



## L SERIES

OPW L Series NGV1-certified fueling receptacles are designed for use on medium storage natural gas vehicles, including automobiles, light trucks, shuttle buses and vans.



### Features

- ◆ **High-Flow Capacity**  
The L Series receptacles have much larger flow capacity than conventional receptacles. The flow path allows very high flows, combined with low pressure drop and enhanced resistance to hydrate formation.
- ◆ **Durable, Corrosion-Resistant Construction**  
All OPW receptacles are made from stainless steel.
- ◆ **Non-Contact Check Valve**  
Each OPW NGV1 receptacle contains a highly reliable non-contact check valve that opens only when differential pressure is present during fueling (per NGV1 1.5.4).
- ◆ **Unique Sealing System**  
The sealing system in all OPW receptacles consists of a stainless steel poppet that aligns with a rearward facing, captured seal located in the receptacle body. This arrangement prevents: seal "wash-out" during high-flow conditions and "cratering" due to debris. The seal material has exceptionally long service life, resists creep and deformation and has exceptional wear resistance under all operating pressure and temperature conditions. The poppet is treated, impact-resistant stainless steel with a polished surface to provide reliable sealing at low back pressures.
- ◆ **Bulkhead or Straight Thread**  
The L Series allows the user to order a complete receptacle or buy and assemble their own adaptor shaft. They come with and without bulkhead fitting and with or without filter. The external bulkhead nut costs less than conventional stainless steel fittings.

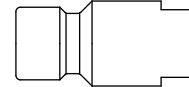
- L Series receptacles can be used with parallel thread or compression tube fittings. L Series bodies come with either wrench flats or hex to ease vehicular mounting.
- ◆ **Filtered Receptacle (LE)**  
Filters capture dirt and gas-borne debris commonly found in CNG systems. Filtered receptacles protect the receptacle seals and the vehicle fuel system. A 50-micron filter is incorporated ahead of the receptacle check valve.
- ◆ **Design Your Own Sub-System**  
The OPW L Series receptacles come with the following standard features: rubber dust cap, mounting hex or wrench flats. LD and LE receptacles come with a standard external bulkhead nut.
- The bulkhead fittings allow the use of inexpensive compression tube fittings. A 50-micron filter upstream of the poppet seal is available as an option. All adaptor shafts can be purchased from OPW or from your supplier of choice.
- OPW L Series NGV1 Receptacles are designed for medium storage NGV at 200 Bar (3000 psi) or 250 Bar (3600 psi) operating pressure.
- ◆ **Rubber Dust Cap**  
Standard protective dust caps are supplied with all receptacles.
- ◆ **Serviceable O-ring**  
Designed to prevent leakage at the connection point.

## CNG Receptacles

OPW offers a complete line of fueling receptacles for any natural gas vehicle (NGV) application. Our receptacles form part of a dedicated system designed specifically for fueling NGV.

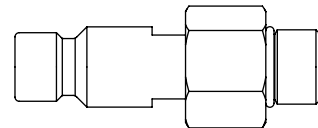
### LB

- Wrench Flats



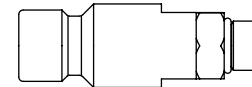
### LBXX78

- 7/8 - 14 UNF - 2A



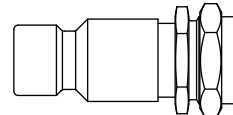
### LBXX16

- 9/16 - 18 - UNF - 2A



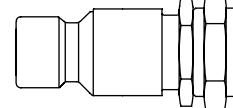
### LD

- Bulk Head

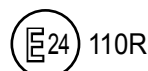


### LE

- Bulk Head
- Filter



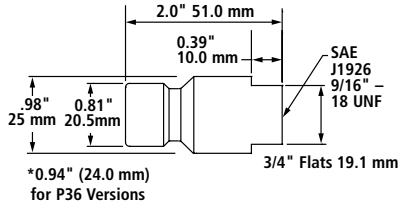
## Listings and Certifications



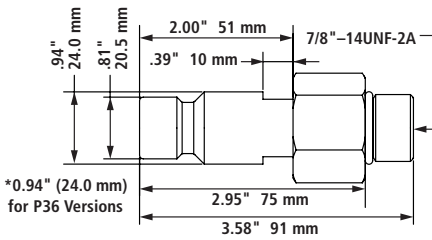


## L Series NGV1 Fueling Receptacles

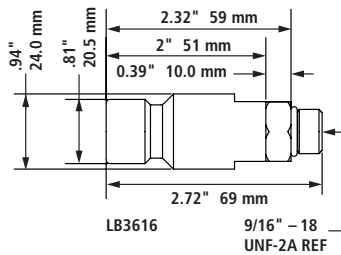
OPW L Series NGV1-certified Refueling Receptacles are designed for use on medium storage natural gas vehicles, including automobiles, light trucks, shuttle buses and vans.



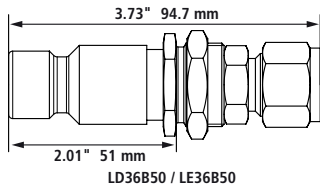
LB30 / LB36



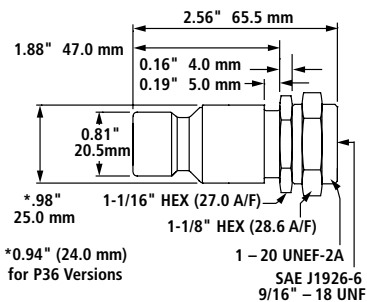
LBXX78



LB3616 9/16" - 18 UNF-2A REF



LD36B50 / LE36B50



LD30 / LD36 / LE30 / LE36

## Materials

**Body:** Stainless steel

**Internal Parts:** Stainless steel and brass

**Seals:** Specially formulated polymers and elastomers specific to high-pressure NGV applications.



LB30 or LB36 with stainless steel filter; 250 mesh

## Features

- ◆ Protective Rubber Dust Caps - included with all OPW "L" series receptacles.
- ◆ Connects with CC200, CC300, CC600 and CT1000 Series NGV1 CNG Nozzles and BDN Defueling Nozzles.

## Specifications:

Min. Flow Rate: 1500 SCFM @ 3000 psid  
Temperature Range: -40° F to 250° F (-40° C to 120° C)

Cv: LB = 0.91  
LD = 0.85  
LE = 0.83

MAWP: 5000 psi (345 Bar)

## Ordering Specifications

Product #	Type/Size	Service Pressure		Weight	
LB30	NGV1 Receptacle w/ 3/4" Flats, P30	3000 psi.	200 bar	.31 lb.	.14 kg
LB36	NGV1 Receptacle w/ 3/4" Flats, P36	3600 psi.	250 bar	.31 lb.	.14 kg
LB3078	LB30 + 50061	3000	200	0.68	0.31
LB3678	LB36 + 50061	3600	250	0.74	0.34
LB3616	LB36 + 50030	3600	250	0.42	0.19
LD30	NGV1 Receptacle w/ Bulkhead, P30	3000 psi.	200 bar	.44 lb.	.2 kg
LD36	NGV1 Receptacle w/ Bulkhead, P36	3600 psi.	250 bar	.44 lb.	.2 kg
LD36B50	LD36 + 212435	3600 psi.	250 bar	.44 lb.	.2 kg
LE30	NGV1 Receptacle w/ Bulkhead and Filter, P30	3000 psi.	200 bar	.44 lb.	.2 kg
LE36	NGV1 Receptacle w/ Bulkhead and Filter, P36	3600 psi.	250 bar	.44 lb.	.2 kg
LE36B50	LE36 + 212435	3600 psi.	250 bar	.44 lb.	.2 kg
1141	Replacement "Interface" O-ring for L Series receptacles				
001147	Replacement Rubber Dust Cap				
001147 ORANGE	Orange Color Replacement Rubber Dust Cap	<b>NEW</b>			

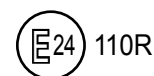
Adaptor Shafts: Can be threaded into LB/LD/LE receptacles above. Materials: Stainless steel

Adaptor Shafts P/N	Description	Weight	
		lbs.	kg
50030	Adaptor Shaft SAE-6 (9/16" - 18 UNF - 2A) x SAE-6 (9/16" - 18 UNF - 2A)	0.07	0.03
50061	Adaptor Shaft SAE-10 (7/8" - 14 UNF - 2A) x SAE-6 (9/16" - 18 UNF - 2A)	0.12	0.05
50066	SAE-6, (9/16"x 18 UNF) to 3/8" Tube Fitting with Cap, Ferrule and Swage Ring	0.09	0.04
212435	SAE-6, (9/16"x 18 UNF) to 1/2" Tube Fitting with Cap, Ferrule and Swage Ring	0.09	0.04

## Listings and Certifications



CE 0036





## Materials

**Body and Adaptor Shaft:** Stainless steel

**Internal Components:** Stainless steel

**Seals:** Specially formulated polymers and elastomers specific to high-pressure NGV applications.



CL50

## Features

- ◆ **High-Flow** - the flow path has been optimized to increase the amount of flow and decrease the pressure drop resulting in a reduction of noise and vibration from the check valve.
- ◆ **Durable, Corrosion-Resistant Construction** - stainless steel construction provides improved durability and corrosion resistance in the harsh on-highway, heavy-duty environment.
- ◆ **Non-Contact Check Valve** - each OPW CL series receptacle contains a highly reliable non-contact check valve that opens when differential pressure is present during refueling.
- ◆ **Sealing System** - the sealing system in all CL series receptacles consists of a stainless steel poppet that aligns with a rearward facing captured seal located in the receptacle body. This arrangement prevents seal "wash out" during high-flow and has exceptional wear resistance under all operating pressure and temperature conditions.
- ◆ **Rubber Dust Cap** - a standard protective dust cap is supplied with CL50 series receptacles.
- ◆ **Serviceable O-ring** - designed to prevent leakage at the connection point.
- ◆ Connects to CT5000S and CC6000 series heavy-duty CNG nozzles

## Specifications:

Min. Flow Rate: 5000 SCFM @ 3000 psid

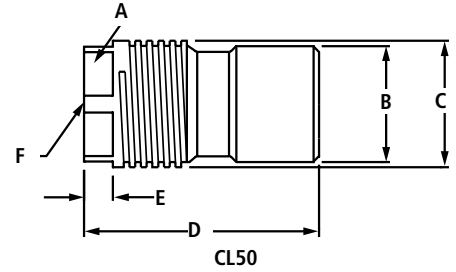
Temperature Range: -40° F to 250° F  
(-40° C to 120° C)

Cv: 3.30

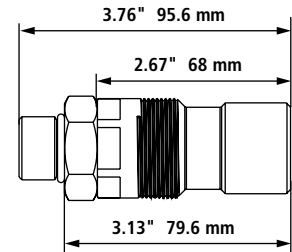
MAWP: 5000 psi (345 bar)

## CL50 Series Bus/Heavy-Duty Truck Receptacles

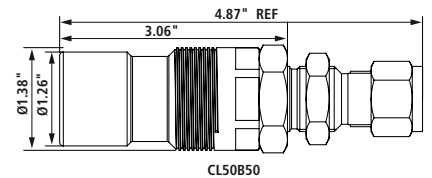
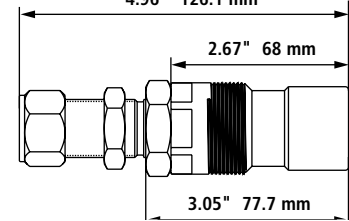
OPW CL50 Series receptacles are designed for use on extremely high-flow, heavy-duty applications including quick-fill, self-service fueling of transit buses and large trucks.



CL50



CL5078  
4.96" 126.1 mm



CL50B50

## Ordering Specifications

Product #	Type/Size	Service Pressure		Weight	
CL50	7/8" - 14 SAE-10 Female Port	3600 psi.	(250 bar)	0.91 lb.	0.413 kg
CL5000	5/8" Double Ferrule Fitting	3600 psi.	(250 bar)	1.29 lbs.	0.585 kg
CL5078	CL50 + 001129	3600 psi.	(250 bar)	1.141 lbs.	0.518 kg
CL5016	CL50 + 001133	3600 psi.	(250 bar)	1.29 lbs.	0.585 kg
CL50B50	CL50 + 1/2" Double Ferrule Fitting	3600 psi.	(250 bar)	1.29 lbs.	0.585 kg
001129	7/8"-14 SAE-10 Male Fitting				
001133	16 mm Double Ferrule Fitting				
212433	7/8" - 14 SAE-10 to 1/2" Tube Fitting				
212439	1/2" Tube Nut and Ferrule Fitting				
001121	Replacement "Interface" O-ring for CL50 Series Receptacles				
001126	Replacement Rubber Dust Cap				

## Dimensions

	in	mm
CL50		
A	1.25	32
B	1.25	32
C	1.39	35
D	2.67*	68*
E	0.31	8
F	SAE J1926-10 7/8"-14 UNF	

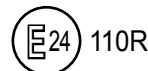
## \*D-Dimensions for:

	in	mm
CL5000	4.80	122.1
CL5016	4.96	126.1
CL5078	3.76	95.6
CL50B50	4.87	123.7

Listings and  
Certifications



CE 0036



# CleanEnergy Nozzle Compatibility Matrix



	CNG Nozzles	CNG Breakaways		NEW CNG Breakaways & CNGBREAKKITS			Standard NGV1 CNG Receptacles NOTE: These use Receptacle Fit Gage RINGO-0001						High Flow CNG Receptacles NOTE: These use Receptacle Fit Gage RINGO-0005						Nozzle Gages					
		ILB-1	ILB-5	FLB 1000 & CNG BREAK KIT-1000	FLB 5000 & CNG BREAK KIT-5000	NGVLB	LB30	LD30	LE30	LB36	LD36	LE36	CL40	CL4078	CL50	CL5000	CL5016	CL5078	JAWGO -1	JAWGO -5				
NGV1	Type 1	PGXXP30	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X		
		PGXXP36	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	
		CT1000SS (3,000 psi/ 200 bar)	✓	X	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X
		CT1000P36S (3,600 psi/ 250 bar)	✓	X	✓	X	✓	X	X	X	✓	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X
	Type 2 & 3	CC300P30S (3,000 psi/ 200 bar)	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X	
		CC300P36S (3,600 psi/ 250 bar)	✓	X	✓	X	✓	X	X	X	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X	
		CC600S (3,000 psi/ 200 bar)	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X	
		CC600P36S (3,600 psi/ 250 bar)	✓	X	✓	X	✓	X	X	X	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X	
	Type 3	CC600 Series Nozzle including 3-Way Valve (3WV series) (3,600 psi/250 bar & 3,000 psi/200 bar)	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	✓	✓	✓	X	
		CC250 (3,000 psi/200 bar)	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X	X	X	X	X	
Bus / High Flow	Type 1	CT5000S (3,600 psi/250 bar)	X	✓	X	✓	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	✓		
	Type 2	CC6000 (3,600 psi/250 bar)	X	✓	X	✓	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	✓		
CNG Defueling	BDN (3,600 psi/250 bar)	✓	X	✓	X	✓	✓	✓	✓	X	✓	✓	X	X	X	X	X	X	✓	✓	✓	X		

# CleanEnergy Hose Kit Compatibility Matrix

Fully Factory Assembled and Tested



			Time Fill			Light Duty (LD)					Heavy Duty (HD)		Extra Heavy Duty (XHD)	Defueling		
			2' Whip Hose / 14' Main Hose	2' Whip Hose / 18' Main Hose	8' Whip Hose / 12' Main Hose	2' Whip Hose / 8.3' Main Hose	2' Whip Hose / 8.3' Main Hose	2' Whip Hose / 10' Main Hose	2' Whip Hose / 13' Main Hose	2' Whip Hose / 13' Main Hose	2' Whip Hose / 8.3' Main Hose	2' Whip Hose / 8.3' Main Hose	2' Whip Hose / 8.3' Main Hose	10' Whip Hose / 2' Main Hose	25' Whip Hose / 25' Main Hose	
			TFCNG KIT-14C36	TFCNG KIT-20B36	TFCNG KIT-20D36	LDCNG KIT-11	LDCNG KIT-11 FLB	LDCNG KIT-12	LDCNG KIT-15A	LDCNG KIT-20B36	HDCNG KIT-11	HDCNG KIT-11FLB	XHDCNG KIT-10	LDCN DPK-12	XFLDCNG KIT-50	
Hose Kit Component																
Nozzles	NGV1	Type 1	PGXXP30	X	X	X	Contact OPW for Quote					X	X	X	X	X
		PGXXP36	X	X	X	Contact OPW for Quote					X	X	X	X	X	
		CT1000SS	X	X	X	X	X	X	✓	X	X	X	X	X	X	
		CT1000P36S	X	X	X	✓	✓	✓	X	X	X	X	X	X	✓	
	Type 2 & 3	CC600 Nozzle including 3-Way Valve	✓	✓	✓	X	X	X	X	✓	X	X	X	X	X	
	Bus / High Flow	Type 1	CT5000S	X	X	X	X	X	X	X	✓	✓	✓	X	X	
	Defueling	BDN	X	X	X	X	X	X	X	X	X	X	X	✓	✓ with 3WV-46D	
Fill Line Break-aways	Standard Duty	ILB-1	X	X	X	✓	X	X	X	X	X	X	X	X	X	
		FLB-1000	X	X	X	X	X	X	X	X	X	X	X	✓	X	
		CNGBREAK KIT-1000	✓	✓	✓	X	✓	✓	✓	✓	X	X	X	X	✓	
Fill Line Break-aways	Bus / High Flow	ILB-5	X	X	X	X	X	X	X	X	✓	X	X	X	X	
		FLB-5000	X	X	X	X	X	X	X	X	X	X	X	X	X	
		CNGBREAK KIT-5000	X	X	X	X	X	X	X	X	X	✓	✓	X	X	
Vent Line Breakaways	NGVLB	✓	✓	X	✓	X	✓	✓	✓	✓	✓	✓	X	✓		
Hose Retractor	6102-CNG	X	X	X	✓	✓	✓	✓	✓	X	X	X	X	✓		
	6102-CNG2	X	X	X	X	X	X	X	X	X	X	X	X	X		
	6102-CNG3	X	X	X	X	X	X	X	X	✓	✓	X	X	X		
	6102-CNG4	✓	✓	✓	X	X	X	X	X	X	X	X	X	X		

## Canadian Registration Numbers by Province

Canadian Registration Numbers OPW CleanEnergy Products	British Columbia	Alberta	Ontario	Quebec	Saskatchewan	Manitoba	Nova Scotia	New Brunswick
PG series	pending	pending	pending	pending	pending	pending	pending	pending
CT1000 series	0H13989.51	0H13989.52	0H13989.5	0H13989.56	0H13989.56	0H13989.56	pending	pending
CT5000	0H15417.51	0H15417.52	0H15417.5	0H15417.56	0H15417.56	0H15417.54	0H15417.58ADD1	pending
CC600 series	0H13989.51	0H13989.52	0H13989.5	0H13989.56	0H13989.56	0H13989.56	pending	pending
ILB-1	0H13989.51	0H13989.52	0H13989.5	0H13989.56	0H13989.56	0H13989.56	pending	pending
ILB-5	0H15417.51	0H15417.52	0H15417.5	0H15417.56	0H15417.56	0H15417.56	pending	pending
VLB	0H13989.51	0H13989.52	0H13989.5	0H13989.56	0H13989.56	0H13989.56	pending	pending
FLB-1000 (new)	0H17341.51	0H17341.52	0H17341.5	0H17341.56	0H17341.56	0H17341.56	0H17341.5987	0H17341.5987
FLB-5000 (new)	0H17341.51	0H17341.52	0H17341.5	0H17341.56	0H17341.56	0H17341.56	0H17341.5987	0H17341.5987
NGVLB (new)	0H17341.51	0H17341.52	0H17341.5	0H17341.56	0H17341.56	0H17341.56	0H17341.5987	0H17341.5987
BDN	Pending	0H17140.2	Pending	Pending	Pending	Pending	Pending	Pending

### TUV Approved

- ◆ PGXXP3X Series
- ◆ CT1000 series nozzles
- ◆ CT5000 series nozzles
- ◆ CC 200 series nozzles
- ◆ CC 300 series nozzles
- ◆ CC 600 series nozzles
- ◆ CC 6000 series nozzles
- ◆ ILB series breakaways
- ◆ FLB series breakaways
- ◆ NGVLB series breakaways
- ◆ LB, LD, LE series receptacles
- ◆ CL series receptacles