

The Right Connection™

Flomax Fluid Management Systems

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Flomax Part Number Cross-reference

Standard Series Connectors

Dixon Part #	Caterpillar® Part #	Wiggins Part #
Engine Oil Nozzles		
ENBL	9S9273	OS2
ENBL-P	---	OSP2
ENBL-PLUG	9S9274	OP-12
ERJ	---	ON6
Engine Oil Receivers		
ERS	9S9271	ON2
ERS-C	---	ONC2A
ERS-CAP	9S9272	O3B12P
Coolant Fluid Nozzles		
CN	108-5455	EC280B8
CN-P	---	---
CN-PLUG	108-5456	1209-8
Coolant Fluid Receivers		
CR-S	IQ5459	EC285A8
CR-C	---	---
CR-CAP	5P3587	1208-8
Hydraulic Oil Nozzles		
HN	108-5433	6000B12
HN-P	---	---
HN-PLUG	---	6009-12
Hydraulic Oil Receivers		
HR	108-5454	6005A12
HR-C	---	---
HR-CAP	IQ-5468	6008-12
Transmission Fluid Nozzles		
TN	126-7538	C-1807
TN-P	---	---
TN-PLUG	---	P-1844
Transmission Fluid Receivers		
TR	108-5456	P-1804
TR-C	---	---
TR-CAP	SP3587	P-1880

Fuel Vent Series

Dixon Part #	Caterpillar® Part #	Wiggins Part #
VT	6G7803	ZV10
VT7	---	---
VT9	---	---
VTT	---	ZV10C

R Series Connectors

Dixon Part #	Caterpillar® Part #	Wiggins Part #
Engine Oil Nozzles		
R-EN	---	R15
R-EN-P	---	---
R-EN-PLUG	---	---
Engine Oil Receivers		
R-ER	---	R16
R-ER-C	---	---
R-ER-CAP	---	---
Coolant Fluid Nozzles		
R-CN	---	R11
R-CN-P	---	---
R-CN-PLUG	---	---
Coolant Fluid Receivers		
R-CR	---	R12
R-CR-C	---	---
R-CR-CAP	---	---
Hydraulic Oil Nozzles		
R-HN	---	R17
R-HN-P	---	---
R-HN-PLUG	---	---
Hydraulic Oil Receivers		
R-HR	---	R18
R-HR-C	---	---
R-HR-CAP	---	---
Transmission Fluid Nozzles		
R-TN	---	R13
R-TN-P	---	---
R-TN-PLUG	---	---
Transmission Fluid Receivers		
R-TR	---	R14
R-TR-C	---	---
R-TR-CAP	---	---

Diesel Fueling System

Dixon Part #	Caterpillar® Part #	Wiggins Part #
Nozzles		
FN600	---	ZZ99A1
FN600BL	---	---
FN600B-PLUG	---	---
Receivers		
FRS	269000	ZN2A
FRS-C	---	ZNC2A
FRA	---	ZN2A
FRA-C	269000	ZNC2A
FR-CAP	---	ZC20P
FR2	9D0630	---
FR2-C	---	---
FR2-R	---	---
GFR-0	---	ZN6A
GFR-45	---	---
GFR-90	---	ZN6B
GFR1-0	---	ZN6B
GFR1-45	---	---
GFR1-90	---	ZN6B
FNS	---	ZS9
FNS2	---	---
FN600S	---	---
FNS10	---	---

Flomax Diesel Fueling System

Designed for on-site refueling of construction, mining, forestry and agricultural equipment. Interchanges with Caterpillar® and Wiggins systems.

Diesel Fuel Nozzle

- 1½" female NPT
- integrated high flow swivel
- integrated sealing plug
- plug/bumper assembly gives complete nose seal
- stainless steel dog latch mechanism and ball lock styles available
- tested to 180 gallons per minute
- investment cast aluminum housing
- anodized aluminum non-wear parts
- heat treated stainless steel wear components
- Delron® bushings eliminate metal-to-metal wear

Description	Part #
dog latch mechanism with sealing plug	FN600
ball lock with sealing plug	FN600BL
sealing plug for FN600	FN600B-PLUG
sealing plug for FN600BL	FN600B



Diesel Fuel Receiver

- 2" male NPT
- available in anodized aluminum or nickel-plated steel
- O-ring sealed aluminum cap
- cap has set screw attached vinyl coated cable lanyard

one-piece body

Description	Material	Part #
one-piece receiver without cap	nickel-plated steel	FRS
one-piece receiver with cap	nickel-plated steel	FRS-C
one-piece receiver without cap	anodized aluminum	FRA
one-piece receiver with cap	anodized aluminum	FRA-C
cap for receiver	anodized aluminum	FR-CAP



- FR2 receiver allows replacement of wear components without draining the fuel tank
- FR2 receiver has an aluminum base with nickel-plated steel nose

two-piece body

Description	Part #
two piece receiver with removable stainless sleeve without cap	FR-RS
two piece receiver with removable stainless sleeve with cap	FR-RS-C
removable sleeve replacement for two piece receiver	FR-RS-R



Diesel Fuel Swivels

- stainless steel male threaded base
- stainless steel ball bearings
- hand black anodized female threaded nut
- fluorosilicone sealing O-rings

Thread Size	Description	Part #
1½" male NPT x 1½" female NPT	standard	FNS
2" male NPT x 1½" female NPT	standard	FNS2
1½" female NPT x 1½" female NPT	double	FNSID



standard

Thread Size	Description	Part #
1½" male NPS x 1½" female NPT	used with FN600	FN600S



double

Flomax Diesel Fueling System

Diesel Fuel Gravity Fill Receiver



GFR-0



GFR-90

- used with the FN600 or FN600BL to convert to gravity fueling

Size	Description	Anodized Aluminum Part #
1-3/8"	straight	GFR-0
1-3/8"	45°	GFR-45
1-3/8"	90°	GFR-90
1"	straight	GFR1-0
1"	45°	GFR1-45
1"	90°	GFR1-90

Flomax Fuel Vent Series



VTT

- 2" male NPT
- billet cap provides superior impact resistance
- easily serviced all metal construction
- rigid ball cage for positive seal
- available with:
 - threaded outlet
 - half coupling
 - anti-vandalism mounting

Description	Part #
with 5" tube	VT
with 7" tube	VT7
with 9" tube	VT9
with 5" tube and threaded outlet	VTT

Flomax Service Box



Designed to enclose receivers for diesel fuel, hydraulic oil, transmission fluid and coolant reducing contamination and weather related problems.

- normally installed on heavy duty earth mover equipment and drill rigs
- 12 gauge steel construction with heavy duty hinges
- painted white - Imron® Primer

Part #
FSB

Flomax Standard Series Connectors

The Flomax standard series connectors consist of four color-coded mating connectors. They have all-metal construction with stainless steel wear components and anodized aircraft grade aluminum non-wear components. Each has easily recognizable labeling and is fully compatible and interchangeable with industry standards.

Engine Oil (red)

- universally fits all crankcase receivers, both R-series and Standard series
- incorporates 10 locking balls with a 40% deeper engagement
- resistant to clogging with a greater ease of cleaning
- smooth actuation
- larger diameter pullback lanyard
- bright red anodized aircraft grade aluminum

Nozzles

Male Thread	Female Thread	Description	Anodized Aluminum Part #
3/4" NPT	---	engine nozzle ball lock	ENBL
3/4" NPT	---	engine nozzle ball lock with plug	ENBL-P
---	---	engine nozzle plug	ENBL-PLUG



Receivers

Male Thread	Female Thread	Description	Anodized Aluminum Part #
3/4" NPT	---	engine receiver	ERS
3/4" NPT	---	engine receiver with cap	ERS-C
---	---	engine receiver cap	ERS-CAP
3/4" JIC	---	engine receiver with JIC bulkhead base	ERJ
3/4" JIC	---	engine receiver with JIC bulkhead base and cap	ERJ-C



ERJ-C

Coolant Fluid (teal)

- nickel-plated stainless steel nozzle nose and base
- standard roll-pin locking mechanism
- ergonomically engineered pullbacks and caps
- bright teal anodized aircraft grade aluminum

Nozzles

Male Thread	Female Thread	Description	Anodized Aluminum Part #
1/2" NPT	---	coolant nozzle ball lock	CN
1/2" NPT	---	coolant nozzle ball lock with plug	CN-P
---	---	coolant nozzle plug	CN-PLUG



Receivers

Male Thread	Female Thread	Description	Anodized Aluminum Part #
1/2" NPT	---	coolant receiver	CR-S
1/2" NPT	---	coolant receiver with cap	CR-C
---	---	coolant receiver cap	CR-CAP



Flomax Standard Series Connectors

The Flomax standard series connectors consist of four color-coded mating connectors. They have all-metal construction with stainless steel wear components and anodized aircraft grade aluminum non-wear components. Each has easily recognizable labeling and is fully compatible and interchangeable with industry standards.

Hydraulic Oil (gold)

- nickel-plated stainless steel wear components
- 10 steel dog latching mechanism
- ergonomically engineered pullbacks and caps
- bright gold anodized aircraft grade aluminum

Nozzles



Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	3/4" NPT	hydraulic nozzle	HN
---	3/4" NPT	hydraulic nozzle with plug	HN-P
---	---	hydraulic nozzle plug	HN-PLUG

Receivers



Male Thread	Female Thread	Description	Anodized Aluminum Part #
3/4" NPT	---	hydraulic receiver	HR
3/4" NPT	---	hydraulic receiver with cap	HR-C
---	---	hydraulic receiver cap	HR-CAP

Transmission Fluid (violet)

- nickel-plated stainless steel nose and base
- 6 steel dog latching mechanism
- ergonomically engineered pullbacks and caps
- bright violet anodized aircraft grade aluminum

Nozzles



Male Thread	Female Thread	Description	Anodized Aluminum Part #
1/2" NPT	---	transmission nozzle	TN
1/2" NPT	---	transmission nozzle with plug	TN-P
---	---	transmission nozzle plug	TN-PLUG

Receivers



Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	3/8" NPT	transmission receiver	TR
---	3/8" NPT	transmission receiver with cap	TR-C
---	---	transmission receiver cap	TR-CAP

Flomax R Series Connectors

The Flomax R-series connectors are fully compatible and interchangeable with industry standards. They have all-metal construction using anodized aircraft grade aluminum non-wear components.

Engine Oil (red)

- all metal construction
- standard roll-pin locking mechanism
- ergonomically engineered pullbacks and caps
- bright red anodized aircraft grade aluminum

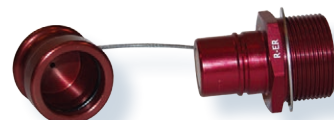
Nozzles

Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	¾" NPT	R-series engine nozzle	R-EN
---	¾" NPT	R-series engine nozzle with plug	R-EN-P
---	---	R-series engine nozzle plug	R-EN-PLUG



Receivers

Male Thread	Female Thread	Description	Anodized Aluminum Part #
1.625-12 UN-2A	1.312-12 UN-2B	R-series engine receiver	R-ER
1.625-12 UN-2A	1.312-12 UN-2B	R-series engine receiver with cap	R-ER-C
---	---	R-series engine receiver cap	R-ER-CAP



Coolant (teal)

- all metal construction
- standard roll-pin locking mechanism
- ergonomically engineered pullbacks and caps
- bright teal anodized aircraft grade aluminum

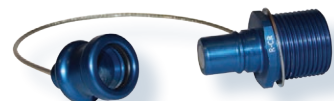
Nozzles

Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	½" NPT	R-series coolant nozzle	R-CN
---	½" NPT	R-series coolant nozzle with plug	R-CN-P
---	---	R-series coolant nozzle plug	R-CN-PLUG



Receivers

Male Thread	Female Thread	Description	Anodized Aluminum Part #
1.187-12 UN-2A	.875-14 UN-2B	R-series coolant receiver	R-CR
1.187-12 UN-2A	.875-14 UN-2B	R-series coolant receiver with cap	R-CR-C
---	---	R-series coolant receiver cap	R-CR-CAP



Flomax R Series Connectors

The Flomax R-series connectors are fully compatible and interchangeable with industry standards. They have all-metal construction using anodized aircraft grade aluminum non-wear components.

Hydraulic Oil (gold)

- all metal construction
- standard roll-pin locking mechanism
- ergonomically engineered pullbacks and caps
- bright gold anodized aircraft grade aluminum

Nozzles



Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	1" NPT	R-series hydraulic nozzle	R-HN
---	1" NPT	R-series hydraulic nozzle with plug	R-HN-P
---	---	R-series hydraulic nozzle plug	R-HN-PLUG

Receivers



Male Thread	Female Thread	Description	Anodized Aluminum Part #
1.875-12 UN-2A	1.625-12 UN-2B	R-series hydraulic receiver	R-HR
1.875-12 UN-2A	1.625-12 UN-2B	R-series hydraulic receiver with cap	R-HR-C
---	---	R-series hydraulic receiver cap	R-HR-CAP

Transmission Fluid (violet)

- all metal construction
- standard roll-pin locking mechanism
- ergonomically engineered pullbacks and caps
- bright violet anodized aircraft grade aluminum

Nozzles



Male Thread	Female Thread	Description	Anodized Aluminum Part #
---	3/4" NPT	R-series transmission nozzle	R-TN
---	3/4" NPT	R-series transmission nozzle with plug	R-TN-P
---	---	R-series transmission nozzle plug	R-TN-PLUG

Receivers



Male Thread	Female Thread	Description	Anodized Aluminum Part #
1.312-12 UN-2A	1.062-12 UN-2B	R-series transmission receiver	R-TR
1.312-12 UN-2A	1.062-12 UN-2B	R-series transmission receiver with cap	R-TR-C
---	---	R-series transmission receiver cap	R-TR-CAP

Flomax High Flow Series

3/4" Series

Consists of 6 nozzle and receiver sets that are color coded for quick identification of mating parts. Each color nozzle and receiver will only couple with their matching color component. This provides complete protection against cross contamination.

- maximum flow rate of 45 GPM at 70 PSI
- working pressure rating: **200 PSI**
- The standard mounting for the nozzle is a 3/4" female NPT and for the receiver is a 3/4" male NPT.

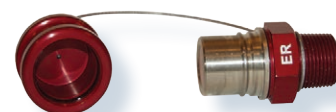
Nozzles

Female NPT size	Description	Anodized Aluminum Part #
3/4"	red nozzle with plug gold nozzle with plug teal nozzle with plug violet nozzle with plug navy nozzle with plug copper nozzle with plug	ENBL-P ENBL-P2 ENBL-P3 ENBL-P4 ENBL-P5 ENBL-P6



Receivers

Male NPT size	Description	Anodized Aluminum Part #
3/4"	red receiver with cap gold receiver with cap teal receiver with cap violet receiver with cap navy receiver with cap copper receiver with cap	ERS-C ERS-C2 ERS-C3 ERS-C4 ERS-C5 ERS-C6



Note: ERS series is available with JIC bulkhead base. Substitute 'J' for 'S'. Example: ERJ-C2

Flomax High Flow Series

1" Series

Consists of 7 nozzle and receiver sets that are color coded for quick identification of mating parts. Each color nozzle and receiver will only couple with their matching color component. This will provide complete protection against cross contamination.

Each of the 7 nozzles and 7 receivers has the following performance:

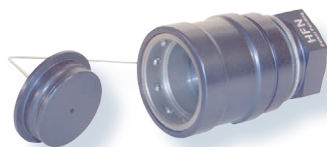
- The nozzle/receiver combination has a flow area equivalent to a 1" schedule 80 pipe.
- The fittings have a **500 PSI** working pressure rating with 1500 PSI minimum burst pressure.
- All wear parts are constructed of stainless steel for long life and corrosion resistance.
- All non-wear parts are constructed of colored anodized aircraft grade aluminum for high strength, lightweight and corrosion resistance.

- The standard mounting for the nozzle is a 1" female NPT and for the receiver is a 1" male NPT. The receivers also come with a 1" female NPT threaded base.
- The nozzle incorporates a "ball lock" mechanism to ensure smooth and reliable operation.

Physical Description:

- nozzle length: 3.90" (99 mm)
- receiver length: 3.44" (87 mm)
- diameter: 2.50" (64 mm)
- hex size: 2" (51 mm)
- nozzle and receiver coupled length: 5.44" (138 mm)

Nozzles



Female NPT size	Description	Anodized Aluminum Part #
1"	red nozzle with plug gold nozzle with plug teal nozzle with plug violet nozzle with plug navy nozzle with plug copper nozzle with plug blue/gray nozzle with plug	HFN-P1 HFN-P2 HFN-P3 HFN-P4 HFN-P5 HFN-P6 HFN-P7

Receivers



Male NPT size	Description	Anodized Aluminum Part #
1"	red receiver with cap gold receiver with cap teal receiver with cap violet receiver with cap navy receiver with cap copper receiver with cap blue/gray receiver with cap	HFR-C1 HFR-C2 HFR-C3 HFR-C4 HFR-C5 HFR-C6 HFR-C7

FloMeg - the Non-Pressure Shutoff System

1. The FloMeg system uses an internal float to determine shutoff levels, not the tank's pressure. A pilot line runs from the valve to the float. As the tank is filling a small stream of fuel enters an opening in the piston through the pilot line and drops into the tank. When the fuel level has reached the specified level, the float valve closes and the fuel stream in the pilot line is stopped; the force in the receiver valve closes the piston. Once the piston closes, the nozzle senses the back pressure and shuts off.
2. Tank stress and rupture is eliminated because of the low tank pressure during or after filling thus prolonging the natural lifetime of the fuel tank.
3. When the fuel level is at the preselected level the float will remain closed making it impossible for the operator to override the system. Operators will not be able to "top off" the tank.
4. The Fuel Receiver is installed into the FloMeg receiver valve. When the FloMeg receiver piston is closed, it will not allow fluid in or out. If the fuel receiver sticks, there is minimal risk of fuel spills because the piston in the receiver valve will remain closed.



F2V1001



F2F2001

FNBL Diesel Fuel Nozzle Cleaning Instructions

1. Pull the FNBL nose apart

- Pull the pullback toward the body to reveal the nose ring.
- Remove the nose ring found near the front of the nose.
- Slide the pullback of the nose taking care to capture the ten stainless steel ball bearings.



2. Clean the FNBL nose parts

- The pullback has a Delron® bushing and a felt seal that should be checked and replaced if needed.
- The wiper seal inside the nose should be removed and replaced.
- Clean the nose, pullback spring, spring retainer, pullback and ball bearings as needed.



3. Re-assembly of the FNBL nose

- Put a small amount of O-ring lube on the nose in the ten ball bearing holes to hold them in place during re-assembly
- Put a ball bearing in each of the ten holes in the nose.
- Make sure the felt seal is completely inserted in the felt seal groove in the pullback.
- Slide the pullback over the nose as far back toward the body as it will go.
- Put the nose ring back in its groove near the front end of the nose.



Safety

Dixon's couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon recommends that all hose assemblies be tested in accordance with the Rubber Manufacturers Association's recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit RMA.org for more information.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended. If any problem is detected, couplings must be removed from service immediately.

Dixon is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon's Testing and Recommendation Services. Call 877-963-4966 or click dixonvalve.com to learn more.

Dixon is recognized as the premier manufacturer and supplier of hose fittings and accessories spanning a wide range of industrial uses. Dixon's range includes products for food, dairy processing, beverage and brewery, mobile tankers, mining, construction, chemical processing, petroleum, oilfields, refining and manufacturing.

dixonvalve.com • Customer Service: 877.963.4966



The Right Connection™

Dixon Valve

800 High Street, Chestertown, MD 21620

ph: 877.963.4966

fx: 800.283.4966



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