


# Above Ground Products

## Setting the Industry Standard for More Than 120 Years

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### OPW NEWGARD™ Two-Piece Hand Insulator

OPW 11A® and 11B® Series nozzles are furnished complete with NEWGARD™ 2-piece hand insulators. 2-Piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry to use.



### OPW NEWGARD™ Full Hand Insulator

All OPW 7 Series, Astro Series, and 1A Series nozzles are furnished complete with NEWGARD™ one-piece hand insulators. Available in a variety of colors.



## OPW AUTOMATIC NOZZLE FEATURES – MULTIPLE SOLUTIONS FOR MULTIPLE CUSTOMERS



#### No Pressure No Flow Device

- ◆ Safety feature to prevent spills when system is not pressurized

#### Accu-Stop™ Flow Control

- ◆ Allows customer to top off tank to exact amounts
- ◆ Easily stops the flow of gasoline precisely

#### Durable Spout

- ◆ Highest flow rates in industry
- ◆ Quick/easy replacement
- ◆ Stainless steel tip (11B only)

#### Hand Insulator

- ◆ Attractive visual appeal
- ◆ Comfortable to the touch in cold or hot weather
- ◆ Ergonomic for smaller hands
- ◆ Available in a variety of colors

#### Automatic Shut-Off Sensing Port

- ◆ Highly accurate sensing port ensures nozzle shut-off reliability

#### Low Profile Aluminum Body

- ◆ Lightweight and durable
- ◆ Attractive design

#### Flow Lock™

- ◆ Shuts off nozzle automatically when spout is tipped up, limiting spillage

#### Duratuff® Lever & Guard

- ◆ Toughest, most durable handguard & lever in the industry
- ◆ Comfortable to the touch in hot or cold weather

#### Blocker on the Lever Guard

- ◆ Prevents use of foreign objects to jam nozzle open in pre-pay applications

#### Trigger Spring

- ◆ Great durability & service life
- ◆ Improves clip disengagement at shut-off

#### Hold-Open Rack

- ◆ Easy, one-finger control to set flow rate

\*Patent Pending

**WHY**

**new OPW 14 Series nozzles  
are ideal for ensuring a  
spotless reputation.**



**NEW**

**Cleaner Nozzle Technology**



Because new 14 Series clean fueling nozzles by OPW feature patent-pending free-draining spout technology that significantly reduces retained fuel in the spout after fueling. This unique innovation provides a cleaner, greener fueling experience for your customers and a spotless reputation for your site.

Visit [opwclean14.com](http://opwclean14.com) to learn **WHY** the OPW 14 Series is the right choice for ensuring you a spotless reputation.

**OPW**   
RETAIL FUELING  
a **DOVER** company



### OPW 14 Series Nozzles

- 14E Dripless Gasoline Nozzle with interlock.



- 14C Diesel Capture Technology Nozzle



## PUMPING OUT INNOVATIVE PRODUCTS SINCE 1892.

The name in nozzles has always been OPW. We build each new model on a heritage of over 125 years in fueling excellence, and we don't plan on stopping. No matter the grade of gasoline or the type of fuel, we provide solutions, including a whole new series of clean fueling nozzles, to keep fueling stations operating at peak performance and in perfect compliance. Expert guidance and responsive service come standard too. Do your nozzles carry the OPW name?



## OPW CARB-Certified 14E ECO Enhanced Conventional Gasoline Nozzle

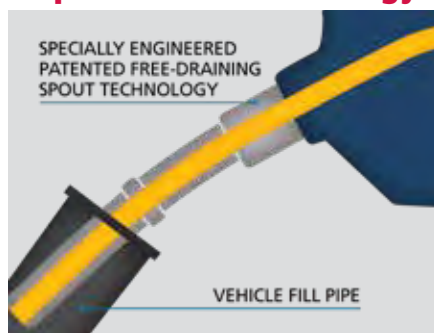
The OPW 14E ECO Enhanced Conventional Gasoline nozzle is part of the new OPW 14 Series cleaner fueling experience nozzles, featuring innovative patented\* dripless free-draining spout technology. Other dripless technologies capture fuel in the spout where it is allowed to evaporate and increase VOC emissions.

The new OPW 14E dripless spout technology is designed to keep gasoline from dripping on your customers' hands, clothing, vehicles and the ground to provide a cleaner, greener, and more satisfying customer experience.

The CARB ECO OPW 14E utilizes a special interlock system inside the bellows to activate the flow of fuel.

**View the 14E Nozzle CARB  
Executive Order.**

### Dripless Nozzle Technology



## MATERIALS

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum with  
Stainless-Steel tip and  
Teflon-coated inside  
**Inlet Size:** 3/4" NPT  
**Weight:** 2.73 lbs. each  
1.25 kg each



The 14E is designed with an interlock to meet CARB requirements for dripless nozzles.

## FEATURES & BENEFITS

### Safe for Use

- ◆ True Dripless Technology\* – patented dripless, free-draining spout with no dams or hidden reservoirs to catch liquid. Designed to exceed CARB dripless requirements.
- ◆ Rugged Durability – designed to meet the rigorous demands of high-volume sites.
- ◆ FlowLock™ allows nozzle to shut off when falling out of a vehicle or is tipped up, limiting spillage and unsafe conditions.
- ◆ Enhanced Drip Control (14E Models only) - specially designed interlock prevents fuel from flowing unless the spout is fully inserted in the vehicle fill pipe and the actuator is engaged. This is a CARB requirement.

### Durable and Long-Lasting Design

- ◆ Cycle tested and proven to last longer than 1 million cycles.

- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.

### Cleaner Fueling Experience for Customers

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive two-piece hand insulator which includes NEWGARD™ barrel cover and colored scuff guard, is the most comfortable nozzle in the industry to use.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate.

### Design Working Pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## LISTINGS & CERTIFICATIONS

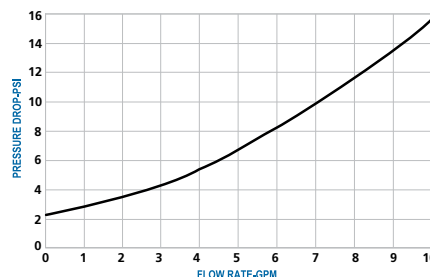


\*US PATENTS 7,134,580 AND 9,126,820.  
OTHER PATENTS-PENDING

## ORDERING SPECIFICATIONS

Scuff Guard Color	14E Unleaded Nozzles
Green	14E-0100
Silver	14E-0200
Red	14E-0300
Black	14E-0400
Blue	14E-0500
Gold	14E-0750
Orange	14E-0800
Yellow	14E-0900

## GPM FLOW CHART



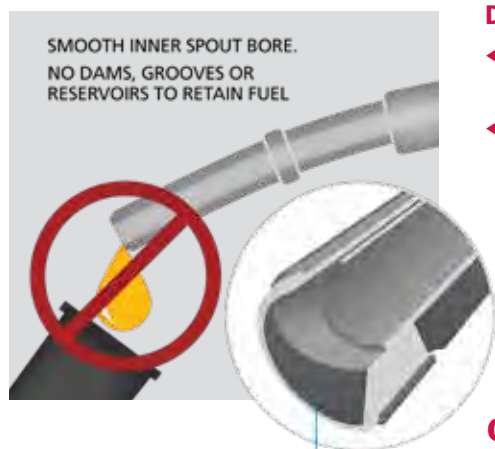
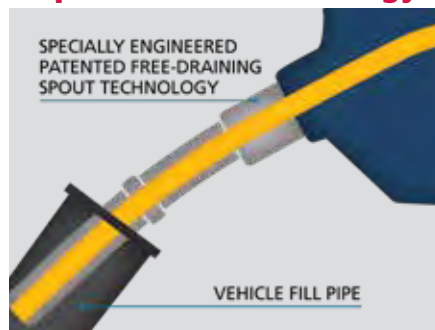
## OPW 14BP Gasoline Nozzle

The OPW 14BP Conventional Gasoline Nozzle is part of the new OPW 14 Series cleaner fueling experience nozzles, featuring innovative patented and patent-pending dripless spout technology.

The new OPW 14BP dripless nozzle spout technology is designed to keep gasoline from dripping on your customers' hands, clothing, vehicles and the ground to provide a cleaner, greener and more satisfying customer experience.

The OPW 14BP is a standard fueling nozzle without the interlock device.

### Dripless Nozzle Technology



## MATERIALS

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum with  
 Stainless Steel tip and  
 Teflon-coated inside  
**Inlet Size:** 3/4" NPT  
**Weight:** 2.73 lbs. each  
 1.25 kg each



## FEATURES & BENEFITS

### Safe for Use

- ◆ True Dripless Technology\* – patented and patent-pending, dripless spout, no dams or hidden reservoirs to catch liquid. Designed to exceed CARB dripless requirements.
- ◆ Rugged Durability – designed to meet the rigorous demands of high-volume sites.
- ◆ FlowLock™ allows nozzle to shut off when falling out of a vehicle or is tipped up, limiting spillage and unsafe conditions.

### Durable and Long-Lasting Design

- ◆ Cycle tested and proven to last longer than 1 million cycles.
- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.

### Cleaner Fueling Experience for Customers

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive two-piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry to use.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate.

### Design Working Pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## LISTINGS & CERTIFICATIONS

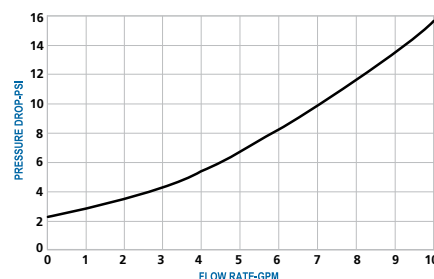


\*US PATENTS 7,134,580 AND 9,126,820.  
OTHER PATENTS-PENDING

## ORDERING SPECIFICATIONS

2-Piece Hand Insulator Color	14BP Unleaded
Green	14BP-0100
Silver	14BP-0200
Red	14BP-0300
Black	14BP-0400
Blue	14BP-0500
Yellow	14BP-0750
Gold	14BP-0800
Orange	14BP-0900
Bare	14BP-0009

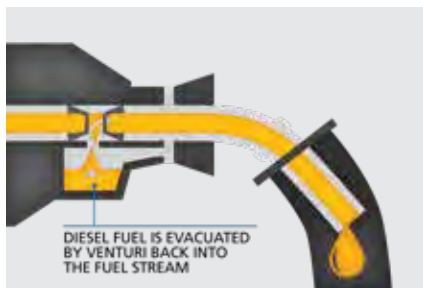
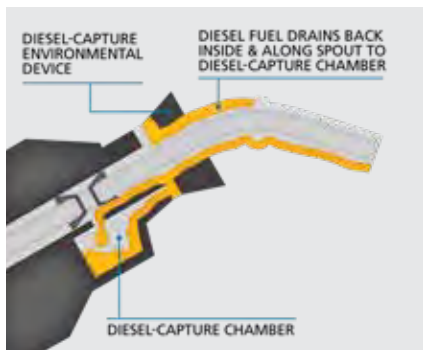
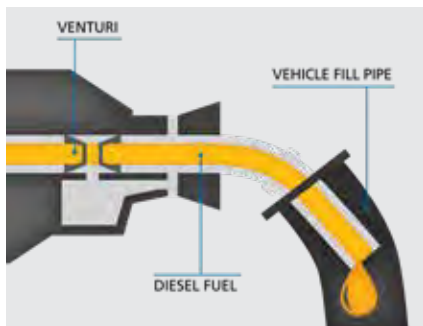
## GPM FLOW CHART



## OPW 14C Diesel Capture Technology Nozzle

The OPW 14C is part of the new OPW 14 Series cleaner fueling experience nozzles, featuring innovative patented\* diesel-capture technology. This innovation is designed to provide a cleaner, greener fueling experience for customers while keeping diesel fuel off their hands and off the ground.

### Diesel Capture Technology



## MATERIALS

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum  
**Inlet Size:** 3/4" NPT  
**Weight:** 2.73 lbs. each  
 1.25 kg each



## FEATURES & BENEFITS

### Safe for Use

- ◆ Diesel Fuel Capture Technology\* – the patented technology allows excess diesel fuel to drain into a uniquely engineered chamber located in the body of the nozzle located at the base of the spout. This excess diesel fuel is then introduced back into the fuel stream.
- ◆ Drip Guard – designed to capture any fuel that runs out onto the outside of the nozzle.
- ◆ Compatible for diesel-fuel blends up to B20.
- ◆ Rugged Durability – designed to meet the rigorous demands of high-volume sites.
- ◆ FlowLock™ allows nozzle to shut off when falling out of a vehicle or is tipped up, limiting spillage and unsafe conditions.

### Durable and Long-Lasting Design

- ◆ Cycle tested and proven to last longer than 1 million cycles.

- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.

### Cleaner Fueling Experience for the Customer

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive two-piece hand insulator which includes NEWGARD™ barrel cover and colored scuff guard, is the most comfortable nozzle in the industry to use..
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate.

### Design Working Pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## LISTINGS & CERTIFICATIONS

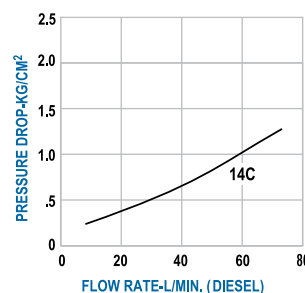


\*US PATENTS 7,134,580 AND 9,126,820.  
 OTHER PATENTS-PENDING

## ORDERING SPECIFICATIONS

Scuff Guard Color	14C Diesel Nozzles
Green	14C-0100
Silver	14C-0200
Red	14C-0300
Black	14C-0400
Blue	14C-0500
Gold	14C-0750
Orange	14C-0800
Yellow	14C-0900

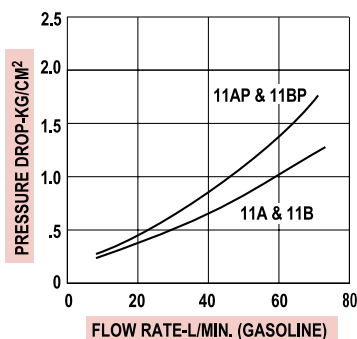
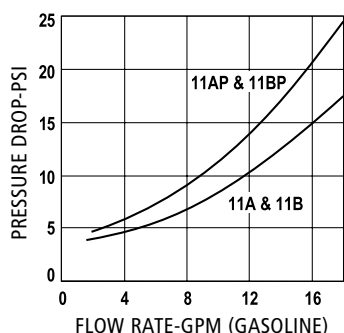
## GPM FLOW CHART



## FIRST to Meet NEW UL 2586 Requirements

### OPW 11A® and 11B® Automatic Nozzles

The OPW 11® Series automatic nozzles are OPW's premium conventional nozzles for safe retail and commercial petroleum filling. The OPW 11® Series is the most trusted conventional nozzle in the world for full service use. The OPW 11B® Series is designed for use in retail and commercial filling applications including prepay, self- and full-service, credit/debit card readers or card-lock systems to help prevent gasoline spills. The OPW 11B® will not open until the pumping system is pressurized, and closes automatically when the pressure is removed.

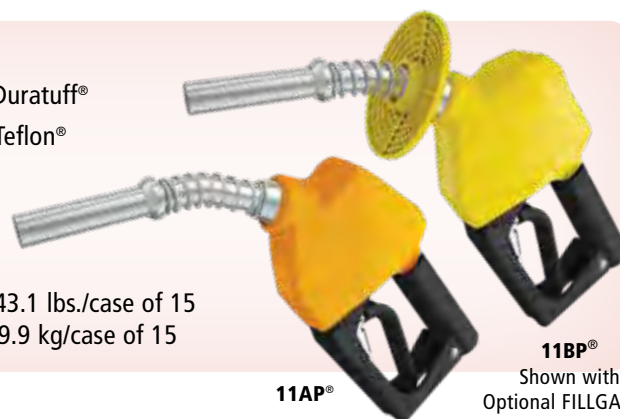


#### Accessories

Name	Product #	Description	Used For:
3/4" to 1" Bushing	28S-0350	3/4" MNPT to 1" FNPT Bushing	Converting 11 Series Nozzle for use on 1" Hose
1" to 3/4" Bushing	28R-2404	1" MNPT x 3/4" FNPT Bushing	Converting 7 Series Nozzle for use on 3/4" Hose

### Materials

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum  
**Inlet Size:** 3/4" NPT  
**Weight:** 2.73 lbs. each, 43.1 lbs./case of 15  
 1.25 kg each, 19.9 kg/case of 15



### Features

#### Safe for Use

- ◆ UL- and ULC-Listed for use in gasoline, diesel, and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Prevents gasoline spills in prepay or card-lock systems utilizing OPW's unique No Pressure – No Flow Device. The nozzle cannot be opened until the pumping system is pressurized, and closes automatically when the pressure is removed (11B Series only).
- ◆ Prevents consumer from jamming the nozzle in an open position – blocker on lever guard.
- ◆ FlowLock™ allows nozzle to shut-off when falling out of a vehicle, and is tipped up, limiting spillage and unsafe conditions.

#### Durable and Long-Lasting Design

- ◆ Cycle-tested and proven to last longer than 1 million cycles – better than any other nozzle available on the market today\*.

- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.
- ◆ New hold-open clip spring lasts longer than previous designs.

#### Appealing to Customers

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive 2-Piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry to use.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate (not on all models).

#### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

\* OPW internal lab testing results as of August 2010.

### Replacement Parts

Name	Product #	Description	Used For:
11A Leaded Spout Kit	5BS-2110	11A, 15/16" O.D. Leaded Spout	11A Spout Replacement
11AP Unleaded Spout Kit	5BPS-2117	11AP, 13/16" O.D. Unleaded Spout	11AP Spout Replacement
11B Leaded Spout Kit	5BBS-2135	11B, 15/16" O.D. Leaded Spout	11B Spout Replacement
11BP Unleaded Spout Kit	5BBPS-2137	11BP, 13/16" O.D. Unleaded Spout	11BP Spout Replacement
NEWGARD Kits	See pg. 153	Replacement Hand Insulators	11A, 11AP, 11B, 11BP NEWGARD Replacements
Instruction Sheet	H15985M	Installation and Instruction Sheet	11A, 11AP, 11B, 11BP Instruction Sheet

### Listings and Certifications



See pages 231 - 239 for certification number

NOTE: 11A and 11B nozzles models are available with 1- or 2-piece Hand Insulators.

## Ordering Specifications

### E-10 Automatic Nozzles with Hold-Open Devices compatible up to E10 (10% Ethanol)

Hand-warmer Color	11BP Unleaded 2 Piece Handwarmer	11BP Unleaded 1 Piece Handwarmer	11BP AdMaster™ 2 Piece Handwarmer	11BP 2 Piece Handwarmer Extreme Cold
Green	11BP-0100	11BP-0100-1P	11BP-0100-AD	11BP-0100-XC
Silver	11BP-0200	11BP-0200-1P	—	—
Red	11BP-0300	11BP-0300-1P	11BP-0300-AD	11BP-0300-XC
Black	11BP-0400	11BP-0400-1P	11BP-0400-AD	11BP-0400-XC
Blue	11BP-0500	11BP-0500-1P	11BP-0500-AD	—
Gold	11BP-0750	11BP-0750-1P	—	—
Orange	11BP-0800	11BP-0800-1P	—	—
Yellow	11BP-0900	11BP-0900-1P	11BP-0900-AD	—
Bare	11BP-0009	11BP-0009	—	—

Contact Customer Service for special color applications.

### E-10 Automatic Nozzles without Hold-Open Devices compatible up to E10 (10% Ethanol)

Handwarmer Color	11AP Unleaded* 2 Piece Handwarmer	11AP Unleaded* 1 Piece Handwarmer	11AP* AdMaster™ 2 Piece Handwarmer
Green	11AP-0100	11AP-0100-1P	11AP-0100-AD
Silver	11AP-0200	11AP-0200-1P	—
Red	11AP-0300	11AP-0300-1P	11AP-0300-AD
Black	11AP-0400	11AP-0400-1P	11AP-0400-AD
Blue	11AP-0500	11AP-0500-1P	11AP-0500-AD
Gold	11AP-0750	11AP-0750-1P	—
Orange	11AP-0800	11AP-0800-1P	—
Yellow	11AP-0900	11AP-0900-1P	11AP-0900-AD
Bare	11AP-0009	11AP-0009	—

\*11A Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

### E-25 Nozzles compatible up to E25 (25% Ethanol)

Handwarmer Color	11AP* Unleaded 2 Piece Handwarmer	11BP Unleaded 2 Piece Handwarmer
Green	11AP-0100-E25	11BP-0100-E25
Red	11AP-0300-E25	11BP-0300-E25
Black	11AP-0400-E25	11BP-0400-E25
Blue	11AP-0500-E25	11BP-0500-E25
Orange	11AP-0800-E25	11BP-0800-E25
Yellow	11AP-0900-E25	11BP-0900-E25

\*11A Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

### E-85 Nozzles compatible up to E85 (100% Ethanol)

Handwarmer Color	11BP Unleaded 2 Piece Handwarmer	11BP AdMaster™ 2 Piece Handwarmer
Green	11BP-0192-E85	—
Red	11BP-0392-E85	—
Black	11BP-0492-E85	11BP-0492-E85-AD
Yellow	11BP-0992-E85	11BP-0992-E85-AD

### B-5 Nozzles compatible up to B5 (5% Biodiesel), Fuel Oil and Kerosene

Hand-warmer Color	11A Leaded* 2 Piece Handwarmer	11A Leaded* 1 Piece Handwarmer	11A Leaded* AdMaster™	11B Leaded 2 Piece Handwarmer	11B Leaded 1 Piece Handwarmer	11B Leaded AdMaster™
Green	11A-0100	11A-0100-1P	11A-0100-AD	11B-0100	11B-0100-1P	11B-0100-AD
Silver	11A-0200	11A-0200-1P	—	—	11B-0200-1P	—
Red	11A-0300	11A-0300-1P	—	11B-0300	11B-0300-1P	—
Black	11A-0400	11A-0400-1P	11A-0400-AD	11B-0400	11B-0400-1P	11B-0400-AD
Blue	11A-0500	11A-0500-1P	11A-0500-AD	11B-0500	11B-0500-1P	—
Gold	11A-0750	11A-0750-1P	—	11B-0750	11B-0750-1P	—
Orange	11A-0800	11A-0800-1P	—	11B-0800	11B-0800-1P	—
Yellow	11A-0900	11A-0900-1P	11A-0900-AD	11B-0900	11B-0900-1P	11B-0900-AD
Bare	11A-0009	—	—	11B-0009	11B-0009	—

\*11A Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

### B-20 Nozzles compatible up to B20 (20% Biodiesel)

Handwarmer Color	11A Leaded* 2 Piece Handwarmer	11B Leaded 2 Piece Handwarmer	11B Leaded 2 Piece Handwarmer for Extreme Cold
Green	11A-0100-B20	11B-0100-B20	11B-0100-XCB20
Black	11A-0400-B20	11B-0400-B20	11B-0400-XCB20
Yellow	11A-0900-B20	11B-0900-B20	11B-0900-XCB20

\*11A Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

#### ⚠ WARNING

In order to be UL2586 approved effective April 30, 2015, the use of a Hold-Open device is only permitted on dispensing nozzles equipped with a "B-Cap" (no pressure - no flow) or interlock feature. The use of foreign objects to hold open automatic nozzles could result in shut-off failure and personal injury.

#### Custom Colors

With minimum quantities.  
Contact OPW Customer Service.

White	Dark Blue
Light Red	Brown
Azure Blue	



**28S-0350**  
Bushing Adaptor



**28R-2404**  
Bushing Adaptor



OPW 5BS and 5BBS  
Leaded, Diesel, Kerosene



OPW 5BBPS and OPW 5BPS  
Unleaded

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.



## OPW 11A® AND 11B® Automatic Nozzles

The OPW 11® Series automatic nozzles are OPW's premium conventional nozzles for safe retail and commercial petroleum filling. The OPW 11® Series is the most trusted conventional nozzle in the world for full service use. The OPW 11B® Series is designed for use in retail and commercial filling applications including prepay, self and full service, credit/debit card readers or card-lock systems to help prevent gasoline spills. The OPW 11B® will not open until the pumping system is pressurized, and closes automatically when the pressure is removed.

## OPW 7H® AND 7HB® Automatic Shut-OFF Nozzles

### For Heavy-Duty, High-Flow Truck, Bus and Fleet Service

If you operate a full-service truckstop, refuel your own fleet or manage a card-lock refueling location, the low-cost, long-life and durability of the OPW 7H® high flow nozzle can help increase your productivity, sales and profits. The OPW 7HB® will not open until the pumping system is pressurized, and closes automatically when the pressure is removed.

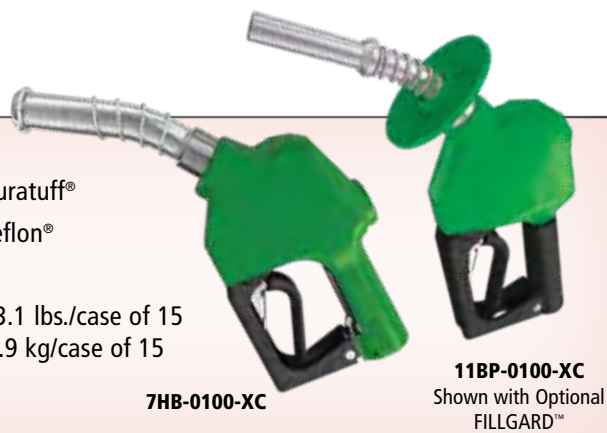
## Listings and Certifications



See pages 231 - 239 for certification number

## Materials

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Weight:** 2.73 lbs. each, 43.1 lbs./case of 15  
 1.25 kg each, 19.9 kg/case of 15



7HB-0100-XC

11BP-0100-XC  
Shown with Optional  
FILLGARD™

Nozzles (above) shown with optional hand insulator. Hand insulator not included.

## Features

### Safe for Use

- ◆ UL-Listed for use in gasoline, diesel, and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com)
- ◆ Prevents gasoline and/or diesel spills in prepay or card lock systems utilizing OPW's unique No Pressure – No Flow Device. The nozzles cannot be opened until the pumping system is pressurized, and close automatically when the pressure is removed. (OPW 11B® and 7HB® Series Only)
- ◆ Prevents consumer from jamming the nozzle in an open position – Blocker on lever guard.
- ◆ FlowLock™ allows nozzle to shut-off when falling out of

a vehicle, and tipped up limiting spillage and unsafe conditions.

### Durable & Long Lasting Design

- ◆ Compatible to -54°C [-65°F]\*
- ◆ Cycle-tested and proven to last longer than 1 million cycles - Better than any other nozzle available on the market today\*
- ◆ Durable lever guard that won't scratch your customers' vehicles – Made from Duratuff®.
- ◆ New hold open clip spring lasts longer than previous designs. (OPW 11B® and 7HB® Series Only)
- ◆ Easy to use – Utilizing Accu-Stop® to-the-penny Flow Control Technology.

\* OPW internal lab testing results as of August 2010.

## Ordering Specifications

Product #	Description
11B-0100-XC	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, Green
11B-0400-XC	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, Black
11B-0900-XC	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, Yellow
11BP-0100-XC	Extreme Cold Weather, 3/4" NPT Gasoline Nozzle, 11BP, Green
11BP-0300-XC	Extreme Cold Weather, 3/4" NPT Gasoline Nozzle, 11BP, Red
11BP-0400-XC	Extreme Cold Weather, 3/4" NPT Gasoline Nozzle, 11BP, Black
7HB-0100-XC	Extreme Cold Weather, 1" NPT Diesel Nozzle, 7HB, Green
7HB-0400-XC	Extreme Cold Weather, 1" NPT Diesel Nozzle, 7HB, Black
7HB-0900-XC	Extreme Cold Weather, 1" NPT Diesel Nozzle, 7HB, Yellow
66 REC-1000	Cold Weather Breakaway – See page 163
11B-0100-XCB20	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, B20, Green
11B-0400-XCB20	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, B20, Black
11B-0900-XCB20	Extreme Cold Weather, 3/4" NPT Auto-Diesel Nozzle, 11B, B20, Yellow

## Replacement Parts

Name	Product #	Description	Used For:
11AK Leaded Spout Kit	5BS-2110XC	11A, 1 1/16" O.D. Leaded Spout	11AK Spout Replacement
11AKP Unleaded Spout Kit	5BPS-2117XC	11AP, 1 3/16" O.D. Unleaded Spout	11AKP Spout Replacement
11B Leaded Spout Kit	5BBS-2135XC	11B, 1 1/16" O.D. Leaded Spout	11B Spout Replacement
11BP Unleaded Spout Kit	5BBS-2137XC	11BP, 1 3/16" O.D. Unleaded Spout	11BP Spout Replacement

\*Beginning April 30, 2015; nozzles with Hold-Open clips must have a B-Cap no-pressure no-flow device or an Interlock feature to be UL2586 approved.

## Materials

**Body:** Aluminum w/ nickel plating

**Lever & Lever Guard:** Duratuff®

**Packing:** Graphite with Teflon®

**Seals:** Viton®

**Spout:** Aluminum w/ nickel plating

**Inlet Size:** 3/4" NPT

**Weight:** 2.73 lbs. each  
1.25 kg each

**11BP-0992-E85**



## Features

### Safe for Use

- ◆ UL-Listed for up to 85% Ethanol.
- ◆ Prevents gasoline spills in prepay or card-lock systems utilizing OPW's unique No Pressure – No Flow Device. It cannot be opened until the pumping system is pressurized, and closes automatically when the pressure is removed.
- ◆ Prevents consumer from jamming the nozzle in an open position – blocker on lever guard.
- ◆ FlowLock™ allows nozzle to shut-off when falling out of a vehicle, and is tipped up, limiting spillage and unsafe conditions.

### Durable and Long Lasting Design

- ◆ Cycle-tested and proven to last longer than 1 million cycles – Better than any other nozzle available on the market today\*.

- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.
- ◆ New hold-open clip spring lasts longer than previous designs.

### Appealing to Customers

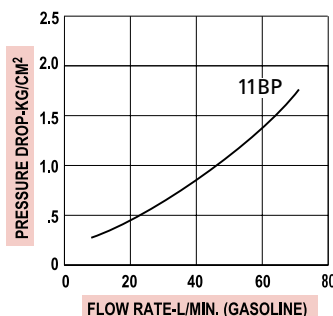
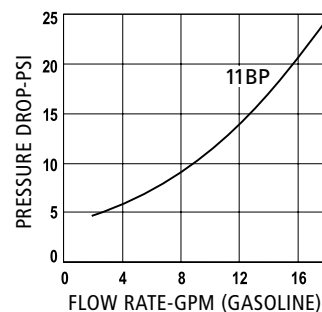
- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive 2-Piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry to use.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate (not on all models).

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.
- \* OPW internal lab testing results as of August 2010.**

## OPW 11BP E-85 Series Ethanol Nozzles

The OPW 11BP E-85 Series nozzles are designed and rigorously tested for use in today's alternative fuels. It's the first nozzle of its kind to be UL-Listed for use in Ethanol-blended fuels up to 85%.



## Ordering Specifications

### E-85 Nozzles compatible up to E85 (85% Ethanol)

Handwarmer Color	11BP Unleaded 2 Piece Handwarmer	11BP AdMaster™ 2 Piece Handwarmer
Green	11BP-0192-E85	—
Red	11BP-0392-E85	—
Black	11BP-0492-E85	11BP-0492-E85-AD
Yellow	11BP-0992-E85	11BP-0992-E85-AD

## 241TPS Ordering Specifications E85 Approved

Product #	Inlet/Outlet	Length A	Depth B
241TPS-0492	3/4" F x 3/4" M (NPT) 19 mm x 19 mm	4 7/8" 124 mm	2 3/16" 56 mm

## Listings and Certifications



**UL Listed for up to 85% Ethanol**

## Replacement Parts

Product	Product #	O.D.	Length	Weight
		in. mm	in. mm	lbs. kg
11BP spout replacement kit	5BBPI-0492	1 3/16" 21	7" 178	.47 .22

NEWGARD™ Kits See page 153.

11BP Instruction Sheet Order Number: **H15889PAE**

## 66V Ordering Specifications E85 Approved

Product #	Size	Weight	Pull Force
	in. mm	lbs. kg	
66V-0492	3/4" F x 3/4" F (NPT) 19 F x 19 F	0.60 0.27	300 lbs.

66V Series 3/4" Instruction Sheet Order Number: **H10993PA**

# Customize and Colorize



## Imprint your company logo or custom message to any color hand insulator

OPW can help you enhance your brand image, drive traffic into your store, and deliver important messages to your customers with its new Enhanced Nozzle Program.

Now you can imprint company names, logos and/or special promotional messages on to your nozzles!

Differentiate your store from all others. Choose from a wide array of standard hand insulator colors or create your own custom color hand insulator.

We Offer You The Convenience of Choice.

**Simply provide high-resolution PDF your Logo Artwork.**



## Hundreds of Hand Insulator Colors to Choose From



**NEW**



**Easy Snap-on Rubber Cover**

## OPW AdMaster™

**A highly effective and affordable way of advertising that drives traffic from the island to your in-store profit centers.**

- ◆ Installs quickly and easily on your OPW nozzle!
- ◆ Increase In-store Sales - Get Customers from the Island into Your Profit Centers
- ◆ Puts Your Message Right in Your Customer's Hand
- ◆ Replaceable - Easily Updated to Current Promotions
- ◆ Available on New Nozzles or Can Be Installed Quickly on Existing Nozzles
- ◆ Available in a Variety of Colors

## Ordering Specifications

Part #	Description
11A-0100-AD	11A Leaded Nozzle with GREEN Advertising Hand Insulator & Clear Cover
11A-0400-AD	11A Leaded Nozzle with BLACK Advertising Hand Insulator & Clear Cover
11A-0500-AD	11A Leaded Nozzle with BLUE Advertising Hand Insulator & Clear Cover
11A-0900-AD	11A Leaded Nozzle with YELLOW Advertising Hand Insulator & Clear Cover
11AP-0100-AD	11A Unleaded Nozzle with GREEN Advertising Hand Insulator & Clear Cover
11AP-0300-AD	11A Unleaded Nozzle with RED Advertising Hand Insulator & Clear Cover
11AP-0400-AD	11A Unleaded Nozzle with BLACK Advertising Hand Insulator & Clear Cover
11AP-0500-AD	11A Unleaded Nozzle with BLUE Advertising Hand Insulator & Clear Cover
11AP-0900-AD	11A Unleaded Nozzle with YELLOW Advertising Hand Insulator & Clear Cover
11B-0100-AD	11B Leaded Nozzle with GREEN Advertising Hand Insulator & Clear Cover
11B-0400-AD	11B Leaded Nozzle with BLACK Advertising Hand Insulator & Clear Cover
11B-0900-AD	11B Leaded Nozzle with YELLOW Advertising Hand Insulator & Clear Cover
11BP-0100-AD	11B Unleaded Nozzle with GREEN Advertising Hand Insulator & Clear Cover
11BP-0300-AD	11B Unleaded Nozzle with RED Advertising Hand Insulator & Clear Cover
11BP-0400-AD	11B Unleaded Nozzle with BLACK Advertising Hand Insulator & Clear Cover
11BP-0500-AD	11B Unleaded Nozzle with BLUE Advertising Hand Insulator & Clear Cover
11BP-0900-AD	11B Unleaded Nozzle with YELLOW Advertising Hand Insulator & Clear Cover
11BP-0492-E85-AD	11BP E-85 Nozzle with BLACK Advertising Hand Insulator and Cover
11BP-0992-E85-AD	11BP E-85 Nozzle with YELLOW Advertising Hand Insulator and Cover
NTK11-0100	11 Series GREEN Advertising Insulator and Clear Cover Kit
NTK11-0300	11 Series RED Advertising Insulator and Clear Cover Kit
NTK11-0400	11 Series BLACK Advertising Insulator and Clear Cover Kit
NTK11-0500	11 Series BLUE Advertising Insulator and Clear Cover Kit
NTK11-0900	11 Series YELLOW Advertising Insulator and Clear Cover Kit
206252	Clear Cover



3 in. x 3 in.  
Message Area

**Clear Cover**

## OPW Factory Assembled Hose Kits

OPW Hose Kits are factory assembled from the whip hose to the nozzle. Every connection is checked for pressure tightness and continuity. Use the OPW Vac-Assist and Balance Packages when converting or decommissioning your State II Vapor Recovery System.

### Features







- ◆ **Factory Assembled**
- ◆ **100% Tested and Certified**
- ◆ **Quick, Easy Installation**
- ◆ **Reduced Dispenser Downtime**







### Listings and Certifications



### Unleaded and Diesel Packages Include

<b>A</b>	11BP Nozzle	3/4" Nozzle	
<b>B</b>	241TPS-0241	3/4" 2-Plane Swivel	
<b>C</b>	66H-0975 Standard or 66H-0975-LP Low Permeation	3/4" Whip Hose, 9 inch long, 3/4" NPT	
<b>D</b>	68EZR-7575	3/4" Reconnectable Breakaway	
<b>E</b>	66H-08575 Standard or 66H-08575-LP Low Permeation	3/4" Hose, 8-1/2" feet long, 3/4" NPT	
<b>F</b>	FILLGARD™ Splash Guard - Color will match Hand Insulator		

### Vac-Assist and Balance Packages Include

<b>A</b>	11BP Nozzle	3/4" Nozzle	
<b>B</b>	241TPS-0241	3/4" 2-Plane Swivel	
<b>C</b>	66H-0975 Standard or 66H-0975-LP Low Permeation	3/4" Whip Hose, 9 inch long, 3/4" NPT	
<b>D</b>	68EZR-7575	3/4" Reconnectable Breakaway	
<b>E</b>	66H-08575 Standard or 66H-08575-LP Low Permeation	3/4" Hose, 8-1/2" feet long, 3/4" NPT	
<b>F</b>	FILLGARD™ Splash Guard - Color will match Hand Insulator		
<b>G</b>	VAR75* 28C-0028*	Vac-Assist to Conventional Adaptor Balance to Conventional Adaptor	

### Ordering Specifications

#### Unleaded Kits

PK-EZR0100	3/4" Unleaded Green Nozzle, Standard Hose
PK-EZR0300	3/4" Unleaded Red Nozzle, Standard Hose
PK-EZR0400	3/4" Unleaded Black Nozzle, Standard Hose
VA-EZR0400-LP	3/4" Unleaded Black Nozzle, Low Permeation Hose

7H High Flow kits also available by request.

#### Diesel Kits

PK-EZR0100-L1	3/4" Leaded Green Nozzle, Standard Hose
PK-EZR0900-L1	3/4" Leaded Yellow Nozzle, Standard Hose
PK-EZR0400-L1	3/4" Leaded Black Nozzle, Standard Hose

Contact OPW Customer Service for custom models.

### Ordering Specifications

#### Vac-Assist Decommissioning Kits

VA-EZR0100	3/4" Unleaded Green Nozzle, Standard Hose
VA-EZR0300	3/4" Unleaded Red Nozzle, Standard Hose
VA-EZR0400	3/4" Unleaded Black Nozzle, Standard Hose
VA-EZR0400-LP	3/4" Unleaded Black Nozzle, Low Permeation Hose

#### Balance Decommissioning Kits

BA-EZR0100	3/4" Unleaded Green Nozzle, Standard Hose
BA-EZR0300	3/4" Unleaded Red Nozzle, Standard Hose
BA-EZR0400	3/4" Unleaded Black Nozzle, Standard Hose

Contact OPW Customer Service for custom models.

## Materials

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spouts:** Aluminum  
**Inlet Size:** 3/4" NPT  
**Weight:** 2.85 lbs. each, 44.90 lbs./case of 15  
 1.3kg each, 20.4kg/case of 15



## Features

- ◆ The new and improved farm hanger is now made from stamped metal and bolted to the nozzle, making it stronger and sturdier than ever.
- ◆ UL- and ULC-Listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ New bleeder poppet orifices allow for use in transfer pumps with or without air elimination systems.
- ◆ Prevents consumer from jamming the nozzle in an open position – blocker on lever guard.
- ◆ Durable lever guard that won't scratch

your customers' vehicles – made from Duratuff®.

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Works with self-priming and non self-priming pumps.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.
- ◆ When bushing from 1" hose on the 1A nozzle, use a 28S Bushing Adaptor

## Ordering Specifications

Full Hand Insulator Color	Includes spout, hanger, spring and no hold-open rack UL Listed		Includes spout, standard spring and no hold-open rack UL Listed		Includes spout, hanger, spring and no hold-open rack UL and ULC Listed	
	For Unleaded Service	For Diesel Service	For Unleaded Service	For Diesel Service	For Unleaded Service	For Diesel Service
Green		11AF-10FS				
Red	11APF-30FS		11APF-300F	11AF-300F		
Black	11APF-40FS	11AF-40FS			11APF-4FSC	11AF-4FSC

\*Nozzles without a no-pressure no-flow or interlock device can not be ULC listed with Hold-Open Clips.

## Replacement Spout Kits

Product #	O.D.		Length		Weight		Used On
	in.	mm	in.	mm	lbs.	kg	
5BF-0112	<sup>15</sup> / <sub>16</sub>	24	7	178	.59	.27	11AF®
5BPF-0172	<sup>13</sup> / <sub>16</sub>	21	7	178	.59	.27	11APF

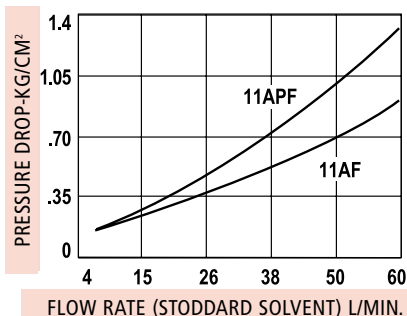
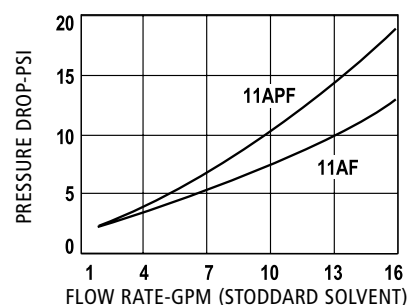
NEWGARD™ Kits See page 153.

## OPW 11AF® 3/4" Automatic Nozzles

The OPW 11AF® Nozzle is a sturdy industry-proven standard used primarily for fueling up to 15 gallons per minute. The 11AF® is an automatic dispensing nozzle designed for use in transfer pump. This nozzle should not be used for retail applications, and does not include a No Pressure – No Flow or Interlock Device.

### WARNING

Do not use OPW 11AF Nozzles for any retail application. It is only intended for use in non-retail applications. Use of foreign objects to hold open automatic nozzles could result in failure to shut off and personal injury.



**28S-0350**  
Bushing Adaptor



**28R-2404**  
Bushing Adaptor

## Listings and Certifications

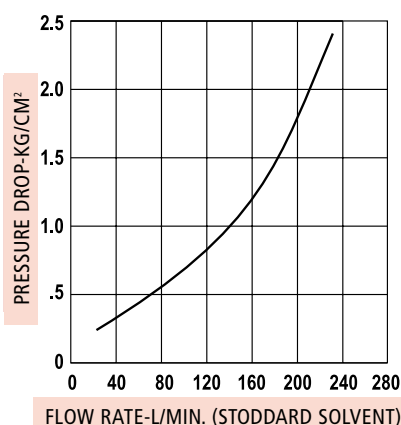
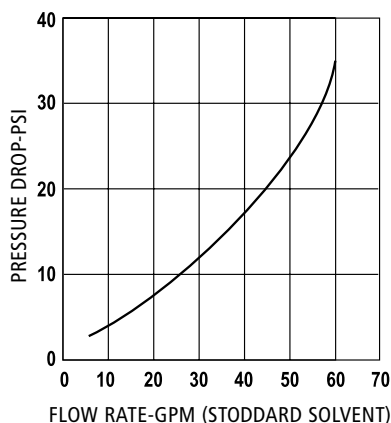


See pages 231 - 239 for certification number

## OPW 7H® and 7HB® Automatic Shut-off Nozzles

### For Heavy-Duty, High-Flow Truck, Bus and Fleet Service

If you operate a full-service truckstop, refuel your own fleet or manage a card-lock refueling location, the low-cost, long-life and durability of the OPW 7H® high-flow nozzle can help increase your productivity, sales and profits.



## Materials

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum  
**Inlet Size:** 1" NPT  
**Weight:** 3.35 lbs. each, 52.05 lbs./case of 15  
 1.51 kg each, 23.6 kg/case of 15

## Features

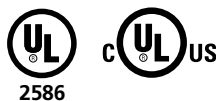
### Safe for Use

- ◆ UL- and ULC-Listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Prevents gasoline spills in prepay or card-lock systems utilizing OPW's unique No Pressure – No Flow Device. The nozzle cannot be opened until the pumping system is pressurized, and closes automatically when the pressure is removed. (7HB Series only)
- ◆ Prevents consumer from jamming the nozzle in an open position – blocker on lever guard.
- ◆ FlowLock™ allows nozzle to shut-off when falling out of a fill pipe, and is tipped up, limiting spillage and unsafe conditions.
- ◆ Low reliable shut-off – specifically designed to ensure proper automatic shut-off as low as 5 gallons per minute.

### Durable and Long Lasting Design

- ◆ Cycle-tested and proven to last longer than 1 million cycles – better than any other nozzle available on the market today.\*

## Listings and Certifications



See pages 231 - 239 for certification number

## FIRST to Meet NEW UL 2586 Requirements



- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.
- ◆ New hold-open clip spring lasts longer than previous designs.

### Appealing to Customers

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Easy to open, even at high pressures, utilizing Dual Poppets.
- ◆ Even, smooth spray pattern – minimizes diesel foaming and false shut-offs.
- ◆ Smooth closing action and reduced line shock from incorporated dashpot technology.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate. (not on all models)
- ◆ Spout Retaining Ring – adds extra measure in securing nozzle spout in fill pipe where required. (not on all models)

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.
- \* **OPW internal lab testing results as of August 2010.**

**⚠ WARNING**

In order to be UL2586 approved effective April 30, 2015, the use of a Hold-Open device is only permitted on dispensing nozzles equipped with a "B-Cap" (no pressure - no flow) or interlock feature. The use of foreign objects to hold open automatic nozzles could result in shut-off failure and personal injury.

## Ordering Specifications

### B-5 Nozzles compatible up to B5 (5% Biodiesel), Fuel Oil and Kerosene

Handwarmer Color	7H® with Spout Ring	7H® without Spout Ring	7HB® with Spout Ring	7HB® without Spout Ring
Green	7H-0100	7H-5100	7HB-0100	7HB-5100
Black	7H-0400	7H-5400	7HB-0400	7HB-5400
Yellow	7H-0900	7H-5900	7HB-0900	7HB-5900
Bare	—	—	7HB-0090	7HB-5009

NOTE: All new 7H and 7HB nozzles now come with FILLGARD™. For replacement FILLGARDs, see page 153.  
\*7H Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

### Custom Colors

With minimum quantities.  
Contact OPW customer service.

Blue

Red

Silver

### B-20 Nozzles compatible up to B20 (20% Biodiesel)

Handwarmer Color	7H® with Spout Ring	7H® without Spout Ring	7HB® with Spout Ring	7HB® without Spout Ring
Green	7H-0100-B20	7H-5100-B20	7HB-0100-B20	7HB-5100-B20
Black	7H-0400-B20	7H-5400-B20	7HB-0400-B20	7HB-5400-B20
Yellow	7H-0900-B20	7H-5900-B20	7HB-0900-B20	7HB-5900-B20

NOTE: All new 7H and 7HB nozzles now come with FILLGARD™. For replacement FILLGARDs, see page 153.  
\*7H Nozzles are no longer permitted and sold with Hold-Open Clips per UL 2586 requirements.

## Replacement Parts

Product	Part #	O.D.*		Length		Weight		Used On
		in.	mm	in.	mm	lbs.	kg	
7H Spout Kit w/ spout ring	5BH-0115	1 3/16*	30	7	178	.66	.30	7H®
7H Spout Kit w/o spout ring	5BH-5115	1 3/16	30	7	178	.66	.30	7H® (w/o ring)
12-inch 7H Spout Kit	5BHB-0125	1 3/16	30	12	305			7H®

NEWGARD™ Kits See page 153

Product	Part #	O.D.*		Length		Weight		Used On
		in.	mm	in.	mm	lbs.	kg	
7HB Spout Kit w/ spout ring	5BBH-0136	1 3/16*	30	7	178	.65	.30	7HB®
7HB Spout Kit w/o spout ring	5BBH-5136	1 3/16	30	7	178	.66	.30	7HB® (w/o ring)

NEWGARD™ Kits See page 153

\* Spout end with anchor ring is 1 31/64" O.D.

7H®, 7HB® Series Instruction Sheet Order Number: **H15985M**



OPW 5BH  
7H® Spout with ring



OPW 5BBH  
7HB® Spout without ring

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## OPW NEWGARD™ Full Hand Insulator

All OPW 7 Series, Astro Series, and 1A Series nozzles are furnished complete with NEWGARD™ hand insulators. Available in a variety of colors.

## OPW NEWGARD™ Two-Piece Hand Insulator

OPW 11A® and 11B® nozzles are furnished complete with NEWGARD™ 2-piece hand insulators. For a more unique appearance, try our new two-piece design. OPW NEWGARD™ 2-piece hand insulators make it easy to match new color schemes or replace soiled insulators without removing the nozzle from the hose.

## OPW 8 FILLGARD™ Splash Guard

FILLGARD™ also enhances the appearance of your gasoline nozzle, and makes dispensing gasoline more pleasant for your customers. FILLGARD™ won't deform or crack in cold weather. FILLGARD™ is not standard on new 7 Series nozzles.



## Ordering Specifications

Hand Insulator Color	NEWGARD™ 1 piece				NEWGARD™ 2 piece		FILLGARD™	
	11A®	11B®	7H®	7HB®	11A®	11B®	11A® & 11B®	7H® / 7HB®
Green	D01246M	C03647M	E00307M	E00325M	D01773M	D01529M	8G-0100	8HG-0100
Silver	D01174M	C03648M	207113		205217	D02078M	8S-0200	
Red	D00907M	E00304M		211218	D01775M	D01789M	8R-0300	8HR-0300
Black	D00909M	E00308M	E00306M	E00324M	D01719M	D01532M	8BL-0400	8HBL-0400
Blue	D00908M	C03649M		H14846M	D01774M	D01790M	8B-0500	
Yellow	D00917M	C03655M	E00368M	H11923M	D01776M	D01791M	8Y-0900	8HY-0900
Gold	D01295M	C03653M			205219	205206	8GL-0750	
Orange	D01245M	C03654M	205598	205599	205248	205252	8O-0800	8HO-0800
					D01530M Barrel			

Note: Barrel and Hand Insulator sold separately.

**Custom Colors:** With minimum quantities. Contact OPW Customer Service.

<input type="checkbox"/> White	<input type="checkbox"/> Azure Blue	<input type="checkbox"/> Brown
<input type="checkbox"/> Light Red	<input type="checkbox"/> Dark Blue	

### Notes:

- 1) OPW may add or delete colors without notice.
- 2) Actual color may vary from production run to production run.
- 3) Custom colors available, minimum quantities applicable.\*\*
- 4) Custom logos available for additional charge.\*\*

\*\* For ordering specifications not listed in this catalog, visit our website at [www.opwglobal.com](http://www.opwglobal.com) or contact Customer Service at 1-800-422-2525.

## Materials

**Body:** Special resin coated aluminum

**Lever & Lever Guard:** Duratuff®

**Seals:** Viton®

**Inlet Size:** M34

(adaptor required for each nozzle)

**Weight:** 2.41 lbs. each, 36 lbs./case of 15  
1.1 kg each, 16.5 kg/case of 15

Meets ISO 22241  
Compatibility  
Testing for DEF  
Contamination

21Gu-0500



Mis-Filling Prevention  
Device (MFPD)

## Features – Benefits

- ◆ Automatic Shutoff Feature shuts off nozzle when the tank is full
- ◆ Mis-filling prevention device eliminates the risk of accidental DEF filling or environmental contamination.
- ◆ Spout with magnetic interface prevents mis-filling mishaps.
- ◆ Durable streamlined nozzle design for easy, comfortable nozzle handling makes it easy to differentiate DEF products.
- ◆ Total end-to-end affordable solution is a convenient and complete system from the Industry Leader.

- ◆ Comes with Integral Contaminant-Prevention Filter; this replaceable, stainless steel, 40-mesh filter provides an added level of protection against DEF contaminants.
- ◆ Outfitted in that familiar and unmistakable "DEF Blue" with slogan badge for instant product identification.



21GU-FLTR



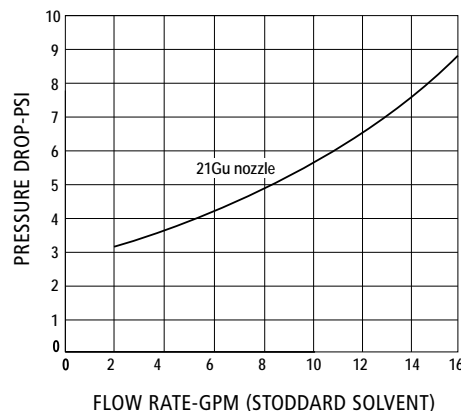
### Maximum pressure and flow rate

- ◆ 40 psi (2.75 bar) maximum pressure.
- ◆ 10 gpm (37.8 lpm) maximum flow rate

## OPW 21Gu™ DEF Nozzle

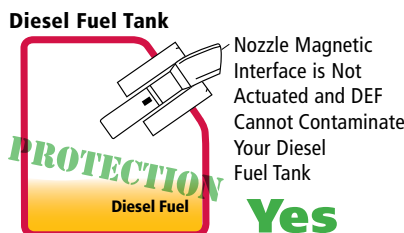
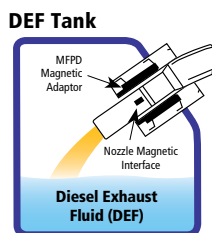
### The Industry's Most Comprehensive DEF-Filling Solution

- ◆ End-to-end dispensing hardware solution for reliable, efficient DEF-filling
- ◆ Industry standard DEF-filling solution in Europe
- ◆ Unique Mis-Filling Prevention Device (MFPD) provides unparalleled filling assurance and peace of mind
- ◆ Affordable mis-filling prevention insurance designed to protect your investment against potential mis-filling mishaps



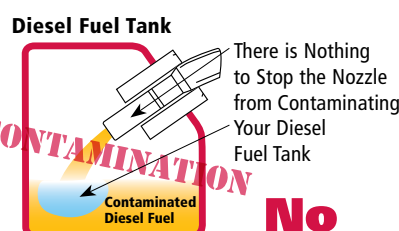
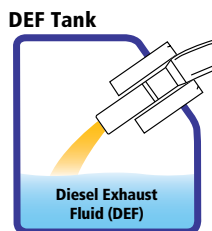
## MIS-FILLING PREVENTION

WITH the OPW 21Gu nozzle and Mis-Filling Prevention Device (MFPD), your investment is safe.



### Other DEF Nozzle

WITHOUT the OPW 21Gu nozzle and Mis-Filling Prevention Device (MFPD), your investment is at risk.



## Listings and Certifications ISO 22241 Compliant

### Are You Protected?

A fixed magnetic field within the Mis-Filling Prevention Device actuates a magnetic interface in the spout of the 21Gu nozzle to allow the flow of DEF. Without the Mis-Filling Prevention Device, the DEF nozzle will not flow. Put the nozzle in the wrong tank – say, your diesel tank – no problem, the nozzle will not flow. No other DEF-filling nozzle has this DEF mis-filling protection capability.

## Nozzle Ordering Specifications

Product #	Description
21GU-0400	Wayne® / Bennett® / Gasboy® (Model 9862XX-ZWW) Nozzle designed for use WITHOUT Mis-Filling Prevention Device
21GU-040G	Gilbarco® / Gasboy® (Model 9862KX-Z) Nozzle designed for use WITHOUT Mis-Filling Prevention Device
21GU-0500	Wayne® / Bennett® / Gasboy® (Model 9862XX-ZWW) Nozzle designed for use WITH Mis-Filling Prevention Device
21GU-050G	Gilbarco® / Gasboy® (Model 9862KX-Z) Nozzle designed for use WITH Mis-Filling Prevention Device

NOTE: Each nozzle requires one adaptor fitting to convert from M34 to 1" BSPP threads.

### Replacement Parts

Product #	Description
206466	21GU-0500 & 050G Blue Hand Insulator
205077	21GU-0400 & 040G Black Hand Insulator
21GU-SPOUT	DEF Replacement Spout designed for use WITH Mis-Filling Prevention Device
21GU-SPOUT-N	DEF Replacement Spout WITHOUT Mis-Filling Prevention Device
204133	DEF Replacement Slogan Badge
21GU-FLTR	Strainer and Spacer Washer



Bennett®, Separation by Design®, Wayne® Guard (Standard) and Gasboy®



Gilbarco® Guard

### 21GU-SSB

Stainless Steel Swivel / Reconnectable Breakaway

#### Features

- ◆ SST construction and compatible with ISO 22241 Standard
- ◆ Converts nozzle from M34 threads to 1" BSPP
- ◆ Integral reconnectable breakaway 175-330 (lbs.) 80-150 (kg)
- ◆ Includes 21GU-BCS for attractive installation and protection of vehicles



## OPW MIS-FILLING PREVENTION DEVICE (MFPD)

DEF mis-filling can be expensive. The OPW 21Gu MFPD offers the industry's most effective and affordable insurance policy against mis-filling mishaps – actually stopping them before they happen. There is no better way to protect your investment and the environment.



## 21Gu Nozzle Adaptor Ordering Specifications

Product #	Description
21GU-SSB	DEF Stainless Steel Reconnectable Breakaway / Swivel - NOTE: One (1) 21GU-SSB is required for each nozzle. Hose connection end is 1" BSPP male thread.
21GU-SCS	Replacement DEF Swivel Cover Sleeve
21GU-BCS	Replacement DEF Swivel/Breakaway Cover Sleeve (Comes with 21GU-SSB)

## 21Gu Mis-Filling Prevention Device

Product #	Description
MFPD	21GU Mis-Filling Prevention Device (MFPD). Order one MFPD or Bulk Packed for OEM sales (420 per case) NOTE: The MFPD is permanently installed in DEF tank fill pipe. Contact your vehicle supplier and specify the OPW DEF Mis-Filling Prevention Device.
MFPD-Pak	Retail Packaged Mis-Fill Prevention (Each)

Note: Want them individually packaged for retail? Contact OPW customer service at 1-800-422-2525.

## Materials

### Hose:

O.D.: 1" (26 mm)

I.D.: 5/8" (16 mm)

Minimum bend radius: 3-1/2" (90 mm)

Thread connections: 1" BSPP female at both ends

Torque specification: 30-37 ft. lbs (40-50 Nm)



## Features

- ◆ Specially designed for DEF-flow applications.
- ◆ Lightweight and highly flexible for easy customer handling.
- ◆ Smooth bore, seamless fluoropolymer lining for exceptional flow performance.
- ◆ Swivel end couplings provide for easy installation.
- ◆ Durable, reliable, long-life performance and maximum flow efficiency.
- ◆ Anti-kinking sleeve at nozzle end to reduce wear on hose during use.

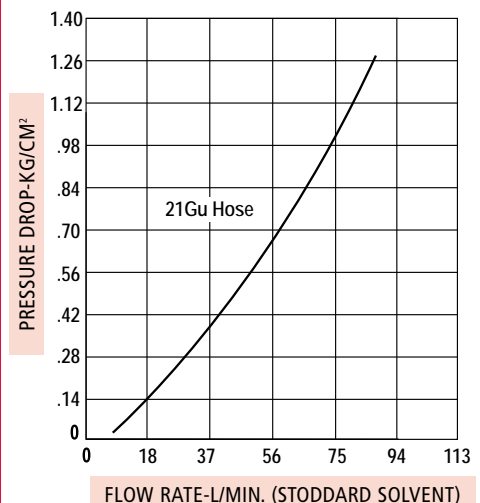
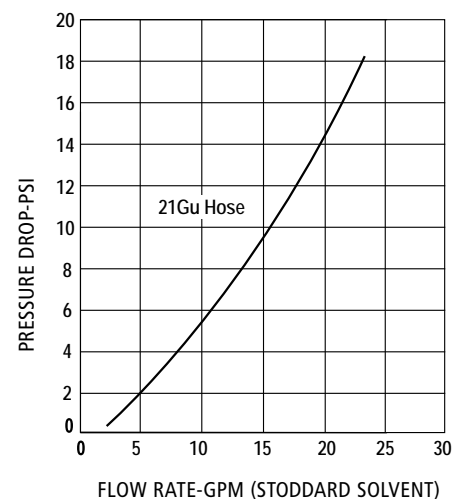
## Ordering Specifications

Product #	Description
21GU-H8	DEF Hose Assembly, 8 ft.
21GU-H11	DEF Hose Assembly, 11 ft. for Bennett® & Gasboy® Dispensers
21GU-H12	DEF Hose Assembly, 12 ft.
21GU-H15	DEF Hose Assembly, 15 ft. for Separation by Design® Dispensers
21GU-H17G	DEF Hose Assembly, 17.4 ft. for Gilbarco® Retail and Wayne® Dispensers
21GU-H21	DEF Hose Assembly, 21 ft.
21GU-HRS	DEF Hose Replacement Seals (10 per pack)
204129	DEF Hose Coupling (comes with hose seal)
204130	DEF Anti-kinking Sleeve

Note: Need a different custom length? Contact OPW customer service at 1-800-422-2525.

## OPW 21Gu Hose Assembly

The OPW 21Gu Series DEF Hose is the de facto standard for hoses in Europe. Designed with integral swivel couplings and an anti-kinking sleeve, the 21Gu hose is easy to install and use. The OPW 21Gu Hose meets compatibility testing as specified in ISO 22241 so that you can rest assured that your hose will last.

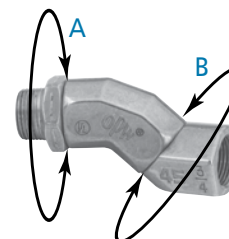
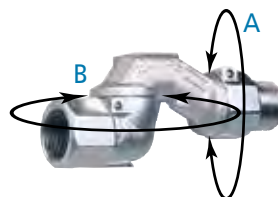


# Conventional Swivels & Breakaways



- Swivel Breakaway Selection Chart..... 158
- Hose Swivels..... 159-160
- Swivel/Breakaways ..... 161
- Reconnectable Breakaways ..... 162-165
- Single Use Breakaways..... 163
- 66H Series Hose..... 165

## SWIVELS



Model	365	241TPS	45
Rotation A	360°	360°	360°
Rotation B	N/A	270°	360°
O-Ring Design	Dual O-Ring – Viton®/Buna-N	Dual O-Ring – Viton®/Buna-N	Dual Seal – Viton®
<sup>3</sup> / <sub>4</sub> " Model	Yes	Yes	Yes
1" Model	Yes	Yes	Yes
Page	159	160	159
Cold Weather Option	No	No	Yes

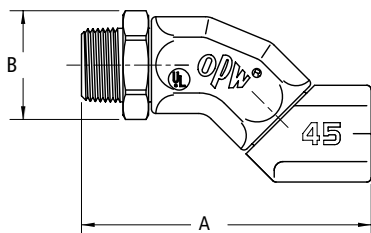
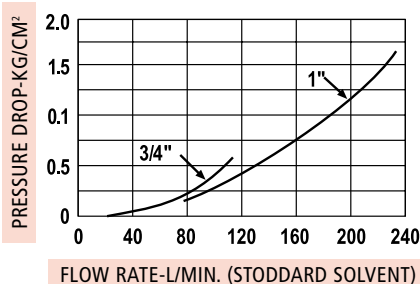
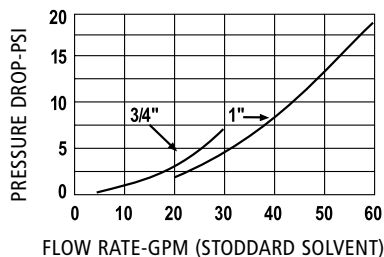
## BREAKAWAYS



Model	66V	68EZR	66REC	66SB
Style	Single Use	Reconnectable	Reconnectable	Reconnectable
Cost	<ul style="list-style-type: none"> <li>• Low Initial Unit Cost</li> <li>• Requires Service Call To Replace</li> </ul>	<ul style="list-style-type: none"> <li>• Higher Initial Unit Cost</li> <li>• No Service Call Required To Reconnect</li> </ul>	<ul style="list-style-type: none"> <li>• Higher Initial Unit Cost</li> <li>• No Service Call Required To Reconnect</li> </ul>	<ul style="list-style-type: none"> <li>• Higher Initial Unit Cost</li> <li>• No Service Call Required To Reconnect</li> </ul>
Application	<ul style="list-style-type: none"> <li>• High Hose Dispensing</li> <li>• Requires Whip Hose</li> </ul>	<ul style="list-style-type: none"> <li>• High Hose Dispensing</li> <li>• Requires Whip Hose</li> </ul>	<ul style="list-style-type: none"> <li>• High Hose Dispensing</li> <li>• Requires Whip Hose</li> </ul>	<ul style="list-style-type: none"> <li>• No Whip Hose Required</li> </ul>
<sup>3</sup> / <sub>4</sub> " Model	Yes	Yes	Yes	Yes
1" Model	Yes	Yes	N/A	Yes
Other Features	Available with a Whip Hose Combination	Audible Click	Audible Click	Combines Swivel & Breakaway
Page	163	162	163	161
Cold Weather Option	No	Yes	Yes	Yes

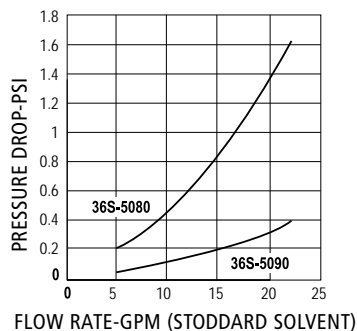
## OPW 45 Hose Swivel

The OPW 45 swivel is designed for gasoline self-service applications where easy nozzle and hose handling is important for customer convenience. The 45 is installed between the nozzle and hose to reduce strain, providing flexibility so fueling hoses last longer.



## OPW 36S Hose Swivel

Designed for use with fuel oil nozzles (at inlet only), the OPW 36S provides 360° swivel action. The full-circle swivel reduces the physical strain of aligning the nozzle with the fillpipe.



## Materials

**Body:** Aluminum

**Outlet Adaptor:** Zinc

**Inlet Adaptor:** Zinc

**Seals:** Buna-N

**Weight:** 3/4": .65 lbs. each; 30 kg  
1": 1.16 lbs. each; .53 kg

**Packed:** 20 per Case (45-5060)  
30 per Case (45-5075)



OPW 45

## Features

- ◆ UL and ULC listed for use in gasoline, diesel, and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Compact, attractive profile for a sleek, modern appearance.
- ◆ Secure design not repairable or rebuildable for certainty of operation. Every OPW 45 is factory assembled and tested.
- ◆ Better flow performance less restriction means higher refueling speeds.
- ◆ Unique 2 planes of rotation for easy nozzle positioning and hose life.
- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

Product #	Size	Overall Length	Across Corners	Weight	
		A	B	lbs.	kg
45-5060	3/4" F x 3/4" M (NPT)	4 1/8"	1 9/16"	.65	.30
20 per case	19 mm x 19 mm	105 mm	40 mm		
45-5075	1" F x 1" M (NPT)	4 3/4"	1 7/8"	1.16	.53
20 per case	25 mm x 25 mm	121 mm	48 mm		

## Materials

**Body:** Aluminum

**Adaptor:** Zinc  
Aluminum

**Seals:** Buna-N O-Ring,  
Viton® O-Ring

**Bearings:** Nylon

36S-5080



## Ordering Specifications

Product Number	Inlet Thread x Outlet Thread	lbs.	kg
36S-5080	3/4" M x 3/4" F (NPT)	0.30	0.14
	(19 mm x 19 mm)		
36S-5090	1" M x 1" F (NPT)	0.40	0.18
	(25 mm x 25 mm)		

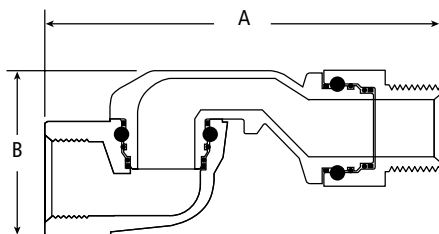
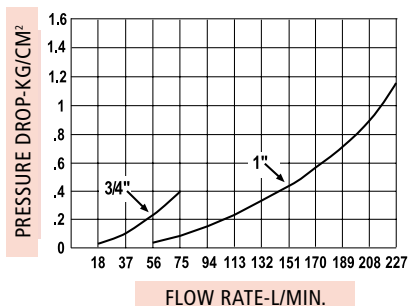
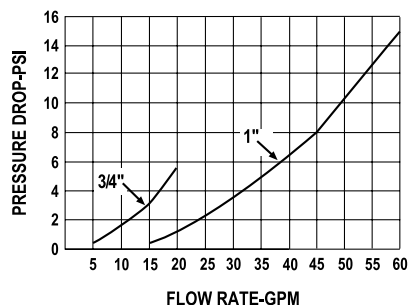
## Listings and Certifications



NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## OPW 241TPS Series Hose Swivels

The OPW 241TPS Series of swivels are designed and rigorously tested for applications where easy nozzle and hose handling is important for customer convenience. Swivels are installed in between the nozzle and the hose to provide flexibility in the system to reduce customer strain, position the nozzle properly and reduce premature hose wear.



## Materials

**Body:** Aluminum  
**Inlet Adaptor:** Zinc  
**Outlet Adaptor:** Zinc  
**Seals:** Buna-N, Viton®  
**Bearing:** Nylon  
**Weight:** 3/4": .65 lbs., .30 kg  
 1": 1.55 lbs., .703 kg  
**Packed:** 60 per Case



241TPS - 3/4"



241TPS - 1"



## Features

- ◆ UL and ULC listed for use in gasoline, diesel, and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Allows for easy nozzle positioning in fill pipes – utilizing two planes of rotation.
- ◆ Reduces premature hose wear – utilizing two planes of rotation.
- ◆ Added protection vs. thermal and chemical degradation – Dual Seals.
- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

Product #	Inlet/Outlet	Length A	Depth B
241TPS-0241	3/4" F x 3/4" M (NPT)	4 7/8"	2 3/16"
241TPS-0492* (E85)			
241TPS-75RF** (E25/B20)	19 mm x 19 mm	124 mm	56 mm
241TPS-1000	1" F x 1" M (NPT)	6 1/32"	2 11/32"
241TPS-10RF*** (B20)	25 mm x 25 mm	153 mm	64 mm

\*241TPS-0492 is UL Listed for up to 85% Ethanol.

\*\*241TPS-75RF is UL Listed for up to 25% Ethanol and 20% Biodiesel.

\*\*\*241TPS-10RF is UL Listed for up to 20% Biodiesel.

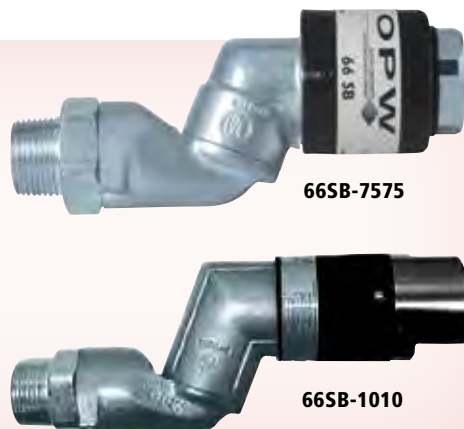
## Listings and Certifications



NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Materials

**Body:** Aluminum  
**Sleeve:** Nylon, HDPE  
**Seals:** Viton®  
**Spring:** Stainless steel  
**Poppet:** Aluminum  
**Packed:** 20 per Case



## OPW 66SB Swivel Breakaway

The OPW 66SB Swivel Breakaway is intended for easy installation at the nozzle inlet. The compact, lightweight design incorporates a 360° swivel rotation at both the male end and middle joint, with a simple and easily-reconnectable breakaway on the opposite end.

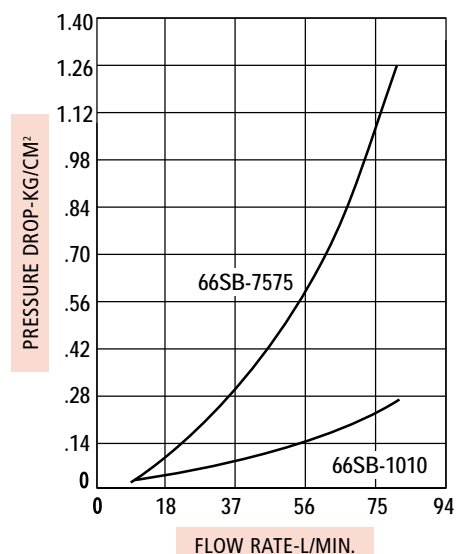
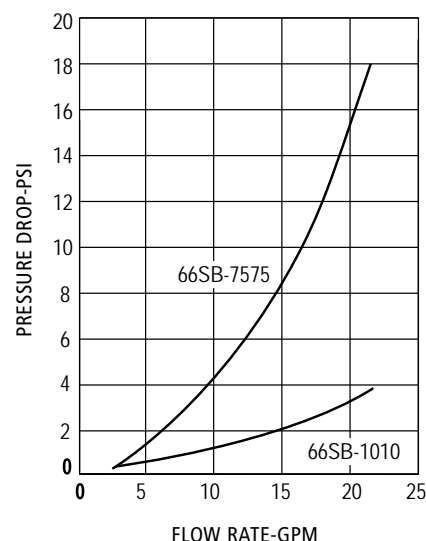
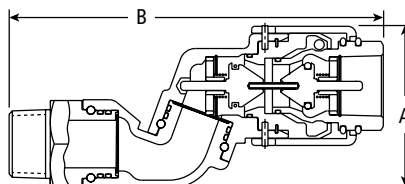
## Features

- ◆ UL and ULC listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Pull Force – the 66SB will break away with a pull force of no more than 350 lbs.
- ◆ Easily Reconnected at Waist Height – after relieving line pressure, simply push coupling halves together until latched. Reconnection force is approximately 15 lbs.
- ◆ Protected Coupling and Poppet – the breakaway's poppet and sealing surface are protected from impact during separation by a plastic sleeve.

- ◆ Reduces Connections – the single-unit design replaces the standard swivel, breakaway and whip hose, eliminating possible leak points.
- ◆ Double O-Ring Seal – both swivel joints are protected by a double O-Ring design.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.



## Ordering Specifications

Product #	Size	Weight	
		lbs.	kg
66SB-7575	3/4" x 3/4" (NPT)	1	0.45
66SB-1010	1" x 1" (NPT)	1.82	0.83

## Dimensions

Product #	A		B	
	in.	mm	in.	mm
66SB-7575	2 1/2"	64	5 29/32"	150
66SB-1010	3 11/32"	85	8 1/2"	216

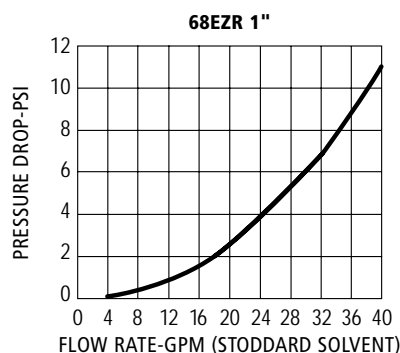
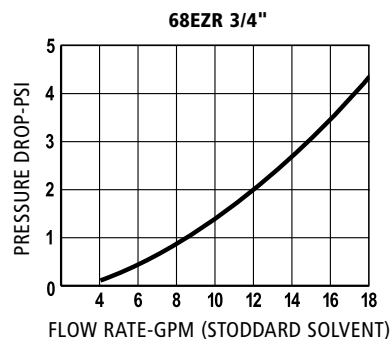
66SB Instruction Sheet Order Number: **F-69**

**Listings and Certifications**



## OPW 68EZR Series 3/4" and 1" Dry Reconnectable Breakaway

The OPW 68EZR Reconnectable Breakaway has been designed for retail fueling operations to deliver an increased level of security in the event of a drive off. Not only is it the fastest and easiest breakaway in the industry to reconnect, but also the one that delivers the greatest peace of mind that it is securely reconnected. Built on the 66REC breakaway technology platform, the 68EZR delivers trusted OPW quality and proven technology at the lowest cost of ownership. The 68EZR is installed on fuel dispensing hoses and will separate when subjected to a designated pull force. Upon separation, the dual valves seat automatically, stopping the flow of fuel and limiting any fuel spillage, while protecting the dispensing equipment. For proper operation on high-hanging hoses, the OPW 68EZR must always be installed with a "straightening" hose, such as the OPW 66H. For low hose applications, the OPW 68EZR should be installed downstream of the retractor cable.



## Materials

### 3/4" 68EZR

**Body:** Die-cast zinc  
**Protective Sleeves:** Impact Resistant Super-tough Nylon  
**Main Seals:** Viton® & Fluorosilicone  
**Main Spring:** Stainless steel  
**Guide and Poppets:** Acetal / Delrin  
**Packed:** 20 per Case

### 1" 68EZR

**Body:** Aluminum  
**Protective Sleeves:** Impact Resistant Super-tough Nylon  
**Main Seals:** Viton® & Fluorosilicone  
**Main Spring:** Stainless steel  
**Guide and Poppets:** Acetal / Delrin  
**Packed:** 20 per Case



## Features

- ◆ UL and ULC listed for use in gasoline, ethanol blends up to 25% (E25), diesel, and biodiesel blends up to 20% (B20). Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Pull Force – the 68EZR will break away with a pull force of no more than 350 lbs.
- ◆ Unique Double-Poppet Design – features low pressure drop.
- ◆ Coupling Halves – protected by proven plastic sleeves.
- ◆ Easily Reconnected – features "Push-Twist-Click" technology; simply realign the valve, push in and then twist until you hear the audible click.
- ◆ Cold weather compatible
- ◆ Reconnection force of approximately 7 lbs.
- ◆ Line Shock – the OPW 68EZR is able to absorb the effects of normal line shock through the unique design of the disconnecting features.
- ◆ 50 psi (3.45 bar) maximum allowable operating pressure.

## Ordering Specifications

Product #	Size	mm	Weight	
			lbs.	kg
68EZR-7575	3/4" (NPT)	19	1.2	0.54
68EZR-75RF*	3/4" (NPT)	19	1.2	0.54
68EZR-1010	1" (NPT)	25	1.2	0.54
68EZR-10RF**	1" (NPT)	25	1.2	0.54

\*68EZR-75RF is UL and ULC listed for use in gasoline, ethanol blends up to 25% (E25), diesel, and biodiesel blends up to 20% (B20).

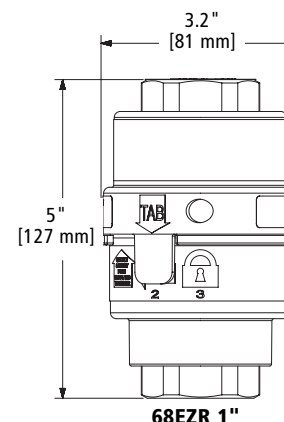
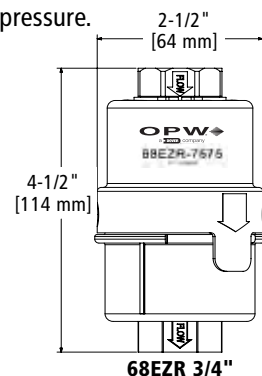
\*\*68EZR-10RF is UL and ULC listed for use in diesel, and biodiesel blends up to 20% (B20).

## Replacement Parts

Part #	Description
211143	3/4" Main Seal
8509	1" Main Seal

68EZR Series Instruction Sheet Order Number: **208080**

## Listings and Certifications



## Materials

**Body:** Die-cast zinc  
**Protective Sleeves:** Impact resistant nylon  
**Main Seals:** Viton®  
**Main Spring:** Stainless steel  
**Guide and Poppets:** Acetal  
**Packed:** 20 per Case

66REC

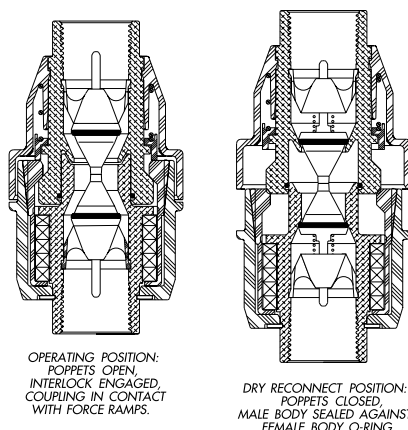


## Features

- ◆ UL and ULC listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Pull Force – the 66REC-1000 will break away with a pull force of no more than 350 lbs.
- ◆ Unique Double-Poppet Design – features low pressure drop.
- ◆ Coupling Halves – protected by proven plastic sleeves.
- ◆ Easily Reconnected – just “push and twist” until you hear the audible click, signifying the unit has been correctly reconnected. Reconnection force approximately 15 lbs.
- ◆ May be reconnected under wet or dry hose conditions.
- ◆ Cold weather compatible
- ◆ Line Shock – the OPW 66REC is able to absorb the effects of normal line shock through the unique design of the disconnecting features.

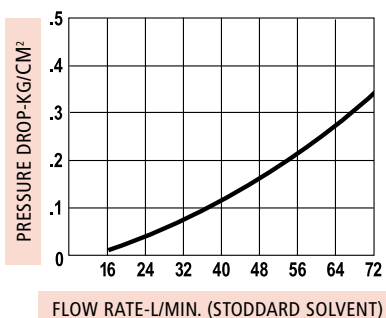
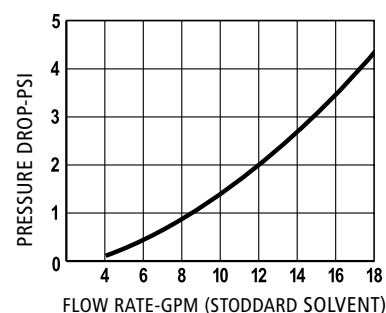
### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.



## OPW 66REC 3/4" Dry Reconnectable Breakaway

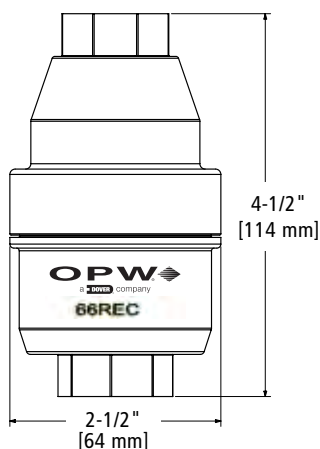
The OPW 66REC is the first dry reconnectable breakaway for the conventional dispensing market. It is designed to be installed on fuel dispensing hoses and will separate when subjected to a designated pull force. The dual valves seat automatically, stopping the flow of fuel and limiting any fuel spillage, while protecting the dispensing equipment. When reconnecting the separated halves, the 66REC seals tightly on an O-ring before the poppet stems engage to open the valve. For proper operation on high-hanging hoses, the OPW 66REC 3/4" must always be installed with a “straightening” hose with a minimum length of 9", such as the OPW 66H. For low hose applications, the OPW 66REC should be installed downstream of the retractor cable.



## Ordering Specifications

Product #	in.	mm	lbs.	kg
66REC-1000	3/4" (NPT)	19	1.2	.54

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.



**Listings and Certifications**



## Materials

**Body:** Aluminum

**Seals:** Buna-N and Viton®

**Weight:** See matrix below

66V Breakaway Scuff Guard



66V



## Features

- ◆ UL and ULC listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Prevents Costly Damage to Dispensers – pulls apart at less the designed pull force during drive-offs.
- ◆ Certainty of Operation – designed for single use, so you know it is replaced instead of re-assembled.

- ◆ Prevents Hazardous and Costly Clean Up – unique double poppet design closes leak path from both dispenser and separated hose side.

## Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

NOTE: OPW 66V Series Breakaways must always be installed with a "straightening" hose with a minimum length of 9" for the 3/4" Series and a minimum length of 12" for the 1" Series, such as the 66H Series hoses.

## Ordering Specifications

Product #	Connection Size		Weight		Description - Pull Force
	in.	mm	lbs.	kg	
66V-0300	3/4" F x 3/4" F (NPT)	19 F x 19 F	0.60	0.27	Valve / No More Than 300 lb.
66V-030RF**	3/4" F x 3/4" F (NPT)	19 F x 19 F	0.60	0.27	Valve / No More Than 300 lb.
66V-0492*	3/4" F x 3/4" F (NPT)	19 F x 19 F	0.60	0.27	Valve for up to E85 / No More Than 300 lb.
66V-1300	1" F x 1" F (NPT)	25 F x 25 F	0.98	0.45	Valve / No More Than 300 lb.
66V-130RF***	1" F x 1" F (NPT)	25 F x 25 F	0.98	0.45	Valve / No More Than 300 lb.
66V-1350	1" F x 1" F (NPT)	25 F x 25 F	0.98	0.45	Valve / No More Than 350 lb.
66V-135RF***	1" F x 1" F (NPT)	25 F x 25 F	0.98	0.45	Valve / No More Than 350 lb.

\* 66V-0492 is UL Listed for up to 85% Ethanol

\*\* 66V-030RF is UL Listed for up to 25% Ethanol and 20% Biodiesel

\*\*\* 66V-130RF and 66V-135RF are UL Listed for up to 20% Biodiesel

### Accessories

66-0075	3/4" F x 3/4" M (NPT)	19 F x 19 M	1.46	0.66	Valve w/ 9" Hose / No More Than 300 lb.
66-1300	1" F x 1" M (NPT)	25 F x 25 M	2.50	1.13	Valve w/ 12" Hose / Maximum 300 lb.
66S-0075	3/4"	19	0.20	0.10	Black Vinyl Scuff Guard Cover
66S-1300	1"	25	0.20	0.10	Black Vinyl Scuff Guard Cover

## 66H Series of Hoses

The 66H Series Hoses are UL approved, steel reinforced hardwall flexible to -40°F. 3/4 inch inside diameter with 3/4 inch male NPT chrome crimped ends.

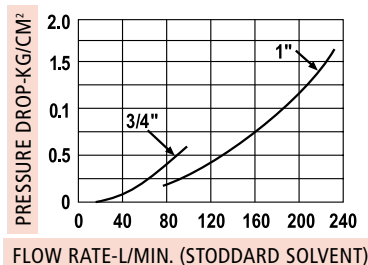
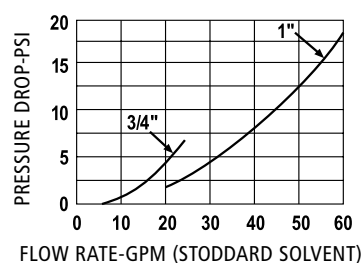
Compatible with fuel blends up to E-15 & B-20. Maximum working pressure 50PSI. Also available in Low Permeation per UL330.

## Ordering Specifications

Product #	Length	Connection Size		Weight		Description
		in.	mm	lbs.	kg	
66H-0975	9 inch (23 cm)	3/4" M x 3/4" M (NPT)	19 M x 19 M	0.75	0.34	Straightening Hose
66H-0975-LP	9 inch (23 cm)	3/4" M x 3/4" M (NPT)	19 M x 19 M	0.75	0.34	Straightening Hose LOW PERMEATION per UL330
66H-1300	12 inch (30 cm)	1" M x 1" M (NPT)	25 M x 25 M	1.40	0.63	Straightening Hose
66H-08575	8.5 feet (2.6 m)	3/4" M x 3/4" M (NPT)	19 M x 19 M	4	1.8	Curb Hose
66H-08575-LP	8.5 feet (2.6 m)	3/4" M x 3/4" M (NPT)	19 M x 19 M	4	1.8	Curb Hose LOW PERMEATION per UL330

## OPW 66V Series Breakaways

The OPW 66V Series breakaways are designed and rigorously tested for use in today's fuels. Installed on fuel dispensing hoses, they will separate at the designed pull force, reducing expensive damage to the dispenser and piping system. Internal dual valves close automatically during separation, stopping the flow of fuel from both the dispenser and the separated hose, reducing environmental and health risks of potential spilled fuel.



66V Series 3/4" Instruction Sheet Order Number: H10993PA

66V Series 1" Instruction Sheet Order Number: H10993PA

66S Series Instruction Sheet Order Number: H11015PA

## Listings and Certifications



**We don't stop at the nozzle.**  
**We've got you covered with swivels, breakaways and hoses.**

### OPW Swivels Compatibility



Model	365	241TPS	45
Up to E10	365-5080	241TPS-0241	45-5060
Up to E25		241TPS-75RF	
Up to E85		241TPS-0492	
Up to B5	365-5080, 365-5090	241TPS-0241, 241TPS-1000	45-5060, 45-5075
Up to B20		3/4" 241TPS-75RF, 1" 241TPS-10RF	

### OPW Breakaway Compatibility



**Now Approved**  
 For E25,  
 Ethanol Blend



Model	66V	68EZR	66REC	66SB
Up to E10	66V-0300	68EZR-7575	66REC-1000	66SB-7575 66SB-1010
Up to E25	66V-030RF	68EZR-75RF		
Up to E85	66V-0492			
Up to B5	66V-0300 66V-1300 66V-1350	68EZR-7575 68EZR-1010	66REC-1000	66SB-7575 66SB-1010
Up to B20	3/4" 66V-030RF 1" 66V-130RF 1" 66V-135RF	68EZR-75RF 68EZR-10RF		

### Hose Compatibility



Straightening Hose:  
 66H-0975 - 9 inch (23 cm)



Curb Hose: 66H-08575  
 8.5 foot (2.6 m)

Model	Whip Hose (9 in)	Curb Hose (8.5 ft)
Up to E10	66H-0975	66H-08575
Up to E25	66H-0975-E25	66H-08575-E25
Up to E85	66H-0975-E85	66H-08575-E85
Up to B5	66H-0975	66H-08575
Up to B20	66H-0975	66H-08575
Low Perm	66H-0975-LP	66H-08575-LP

**E25, B20**  
**Hose Kits Available**

Contact Your OPW Distributor or Sales Representative



## Materials

**Body:** Aluminum nickel-plated  
**Spring:** Steel zinc-plated  
**Guide:** Ceramic-filled plastic  
**Adaptor:** Steel zinc-plated  
**Inlet and Outlet Size:** 3/4" NPT



44-0044

44N-1044

## Features

- ◆ UL and ULC listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Compact, attractive profile – for a sleek, modern appearance.
- ◆ Includes a 3/4" NPT pipe nipple.
- ◆ The OPW 44-0044 is designed to be installed at the dispenser outlet or between the dispenser and the breakaway valve, thus removing it from the abusive action sometimes

seen at the nozzle.

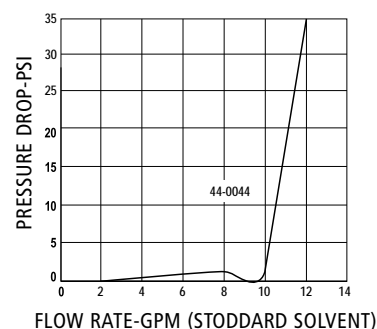
- ◆ A flow indication arrow – is indicated on the flow limiter for easy installation.

### Design working pressure

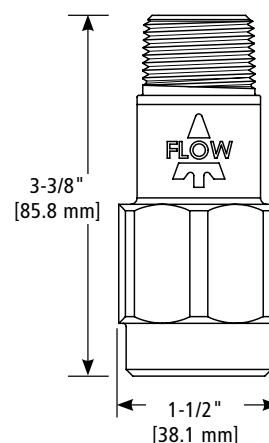
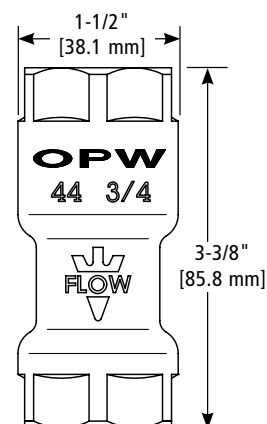
- ◆ 50 psi (3.45 bar) maximum pressure.

## OPW 44 Flow Limiter

The OPW 44 Flow Limiter allow your customers to comply with the EPA 10 gpm maximum flow rate mandate which went into effect July 1, 1996. The OPW 44-0044 Flow Limiter is designed to control the maximum fuel flow rate to 10 gpm.



44-0044



## Ordering Specifications

Product #	Length	Weight	
	in.	lbs	kg
44-0044	3/4 F x 3/4 F (NPT)	1.2	.54

44 Series Instruction Sheet Order Number: **H12918PA**

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Listings and Certifications



See pages 231 - 239 for certification

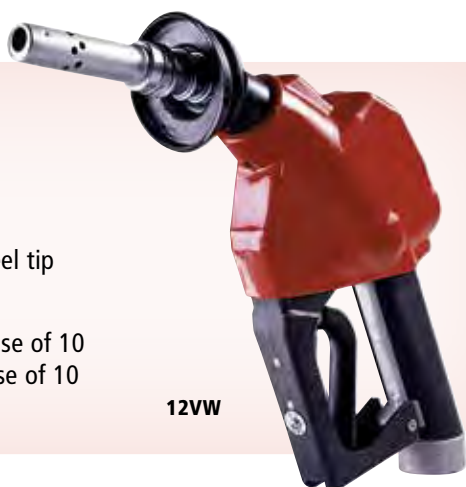
# Vacuum-Assist Vapor Recovery Hanging Hardware



• 12VW Nozzles.....	168
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## Materials

**Body:** Aluminum  
**Lever & Lever Guard:** Duratuff®  
**Packing:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** Aluminum w/ Stainless Steel tip  
**Inlet Size:** M34 Metric  
**Weight:** 3.1 lbs. each; 31.0 lbs./case of 10  
 1.41 kg each; 14.1 kg/case of 10



12VW

## Features

### Safe for Use

- ◆ UL listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Prevents gasoline spills in prepay or card-lock systems utilizing OPW's unique No Pressure – No Flow Device. – The nozzle cannot be opened until the pumping system is pressurized and closes automatically when the pressure is removed.
- ◆ Prevents consumer from jamming the nozzle in an open position – blocker on lever guard.
- ◆ FlowLock™ allows nozzle to shut off when falling out of a vehicle, and is tipped up, limiting spillage and unsafe conditions.
- ◆ Vapor Escape Guard (VEG) improves vapor collection.
- ◆ Lever-activated vapor valve only opens when product is flowing controlling the amount of vapors collected from the vehicle.
- ◆ Stainless steel insert in spout to last longer than standard aluminum-only spouts.
- ◆ Durable lever guard that won't scratch your customers' vehicles – made from Duratuff®.
- ◆ New hold-open clip spring lasts longer than previous designs.
- ◆ Internal vapor path – no replacement parts needed.

### Appealing to Customers

- ◆ Easy to use – utilizing Accu-Stop® to-the-penny Flow Control Technology.
- ◆ Attractive 2-Piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry to use.
- ◆ Convenient – one-finger hold-open clip that is easy to set the flow rate (not on all models).

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.
- \* **OPW internal lab testing results as of August 2010.**

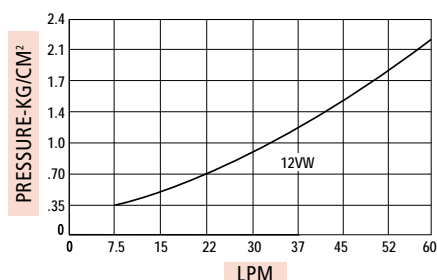
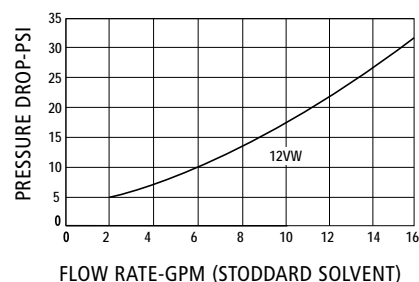
### Durable and Long Lasting

- ◆ Cycle tested and proven to last longer than 1 million cycles – better than any other nozzle available on the market today\*.

## OPW 12VW Vacuum-Assist Nozzles

The OPW 12VW Series automatic nozzles are one of OPW's premium nozzles for Vacuum-Assist vapor recovery systems. Designed with an integrated vapor-valve, they are certified on the most used vapor recovery systems in the world. The 12VW is the most trusted vapor recovery nozzle in the world for the applications it is certified on including:

- Dresser/Wayne Wayne® Vac
- Gilbarco® VaporVac®
- Schlumberger
- Vacurite



**Listings and  
Certifications**



**CARB**

California Air Resources Board

## Listings and Certifications

### Certifications and Listings

### Gilbarco® VaporVac®

CARB Initial Certification Date	April 2000	July 2000
CARB Certification Number	G-70-153* / G-70-199**	G-70-150* / G-70-199**

\* Latest version.

\*\*Approval for 350ml liquid retention requirement.

### Ordering Specifications

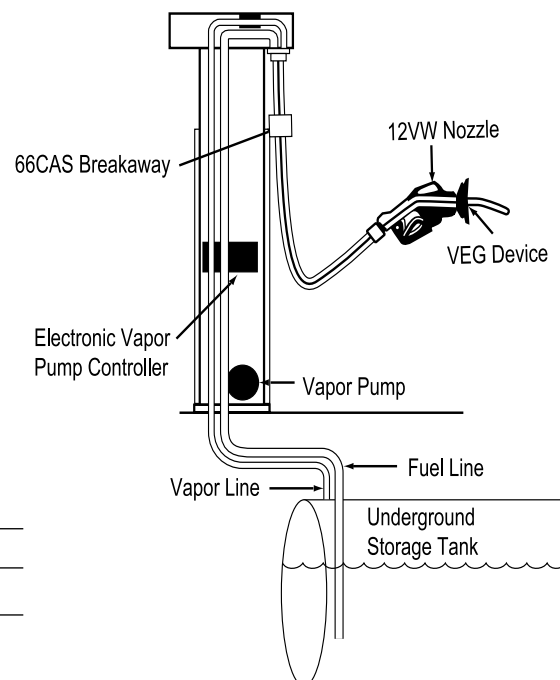
Standard Hand Insulator Color	12VW New Unleaded, with Hold-open Rack	12VW w/ AdMaster™
Green	12VW-0100	
Silver	12VW-0200	
Red	12VW-0300	
Black	12VW-0400	12VW-0400-AD
Blue	12VW-0500	
Gold	12VW-0750	
Yellow	12VW-0900	
Bare	12VW-0000	

### Replacement and Repair Parts

Product	Description	Part#
Spout Kit	Replacement aluminum unleaded spout with VEG	5VW-2000
ECD Kit	Replacement ECD and hardware	3VW-0450

12VW Series Instruction Sheet Order Number: **H15890PAE**

### Typical Installation



## OPW 6 NEWGARD™ Two-Piece Hand Insulator

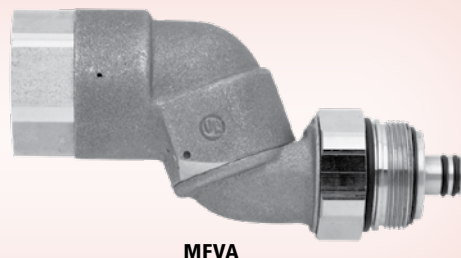
### Ordering Specifications

Hand Insulator Color	12VW New Unleaded, with Hold-Open Rack
Green	H13964M
Silver	H14662M
Red	H13942M
Black	H13941M
Blue	H14580M
Gold	H14661M
Yellow	H13943M
Hand Insulator Barrel	D02141M



## Materials

**Body:** Aluminum  
**Outlet Adaptor:** Aluminum  
**Inlet Adaptor:** Aluminum  
**Seals:** Viton and Buna-N  
**Weight:** 1.5 lbs. each, 0.68 kg



MFVA

## Features

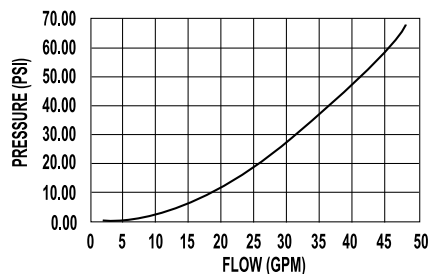
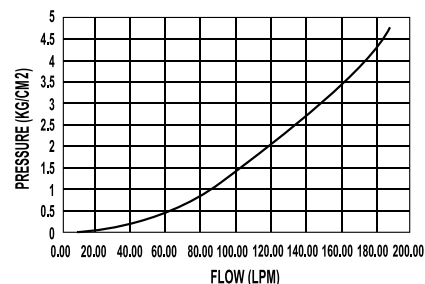
- ◆ **UL listed** for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ **Easier Hose Movement** – filling the vehicle is much easier, because hoses do not kink and are much freer to move.
- ◆ **Improved Wear** – reduces stress and wear on hoses.
- ◆ **Two-Plane Rotation** – the first swivel plane allows for 360° of motion perpendicular to the axis of the nozzle.
- ◆ The second swivel plane allows for 360° of motion parallel to the axis of the nozzle for easy nozzle positioning in the fillpipe.
- ◆ **Compact, Attractive Profile** – provides a sleek, modern appearance, allowing hoses to hang straight down instead of at an angle.
- ◆ **Secure Design** – not repairable or rebuildable for certainty of operation. Every MFVA is factory assembled and tested.
- ◆ **Special Swivel Outlet Design** – male adaptor is specially designed so that tightening of the threaded joint will not inhibit swivel rotation.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

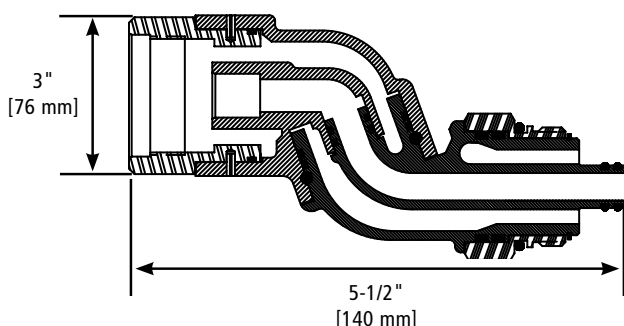
## OPW MFVA Inverted Swivel

The OPW MFVA Inverted Swivel is designed for vapor recovery applications where easy nozzle and hose handling is important for customer convenience. When attached between the nozzle and the hose, the OPW MFVA two-plane swivel allows your customer a much fuller range of motion in positioning the nozzle to fill the vehicle. Your customer can access the fillpipe from virtually any angle with minimal effort. The OPW MFVA attaches between the hose and the nozzle to reduce strain, providing flexibility so fueling hoses last longer. The OPW MFVA provides 360° swivel action for easy nozzle positioning into the fillpipe.



## Ordering Specifications

Product #	Description	Threads
MFVA	Vacuum Assist Swivel	M34 Metric



**Listings and  
Certifications**

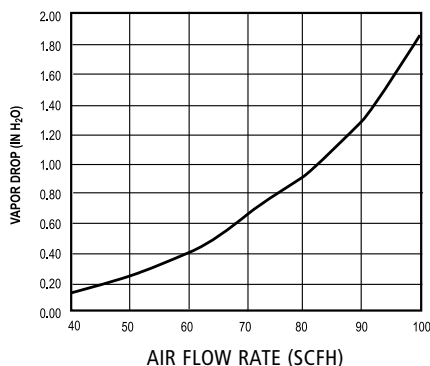


**CARB**

California Air Resources Board

## OPW 66ISB Vacuum-Assist Stage II Vapor Recovery Reconnectable Swivel/Breakaways

Reconnectable, vapor poppeted Vacuum-Assist Swivel/Breakaways available. Designed for those who want to provide customers with the convenience of a 2-plane swivel and the added safety of a breakaway.



## Materials

**Body:** Aluminum  
**Sleeve:** Nylon, HDPE  
**Seals:** Viton®  
**Spring:** Stainless steel  
**Poppet:** Aluminum  
**Weight:** 1.3 lbs., 0.60 kg



66ISB-5100

## Features

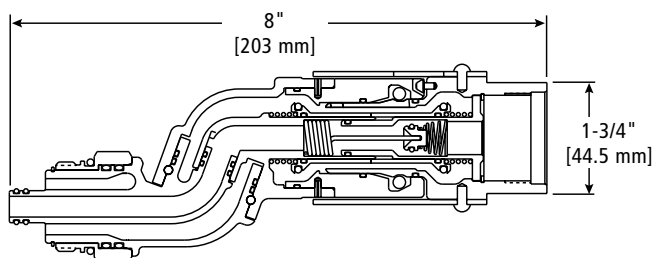
- ◆ UL and ULC listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Engineered to separate with an axial pull force of no more than 350 lbs.
- ◆ 66ISB-5100 comes with vapor poppet.
- ◆ Swivel rotation of 360° in both planes.
- ◆ Push-back reconnect style.
- ◆ Easier reconnection at waist height.
- ◆ Extends hose life.
- ◆ Double O-rings at each joint.

## Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

Product #	Threads
66ISB-5100	M34 Metric Breakaway



## Listings and Certifications



**CARB**

California Air Resources Board

CARB Certified and UL Listed Per Standard 567.

## Materials

**Body:** Aluminum  
**Main Seals:** Viton  
**Guide and Poppets:** Acetal  
**Protective Sleeves:** Impact Resistant Nylon®  
**Main Spring:** Stainless steel  
**Weight:** 1.0 lbs., 0.96 kg



66CAS-0300

## Features

- ◆ UL listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com).
- ◆ Dual Poppets – close to prevent product spillage and vapor leakage.
- ◆ Dual poppeted breakaways are recommended for use in any vacuum-assist systems, especially nozzles with integral vapor valves.
- ◆ Sleek, Attractive Appearance – to enhance station image.
- ◆ Quick Reconnect – requires only 15 lbs. of force to reconnect.
- ◆ Dry Reconnect – designed to help prevent liquid from spraying the operator during the reconnection operation.
- ◆ Rugged, Durable Construction – outer sleeve to protect coupling and sealing parts from damage for long, trouble-free service life.
- ◆ Nozzle and Hose Compatibility – interfaces with Stage II vapor recovery nozzles by OPW, and with all manufacturers of vapor recovery hoses (features the popular M34 metric thread).

## Construction/Design

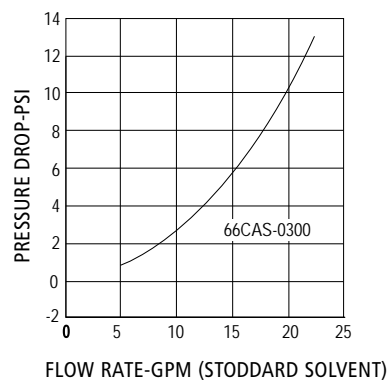
- ◆ Outer sleeve to protect sealing and coupling parts in a driveaway.
- ◆ Field-proven, double-poppet design that seals both ends of the product line and the dispenser side of the vapor line in a driveaway.
- ◆ Inverted metric coaxial hose fitting for installation into any vacuum-assist dispenser.
- ◆ Easily replaces any inverted breakaway currently in use today.

## Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## OPW 66CAS Dry Reconnect Inverted Breakaways

The OPW 66CAS Dual Poppeted, Dry Reconnect Inverted Breakaway is designed to close off the liquid path and the vapor path in the event of a drive-away. Engineered to separate at maximum of 350 pounds of axial pull force, the OPW 66CAS Breakaway is also designed to handle line shock better than a single use breakaway, while protecting your dispensing system from catastrophic damage. The OPW 66CAS is developed for use with inverted coaxial metric hoses and designed to meet today's demanding standards.

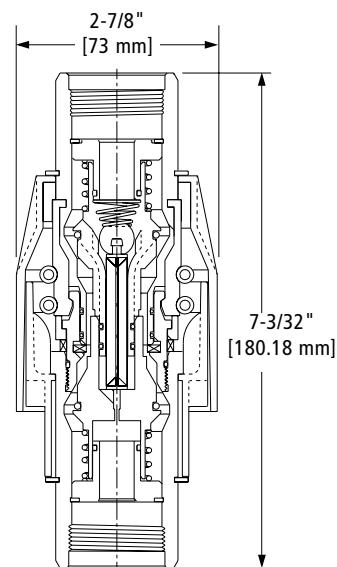


## Ordering Specifications

Product #	Threads
66CAS-0300	M34 Metric Breakaway
66CAS Series Instruction Sheet	
Order Number: <b>H13008M</b>	

## Replacement Parts

Product #	Threads
66SRK-1000	Seal Replacement Kit



**Listings and  
Certifications**



**CARB**

California Air Resources Board

# Balance Vapor Recovery Hanging Hardware



- Reconnectable Breakaways ..... 175

## Materials

**Body:** Aluminum  
**Seals:** Buna-N  
**Weight:** 0.75 lbs.,  
0.34 kg



**VAR75**

## Features

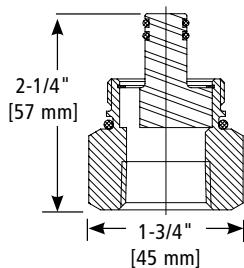
- ◆ Lightweight, maintenance free and easy to install.
- ◆ Adapts M-34 thread to a 3/4" NPT thread.

## Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

Part No.	Description
VAR75	Vac-assist to 3/4" NPT Conventional Converter



## Materials

**Body:** Aluminum  
**Seals:** Buna-N  
**Weight:** 0.75 lbs.,  
0.34 kg



**28C**

## Features

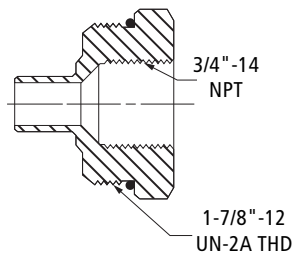
- ◆ Lightweight, maintenance free and easy to install.
- ◆ Adapts 1-7/8 – 12 UN thread to a 3/4" NPT thread

## Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

Part No.	Description
28C-0028	Coax Vapor Recovery x 3/4" NPT Bushing



## OPW VAR75 Converter Vac-Assist to 3/4" NPT

Converts vacuum-assist nozzle to a conventional hose or a vacuum-assist dispenser for use with a conventional hose.

## OPW 28C Balance Coax Adaptor

The OPW Balance Adaptor is designed to convert Balance Coax dispensers into a conventional hose point. Simply remove the existing balance hose and thread the 28C into the existing dispenser; then thread in your new Conventional hose.

## Materials

**Body:** Die-cast zinc

**Protective Sleeves:** Impact modified nylon

**Main Seals:** Viton®

**Main Spring:** Stainless steel

**Guide and Poppets:** Acetal

**Weight:** 0.97 lbs., 0.44 kg **66CLP-5100**



## OPW 66CLP Balance Phase II Enhanced Vapor Recovery Reconnectable Breakaway

For more than a decade, the 66CLP has earned the reputation as the industry standard in preventing fuel vapors from escaping during a separation incident on balance systems. Its proven design minimizes downtime and allows all hose points to be put back in service as quickly and easily as possible after a separation event. The OPW 66CLP is also approved for VST Phase II Enhanced Vapor Recovery Systems.

## Features

- ◆ UL listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at **www.opwglobal.com**.
- ◆ Separates at 350 pounds of axial force.
- ◆ Push-back reconnect style.
- ◆ Durable, lightweight construction.
- ◆ Minimal pressure drop.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.

## Ordering Specifications

### Product # Description

66CLP-5100 Vapor Poppeted Reconnectable Balance Breakaway

66CLP Instruction Sheet Order Number: **F-70**

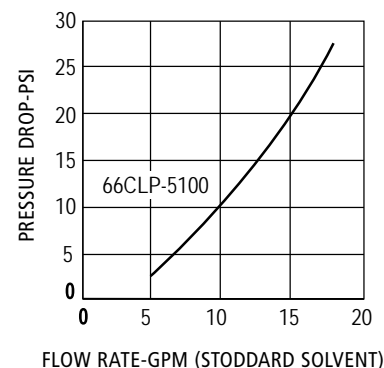
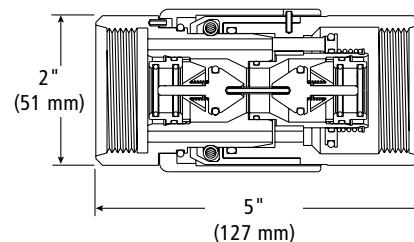
### Replacement Parts

#### Product # Description

204870 O-ring

204872 Spring

204811 Outer Cover



## Listings and Certifications

### CARB Certification Numbers

**Executive Order VR-203-N** (for Balance Phase II Enhanced Vapor Recovery (EVR) Systems Not Including In-Station Diagnostics (ISD))

**Executive Order VR-204-N** (for Balance Phase II Enhanced Vapor Recovery (EVR) Systems Including In-Station Diagnostics (ISD) Systems)

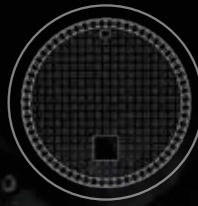
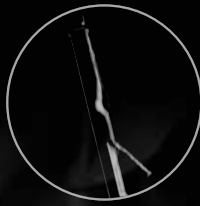
**Listings and  
Certifications**



**CARB**

California Air Resources Board

— FlexWorks — Edge DWSC — 71SD-T — Fibrelite —



ElectroTite



OPW 14E

ECO Nozzle

Fueling Site 2020 - Phase 1: Above and Below Ground Assembly

## DEFINING | WHAT'S NEXT

For more than 125 years, OPW has been leading the way in fueling innovation worldwide. We have built our legendary reputation by advancing business partnerships with our distributors that help petroleum marketers provide an optimum fueling experience for their consumers.

At OPW, we are constantly looking to the future, refining our existing solutions and pioneering new technologies in a never-ending quest to deliver what matters most to consumers: a safe, clean, efficient, comfortable, environmentally conscious, water-tight, compliant and reliable fueling environment.

We are doing more than leading the way. We are *defining what's next*.

# Industrial Products



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## OPW 19DEF Series Industrial Automatic Nozzle

When you're responsible for ensuring the safe, reliable and affordable dispensing of Diesel Exhaust Fluid (DEF) for on-road, off-road, commercial and industrial heavy-duty trucks, farming or other diesel powered vehicles, you rely on the most trusted name in dispensing nozzles – OPW.

The NEW OPW 19DEF Series Industrial Automatic Nozzle is specifically designed for your commercial and industrial fleet operations, offering unmatched reliability with the features you want.

## OPW 19DEF Series Swivels

### Reconnectable Swivel Breakaway



- Designed to connect to the inlet of the nozzle. - No whip hose needed
- The industries best swiveling ability
- Breakaway is reconnectable with built in swivel / Retaining jaws and seals are replaceable
- Breakaway will separate at no more than 350 pounds of force. (axial or angular)

### Hose Swivel



- Hose swivel designed for 3/4" DEF hose (Clamps not included)
- The industries best swiveling ability

### Swivel



- The industries best swiveling ability

## Design Working Pressure

- ◆ 50 PSI (3.45 bar) maximum pressure

NOTE: The OPW 19DEF Equipment is for commercial fleet applications only and are not UL Listed for gasoline dispensing facilities.

## Materials

**Packing & Disc:** Fluorocarbon

**Lever & Lever Guard:** Duratuff®

**Spout:** Stainless Steel

O.D. 19mm (0.75 in) per ISO 22241 Specifications

**Inlet Size:** 3/4" NPT or 3/4" BSPP

**Weight:** 2.73 lbs. each, 43.1 lbs./case of 15, 1.25 kg each, 19.9 kg/case of 15



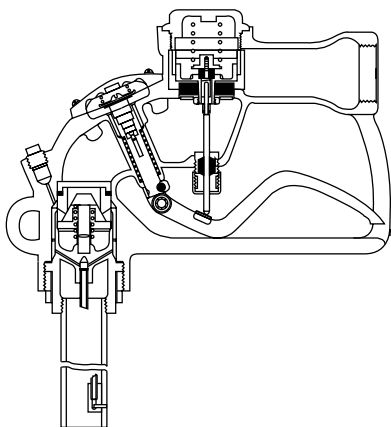
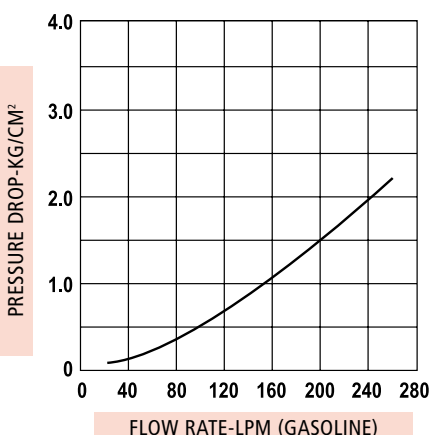
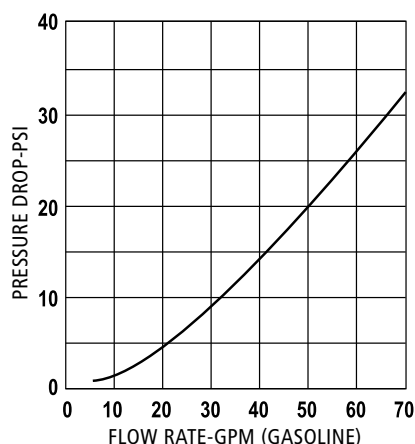
## Features - Benefits

- ◆ Stainless Steel Spout – provides optimum DEF purity and prevents corrosion
- ◆ Lowest Overall Cost of Ownership – reliable, long lasting design based on proven OPW quality platform and industry standard-setting technology
- ◆ Ease of Use – sleek, lightweight design with patented Accu-Stop® Flow Control Technology and convenient one-finger hold-open clip to set flow rate
- ◆ User Comfort – attractive 2-Piece NEWGARD™ Hand Insulator is the most comfortable nozzle in the industry in hot or cold weather
- ◆ Vehicle Protection – our Duratuff® lever guard not only provides for rugged durability when dropped but also won't scratch your fleet vehicle
- ◆ Meets ISO 22241 Requirements – all materials of construction are 100% 3rd party tested and approved for DEF compatibility

Product #	Description
<b>Nozzles</b>	
19DEF-0500SS	Nozzle, DEF - 3/4" Female NPT inlet, for use WITHOUT Mis-Filling Prevention Device
19DEF-050LSS	Nozzle, DEF - 3/4" Female BSPP inlet, for use WITHOUT Mis-Filling Prevention Device
19DEFM-0500SS	Nozzle, DEF - 3/4" Female NPT inlet, for use WITH Mis-Filling Prevention Device
19DEFM-050LSS	Nozzle, DEF - 3/4" Female BSPP inlet, for use WITH Mis-Filling Prevention Device
<b>Swivel Breakaway</b>	
19DB-0075	Breakaway, DEF, 3/4" NPT
19DB-0075L	Breakaway, DEF, 3/4" BSPP
<b>Hose Swivel</b>	
19DHS-0075	Hose Swivel, DEF, 3/4" NPT
19DHS-0075L	Hose Swivel, DEF, 3/4" BSPP
<b>Swivel</b>	
19DS-0075	Swivel, DEF, 3/4" NPT
19DS-0075L	Swivel, DEF, 3/4" BSPP
<b>Hose Adaptors</b>	
19DM-0100	3/4" MNPT to 1" MNPT - Connecting nozzle to 1" NPT Female hose
19DF-0100	3/4" MNPT to 1" FNPT - Connecting nozzle to 1" NPT Male hose
19DML-0100	3/4" MBSPP to 1" MBSPP - Connecting nozzle to 1" BSPP Female hose
19DFL-0100	3/4" MBSPP to 1" FBSP - Connecting nozzle to 1" BSPP Male hose
19DML-0075	3/4" MBSPP to 3/4" MBSPP - Connecting nozzle to 3/4" BSPP Female hose

## OPW 1290 and 1291C Automatic Shut-Off Nozzles

**For Heavy-Duty, High-Flow Truck, Bus and Home Fuel Oil Delivery Service**



### Materials

**Body:** Aluminum

**Main stem:** Stainless steel

**Packing:** Graphite with Teflon®

**Main Disc:** Viton®

**Inlet Size:** 1-1/2" NPT



1291C-0050

### Features

- ◆ Venturi-Type Shut-Off Mechanism – for automatic shut-off.
- ◆ Aluminum Body – lighter in weight and easier to maneuver than other nozzles on the market.
- ◆ Two-position hold-open device\*.
- ◆ One-Hand Control of Hold-Open Mechanism – means easy setting of flow rate.
- ◆ Right Angle Design – provides larger lever area for better grips and easier control, permitting the nozzle to fit into awkward spaces close to walls and into corners.

- ◆ Easily-Replaced Spout – simply remove the spout retainer nut.
- ◆ Built-In Outlet Check Valve – meets all known requirements of the Division of Measurement Standards.
- ◆ Dual Poppets – make nozzle easy to open against high inlet pressure.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure.
- ◆ Service Temperature range: -20° F to 140° F

### Ordering Specifications

Product #	Description	Inlet Thread			
		in.	mm	lbs.	kg
1290-0050	New	1 1/2"	38	6.8	3.1
1291C-0050*	New	1 1/2"	38	6.8	3.1
1290G-0050	New	1 1/2"	38	6.8	3.1

Government National Stock #s:

1290-0050; NSN 4930-01-290-0756

1290G-0050; NSN 4930-01-352-1660 green anodized

1290GS-0050; NSN 4930-01-352-1661 tan anodized

(1290GS-AR50; tan anodized without Kamlok coupler and dust plug)

### Replacement Spout

Product #	Description	O.D.		Length		Weight	
		in.	mm	in.	mm	lbs.	kg
5D-0125	8-1/2", 1290, Spout Kit	1 3/8"	35	8 1/2"	215	1.5	0.68
5D-0126C	8-1/2", 1291C, Spout Kit	1 3/8"	35	8 1/2"	215	1.5	0.68

1290 Series Instruction Sheet Order Number: **H09238PA**

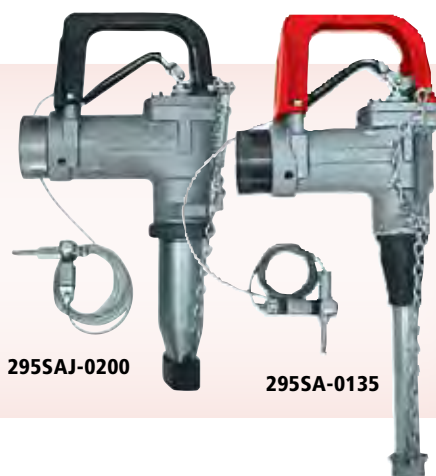
**Listings and Certifications**



**\*1291C Nozzles are not permitted and sold with Hold-Open Clips per ULC S620 requirements.**

## Materials

**Body:** Cast aluminum  
**Main Stem:** Stainless steel  
**Stem Seal:** Buna-N O-Ring  
**Disc:** Viton®  
**Spout:** Aluminum



## Features

- ◆ Aluminum Body – lighter weight, easier to maneuver.
- ◆ Dual Poppets – easy-to-open nozzle against high inlet pressures.
- ◆ Color-Coded Composite Lever Guards – helps distinguish between AVGAS and Jet A. Easily replaced in lever guard kit.
- ◆ Right Angle Design – provides larger lever area for better grip and easier control.
- ◆ Vinyl-Coated Lever – insulates fingers against cold.
- ◆ 100 Mesh Strainer – prevents foreign matter from entering fuel tank; easy to remove and clean.
- ◆ Dust Cap – keeps spout free from dirt and stops fuel drippage when connected.
- ◆ Adjustable Dash Pot – permits adjusting the main poppet closure rate over a wide range of flows to overcome line shock with minimum afterflow.
- ◆ Easily replaced spout – the spout is easily threaded into the body. Replacement spouts are readily available from OPW.
- ◆ Built-In Swivel – eliminates twisting and kinking of the hose. This swivel is electroless nickel-plated and has full-bearing surfaces.
- ◆ NPT Female Threads at Inlet End of 295SA – accepts all 1", 1-1/4" or 1-1/2" male connections.
- ◆ NPT Female Threads At Inlet End Of 295SAJ – accepts all 1-1/2" male connections.
- ◆ Unique Jet Aircraft Spout Design of 295SAJ – to help prevent inadvertent fueling of piston engine aircraft with turbine fuel.
- ◆ Ground Wire Assembly – included on all aviation nozzles.

### Design working pressure

- ◆ 110 psi (7.58 bar) maximum pressure

### Level Guard Replacement Kits

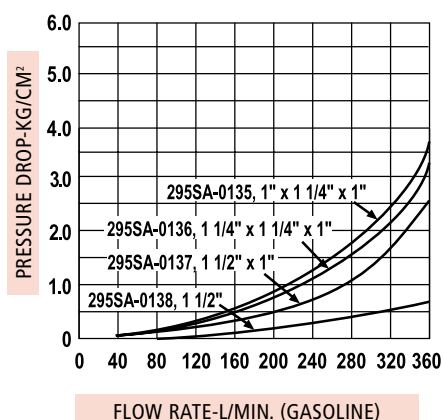
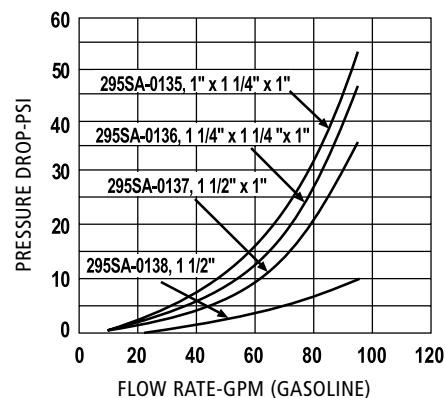
Product #	Nozzle
295KLG-0300	295SA-0135, 0136, 0137, 295SAC-0156, 0157 Red
295KLG-0350	295SA-0138, 275SAC-0158 Red
295KLG-0400	295SAJ-0200, 295SACJ-0200 Black

All lever guard kits include new lever sub-assembly.  
295 Series Instruction Sheet Order Number: **H09237PA**

## Manual Overwing Aircraft Nozzles

### 295SA – AVGAS

### 295SAJ – Jet Fuel



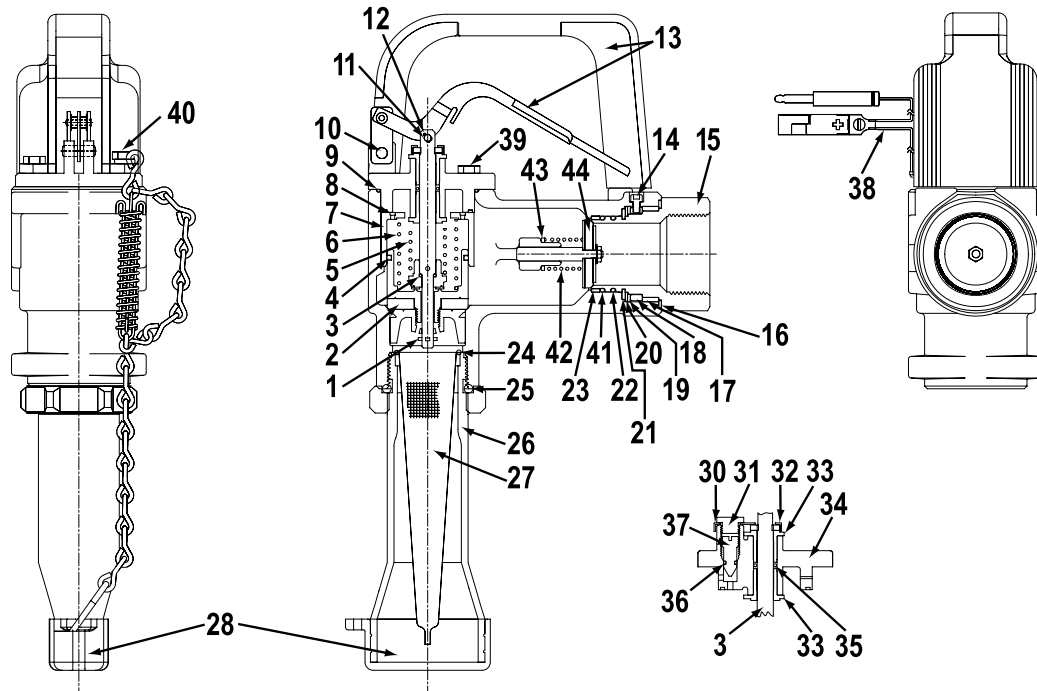
## Ordering Specifications

Product #	Inlet Thread				Spout O.D	
	in.	mm	lbs.	kg	in.	mm
295SA-0135	1	25	4.60	2.10	1	25
295SA-0136	1 1/4	32	4.50	2.00	1	25
295SA-0137	1 1/2	38	4.50	2.00	1	25
295SA-0138	1 1/2	38	5.10	2.30	1 5/8	41
295SAJ-0200	1 1/2	38	5.60	2.50	2 2/3	54
295SAC-0156*	1 1/4	32	4.50	2.00	1	25
295SAC-0157*	1 1/2	38	4.50	2.00	1	25
295SAC-0158*	1 1/2	38	5.15	2.30	1 5/8	41
295SACJ-0200*	1 1/2	38	5.65	2.60	2 2/3	54

\* Check Valve

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Replacement Parts - OPW 295SA/295SAC &amp; 295SAJ



Key	Part #	Description	295SA-0135 inlet/ spout 1" x 1"	295SA-0136 & 295SAC-0156 inlet/ spout 1 1/4" x 1"	295SA-0137 & 295SAC-0157 inlet/ spout 1 1/2" x 1"	295SA-0138 & 295SAC-0158 inlet/ spout 1 1/2" x 1 1/2"	295SAJ-0200 & 295SACJ-0200 inlet/ spout 1 1/2" x 1 1/2"
1	H02477M	Cotter Pin	•	•	•	•	•
2	H07719	Main Poppet S/A	•	•	•	•	•
3	H09420	Stem & Sec. Poppet				•	•
3	H09417	Stem & Sec. Poppet	•	•	•		
4	H12706M	O-Ring	•	•	•	•	•
5	H09367M	Spring	•	•	•	•	•
6	H05064M	Spring	•	•	•	•	•
7	H05088M	Skirt	•	•	•	•	•
8	H05198M	Seal	•	•	•	•	•
9	H04828M	Seal	•	•	•	•	•
10	H03981RE	Pin	•	•	•	•	•
11	215290	Cotter Pin	•	•	•	•	•
12	H07580M	Rivet	•	•	•	•	•
13	295KLG-0300	Lever Guard Kit*	•	•	•		
13	295KLG-0350	Lever Guard Kit*				•	
13	295KLG-0400	Lever Guard Kit*					•
14	H13774M	Screw (3 req'd)*	•	•	•	•	•
15	295SWK-0007	Swivel Repair Kit**	•				
15	295SWK-0009	Swivel Repair Kit**		•			
15	295SWK-0014	Swivel Repair Kit**				•	•
15	295SWK-0013	Swivel Repair Kit**			•		
16	H08886M	Dust Seal				•	•
16	H01227M	Dust Seal	•	•	•		
17	H08887M	Bearing				•	•
17	H08879M	Bearing	•	•	•		
18	H09713RS	Retainer				•	•
18	H09712RS	Retainer	•	•	•		

\* Replacement part for nozzles built after 08/1998. Part is unavailable for nozzles built before this date.

\*\* Includes 295SRK-0001 or 295SRK-0002 and contact ring.

## Replacement Parts-OPW 295SA/SAC & SAJ Aircraft Nozzles

Key	Part #	Description	295SA-0135 inlet/ spout 1" x 1"	295SA-0136 & 295SAC- 0156 inlet/spout 1 1/2" x 1"	295SA-0137 & 295SAC- 0157 inlet/spout 1 1/2" x 1"	295SA-0138 & 295SAC- 0158 inlet/spout 1 1/2" x 1 1/2"	295SAJ-0200 & 295SACJ-0200 inlet/ spout 1 1/2" x 1 1/2"
19	H08881M	Thrust Bearing	•	•	•		
19	H08889M	Thrust Bearing				•	•
20	H08882M	Lock Ring	•	•	•		
20	H08890M	Lock Ring				•	•
21	H09365M	Retaining Ring	•	•	•		
21	H09366M	Retaining Ring				•	•
22	H12319M	O-Ring, Buna-N	•	•	•		
22	H12320M	O-Ring, Buna-N				•	•
23	H08884M	Bearing	•	•	•		
23	H08892M	Bearing				•	•
24	H06026M	O-Ring	•	•	•		
24	H07670M	O-Ring				•	
24	H11499M	O-Ring					•
25	H05297M	O-Ring	•	•	•		
25	H07766M	O-Ring				•	
25	H10458M	O-Ring					•
26	297SA-9050	Spout S/A	•	•	•		
26	297SA-9060	Spout S/A				•	
26	696J-7010	Spout S/A					•
27	190S-7063	Strainer	•	•	•		
27	153-0910	Strainer				•	
27	153J-0100	Strainer					•
28	H10387	Cap & Chain S/A	•	•	•		
28	H10388	Cap & Chain S/A				•	
28	296CJ-0100	Cap & Chain S/A					•
29	H09212	Body Cap S/A**	•	•	•		
29	H09213	Body Cap S/A**				•	•
30	H05135M	Retainer	•	•	•	•	•
31	H08441RS	Screw	•	•	•	•	•
32	H05087M	Felt Wiper	•	•	•	•	•
33	H05063M	Bushing	•	•	•	•	•
34	C02115A	Cap	•	•	•		
34	C02117A	Cap				•	•
35	H12707M	O-Ring	•	•	•	•	•
36	H12705M	O-Ring	•	•	•	•	•
37	H04825M	Adj. Screw	•	•	•	•	•
38	190WM-8001	Ground Wire S/A	•	•	•	•	•
39	H07062M	Screw (4 req'd)	•	•	•	•	•
40	H06045M	Screws (2 req'd)	•	•	•	•	•
41	H13776M	O-Ring, Viton®				•	•
41	H13775M	O-Ring, Viton®	•	•	•		

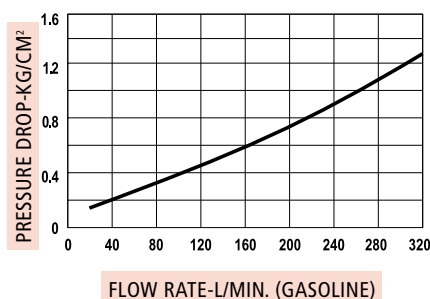
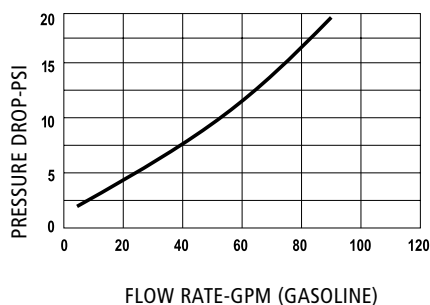
\*\* Body Cap sub-assembly includes parts 30-37.

## Replacement Parts - OPW 295SAC & 295SACJ Only

Key	Part #	Description	295SAC-0156	295SAC-0157	295SAC-0158	295SACJ-0200
42	H07595M	Spring SST	•	•		
42	H07593M	Spring SST			•	•
43	H07613M	Washer, nylon	•	•	•	•
44	H09214	Poppet S/A	•	•		
44	H09215	Poppet S/A			•	•

## OPW 295AF - Manual Aircraft Nozzles

### For Overwing Aircraft Service



### Replacement Parts

Part #	Description
153AF-0100	100 Mesh Strainer
190WF-8002	Ground Wire S/A w/ Dust Cap
C03420NM	Protector Ring
C03422	Dust Cap
297AF-9070	1 1/2" Aluminum Spout for 295AF
E00274AG	Arctic Guard for 295AF

## Materials

**Body:** Cast aluminum  
**Main Stem:** Stainless steel  
**Stem Seal:** Buna-N O-Ring  
**Main Poppet Disc:** Viton®  
**Spout:** 297AF-9070



## Features

- ◆ Aluminum Body – lighter weight, easier to maneuver.
- ◆ Dual Poppets – easy-to-open nozzle against high inlet pressures.
- ◆ Replaceable Lever Guard – easy, low-cost replacement.
- ◆ Right Angle Design – provides larger lever area for better grip and easier control.
- ◆ Vinyl-Coated Lever – insulates fingers against cold.
- ◆ 100 Mesh Strainer – prevents foreign matter from entering fuel tank; easy to remove and clean.
- ◆ Dust Cap – keeps spout free from dirt and stops fuel drippage when connected.
- ◆ Spout Protector Ring – to protect aircraft tanks and wing surface; adjustable. Furnished as standard.
- ◆ Special Heavy-Duty Spout – knurled to facilitate daily strainer service.
- ◆ NPT Female Threads at Inlet End – standard pipe threads all 1-1/2" male connections.
- ◆ Static Ground Wire – with air force plug meets MS 25384-5.
- ◆ Dash-Pot Action – for smoother closing action and reduced line shock.

### Design working pressure

- ◆ 110 psi (7.58 bar) maximum pressure

## Ordering Specifications

Product #	Inlet Thread			
	in.	mm	lbs.	kg
295AF-0100	1 1/2"	38	6.40	2.90

Gov't. Nat'l. Stock #: 4930-01-293-4472  
 295 Series Instruction Sheet Order Number: **H09237PA**

## Materials

**Body:** Cast aluminum

**Main Stem:** Stainless steel

**Stem Seal:** Graphite with Teflon®

**Disc:** Viton®

**Spout:** OPW 296 brass or  
297 aluminum (optional)



**190-0115**

(Spout optional, see Page 189)

## Features

- ◆ Aluminum Body – lighter weight, easier to maneuver.
- ◆ Dual Poppets – allow for low flow metering (this nozzle is not intended for high pressure pump applications).
- ◆ Replaceable Hold-Open Rack – for use when fueling large-capacity tanks. Nozzle must be attended at all times during usage.
- ◆ Right Angle Design – provides larger lever area for better grip and easier control; permits nozzle to fit into awkward spaces close to walls and into corners.
- ◆ Drag Lugs – protect the nozzle when dragged across rough surfaces; enhances long-life durability.
- ◆ Easily Replaced Spout – the spout is easily threaded into the body. Replacement spouts are readily available from OPW.
- ◆ NPT Female Threads at Inlet End – standard pipe threads accept all standard 1", 1-1/4", 1-1/2" and 2" male connections.

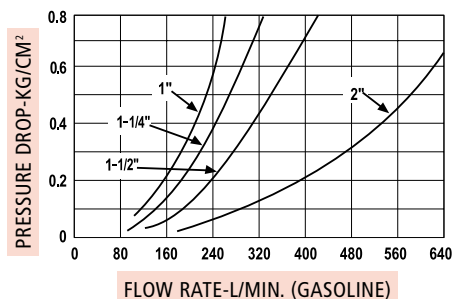
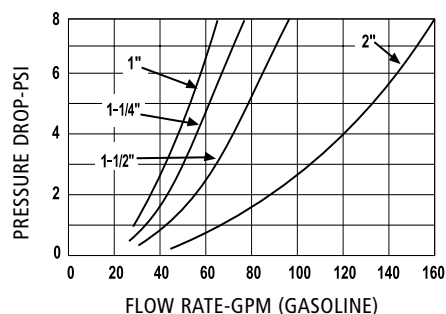
### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure

## OPW 190 High-Flow Manual Nozzles

### For High-Flow, Bulk Fuel Oil Delivery Service

Designed to handle high flow when line pressure is not a critical consideration or otherwise absorbed.



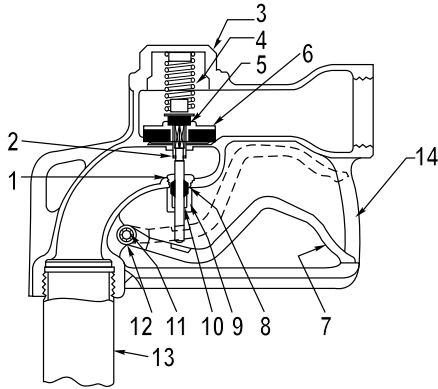
## Ordering Specifications

Product #	Inlet Thread		Spout Diameter		lbs.	kg
	in.	mm	in.	mm		
190-0112	1"	25	1 1/4"	32	2.3	1.0
190-0113	1 1/4"	32	1 1/4"	32	2.3	1.0
190-0114	1 1/2"	38	1 1/2"	38	3.0	1.4
190-0115	2"	51	2"	51	5.8	2.6
190G-B104	1 1/2"	38	1 1/2"	38	5.1	2.3

w/ Spout and Ground Wire

Gov't. Nat'l. Stock #: 4930-01-360-5540

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.



### Replacement Parts - OPW 190 Nozzles

Key	Part #	Description	190-0112	190-0113	190-0114	190-0115	190-B104
1	H00195RB	Stuffing Box	•	•	•		•
1	H00250RB	Stuffing Box				•	
2	H00538RE	Stem	•	•	•		
2	H06742RE	Stem				•	
3	H09600AH	Cap	•	•	•		
3	H09601AH	Cap				•	
3	H11592AH	Cap					•
4	H00136M	Spring	•	•	•		•
4	H03666M	Spring				•	
5	190K-0001	Upper Poppet S/A	•	•	•		•
5	H01814	Upper Poppet S/A				•	
6	H01817	Lower Poppet S/A	•	•	•		•
6	H01818	Lower Poppet S/A				•	
7	H11925M	Lever	•	•	•		•
7	H06733M	Lever				•	
8	C04495M	Packing	•	•	•	•	•
9	H07012M	Packing Gland	•	•	•		•
9	H00520RB	Packing Gland				•	
10	H00113RA	Packing Nut	•	•	•		
10	H00252RA	Packing Nut				•	
10	H00113RAG	Packing Nut					•
11	H08163M	Push Nut	•	•	•	•	•
12	H08164RE	Pin	•	•	•		•
12	H08165RE	Pin				•	
13	297-9020	Spout (optional)	•	•			
13	297-9030	Spout (optional)			•		
13	297-9040	Spout (optional)				•	
13	296-0040	Spout, Brass (optional)		•			
13	296-0060	Spout, Brass (optional)			•		
13	296-0080	Spout, Brass (optional)			•		
14	C04698M	Rack	•	•	•	•	•
14	H14105M	Screw	•	•	•	•	•
Not Shown							
	296CA-4000	Dust Cap*					•
	153-0910	Strainer					•

\*See page 189 for Dust Caps

## Materials

**Body:** Cast aluminum  
**Main Stem:** Stainless steel  
**Stem Seal:** Buna-N O-Ring  
**Main Poppet Disc:** Viton®  
**Spout:** OPW 297 aluminum (optional)



**295SC-0141**  
(Spout optional, see Page 189)

## Features

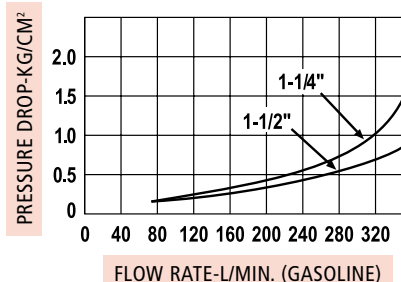
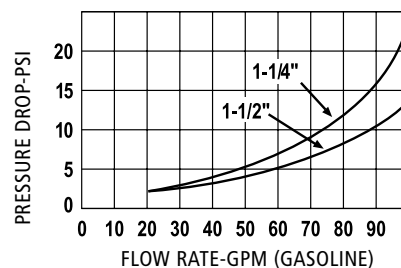
- ◆ Aluminum Body – lighter weight, easier to maneuver.
- ◆ Dual Poppets – easy-to-open nozzle against high inlet pressures.
- ◆ Replacement Hold-Open Rack – one-hand control of hold-open mechanism means easy setting of flow speed. Nozzle must be attended at all times during usage.
- ◆ Replaceable Composite Lever Guard – easy, low-cost replacement.
- ◆ Right Angle Design – provides larger lever area for better grip and easier control; permits nozzle to fit into awkward spaces close to walls and into corners.
- ◆ Adjustable Dash Pot – permits adjusting the main poppet closure rate over a wide range of flows to overcome line shock with minimum afterflow.
- ◆ Built-In Swivel – eliminates twisting and kinking of the hose. This swivel is hard-coated aluminum and has full-bearing surfaces.
- ◆ Built-In Check Valve – prevents hose drainage after pump is turned off.
- ◆ Vinyl-Coated Lever – insulates fingers against cold.
- ◆ Easily Replaced Spout – the spout is easily threaded into the body. Replacement spouts are readily available from OPW.
- ◆ NPT Female Threads at Inlet End – standard pipe threads accept all 1-1/4" or 1-1/2" male connections.

### Design working pressure

- ◆ 110 psi (7.58 bar) maximum pressure

## OPW 295SC High-Flow Manual Nozzles

**For High-Flow, Bulk Fuel Oil Delivery Service**



### Lever Guard Replacement Kit

Part #	Description
295KLG-0200	Short Grey for 295SC-0139
295KLG-0250	Long Grey for 295SC-0141

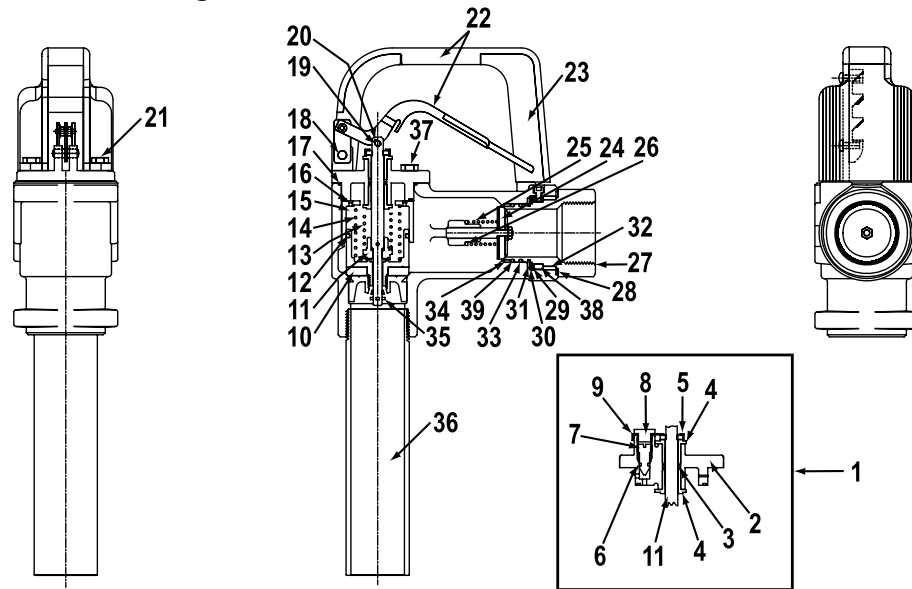
295 Series Instruction Sheet Order Number:  
**H09237PA**

## Ordering Specifications

Product #	Inlet Thread			
	in.	mm	lbs.	kg
295SC-0139	1 1/4"	32	3.75	1.7
295SC-0141	1 1/2"	38	4.33	2.0

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Replacement Parts - OPW 295SC High-Flow Nozzles



Key	Part #	Description	1 1/4" 11 1/2" NPT	1 1/2" 11 1/2" NPT
1	H09212	Cap S/A	•	
1	H09213	Cap S/A		•
2	C02115A	Cap	•	
2	C02117A	Cap		•
3	H12707M	O-Ring	•	•
4	H05063M	Bushing (2 req'd)	•	•
5	H05087M	Felt Wiper	•	•
6	H12705M	O-Ring	•	•
7	H04825M	Adjusting Screw	•	•
8	H08441RS	Screw	•	•
9	H05135M	Retainer	•	•
10	H07719	Main Poppet S/A	•	•
11	H09417	Stem & Sec. Poppet	•	
11	H09420	Stem & Sec. Poppet		•
12	H12706M	O-Ring	•	•
13	H09367M	Spring	•	•
14	H05064M	Spring	•	•
15	H05088M	Skirt	•	•
16	H05198M	Seal	•	•
17	H04828M	Seal	•	•
18	H03981RE	Pin	•	•
19	H05000M	Cotter Pin	•	•
20	H07580M	Rivet	•	•
21	H06045M	Screw (2 req'd)	•	•
22	295KLG-0200	Guard Kit	•	
22	295KLG-0250	Guard Kit		•
23	C04698M	Hold-Open Rack	•	•
23	H14105M	Screw	•	•
24	H09214	Poppet S/A	•	

Key	Part #	Description	1 1/4" 11 1/2" NPT	1 1/2" 11 1/2" NPT
24	H09215	Poppet S/A		•
25	H07593M	Spring		•
25	H07595M	Spring	•	
26	H07613M	Washer	•	•
27	295SWK-0009	Swivel Repair Kit*	•	
27	295SWK-0014	Swivel Repair Kit*		•
28	H08886M	Dust Seal		•
28	H01227M	Dust Seal	•	
29	H08881M	Thrust Bearing	•	
29	H08889M	Thrust Bearing		•
30	H08882M	Lock Ring	•	
30	H08890M	Lock Ring		•
31	H09365M	Retaining Ring	•	
31	H09366M	Retaining Ring		•
32	H08879M	Bearing	•	
32	H08887M	Bearing		•
33	H12319M	O-Ring	•	
33	H12320M	O-Ring		•
34	H08884M	Bearing	•	
34	H08892M	Bearing		•
35	H02477M	Cotter Pin	•	•
36	297-9020	Spout	•	
36	297-9030	Spout		•
37	H07062M	Screw (4 req'd)	•	•
38	H09712RS	Retainer	•	
38	H09713RS	Retainer		•
39	H13776M	O-Ring, Viton®		•
39	H13775M	O-Ring, Viton®	•	

\* Includes 295SRK-0001 or 295SRK-0002 and contact ring.

## Materials

**Body:** Cast aluminum  
**Main Stem:** Stainless steel  
**Stem Seal:** Graphite with Teflon®  
**Disc:** Viton®  
**Spout:** OPW 296 brass or  
 297 alum. (optional)



**210-0105**  
(Spout optional, see Page 189)

## Features

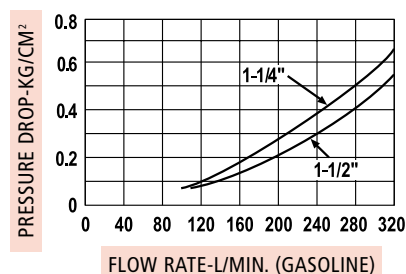
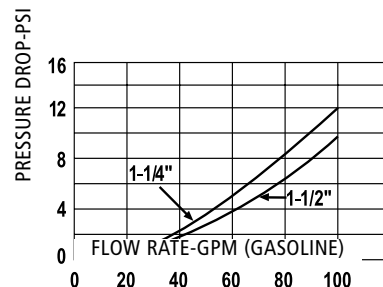
- ◆ Aluminum Body – lighter weight, easier to maneuver.
- ◆ Dual Poppets – allows for low-flow metering.
- ◆ Replaceable Hold-Open Rack – for use when fueling large-capacity tanks. Nozzle must be attended at all times during usage.
- ◆ Dash Pot – non-adjustable, to minimize closing line shock.
- ◆ Right Angle Design – provides larger lever area for better grip and easier control; permits nozzle to fit into awkward spaces close to walls and into corners.
- ◆ Drag Lugs – protect the nozzle when dragged across rough surfaces; adds to long life with rough usage.
- ◆ Easily Replaced Spout – the spout is simply threaded into the body. Replacement spouts are readily available from OPW.
- ◆ NPT Female Threads at Inlet End – standard pipe threads accept all standard 1 1/4" and 1 1/2" male connections.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure

## OPW 210 High-Flow Manual Nozzles

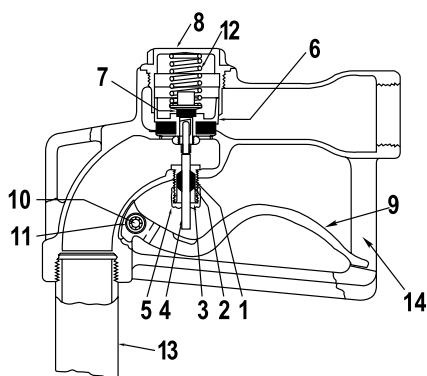
**For High-Flow, Bulk Fuel Oil Delivery Service**



## Replacement Parts

Key	Part #	Description
1	H00195RB	Stuffing Box
2	C04495M	Packing
3	H07012M	Packing Gland
4	H05719RE	Stem*
5	H00113RA	Packing Nut
6	H01841	Lower Disc S/A*
7	190K-0001	Upper Poppet
8	H01461AH	Cap
9	H00999M	Lever
10	H08165RE	Pin
11	H08163M	Push Nut (2 required)
12	H00136M	Spring
13	297-9020	Spout (optional) - 1 1/4" aluminum
13	297-9030	Spout (optional) - 1 1/2" aluminum
13	296-0040	Spout (optional) - 1 1/4" brass
13	296-0060	Spout (optional) - 1 1/2" brass
14	C04698M	Rack
14	H14105M	Screw

\* Replacement part for nozzles built after 04/1998. Part is unavailable for nozzles built before this date.



## Ordering Specifications

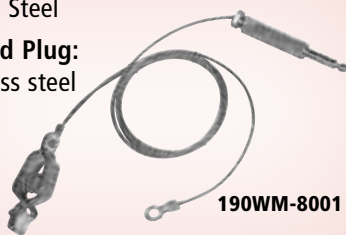
Product #	in.	mm	lbs.	kg
210-0104	1 1/4"	32	3.95	1.8
210-0105	1 1/2"	38	4.40	2.0

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Materials

Cable: Steel

Ground Plug:  
Stainless steel



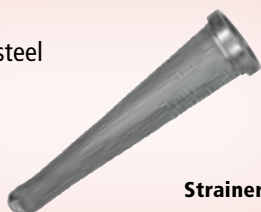
190WM-8001

## Ordering Specifications

Product #	Length		Used On
	ft.	m	
190WM-8001	6'	1.83	295SA
190WF-8002	6'	1.83	295AF

## Materials

Screen:  
Stainless steel



Strainer

## Ordering Specifications

Product #	Size		Used On
	in.	mm	
153-0910	1 1/2"	38	190G, 295SA
153J-0100	1 1/2"	38	295SAJ
190S-7063	1"	25	295SA Series w/ 1" Spout
153AF-0100	1 1/2"	38	295AF

## Materials

Body: Anodized  
Aluminum

Spring: Bronze

Stem: Bronze

Disc: Buna-N

Body: Rubber

Spring: Stainless

Stem: Bronze

Disc: Buna-N



296CA



296CJ

## Ordering Specifications

Product #	Size		Spout	Used On
	in.	mm		
296CA-4000	1 5/8"	41	296	190 1"
296CA-4005	1 5/8"	41	296	1 1/4", 1 1/2"
296CJ-0100	1 1/2"	38	696J only	295SAJ 1 1/2"
H10387	1"	26	297SA 1"	295SA
H10388	1 1/2"	38	297SA 1 1/2"	295SA

## Manual Nozzle Accessories OPW 190 Ground Wire

The OPW 190 ground wire assembly is designed for use on 295 series aircraft nozzles. The OPW 190WM is designed for use with the 295SA and includes a cable, attaching eyelet, ground plug and clamp. The OPW 190WF is for use with the 295AF aircraft nozzle and includes a cable, eyelet, ground plug and dust cap.

## OPW Strainers

OPW strainers prevent foreign matter from entering fuel tanks. They are held in position by a tube and have a 100-mesh screen.

## OPW 296 Protective Caps

OPW 296 Protective Caps are for use with OPW 296 and 297SA nozzle spouts. Each cap also comes with a chain and tension spring. The size ordered should be the same size as the spout O.D.

## Spout Ordering Specifications

Product #	Size		O.D.		Length		Weight		Used On	Description
	in.	mm	in.	mm	in.	mm	lbs.	kg		
296-0040	1 1/4 (NPT)	32	1 3/8	35	9	229	0.90	0.41	190-0113; 210-0104; 190-0112	Brass
296-0060	1 1/2 (NPT)	38	1 3/8	35	9	229	0.98	0.45	190-0114; 210-0105	Brass
296-0080	1 1/2 (NPT)	38	1 5/8	41	9	229	1.05	0.48	190-0114; 210-0105	Brass
297-9020	1 1/4 (NPT)	32	1 21/32	42	8	203	0.50	0.23	190-0113; 210-0104; 295SC-0139; 190-0112	Aluminum
297-9030	1 1/2 (NPT)	38	1 29/32	48	8	203	0.60	0.27	190-0114; 210-0105; 295SC-0141	Aluminum
297-9040	2 (NPT)	51	2 3/8	60	8	203	0.80	0.36	190-0115	Aluminum
297SA-9050	1 1/4 (NPSM)	32	1	25	9	229	0.60	0.27	295SA-0135, 0136, 0137 & 295SAC-0156	Aluminum
297SA-9060	1 1/2 (NPSM)	38	1 5/8	41	7	178	0.80	0.36	295SA-0138, 295SAC-0157, 295SAC-0158	Aluminum
696J-7010	1 1/2 (NPSM)	38	2 2/3	54	7 1/4	184	0.80	0.36	295SAJ-0200	Aluminum



OPW 296



OPW 297



OPW 297SA  
(9050)



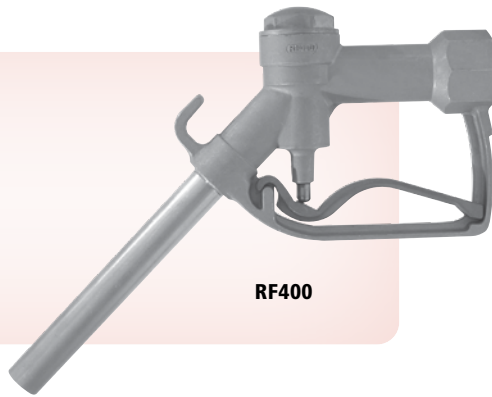
OPW 297SA  
(9060)



OPW 696J

## Materials

**Body:** Aluminum  
**Main Stem:** Brass  
**Main Poppet Disc:** Viton®  
**Spout:** Aluminum  
**Weight:** 0.5 lbs, 0.23 kg

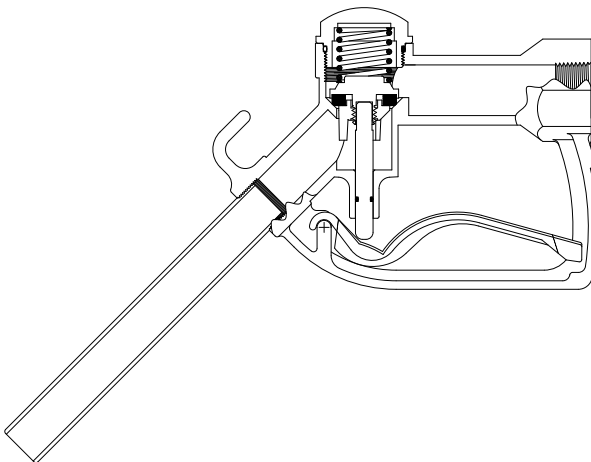


## Features

- ◆ UL listed for use in gasoline, diesel and up to 10% ethanol blends. Specific listings available at [www.opwglobal.com](http://www.opwglobal.com)
- ◆ Manual Nozzle – no automatic shut-off.
- ◆ Built in hanger for quick use in field.
- ◆ **Design working pressure**  
 ◆ 50 psi (3.45 bar) maximum pressure

## Ordering Specifications

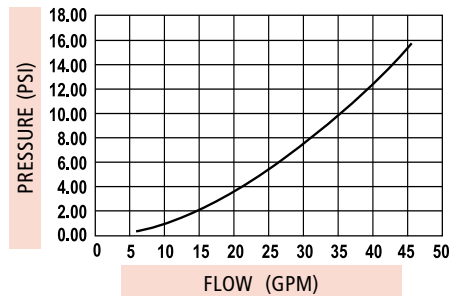
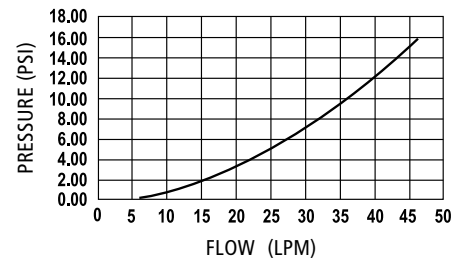
Product #	Description	Inlet Thread		Spout Diameter	
		in.	mm	in.	mm
RF400-75	¾", leaded spout	¾	19	1 5/16	23
RF400-75P	¾", unleaded spout	¾	19	1 3/16	20
RF400-10	1", leaded spout	1	25	1 5/16	23
RF400-10P	1", unleaded spout	1	25	1 3/16	20



## OPW RF400 Manual Utility Farm Nozzle

### For General Utility Farm Usage

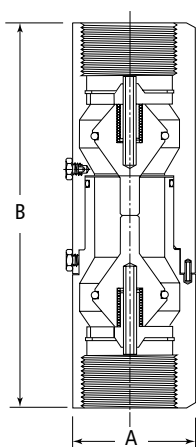
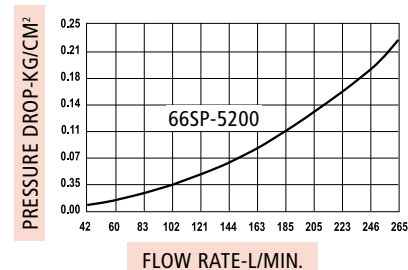
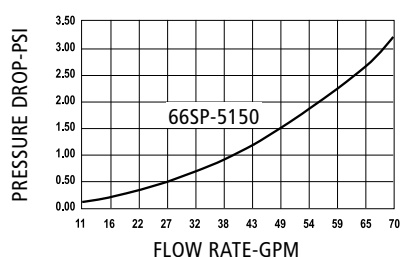
The OPW RF400 nozzle is designed for use in non retail, commercial, industrial and agriculture use where an automatic nozzle is not needed.



## OPW 66SP High-Volume Breakaways

The 66SP is designed for installation on fuel dispensing hoses that require a substantial volume of flow, and therefore the potential for a high-volume spill.

The 66SP utilizes shear pin technology to ensure separation at proper pull forces, and limit unwanted valve closures that stop or limit fuel flow. Once separated, a qualified service technician can easily repair the breakaway with an OPW 66PRK Shear Pin Replacement Kit.



## Materials

**Body:** Aluminum

**Seals:** Viton®, Buna-N and Fluorosilicone

**Spring:** Stainless steel

**Poppet:** Aluminum

**Weight:**

66SP-5150: 1.93 lbs, .87 kg

66SP-5200: 3.80 lbs, 1.72 kg

66SP-5150



66SP-5200



## Features

- ◆ **Pull Force** – the 66SP will separate with a maximum pull force of 600 lbs., and limits fuel spillage from either hose end.
- ◆ **Easily Repaired** – after separation, the 66SP can be repaired and put back in service with the OPW 66PRK Shear Pin Replacement Kit.
- ◆ **Heavy-Duty Construction** – physically designed for durability in high-volume environments, including a protective, nickel plated body.
- ◆ **Low Pressure Drop** – valve design ensures superior flow rate for high-volume fills.
- ◆ **Special Seals** – special fluorosilicone (66SP-5200 only) O-rings help protect the valve in harsh, high-volume environments.

### Design working pressure

- ◆ 50 psi (3.45 bar) maximum pressure

## Ordering Specifications

Product #	Inlet Thread	Weight		A		B	
		lbs.	kg	in.	mm	in.	mm
66SP-5150	1½" (NPT)	1.93	0.87	2¼"	57	7⅝"	194
66SP-5200	2" (NPT)	3.80	1.72	3½"	89	7⅞"	197

## Replacement Parts

Product #	Description
66PRK-5015	Shear Pin Replacement Kit for 66SP-5150
66PRK-5020	Shear Pin Replacement Kit for 66SP-5200

66SP Series Instruction Sheet Order Number: **H40128M**

## Materials

**Body:** Aluminum

**Adaptor:** Zinc  
Aluminum

**Seals:** Buna-N O-Ring,  
Viton® O-Ring

**Bearings:** Nylon  UL Listed MH4542



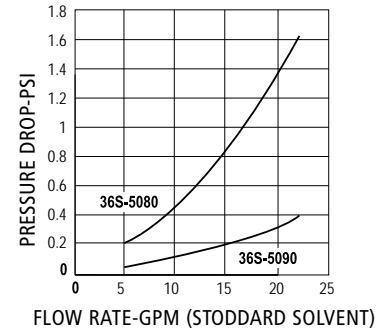
36S-5080

## Ordering Specifications

Product Number	Inlet Thread x Outlet Thread		lbs.	kg
36S-5080	3/4" M x 3/4" F (NPT)	(19 mm x 19 mm)	0.30	0.14
36S-5090	1" M x 1" F (NPT)	(25 mm x 25 mm)	0.40	0.18

## OPW 36S Hose Swivel

Designed for use with fuel oil nozzles (at inlet only), the OPW 36S provides 360° swivel action. The full-circle swivel reduces the physical strain of aligning the nozzle with the fillpipe.



## Materials

**Body:** Electroless nickel-plated

**Bearings:** Molded plastic

**Seals:** Buna-N O-Ring,  
felt dust seal, Viton® O-Ring



25-0110

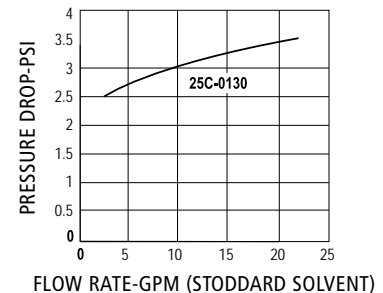
## Ordering Specifications

Product #	Inlet Thread		Weight	
	in.	mm	lbs.	kg
25-0110	1 1/4" (NPT)	32	0.95	.43
25-0120	1 1/2" (NPT)	38	1.06	.48
25C-0130*	1 1/4" (NPT)	32	0.95	.43

\*With Check Valve

## OPW 25 Hose Swivel

Designed for use with fuel oil nozzles (at inlet only), the OPW 25 provides 360° swivel action. The full-circle swivel reduces the physical strain of aligning the nozzle with the fillpipe.



## OPW 2" Single-Plane Hose Swivel

Durable brass construction with high flow rate.

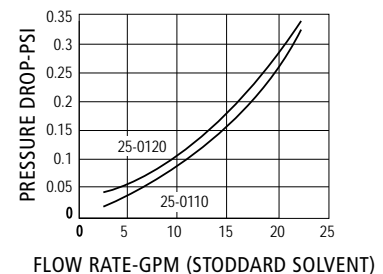
## Materials

**Body:** Brass

**Seals:** Buna-N O-Rings



Product #	in.	mm	lbs.	kg
2-0055	2	50.8	1	.45



## Materials

**Body:** Electroless nickel-plated

**Bearings:** Molded plastic

**Seals:** Buna-N O-Ring,  
felt dust seal, Viton® O-Ring

Product #	Description
295SRK-0001	25 and 295 Series 1", 1 1/4" NPT
295SRK-0002	25 and 295 Series 1 1/2" NPT

## OPW 295SRK

Designed for use on 25 Series swivels and 295 nozzles, the OPW 295SRK consists of a dust seal, 2 O-rings, 3 button-head screws, hex key and thread sealant.

## OPW 29 Check Valve

The OPW 29 is designed for use between the hose and nozzle, and helps prevent draining of the hose when the power is shut-off.

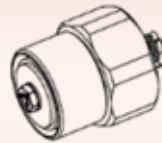
## Materials

**Body:** Bronze

**Spring:** Bronze

**Stem:** Bronze

**Disc:** Buna-N



29-0004

## Ordering Specifications

Product #	Inlet		Outlet	
	in.	mm	in.	mm
29-0004	1" F (NPT)	25	1" M	25
29-0016	1 1/2" F (NPT)	38	1 1/2" M	38

## Features

- ◆ External-type inlet check valve.
- ◆ Standard pipe threads.
- ◆ Poppet opens at 2 1/2 PSI for 1" size;  
1 1/2 PSI for 1 1/2" size

# Hose Retractors



- Spring Balance Hose Retractors.....195 - 197
- Counterweight Hose Retractors..... 198

## Materials

**Housing:** Cast aluminum

**Cable:** Black polyester

**Post:** Aluminum



Nozzle Hook  
and Hood Kit Not  
Sold by OPW.

## POMEKO 102 Spring Balance Single Hose Retractors

POMEKO 102 Spring Balance Single Hose Retractors keep excess hose off the ground and out of the way, prolonging hose life and reducing potential hazards. The POMEKO 102 is a California Air Resources Board (CARB) certified Stage II component for use with single and dual hose dispensers as per Executive Order G-70-52-AM.

## Features

- ◆ Easy to Use – the spring-loaded reel and stretch-resistant cable provide smooth and steady tension throughout hose extension and return.
- ◆ Easy to maintain – the removable sideplate provides full access to the mechanism for easy tension adjustment and unit maintenance. A convenient safety thumb screw is provided to lock the reel in place during tension adjustment.
- ◆ Field Adjustable for Various Hose, Nozzle, Swivel, Breakaway Combinations – no need for upgrading components if a breakaway or swivel is added to the hose assembly. Simply change the tension setting on the spring-loaded hose reel.
- ◆ Multiple Mounting Options – the POMEKO 102 retractor housing is tapped on the top for bolting to overhead crossbars, and on the side for mounting to vertical posts. The 102 is available as a retractor kit (including post, retractor and mounting hardware) or as separate components. Models are also available for aboveground storage tank (AST) applications. AST models include a 44" (112 cm) post with a freestanding base.

102 Spring Balance Hose Retractor  
Instruction Sheet Order Number:  
**H15853PA**



**Post Mounted**

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

## Ordering Specifications

### Vertical Retractor Kits (Box, Post, Bracket, Foot & Hardware)

Model Number	Mounting Method	Clamp Fits	Weight	
			lbs.	kg
6102-1039P	39" Retractor/Post Kit	(Hose Clamp Not Included)	12	5.4
6102-1078P	78" Retractor/Post Kit	(Hose Clamp Not Included)	14	6.4
6102-AST	44" AST Retractor /Post Kit	(Hose Clamp Not Included)	9	4.1

## Ordering Specifications

### Separate Retractor Components (Box Only)

Model Number	Description	Mounting Method	Clamp Fits				Weight	
			Hose O.D.		Hose I.D.		lbs.	kg
			in.	mm	in.	mm		
6102-1000	Standard Duty Retractor Box, 2 -10 lb retraction strength	Overhead Crossbar/Vertical Post	(Hose Clamp Not Included)				7	3.2
6102-1100	Heavy Duty Retractor Box, 12-20 lb retraction strength	Overhead Crossbar/Vertical Post					7	3.2
6102-4000		Overhead Crossbar/Vertical Post	1 3/8"	35	1"	25	7	3.2
6102-6000		Overhead Crossbar	1 1/32"	26	5/8" or 3/4"	16 or 19	7	3.2
6102-8000		Overhead Crossbar	1"	25	5/8"	16	7	3.2

\*POMECO recommends using C05238M, C05261M or P100-3F/P100-44/P100-2AST for use with 102 Series retractors.  
Other size tubes and clamps available upon request.



Hose Clamp

## Ordering Specifications

### Hose Clamps

Model Number	Hose Clamp Size †
PB-1340	Coaxial Hose
PB-1344	Balanced Coaxial, Goodyear Premier
PB-1373	Standard 1" O.D. Hose (5/8" I.D.)
PB-1394	Standard 1 1/8" O.D. Hose (3/4" I.D.)
PB-1396	Standard 1 3/8" O.D. Hose (1" I.D.)
PB-1398	Standard Hose (3/4" I.D.)
PB-1527	Standard Hose (1/2" I.D.)

† Other sizes available upon request

### Options Replacement Parts

Model Number	Hose Clamp Size
C05238M	Post Kit, 39" (99 cm), 1 1/8" x 2"
C05261M	Post Kit, 78" (198 cm), 1 1/8" x 2"
H15212M	10 ft. Replacement Cable
P338SPOOL	Spool of Retractor Cable, 338 ft.
H15210M (P102-02)	Replacement Cable Guide
H15211M	Replacement Reel
P100-4STF	AST Replacement Base
P100-2AST	Sliding Bracket (AST)
P33P	Head Kit

## Materials

**Housing:** Cast aluminum

**Cable:** Black polyester

**Bracket:** Steel

## Features

- ◆ Easy to Install – each model number designates a custom designed retractor package that mounts in the canopy of a particular manufacturers MPD. Packages are shipped complete with the appropriate number of retractors and all the necessary mounting hardware for a clean, professional installation.
- ◆ Easy to Use – the spring-loaded reels and stretch-resistant cables provide smooth and steady tension throughout hose extension and return.
- ◆ Easy to Maintain – the removable sideplate provides full access to the mechanism for easy tension adjustment and unit maintenance. A convenient safety thumb screw is provided on each retractor to lock the reel in place during tension adjustment.



## POMEKO 102 Spring Balance MPD Hose Retractor Packages

POMEKO 102 Spring Balance MPD Hose Retractors keep excess hose off the ground and out of the way, prolonging hose life and preventing extra length hoses from cluttering the island. The 102 MPD hose retractors are especially well-suited for use on Multiple Product Dispensers (MPD) with Stage II Vapor Recovery hose/nozzle assemblies. The POMEKO 102 is a California Air Resources Board (CARB) certified Stage II component for use with MPDs as per Executive Order G-70-52-AM.



## Ordering Specifications

Model Number	Manufacturer/Dispenser	Hoses Per Side***	Weight	
			lbs.	kg
6102-DW1037	Dresser Wayne (37" Frame)	1	40	18.2
6102-DW1048	Dresser Wayne (48" Frame)	1	50	22.7
6102-DW2037	Dresser Wayne (37" Frame)	2	50	22.7
6102-DW2048	Dresser Wayne (48" Frame)	2	58	26.3
6102-DW3048	Dresser Wayne (48" Frame)	3	72	32.6
6102-GB1N	Gilbarco (Advantage Narrow)	1	46	20.9
6102-GB1W	Gilbarco (Advantage Wide)	1	50	22.7
6102-EC01	Gilbarco (Encore)	1	77	34.9
6102-EC02	Gilbarco (Encore)	2	77	34.9

\*Specify dispenser model and serial number when ordering

\*\*\*Hose clamps must be ordered separately for MPD models

NOTE: All 6102 MPDs come with two brackets and the number of hose retractors per side.

## Options Replacement Parts

Model Number	Hose Clamp Size
H15210M	Replacement Cable Guide
H15212M	Replacement Cable -10 ft.
H15211M	Replacement Reel
D02147M	Replacement Housing

Model Number	Hose Clamp Size
H15265M (P102-2)	Sliding Bracket
C05239M	Foot (Bottom)
D02628M	Bracket Only for 06102-DW3
D02629M	Bracket Only for 06102-DW4



Hose Clamp

## Ordering Specifications Hose Clamps

Model Number	Hose Clamp Size †
PB-1344	Balanced Coaxial, Goodyear Premier
PB-1373	Standard 1" O.D. Hose (5/8" I.D.)
PB-1394	Standard 1 1/8" O.D. Hose (3/4" I.D.)
PB-1396	Standard 1 3/8" O.D. Hose (1" I.D.)
PB-1398	Standard Hose (3/4" I.D.)

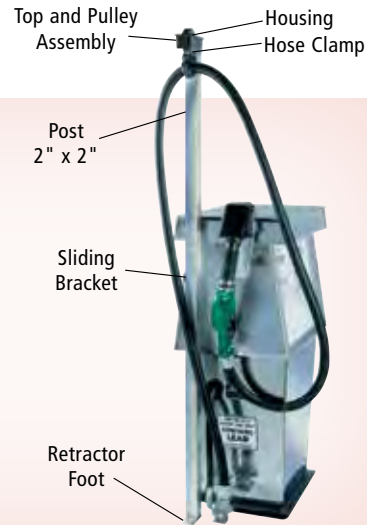
† Other sizes available upon request

## POMECO 100 Counterweight Hose Retractors

POMECO 100 Counterweight Hose Retractors keep excess hose off the ground and out of the way, prolonging hose life and reducing potential hazards. The POMECO 100 is a California Air Resources Board (CARB) certified Stage II component for use with single and dual hose dispensers as per Executive Order G-70-52-AM.

### Materials

**Housing:**  
Impact-resistant plastic  
**Cable:** Black polyester  
**Post:** Aluminum (2" x 2")



### Features

- ◆ Easy to Use – counterweights are precisely matched to each hose configuration to ensure that a minimal pulling force is needed throughout hose extension.
- ◆ Easy to Maintain – the 100 has just two moving parts, ensuring a long service life with a minimum of maintenance.
- ◆ Multiple Hose Configurations – the 100 is available in a multitude of configurations to meet virtually any conventional or vapor recovery hose/nozzle configuration. Models are also available for air and water hose applications to keep hoses clear of vehicles when not in use.

## Ordering Specifications

### Conventional and Vapor Recovery Applications

Model #	Hose Configuration	Hose Length		Clamp Fits		Hose I.D.		Height		Weight	
				Hose O.D.							
		ft.	m	in.	mm	in.	mm	in.	cm	lbs.	kg
6100-4000	Conventional	12-14	3.7 - 4.3	1 3/8	35	1	25	79	201	33	15.0
6100-5000	Conventional	15-18	4.6 - 5.5	1 3/8	35	1	25	92	234	38	17.2
6100-6000	Conventional	12-14	3.7 - 4.3	1 1/32	26	5/8 or 3/4	16 or 19	79	201	30	13.6
6100-7000	Conventional	15-20	4.6 - 6.1	1 1/32	26	5/8 or 3/4	16 or 19	92	234	31	14.1
6100-8000	Conventional	12-14	3.7 - 4.3	1	25	5/8	16	79	201	29	13.2
6100-9000	Conventional	15-20	4.6 - 6.1	1	25	5/8	16	92	234	30	13.6
6100-AGNV	Inverted Coaxial	11-13	3.4 - 4.0	(Hose Clamp Not Included)				79	201	33	15.0
6100-AGLC	Coaxial	11-13	3.4 - 4.0	(Hose Clamp Not Included)				79	201	26	11.8
6100-AGBR	Coaxial w/ Breakaway	11-13	3.4 - 4.0	(Hose Clamp Not Included)				79	201	31	14.1

100 Series Counterweight Hose Retractor Instruction Sheet  
Order Number: **H15852PA**

See page 197 for hose clamp  
Ordering Specifications

NOTE: See OPW's Website at [www.opwglobal.com](http://www.opwglobal.com) for product instruction sheets, trouble-shooting guides, how-to-use guide and to view the Do's & Don'ts at the Gas Pump video.

### Options and Replacement Parts

Part #	Description	Counterweight Length		Weight	
		in.	cm	lbs.	kg
H15262	Counterweight for 4000/AGNV Models	27	68.5	24	10.8
H15263	Counterweight for 5000 Model	31	78.7	27	12.2
H15260	Counterweight for 6000, 8000 and AGLC Models	20	50.8	17	7.7
H15261	Counterweight for 7000, 9000, AGBR Models	25	63.5	22	9.9
H15265M	Sliding Bracket, Dispenser Mount				
C05235M	Replacement Tube, 2" x 2" x 75" (191 cm)				
C05236M	Replacement Tube, 2" x 2" x 88" (224 cm)				

Part #	Description
D02671M	Replacement Housing, Plastic
H15266	Top and Pulley Assembly
H15264	12 ft. Replacement Cable
C05239M	Retractor Foot
P100-4STF	Freestanding Retractor Base
P338SPOOL	Replacement Cable Spool, 338 ft. of wire
H15210M	Cable Guide
H13588M	Retaining Ring



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