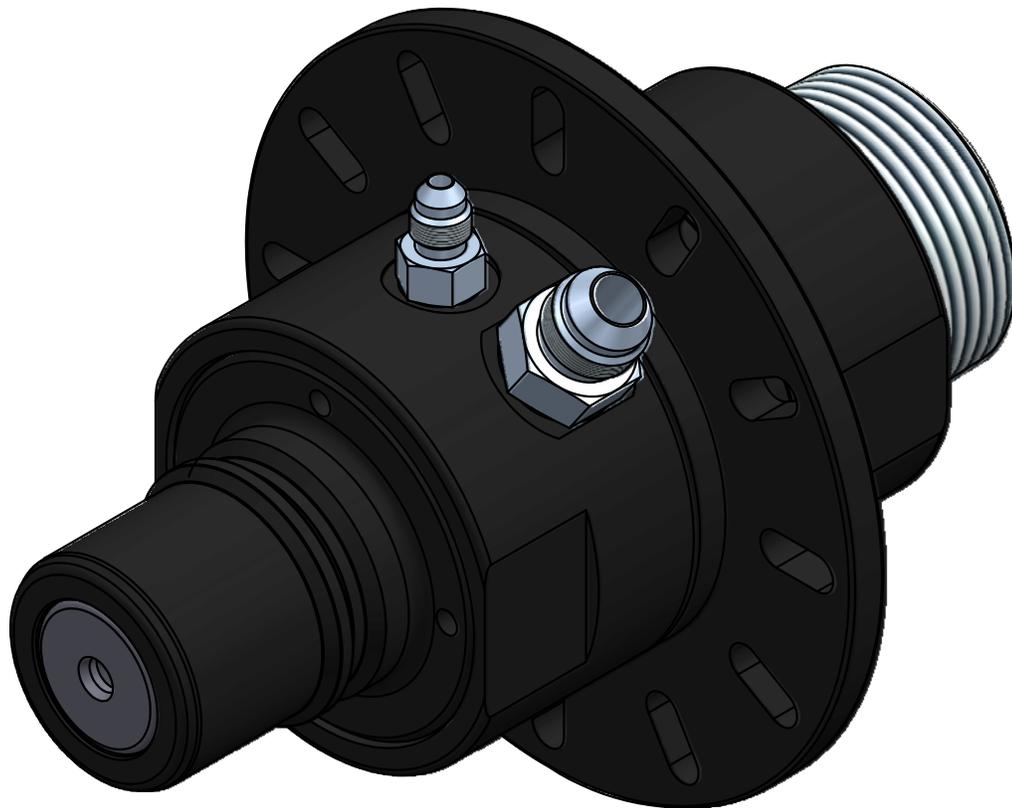


# WIGGINS

# JNX

## Non-Pressurizing Fast Fueling System



## *Introduction*

### ***The JNX-Series Non-Pressurizing Fast Fueling System*** **Fast, Clean, and ULTRA-SAFE**

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 overflow 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***

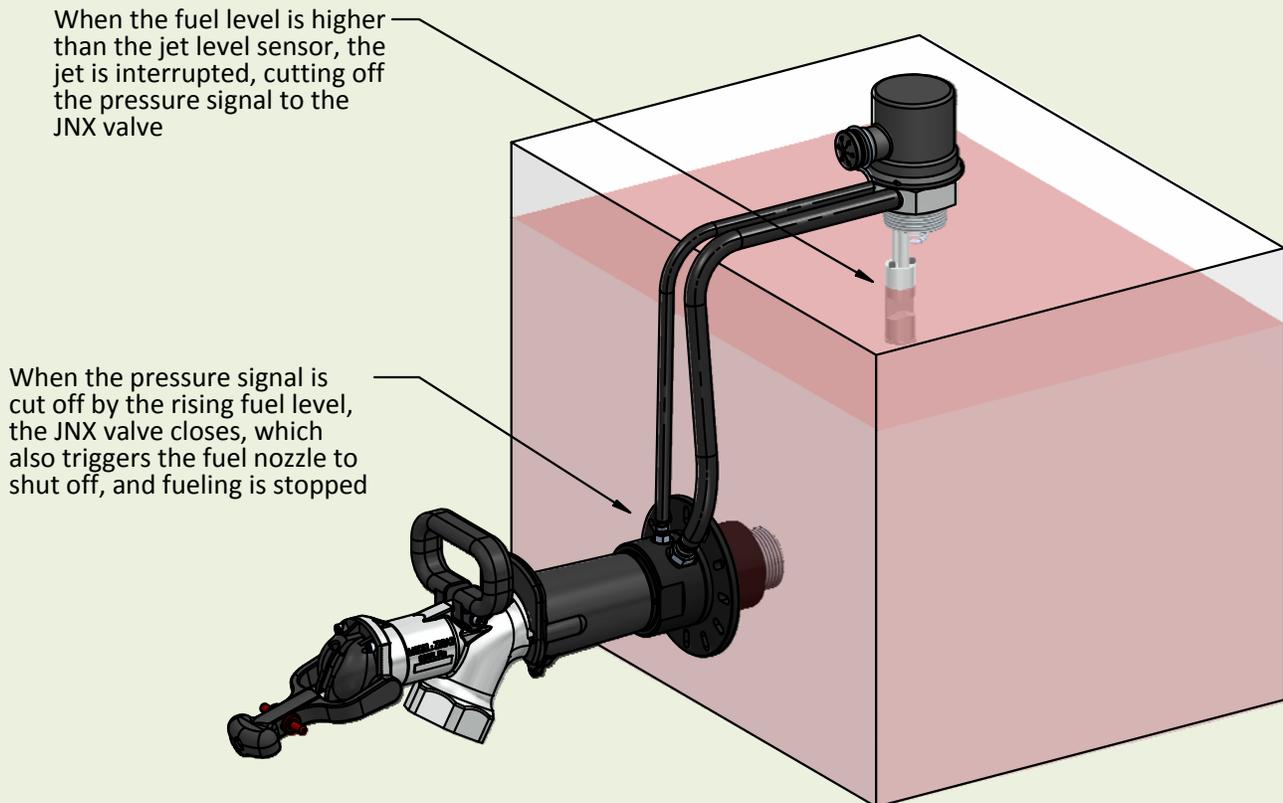
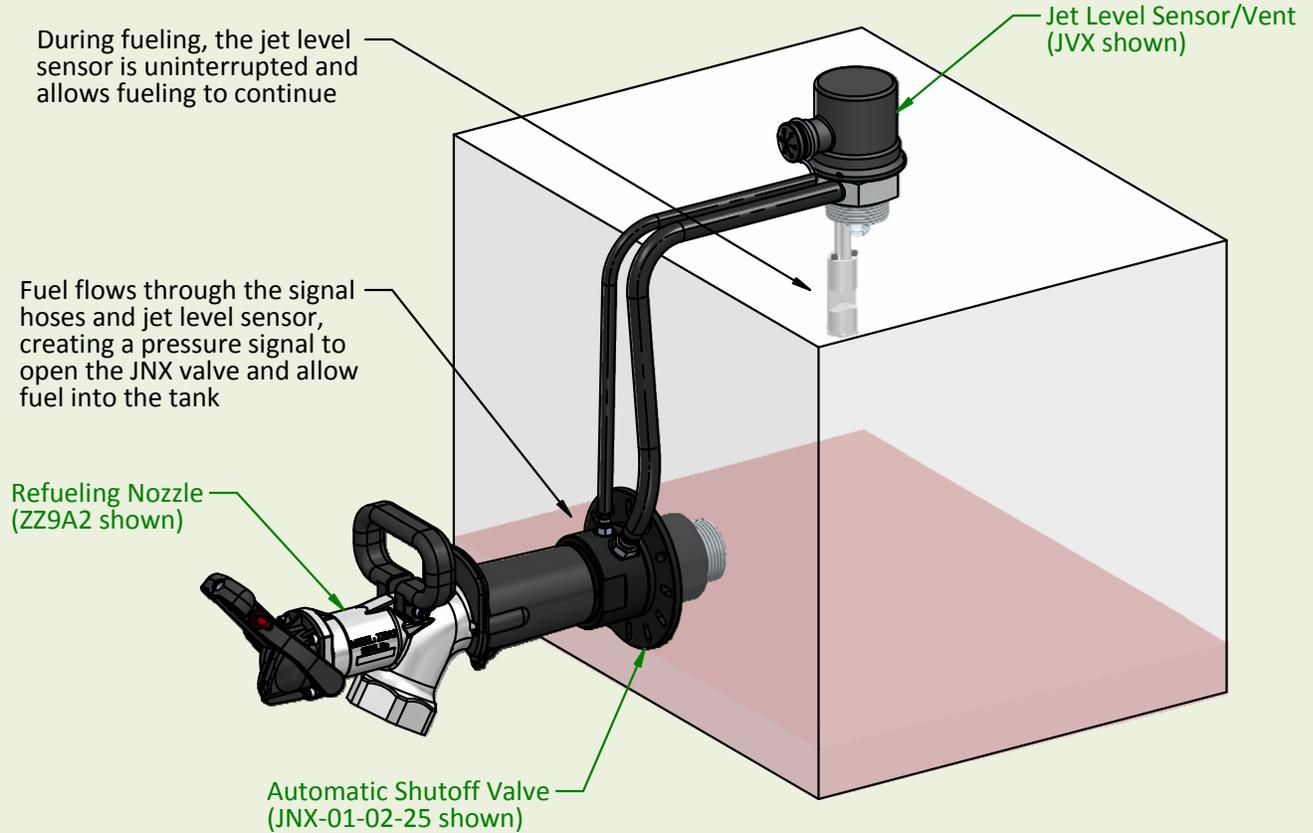
The Wiggins JNX system represents a technological leap forward in non-pressurizing automatic diesel refueling systems. The JNX system uses conventional pressure-sensitive fuel nozzles such as the Wiggins ZZ9A1 and ZZ9A2 while providing users with unique FAIL-SHUT and OVERFILL-RESISTANT features not matched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

# WIGGINS Non-Pressurizing Fast Fueling System

## How It Works



## 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



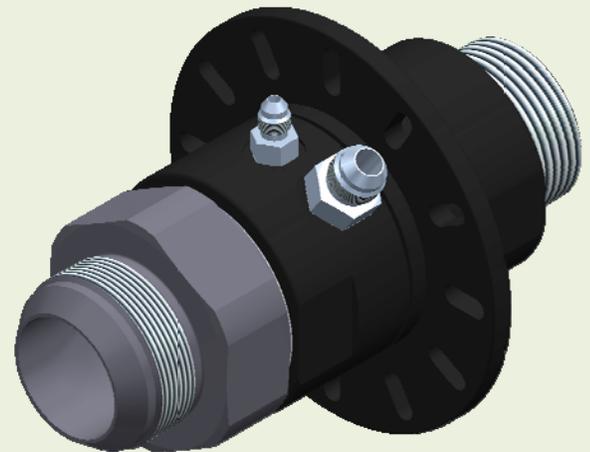
### JNX-01-02-25

- 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



### JNX-01-64

- Remote 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

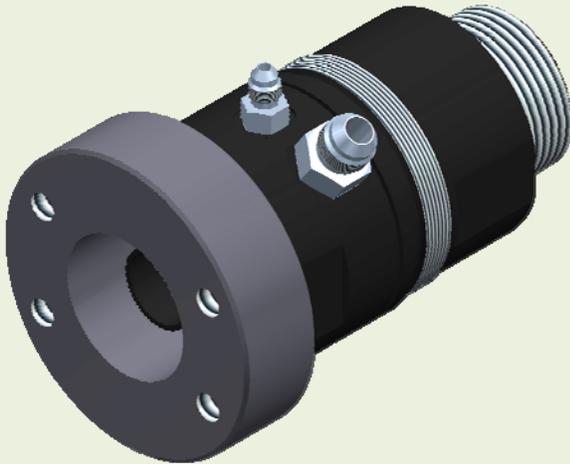


### JNX-01-64-25

- Remote 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

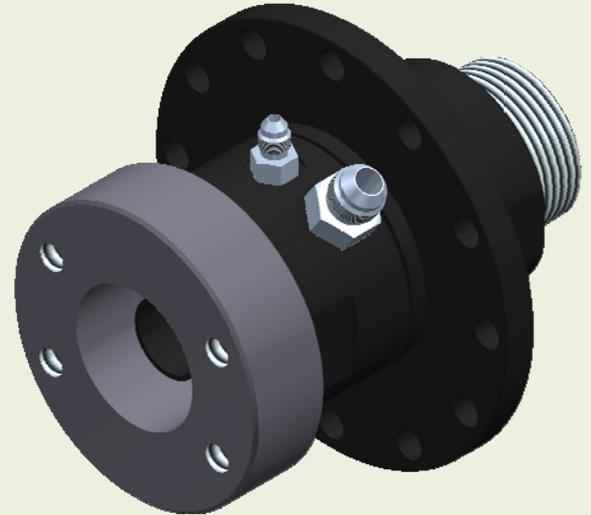
# WIGGINS Non-Pressurizing Fast Fueling System

## 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

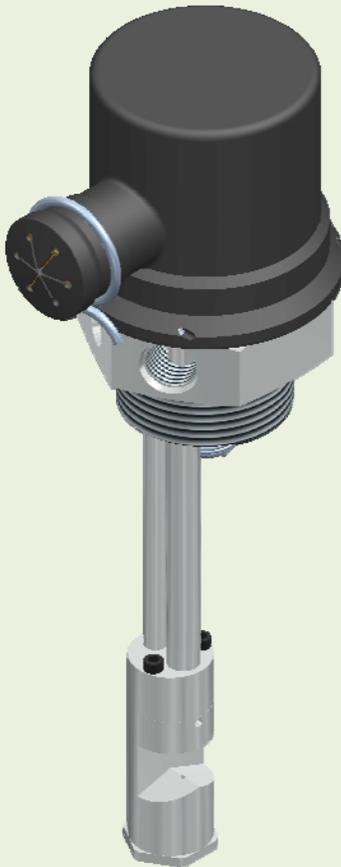
- Automatic shutoff valve
- 2" NPT adapter for ZN2-type receiver
- Bolt-on mounting flange
- Works with JVX (short) or JVXL (long) jet level sensor/vent
- 211 gpm (800 lpm) maximum flow rate

## *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

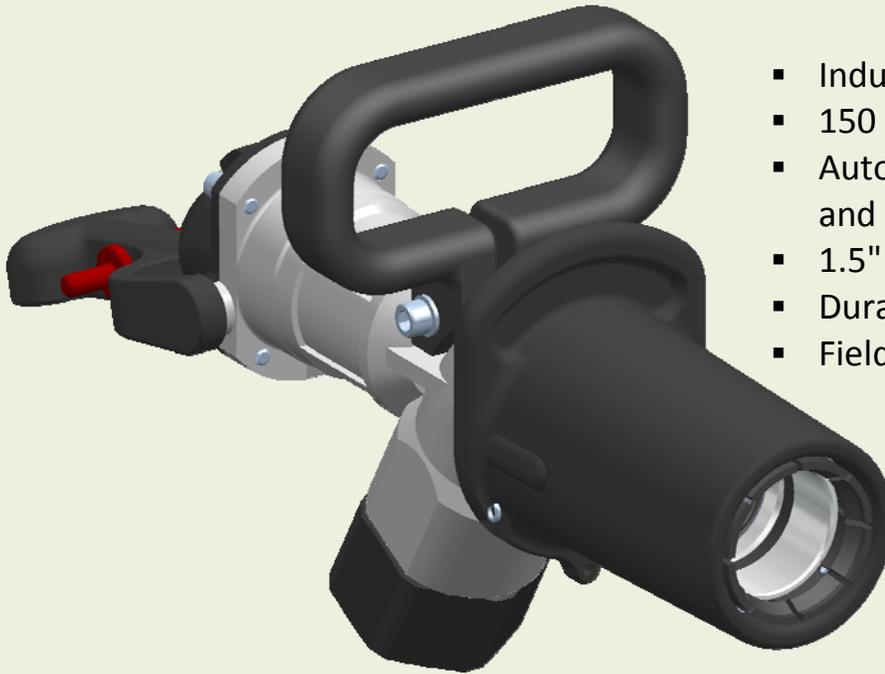


### **JVXL**

- 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

## 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

---

### 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

# WIGGINS Non-Pressurizing Fast Fueling System

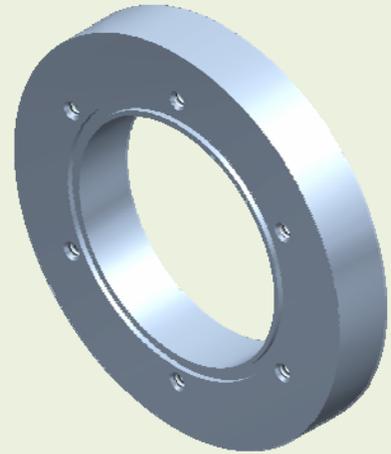
## Accessories

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:



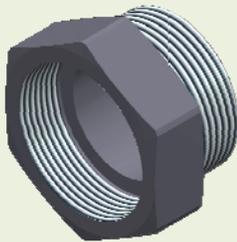
### JNC2A

- 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



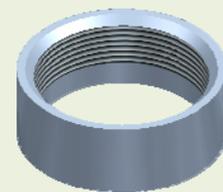
### VR310-11

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



### JNX-75

- 2" NPT adapter for installing JNX-01-02 in ZNC3 or ZNC4 "bell" housing

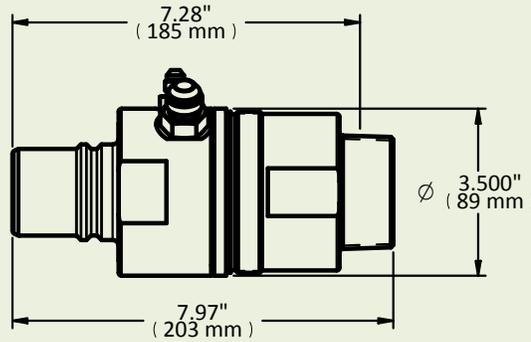


### CSPF-C007

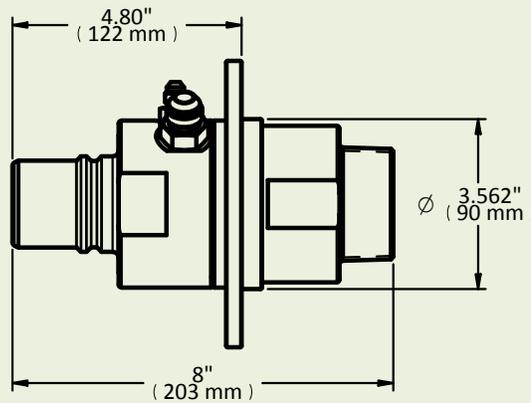
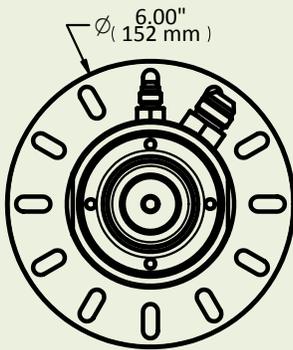
- Weld-on 2" NPT half-coupling for mounting automatic shutoff valve or jet level sensor/vent

# WIGGINS Non-Pressurizing Fast Fueling System

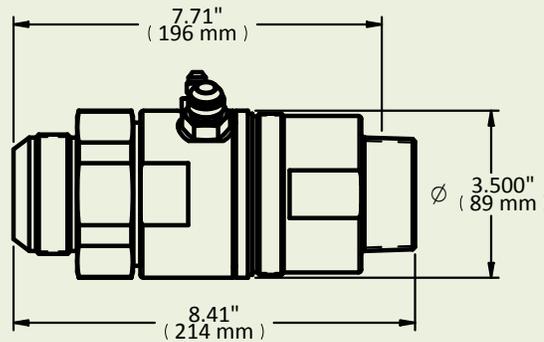
## Technical Information



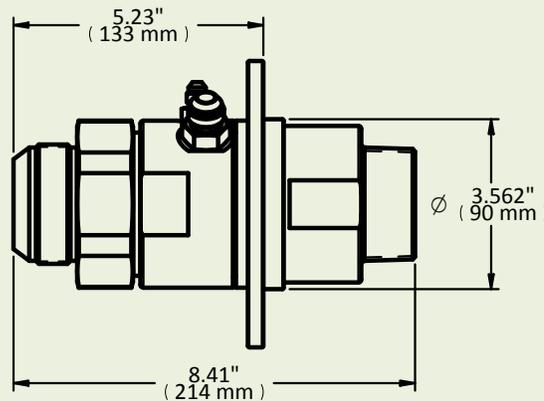
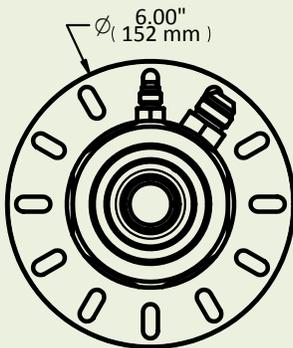
<b>JNX-01-02</b>	
Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	3.33 lbs (1.51 kg)



<b>JNX-01-02-25</b>	
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)



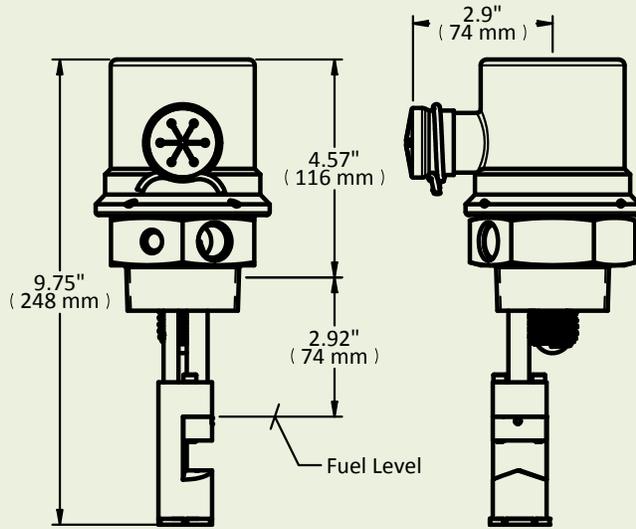
<b>JNX-01-64</b>	
Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	3.74 lbs (1.70 kg)



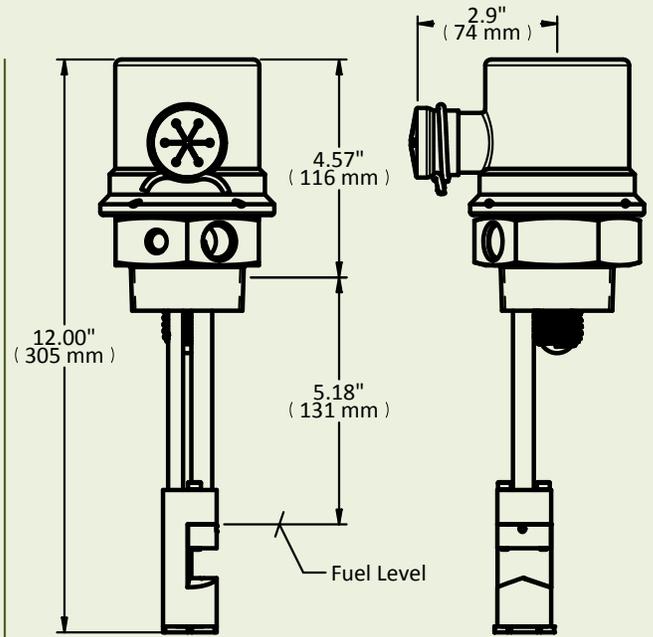
<b>JNX-01-64-25</b>	
Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	211 gpm (800 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	4.35 lbs (1.97 kg)

# WIGGINS Non-Pressurizing Fast Fueling System

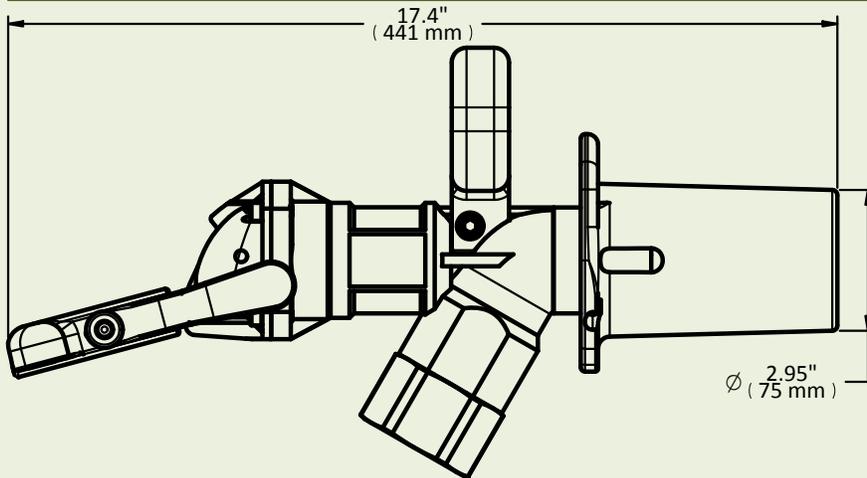
## Technical Information



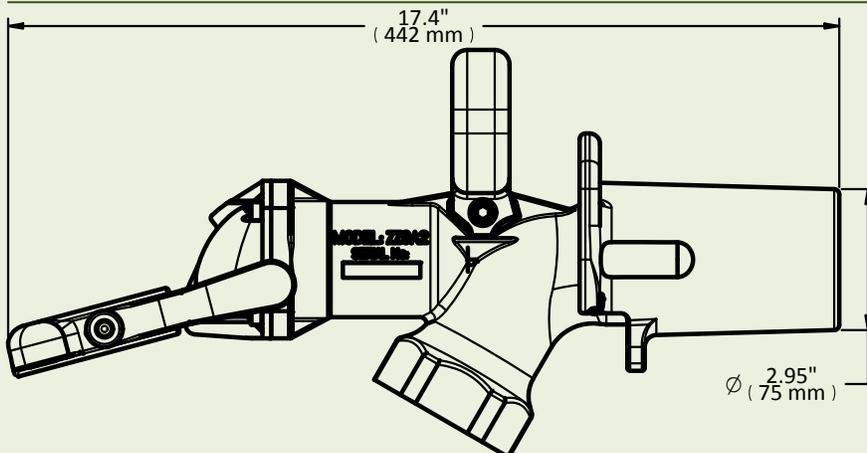
JVX	
Operating Pressure	75 psig (520 kPa)
Weight	1.72 lbs (0.78 kg)



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

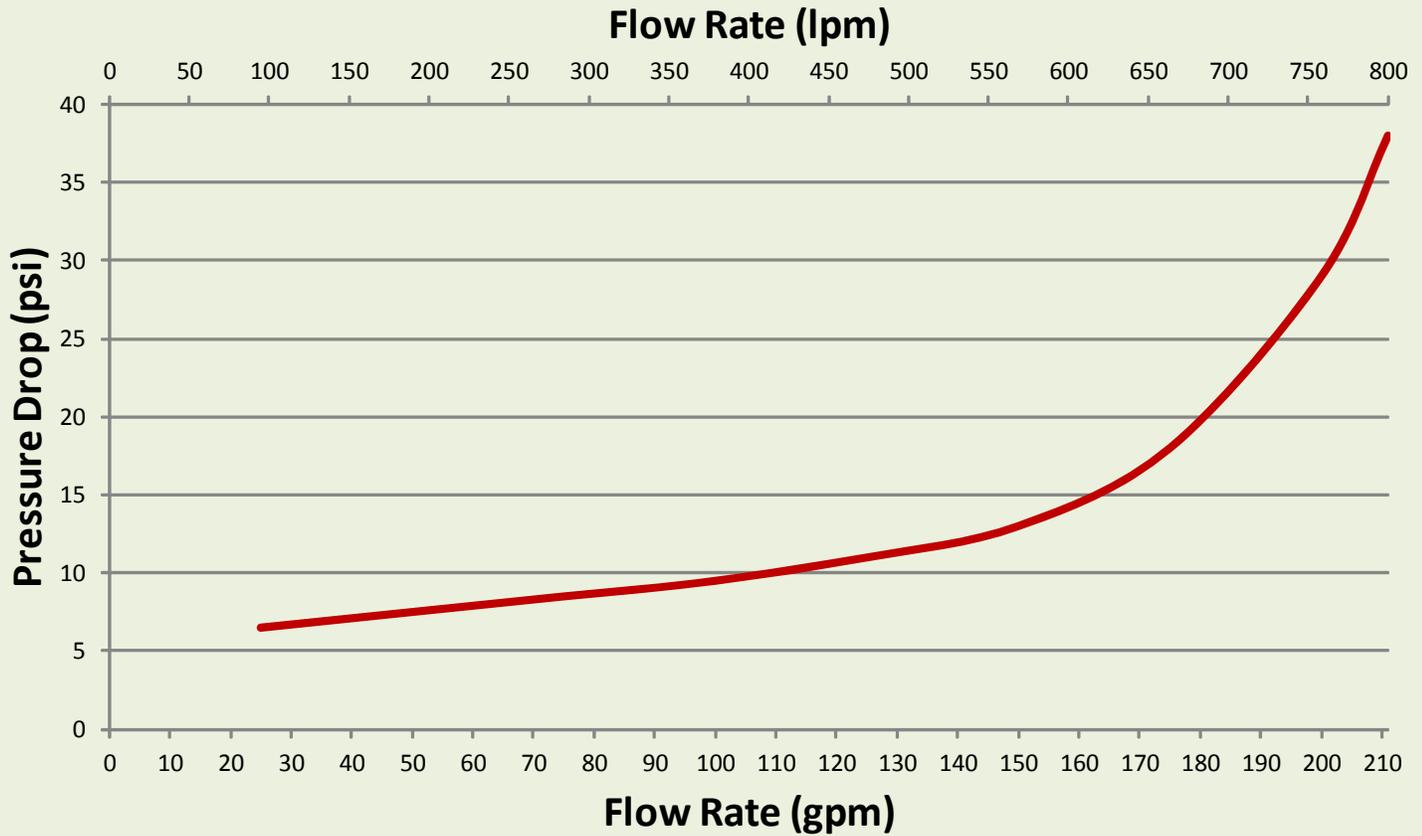


ZZ9A1	
Min. Flow Rate	25 gpm (95 lpm)
Max. Flow Rate	150 gpm (570 lpm)
Operating Pressure	75 psig (520 kPa)
Weight	5.64 lbs (2.56 kg)



ZZ9A2	
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)

### 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.

## *Contact Information*

Wiggins Service Systems has been the leader in fast fueling systems since 1967. Wiggins product is made with aerospace-grade materials and combines superior performance with unmatched quality and reliability. To learn more about Wiggins fast fueling systems, contact your authorized Wiggins distributor.