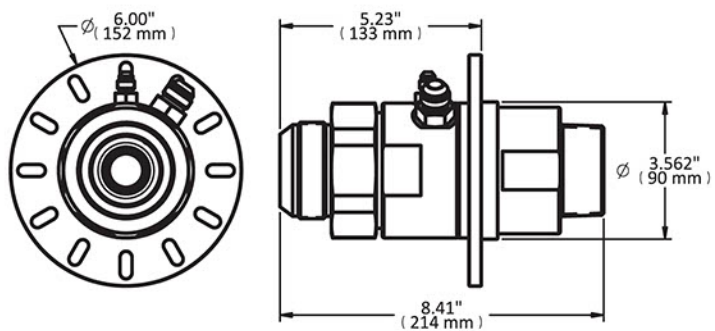


JNX-01-64-25



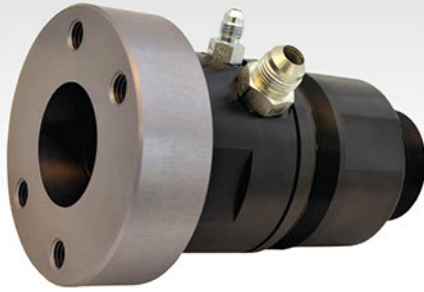
- Standard automatic shutoff valve
- 2" JIC Adapter for fuel transfer hose
- Bolt-on mounting flange
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	4.35 lbs (1.97 kg)



Automatic Shutoff Valves

JNX-01-61



- Remote automatic shutoff valve
- Code 61 inlet adapter
- 2" NPT male thread for mounting to tank
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

JNX-01-61-25S



- Remote automatic shutoff valve
- Code 61 inlet adapter
- 12-bolt mounting flange (as used on certain CAT® machines)
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

JNX-01B-86



- Automatic shutoff valve
- 2" NPT adapter for ZN2-type receiver
- 2" NPT male thread for mounting to tank
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

JNX-01B-86-25



- Automatic shutoff valve
- 2" NPT adapter for ZN2-type receiver
- Bolt-on mounting flange
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate



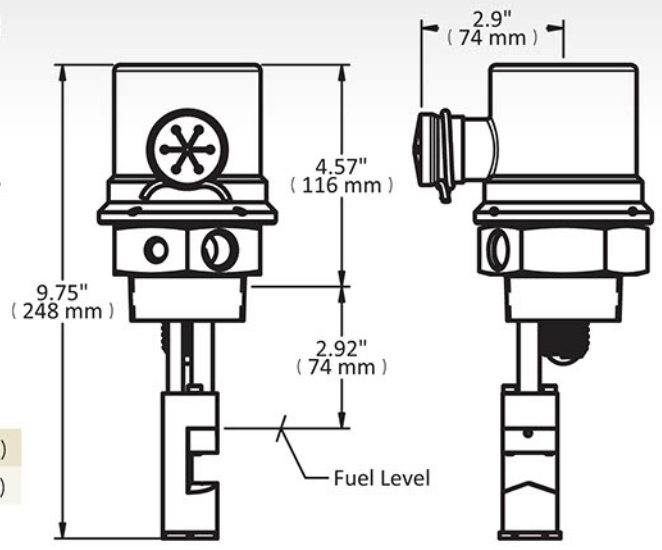
Integrated Jet Level/Sensor/Vent

JVX



- Vent assembly with integrated jet level sensor,
- 3 psig relief valve, and spill protection
- Jet level sensor does not have moving parts: it is extremely reliable
- 2" NPT male thread for mounting to tank
- Short sensor length

Operating Pressure 75 psig (520 kPa)
Weight 1.72 lbs (0.78 kg)

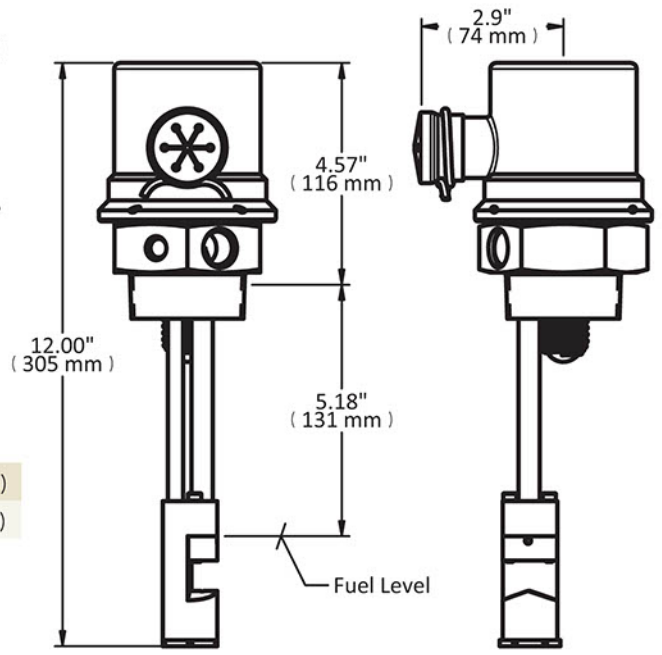


JVXL



- Vent assembly with integrated jet level sensor,
- 3 psig relief valve, and spill protection
- Jet level sensor does not have moving parts: it is extremely reliable
- 2" NPT male thread for mounting to tank
- Long sensor length

Operating Pressure 75 psig (520 kPa)
Weight 1.74 lbs (0.79 kg)

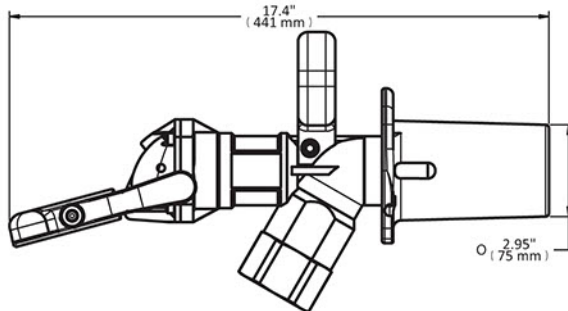


Refueling Nozzles

ZZ9A1



- Industry-standard diesel refueling nozzle
- 150 gpm (570 lpm) maximum flow rate
- Automatic shutoff; works with pressurizing and non-pressurizing systems
- 1.5" NPT female inlet thread
- Durable, dependable Elast-O-Dog latching
- Field-replaceable components

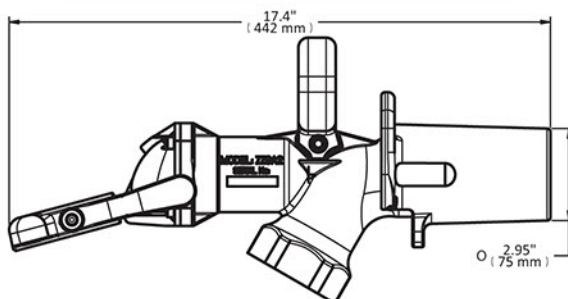


Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	150 gpm (570 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	5.64 lbs (2.56 kg)

ZZ9A2



- High-flow rate diesel refueling nozzle
- 211 gpm (800 lpm) maximum flow rate
- Automatic shutoff; works with pressurizing and non-pressurizing systems
- 2" NPT female inlet thread
- Durable, dependable Elast-O-Dog latching
- Field-replaceable components



Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	6.10 lbs (2.77 kg)



Accessories

Wiggins offers a variety of adapters, flanges, and hose kits that allow JNX to be customized to suit even the most challenging installations. Below are just a few examples:

JNC2A



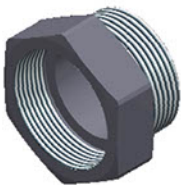
- Receiver for use with remote JNX: mates with ZZ9A1 or ZZ9A2 nozzle
- Extra-light spring to minimize risk of premature shutoff
- Comes with protective dust cap

VR310-11



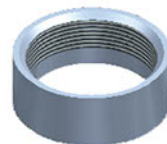
- Weld-on flange for mounting JNX-01-02-25 or JNX-01-64-25

JNX-75



- 2' NPT Extension for mounting JNX receiver inside ZNC3, ZNC3L, ZNC4 and ZNC4L

CSPF-C007



- Weld-on 2" NPT half coupling for mounting automatic shutoff valve or jet level sensor/vent

Fuel Systems

KR91

Actuating Assembly Replacement Kit



KR92

Latching Mechanism Replacement Kit



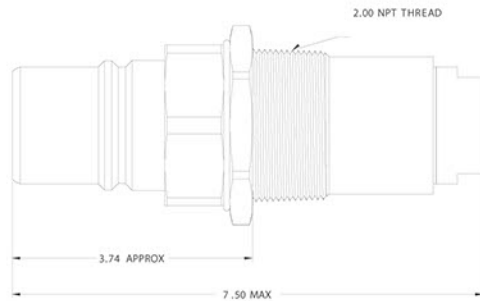
KR93

Housing Handle Replacement Kit



ZN2CV

Fuel Receiver with Check Valve



► ZZ9A1 – Data Table

Flow Rate (gpm)	Pressure Drop	Operating Pressure	Weight (lbs)
25	1.0 psi	125 psig max	5.75
60	4.0 psi	125 psig max	5.75
100	9.0 psi	125 psig max	5.75
125	14.0 psi	125 psig max	5.75
150	24.0 psi	125 psig max	5.75

ZN2CV-100

Rebuild Kit for ZN2CV



ZN2CV-1

Installation Kit for ZN2CV

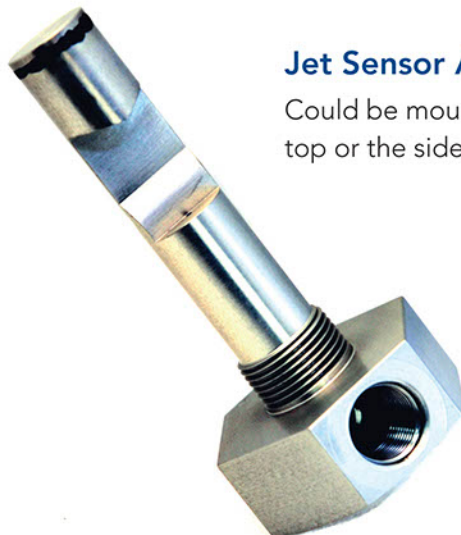
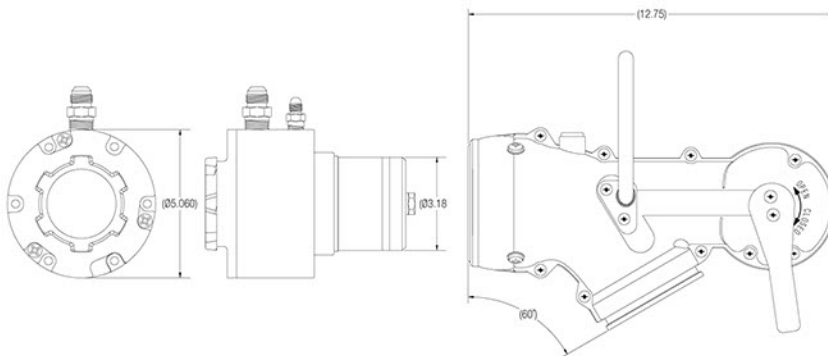




VR300

The VR300 – Fuel at 300 GPM

The VR300 system is also nonpressurized and has a flow capacity of up to 300 gallons per minute. Non-pressurized systems allow operators to use Wiggins high flow fueling systems on vehicles with lightweight or composite fuel tanks.



Jet Sensor Assembly

Could be mounted on the top or the side of the tank.

Easy to Install

- Can be mounted directly on fuel tank, or in remote location
- Several manufacturers have equipped their vehicles to accept the VR300 mounting

Fast

- Designed for vehicles with large fuel tanks
- Fuel at rates up to 300 GPM
- Spend less time fueling and more time working

Clean

- Interlock feature prevents spills from disconnecting nozzle during fueling
- Positive shut off – cannot be overfilled, shut – off cannot be overridden
- Unique cam-lock nozzle attachment assures a leak – proof seal between nozzle and receiver.

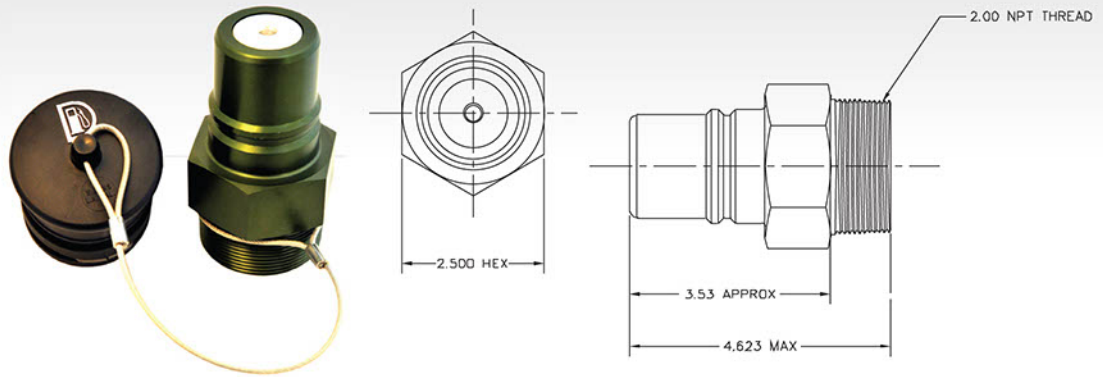
Safe

- Uses same jet sensor technology as JN125
- Nozzle includes full tank indicator display
- Proven reliability – hundreds of units in use world wide

Rated Flow:	10 to 300 GPM
Operating Pressure:	25 to 125 PSIG
Pressure Drop:	7 PSID @ 200 GPM 18 PSID @ 300 GPM
Connect/Disconnect Rotation:	30 Degrees
Disconnect Spillage:	3 cc, Max.
Housing Material:	Aluminum
Weight:	9 LBS

Fuel Receivers

ZN2A



► Data Table

Receiver	Application	Poppet Color
ZN2A	Standard for most applications and mountings	Clear
ZN2B	has a light spring to avoid premature shutoff when head pressure is higher than normal	Blue
ZN2D	has a heavy spring to avoid overfilling the tank when head pressure is lower than normal	Red
ZN2AC	Stainless-Steel version of ZN2A	Clear
ZNC2A	Same as ZN2 with cap	

ZNC3L

Pressurized flush mount bolt-on receiver with half coupling



ZNC4L

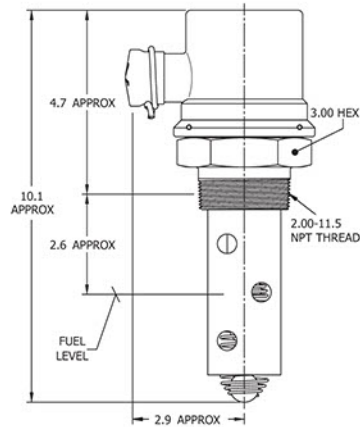
Pressurized flush mount weld-on receiver with half coupling



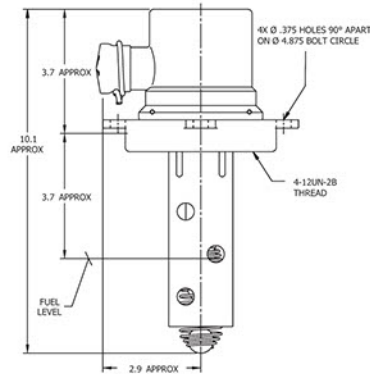


Fuel Tank Vents

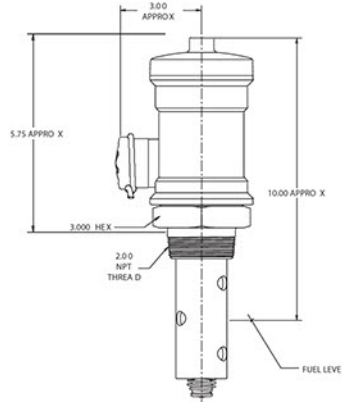
ZV10



ZV11



ZV13



► Data Table

Vent Model	Mounting Style	Length	Pressure Relief	Rebuild Kit Number
ZV10	Pipe Thread	9.375"	10.2 - 12.9 psi	K30285
ZV10A	Welded Half-Coupling	9.375"	10.2 - 12.9 psi	K30285
ZV10B	Flange/Gasket	9.375"	10.2 - 12.9 psi	K30285
ZV10C	Same as ZV10 w/Threaded Outlet	9.500"	10.2 - 12.9 psi	K30285
ZV10F	Same as ZV10 w/Long Stem	12.50"	10.2 - 12.9 psi	K30285
ZV11	Gas Cap Mount	9.312"	10.2 - 12.9 psi	K30285
ZV11A	Gas Cap Mount w/Long Stem	12.50"	10.2 - 12.9 psi	K30285
ZV13	Vented Pipe Thread	12.00"	10.4 - 11.3 psi	N/A
ZV13F	Long Stem	14.70"	10.4 - 11.3 psi	N/A

fuel tank vents

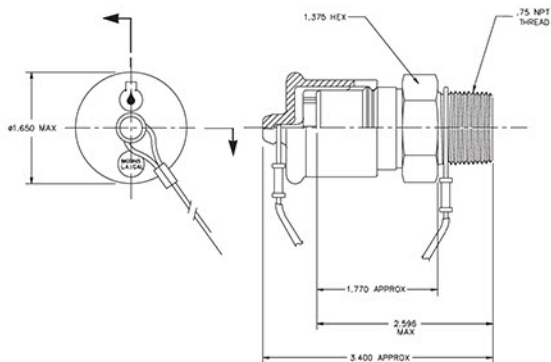
Service Couplings

ON2 / C3B12

Crankcase Receiver and Cap

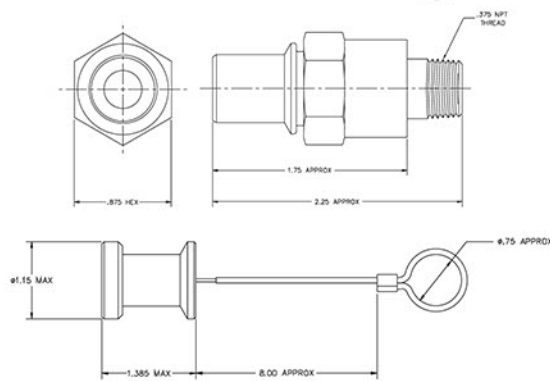


To order receiver with cap, specify ONC2A



P1804 / P1880

Transmission Receiver and Cap



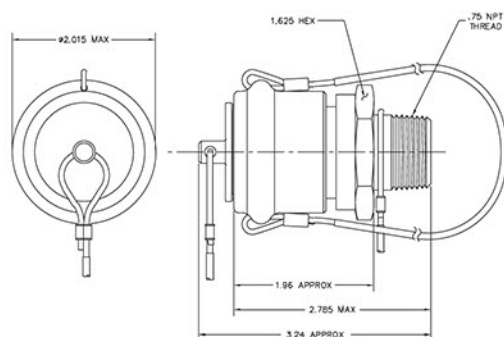
OS2

Crankcase Nozzle and Plug



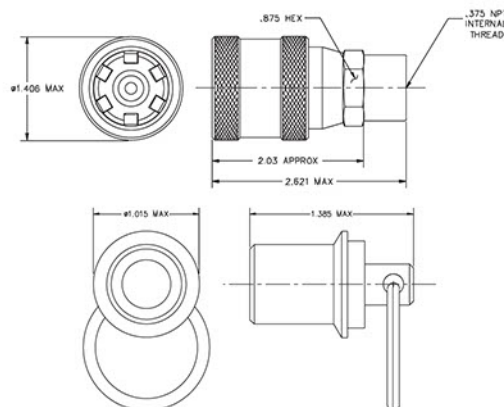
To order nozzle with plug (OP12), specify OSP2

Mates with ON2 and ONC2A Receivers



C1807 / P1844

Transmission Nozzle and Plug





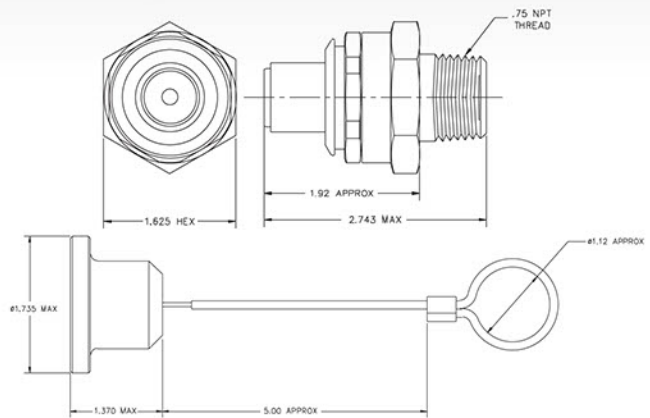
6005A12 / 6008-12

Hydraulic Receiver and Cap

6005A12



6008-12



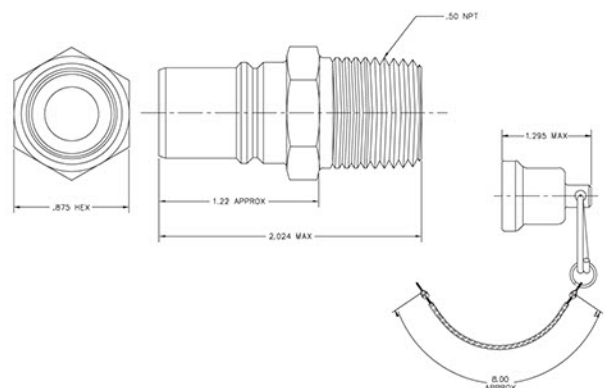
EC285A8 / 1208-8

Coolant Receiver and Cap

EC285A8



1208-8



6000B12 / 6009-12

Hydraulic Nozzle and Plug

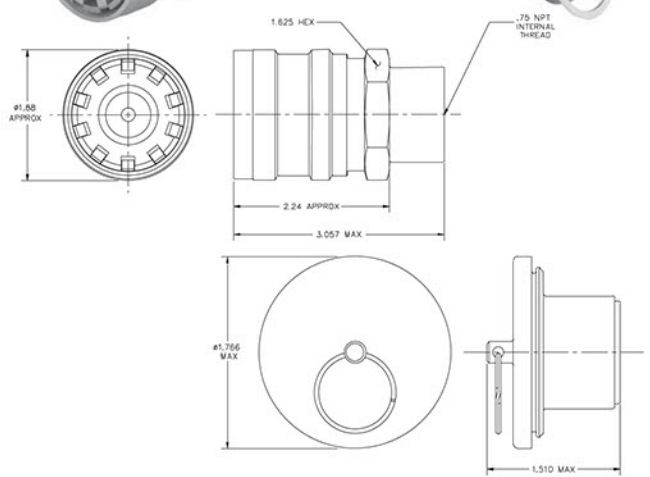
6000B12



Mates with 6005A12 Receiver



6009-12



EC280B8 / 1209-8

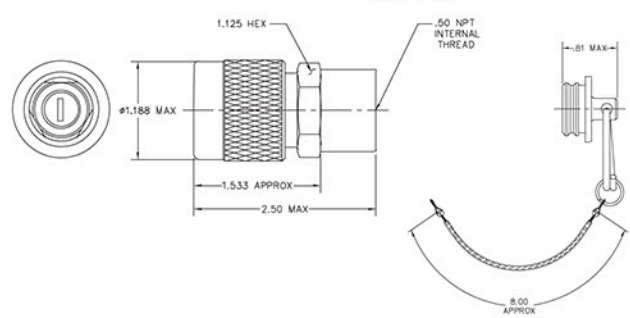
Coolant Nozzle and Plug

EC280B8

Mates with EC285A8 Receiver



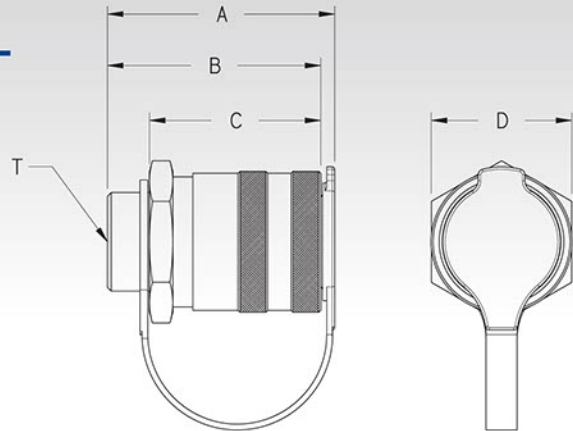
1209-8



Service Couplings

R11

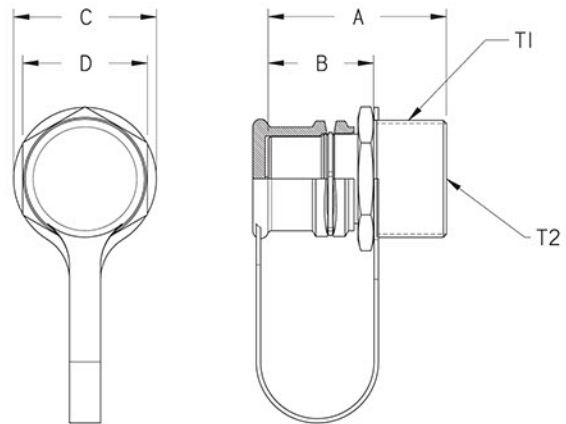
Coolant Nozzle



NOZZLE			Dimension				
Application	Part #	Cap	A	B	C	D	T
Coolant	R11	R1107	2.70" Max	2.53" Approx	1.92" Approx	1.500" Hex	.50" NPT Int. Thread
Transmission	R13	R1307	3.100" Max	2.85" Approx	2.20" Approx	1.750" Hex	.75" NPT Int. Thread
Oil	R15	R1507	3.300" Max	3.04" Approx	2.25" Approx	2.00" Hex	.75" NPT Int. Thread
Hydraulic	R17	R1707	3.700" Max	3.42" Approx	2.75" Approx	2.250" Hex	1.00" NPT Int. Thread

R12

Coolant Receiver



RECEIVER			Dimension					
Application	Part #	Cap	A	B	C	D	T1	T2
Coolant	R12	R1205	2.23" Max	1.17" Approx	1.410" Max	1.250" Hex	1.187"-12UN-2A Thread	.875"-14UNF-2B Int. Thread with SAE J1926/1-10 Boss Seal Surface
Transmission	R14	R1405	2.49" Max	1.39" Approx	1.610" Max	1.437" Hex	1.312"-12UN-2A Thread	1.062"-12UN-28 Int. Thread with SAE J1926/1-12 Boss Seal Surface
Oil	R16	R1605	2.50" Max	1.50" Approx	1.990" Max	1.750" Hex	1.625"-12UN-2A Thread	1.312"-12UN-2B Int. Thread with SAE J1926/1-16 Boss Seal Surface
Hydraulic	R18	R1805	2.89" Max	1.70" Approx	2.300" Max	2.000" Hex	1.875"-12UN-2A Thread	1.625"-12UN-2B Int. Thread with SAE J1926/1-20 Boss Seal Surface



Accessories

Nozzle Adapters for the ZZ9A1



**Straight ZN6A
Adapter Tube**

**90° ZN6B
Adapter Tube**



Bulk Fuel Coupling

ZS5 Nozzle (Mates with ZN2A)

The ZS5 Bulk Transfer Nozzle is designed to mate with the ZN2 receiver. It can be used to drain a fuel tank for servicing, or to transfer fuel from one tank to another. The end fitting is the same 2-inch NPT female fitting as the ZZ9A1.



Breakaway Coupling

ZC150

Breakaway Rebuildable Coupling



accessories