Safety Break-away Couplings - Breaking Bolt Series Industrial Version

The breaking bolt industrial breakaway coupling is designed to minimize spillage and damage associated with drive away and pull away incidents



			Weight in Lbs.		
Size	Width	Length	stainless	aluminum	Rate/ GPM
2"	4.5"	7"	5	3	200
3"	6.8"	11"	18	8	650
4"	8.3"	12"	34	14	800
5"	10.6"	14"	71	27	1100
6"	12"	16"	101	35	1500
8"	13.5"	17.7"	157	66	3700



- designed to be installed between a fixed point (pipe, pump, manifold) and a hose
- coupling automatically senses an excessive load, closes the valves and disconnects
- high flow rate / low pressure drop
- female NPT is standard, optional ANSI / DIN flanges or male NPT are available
- stainless steel or aluminum
- working pressure: stainless steel 360 PSI and aluminum 230 PSI at ambient temperature (70°F)
- Viton® is standard seal

Size	DN	Stainless	Steel	Aluminum		
Size	DIN	Part #	Price/E	Part #	Price/E	
2"	50	SBC200SS	\$3667.85	SBC200AL	\$1711.90	
3"	80	SBC300SS	6484.90	SBC300AL	3324.85	
4"	100	SBC400SS	9960.10	SBC400AL	5085.10	
5"	125	SBC500SS	0	SBC500AL	0	
6"	150	SBC600SS	33608.90	SBC600AL	24709.70	
8"	200	SBC800SSFL 1	0			

^{1 150#} ASA flange

Marine Version

The breaking bolt marine version break-away coupling is designed to minimize spillage and damage associated with pull-away incidents.



Flow Rate/ GPM	Weight in Lbs.	Length	Width	Size
200	5.7	7"	4.5"	2"
650	18.8	11"	6.8"	3"
800	34.1	12"	8.3"	4"
1100	71	14"	10.6"	5"
1500	101	16"	12"	6"
3700	157	17.7"	13.5"	8"



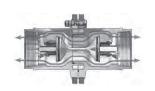
- designed to be installed within a hose string where the coupling will have a length of hose attached to both sides
- typical applications include: ship-to-offshore platform and shipto-ship product transfer operations
- coupling automatically senses an excessive load, closes the valves and disconnects
- release is executed when force causes bolts to break
- female NPT is standard, optional ANSI / DIN flanges or male NPT are available
- working pressure: **360 PSI** at ambient temperature (70°F)
- 316T1 stainless steel body with Viton® O-rings

Size	DN	Stainless Steel	D:: /E
		Part #	Price/E
2"	50	MSBC200SS	\$4400.20
3"	80	MSBC300SS	7781.65
4"	100	MSBC400SS	11958.30
5"	125	MSBC500SS	0
6"	150	MSBC600SS	36966.70
6"	150	MSBC600SSFL 1	38693.00
8"	200	MSBC800SSFL 1	0
0	200	MISDC000331 L	U

^{1 150#} ASA flange

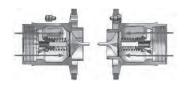
How it Works

Safety break-away couplings have three external break bolts. In the case of axial tension all of the bolts take up the force corresponding to the break force on the hose with a safety margin. Non-axial forces concentrate the tension forces more strongly on one bolt, so that the safety break-away coupling reacts in a natural way to the reduction of the hose break forces.



BEFORE emergency disconnect

The safety break-away valve consists of two halves, each with a valve that has an O-ring seal



AFTER emergency disconnect

When the safety break-away couplings separate, it allows the valves to close. The two valves close rapidly, minimizing exposure to personnel and the environment.

Optional Non-Closure Design

The non-closure design is an economical alternative which allows the coupling to break away due to pull-away/drive-away incidents thus protecting piping systems and equipment. This design allows spillage of product in these instances due to the lack of valving in the coupling.

Useful in applications where non-hazardous product is being conveyed and where there are no environmental concerns. Available in both Industrial and Marine versions. Consult the factory for more information.

Dry Disconnect Couplings

Dry disconnect couplings are designed for the quick and spill free connection and disconnection of hoses and pipelines when transferring expensive hazardous product that is costly to clean up, reprocess or dispose of. Dry disconnects are used by producers of ink, adhesives, fatty acids, pharmaceuticals, liquid soaps, petroleum, chemicals, agricultural and a wide variety of common caustic and specialty acids.





- Easy to handle push and turn free flow, turn and pull closed
- Time saving no need to drain hoses or pipe systems
- Economical no loss or spillage of liquids at connection or disconnection
- Safety the valve cannot be opened until the unit is coupled
- Environment friendly accidental spillage eliminated when proper used
- Safe and reliable due to rugged construction
- Product life uncomplicated design and high quality materials ensures long product life
- Selectivity To avoid product contamination caused by connecting a coupler to the wrong adapter, selective versions of the adapters are available. Contact the factory for further information.
- produced according to NATO standard STANAG 3756 and ATOFINA SGM 2049.TUY.C.

- Working Pressure (at ambient temperature (70°F):
 - aluminum: **300 PSI**, up to 4" brass/ gunmetal *: **300 PSI**, up to 4" stainless steel: **360 PSI**
- Optional seals:

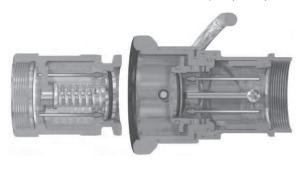
EPDM
NBR - nitrile
Kalrez®
Chemraz®
Perlast®

- Seal kits are available
- * produced to US government bronze specification G

Interchanges with Avery Hardoll and Todo-matic®

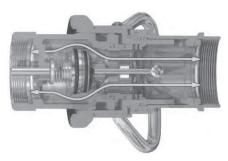
How it Works

The principle of operation is identical for all sizes of couplings.



Closed:

 Turn and pull it's released - no spillage



Open:

 Push and turn it's coupled - full flow

Dry Quick Disconnect Couplers

coupler has built-in swivel

B

- stainless steel ball bearings
- shaft journal in stainless steel embedded in PTFE (Teflon®) to eliminate seizure
- riveted piston pin to minimize the risk for failure under extreme pressure conditions
- the protective ring is a specially formulated, weather resistant and electrically conductive rubber compound
- all wetted parts are stainless steel
- stainless steel couplers: rollers are Hastelloy C276 on the stainless steel shaft
- aluminum and brass couplers: rollers are aluminum-bronze on the stainless steel shaft
- Composite (Polyeten PE-HD 300) plugs provide very good protection against corrosion and withstand hot and cold environments.

Coupler - Hose Unit



3/4" and 1" design



11/2" and 2" design



3" design

4" design



dry quick disconnect couplers x female NPT with Viton® seals

Female NPT Body Size		316 Stainless Steel		Anodized Aluminum		Brass / Gunmetal ¹	
remale NFT	Body Size	Part #	Price/E	Part #	Price/E	Part #	Price/E
3/4"	56 mm	DDC075SS	\$2193.90	DDC075AL	\$1145.40	DDC075BR	\$1606.80
1"	56 mm	DDC100SS	2193.90	DDC100AL	1145.40	DDC100BR	1606.80
1½"	70 mm	DDC150SS	3693.60	DDC150AL	1544.00	DDC150BR	1877.70
2"	70 mm	DDC200SS	3693.60	DDC200AL	1544.00	DDC200BR	1877.70
3"	105 mm	DDC300SS105	5692.80	DDC300AL105	1714.95	DDC300GM105	2493.65
3"	119 mm	DDC300SS	5722.70	DDC300AL	1731.45	DDC300GM	2799.55
4"	164 mm	DDC400SS	9946.70	DDC400AL	3779.10	DDC400GM	5190.20
6"	238 mm	DDC600SS	25399.80	DDC600AL	16335.80		

¹ produced to US government bronze specification G

Dust Plugs for Couplers



Size	Pody Sizo	Polyeten PE-HD 300		
Size	Body Size	Part #	Price/E	
3/4" and 1"	56 mm	DDDP075	\$107.90	
1½" and 2"	70 mm	DDDP150	112.30	
3"	105 mm	DDDP300105	115.90	
3"	119 mm	DDDP300	115.90	
4"	164 mm	DDDP400	231.70	
6"	238 mm	DDDP600 ¹	699.45	

¹ 6" dust plug is aluminum

Dry Quick Disconnect Adapters

- adapter is usually installed on the tank or manifold
- conical valve seat reduces the risk for piston blow out
- PTFE (Teflon®) bearing between the piston shaft and the piston guide eliminate the risk for seizure
- available in female NPT, 150# ASA flange or TTMA
- Composite (Polyeten PE-HD 300) caps provide very good protection against corrosion and withstand hot and cold environments.

Construction:

- aluminum adapter
 - aluminum poppet, stainless steel internal parts
- stainless steel adapter
 - stainless steel poppet, stainless steel internal parts
- brass / gunmetal * adapter -

brass poppet, brass and stainless steel internal parts

Adapter - Tank Unit

dry quick disconnect adapters x female NPT with Viton® seals

	, ,		•				
Female	Body	316 Stainles	s Steel	Anodized Alu	ıminum	Brass / Gun	metal ¹
NPT	Size	Part #	Price/E	Part #	Price/E	Part #	Price/E
3/4"	56 mm	DDA075SS	\$798.50	DDA075AL	\$575.70	DDA075BR	\$654.40
1"	56 mm	DDA100SS	798.50	DDA100AL	575.70	DDA100BR	654.40
11/2"	70 mm	DDA150SS	1214.40	DDA150AL	467.80	DDA150BR	537.70
2"	70 mm	DDA200SS	1214.40	DDA200AL	467.80	DDA200BR	537.70
3"	105 mm	DDA300SS105	1522.35	DDA300AL105	578.30	DDA300GM105	776.40
3"	119 mm	DDA300SS	1441.00	DDA300AL	591.60	DDA300GM	813.50
4"	164 mm	DDA400SS	2822.20	DDA400AL	1167.00	DDA400GM	1899.35
6"	238 mm	DDA600SS	10876.80	DDA600AL	7442.80		



B Dry

Disconnect

female NPT x adapter

dry quick disconnect adapters x 150# ASA flange with Viton® seals

			-		_		
150#	Body	316 Stainles	s Steel	Anodized Alu	ıminum	Brass / Guni	metal ¹
Flange	Size	Part #	Price/E	Part #	Price/E	Part #	Price/E
3/4"	56 mm	DDA075SSFL	\$1487.35				
1"	56 mm	DDA100SSFL	1487.35	DDA100ALFL	\$1023.10	DDA100BRFL	\$1162.90
1½"	70 mm	DDA150SSFL	1451.30	DDA150ALFL	739.25	DDA150BRFL	1027.50
2"	70 mm	DDA200SSFL	1451.30	DDA200ALFL	739.25	DDA200BRFL	1027.50
3"	105 mm	DDA300SS105FL	1607.85	DDA300AL105FL	859.50	DDA300GM105FL	1138.15
3"	119 mm	DDA300SSFL	2010.60	DDA300ALFL	959.40	DDA300GMFL	1251.45
4"	164 mm	DDA400SSFL	3444.35	DDA400ALFL	1393.60	DDA400GMFL	2340.20
6"	238 mm	DDA600SSFL	11587.50	DDA600ALFL	7885.70		



dry quick disconnect adapters x TTMA flange with Viton® seals

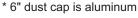
	-		
TTMA	Body Size	Anodized Aluminum	
Flange	Body Size	Part #	Price/E
3"	105 mm	DDA300AL105TTMA	\$859.50
3"	119 mm	DDA300AL119TTMA	959.40
4"	164 mm	DDA400AL164TTMA	1393.60



TTMA flange x adapter

Dust Caps for Adapters

Size	Pody Sizo	Polyeten PE-HD 300			
Size	Body Size	Part #	Price/E		
3/4" and 1"	56 mm	DDDC075	\$175.10		
1½" and 2"	70 mm	DDDC150	191.90		
3"	105 mm	DDDC300105	212.25		
3"	119 mm	DDDC300	236.15		
4"	164 mm	DDDC400	443.95		
6"	238 mm	DDDC600 *	2264.35		



Size	Dody Ciza	Rubber	
Size	Body Size	Part #	Price/E
2"	71 mm	DGDC200	\$100.85
3"	119 mm	DGDC300	235.25



composite



71

¹ produced to US government bronze specification G

Dry Aviation Couplings

Dry aviation couplings are designed for use in aviation refueling systems. Manufactured to accept the international standard 2½" point bayonet, hose end refueling nozzles according to: ISO45 / MS24484 / STANAG 3105 / British Aerospace Spec. 2C14. They are not configured for under-wing refueling.

Technical Information:

B

- body: high strength aluminum
- coupling ring: gunmetal (procuced to U.S. government bronze specification G)
- bayonet flange and inner parts: stainless steel, aluminum
- all wetted parts are aluminum and stainless steel
- **150 PSI** working pressure at ambient temperature (70°F)
- Composite (Polyeten PE-HD 300) plug provides good protection against corrosion and withstands hot and cold environments.

Coupler - Hose Unit

- stainless steel ball bearings
- aunmetal coupling ring minimizes the risk of seizure
- stainless steel shaft journal embedded in PTFE (Teflon®) eliminate seizure
- PTFE (Teflon®) bearings between the driving plate and the piston guide eliminate the risk of
- riveted piston pin minimizes the risk of failure under extreme pressure conditions
- the protective ring is a specially formulated, weather resistant and electrically conductive rubber compound



female thread x coupler

aviation couplers x female NPT with Viton® seals

Camala NDT	Dody Cizo	Aluminum	
Female NPT Body Size		Part #	Price/E
21/2"	ISO 45	DAC250AL	\$2201.10
3"	ISO 45	DAC300AL	2201.10

aviation couplers x female BSP with Viton® seals

Female BSP	Pody Sizo	Aluminum			
remaie bor	Body Size	Part #	Price/E		
2½" 3"	ISO 45 ISO 45	DAC250ALBSP DAC300ALBSP	\$2201.10 2201.10		

Sight Flow Indicator with Filter / Screen

- filter / screen can be inspected through the sight glass
- filter / screen is easily removed if cleaning is required
- screen is 100 mesh

aviation sight flow indicator with filter / screen





Dust Plug for Couplers





Dry Aviation Couplings

Dry aviation couplings are designed for use in aviation refueling systems. Manufactured to accept the international standard 2½" point bayonet, hose end refueling nozzles according to: ISO45 / MS24484 / STANAG 3105 / British Aerospace Spec. 2C14. *They are not configured for under-wing refueling.*

Dry Disconnect

Technical Information:

- body: high strength aluminum
- · coupling ring: gunmetal
- · bayonet flange and inner parts: stainless steel, aluminum
- all wetted parts are in aluminum and stainless steel
- 150 PSI working pressure at ambient temperature (70°F)
- Composite (Polyeten PE-HD 300) cap provides good protection against corrosion and withstands hot and cold environments.

Adapter - Tank Unit

- gunmetal coupling ring minimizes the risk of seizure
- PTFE (Teflon®) bearings between the piston shaft and the piston guide eliminate the risk of seizure
- · conical valve seat eliminates the risk of piston blow out when extreme pressure is used

aviation adapters x female NPT with Viton® seals

Comple NDT	Dody Cizo	Aluminum			
Female NPT	Body Size	Part #	Price/E		
2½" 3"	ISO 45 ISO 45	DAA250AL DAA300AL	\$1301.95 1301.95		



female thread x adapter

aviation adapters x 150# ASA flange with Viton® seals

150# Flancia	Dady Cina	Aluminum				
150# Flange	Body Size	Part #	Price/E			
21/2"	ISO 45	DAA250ALFL	\$1511.00			
3"	ISO 45	DAA300ALFL	1511.00			



150# flange x adapter

Dust Cap for Adapters

Ciro	Dody Ciza	Polyeten PE-HD 300			
Size	Body Size	Part #	Price/E		
2½"	ISO 45	DADC250	\$186.60		



Couplers

Dry Break Cam and Groove Dry Disconnect Couplings dry disconnect coupler has automatic closing poppet

- assembly heavy duty stainless steel crank and link provide long
- service life stainless steel handle allows product exposure to corrosive
- chemicals or washdown service strong handle attachment prevents bending of crank
- assembly
- fully interchangeable with Kamvalok (OPW trademark) style
- aluminum fittings have stainless steel internals1
- for pressure ratings at other temperatures, contact the
- Dixon EZ Boss-Lock cam arms provide high security from accidental opening due to vibration or snagging on 11/2" and
- large paddle type cam arms allow for an easy grip on 3"

Must be used with a DBA style adapter for coupler to operate. SAFETY Adapter sold separately.

- stainless steel corrosion resistance is comparable to 304 stainless steel
- Kalrez[®] gasket, main seal O-ring and handle O-ring. Teflon[®] seals on cylinder assembly, stuffing box, and seal under poppet

coupler x female NPT



11/2" and 2" coupler x female NPT



3" coupler x female NPT

Female	Coupler	O I M - t - vi - I	Max	Alumin	um	Stainless	Steel 1
NPT	Size	Seal Material	PSI at 70°	Part #	Price/E	Part #	Price/E
1½"	2"	_	210	DBC61-150	\$731.45	DBC71-150	\$1619.40
2" 3"	2½" 4"	Buna	150 120	DBC61-200 DBC61-300	769.45 1602.60	DBC71-200 DBC71-300	1801.70 3867.15
1½"	2"		210	DBC61-300 DBC62-150	793.05	DBC71-300 DBC72-150	1681.45
2"	2½"	Viton®	150	DBC62-200	862.00	DBC72-130	1894.80
3"	4"	VILOIT	120	DBC62-300	1788.75	DBC72-300	4072.75
1½"	2"	Teflon® Encapsulated	210	DBC63-150	1799.75	DBC73-150	2356.40
2"	21/2"	Silicone & Kalrez®	150	DBC63-200	2062.25	DBC73-200	2755.90
3"	4"		120	DBC63-300	3314.40	DBC73-300	5463.30
11/2"	2"		210	DBC64-150	1140.40	DBC74-150	1681.45
2"	21/2"	EPT	150	DBC64-200	1265.75	DBC74-200	1894.80
3"	4"		120	DBC64-300	2054.30	DBC74-300	4072.75
1½"	2"		210			DBC76-150	5042.45
2"	21/2"	Kalrez® and Teflon® 2	150	DBC66-200	4745.70	DBC76-200	5469.15
3"	4"		120			DBC76-300	11310.55
1½"	2"	Teflon® Encapsulated	210			DBC77-150	2413.80
2"	2½"	Viton® & Kalrez®	150			DBC77-200	2384.10
3"	4"	1.00	120			DBC77-300	5063.80
3"	4"	Viton® B	120	DBC69-300	2158.55	DBC79-300	4458.70

greaseless coupler x female NPT

Female	Coupler	Cool Motorial	Max.	Stainless	Steel 1
NPT	Size	Seal Material	PSI at 70°	Part #	Price/E
1½" 2"	2" 2½"	Teflon® Encapsulated Viton® & Kalrez® Teflon® Encapsulated Viton® & Kalrez®	210 150	DBC77-150-GL DBC77-200-GL	\$2684.15 2864.50



for 2012



coupler x 90° swivel female NPT

Female	Coupler	Cool Material	Max.	Aluminum		
NPT	Size	Seal Material	PSI at 70°	Part #	Price/E	
2" 2" 2"	2½" 2½" 2½"	Buna Viton® Teflon® Encapsulated Silicone & Kalrez®	150 150 150	DBS61-200 DBS62-200 DBS63-200	\$932.85 1076.00 2185.85	

Dust Plug for Couplers

Size	Aluminum		Stainless Steel		
Size	Part #	Price/E	Part #	Price/E	
2" 2½" 4"	200-DP-AL 250-DP-AL 400-DP-AL	\$16.40 23.75 36.15	200-DP-SS 250-DP-SS 400-DP-SS	\$64.00 150.60 175.00	

Locking Kit for Couplers

Description	Aluminum		
Description	Part #	Price/E	
for use with 1½" and 2" dry disconnect couplers for use with 3" dry disconnect couplers	DBCL-200 DBCL-300	\$177.50 177.50	



Dry Break Cam and Groove Dry Disconnect Couplings Adapters

Compatible with most cam and groove style dry disconnects. The Bayco dry disconnect helps prevent spillage from normal or accidental disconnects. A spring loaded sealing device is designed to snap closed should the valve become disconnected with the poppet open, significantly limiting liquid loss.

Contact the Dixon at 800-355-1991 for chemical compatibility, size, and material selection. Special configurations can be designed for your application.

- two-piece adapter design for easy rebuilding of adapters
- fully interchangeable with Kamvalok (OPW trademark) style fittings
- aluminum fittings have aluminum nose piece and brass
- for pressure ratings at other temperatures, contact Dixon

adapter x female NPT

Female	Adapter	0 1111	Max	Aluminum		Stainless Steel 1	
NPT	Size	Seal Material	PSI at 70°	Part #	Price/E	Part #	Price/E
1½"	2"	Buna	210	DBA11-150	\$199.70	DBA71-150	\$486.30
2"	2½"		150	DBA11-200	216.45	DBA71-200	557.10
3"	4"		120	DBA11-300	422.85	DBA71-300	1247.00
1½"	2"	Viton [®]	210	DBA12-150	203.95	DBA72-150	486.30
2"	2½"		150	DBA12-200	222.70	DBA72-200	625.00
3"	4"		120	DBA12-300	436.35	DBA72-300	1264.50
1½"	2"	Teflon® Encapsulated Silicone	210	DBA63-150	268.75	DBA73-150	491.60
2"	2½"		150	DBA63-200	310.30	DBA73-200	629.25
3"	4"		120	DBA63-300	465.45	DBA73-300	1466.20
1½"	2"	EPT	210	DBA64-150	248.25	DBA74-150	504.25
2"	2½"		150	DBA64-200	283.20	DBA74-200	557.10
3"	4"		120	DBA64-300	543.00	DBA74-300	1375.00
1½"	2"	Kalrez®	210	DBA66-150	853.30	DBA76-150	1140.35
2"	2½"		150	DBA66-200	1052.45	DBA76-200	1260.60
3"	4"		120	DBA66-300	1823.00	DBA76-300	2792.70
1½" 2" 3"	2" 2½" 4"	Teflon® Encapsulated Viton®	210 150 120			DBA77-150 DBA77-200 DBA77-300	541.10 659.40 1336.25
3"	4"	Viton® B	120	DBA69-300	667.15		



B

Dry

Disconnect

11/2" and 2" adapter

jump size adapter x female NPT

Female	Adapter	O I M - 4 - vi - I	Max.	Aluminu	m	
NPT	Size	Seal Material	PSI at 70°	Part #	Price/E	
2" 2"	2" 2"	Buna Viton®	150 150	DBA11-1520 DBA12-1520	\$208.50 217.60	



3" adapter

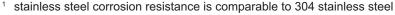
adapter x 150# ASA flange

		-		•	
Flange	Adapter	O I M - t i - I	Max.	Stainless S	teel 1
Size	Size	Seal Material	PSI at 70°	Part #	Price/E
2"	2"	Viton® Teflon® Encapsulated Silicone EPT Kalrez®	150	DBAF72-1520 DBAF73-1520 DBAF74-1520 DBAF76-1520	\$1138.20 1149.50 1149.50 1667.50
2"	2½"	Viton® Teflon® Encapsulated Silicone EPT Kalrez®	150	DBAF72-200 DBAF73-200 DBAF74-200 DBAF76-200	1175.55 1185.50 1185.50 1872.30
3"	4"	Viton® Teflon® Encapsulated Silicone EPT Kalrez®	120	DBAF72-300 DBAF73-300 DBAF74-300 DBAF76-300	1872.40 1951.60 1951.60 3082.60



vapor adapter x female thread

Female	Adanter		Max.	Stainless Steel ¹	
NPSM	Size	Seal Material	PSI at 70°	Part #	Price/E
2"	3"	Teflon®	150	DBAV73-2030	\$665.45



Aluminum

Part # 200-DC-AL 250-DC-AL

400-DC-AL



	•	for
	Stainless S	
Price/E	Part #	Price/E
\$29.20	200-DC-SS	\$105.00
50.70	250-DC-SS	202.00
52 45	400-DC-SS	195.00



New

2012

Size

21/2"

Dry Gas Couplings

Dry gas couplings are designed for safe loading and discharge of bobtails or intermediate bulk delivery trucks. They are quick and easy to connect and can be connected to a tank unit with pressures up to **225 PSI** at ambient temperature (70°F). If the pressure is higher you can equip the couplings with a pressure relief valve. The easy to connect pressure relief valve dissipates trapped fluid pressure into the hose coupler without spillage. The primary application of dry gas couplings is in the handling of LPG - Propane and Butane.

- safe handling of LPG
- easy to use and saves time
- reliable and easy to maintain
- can be coupled to a tank unit with pressures up to 225 PSI
- minimizes the risk of cold burns
- minimizes spillage and product loss
- minimizes health risks
- keeps the environment free of hazardous vapors and liquids
- compatible with existing dry disconnect couplings

Technical Information:

- stainless steel and brass / gunmetal (produced to US government bronze specification G)
- Viton® seals
- female NPT and ASA flanges
- **360 PSI** working pressure at ambient temperature (70°F)
- Composite (Polyeten PE-HD 300) plugs provide good protection against corrosion and withstand hot and cold environments.

Coupler - Hose Unit

dry gas couplers x female NPT with Viton® seals





Dust Plugs for Couplers

Size	Body Ciza	Polyeten PE-HD 300		
Size	Body Size	Part #	Price/E	
1"	56 mm	DGDP100	\$100.85	
2"	71 mm	DGDP200	115.90	
3"	119 mm	DGDP300	115.90	



dry gas adapters x female NPT with Viton® seals



female NPT x adapter

Female NPT	Pody Sizo	316 Stainless Steel		
remale NFT	Body Size	Part #	Price/E	
1" 2" 3"	56 mm 71 mm 119 mm	DGA100SS DGA200SS DGA300SS	\$999.20 1301.95 1439.95	

dry gas adapters x female ACME thread with Viton® seals

Female	Pody Sizo	316 Stainless Steel	
ACME	Body Size	Part #	Price/E
13/4"	56 mm	DGA100SS175	\$1343.25
31/4"	71 mm	DGA200SS325	2181.45

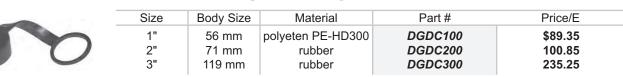


			· ·	
150# Flores	Dady Cina	316 Stainless Steel		
150# Flange		Body Size	Part #	Price/E
	1"	56 mm	DGA100SSFL	\$1637.70
	2"	71 mm	DGA200SSFL	1742.80
	3"	119 mm	DGA300SSFL	2010.60



150# flange x adapter

Dust Caps for Adapters



Flomax Part Number Cross-reference

R Series Connectors

B Dry Disconnect

Standard Series Connectors

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

IN Octios 00	1111001013	
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

Dieser r dening bystein				
Dixon Part #	Caterpillar® part #	Wiggins part #		
Nozzles				
FN600		ZZ99A1		
FN600BL				
FN600B-PLUG				
Receivers				
FRS	269000	ZN2A		
FRS-C		ZNC2A		
FRA	269000	ZN2A		
FRA-C		ZNC2A		
FR-CAP	9D0630	ZC20P		
FR2				
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				

B

Flomax Diesel Fueling System

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

Diesel Fuel Nozzle

- 11/2" 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
- 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 #	Price/E
dog latch mechanism with sealing plug ball lock with sealing plug	FN600 FN600BL	\$2787.25 2629.75
sealing plug for FN600 sealing plug for FN600BL	FN600B-PLUG FN600B	187.45 187.45

Diesel Fuel Receiver

- 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 #	Price/E
one-piece receiver without cap one-piece receiver with cap	nickel-plated steel nickel-plated steel	FRS FRS-C	\$371.25 431.75
one-piece receiver without cap one-piece receiver with cap	anodized aluminum anodized aluminum	FRA FRA-C	371.25 431.75
cap for receiver	anodized aluminum	FR-CAP	123.75

- 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 #	Price/E
two piece receiver with removable stainless sleeve without cap two piece receiver with removable stainless sleeve with cap removable sleeve replacement for two piece receiver	FR-RS FR-RS-C FR-RS-R	\$664.00 695.65 223.15

Diesel Fuel Swivels

- stainless steel male threaded base
- stainless steel ball bearings

- hand black anodized female threaded nut
- fluorosilicone sealing O-rings



standard

Thread Size	Description	Part #	Price/E
1½" male NPT x 1½" female NPT 2" male NPT x 1½" female NPT	standard standard	FNS FNS2	\$343.75 357.50
1½" female NPT x 1½" female NPT	double	FNSID	398.75



double

Thread Size	Description	Part #	Price/E
1½" male NPS x 1½" female NPT	used with FN600	FN600S	\$343.75

Flomax Diesel Fueling System

Diesel Fuel Gravity Fill Receiver

used with the FN600 or FN600BL to convert to gravity fueling

Size	Description	Anodized A	Aluminum
	Description	Part #	Price/E
1-3/8"	straight	GFR-0	\$494.95
1-3/8"	45°	GFR-45	522.45
1-3/8"	90°	GFR-90	522.45
1"	straight	GFR1-0	522.45
1"	45°	GFR1-45	549.95
1"	90°	GFR1-90	549.95



Flomax Fuel Vent Series

- 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 #	Price/E
with 5" tube	VT	\$453.70
with 7" tube	VT7	467.45
with 9" tube	VT9	481.20
with 5" tube and threaded outlet	VTT	509.90



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
- 12 gauge steel construction with heavy duty hinges
- painted white Imron® Primer

Part #	Price/E
FSB	\$1615.00



does not include receivers shown in photo

79

B Dry

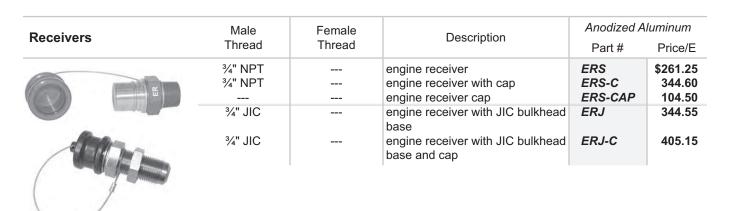
Flomax Standard Series Connectors

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

Part # Price 3/4" NPT engine nozzle ball lock 3/4" NPT engine nozzle ball lock with plug ENBL \$618. 702.	Nozzles	Male	Female	Description	Anodized Aluminum	
3/4" NPT engine nozzle ball lock with plug ENBL-P 702.	14022163	Thread Thread	Part #	Price/E		
		3/4" NPT			ENBL-P	\$618.70 702.05 104.50



Coolant Fluid (teal)

- nickle-plated stainless steel nozzle nose and base
- standard roll-pin locking mechanism

ERJ-C

- ergonomically engineered pullbacks and caps
- bright teal anodized aircraft grade aluminum

Nozzles Male Female Thread Description			Description	Anodized Aluminum	
	Becompact	Part #	Price/E		
	½" NPT ½" NPT 	 	coolant nozzle ball lock coolant nozzle ball lock with plug coolant nozzle plug	CN CN-P CN-PLUG	\$412.50 495.80 104.50

Receivers	Male	Female			d Aluminum	
Receivers	Thread	Thread	Description	Part #	Price/E	
	½" NPT ½" NPT 		coolant receiver coolant receiver with cap coolant receiver cap	CR-S CR-C CR-CAP	\$220.00 303.35 104.50	

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.

B Dry Disconnect

Hydraulic Oil (gold)

- nickle-plated stainless steel wear components
- 10 steel dog latching mechanism

- ergonomically engineered pullbacks and caps
- bright gold anodized aircraft grade aluminum

Nozzles	<i>luminum</i> Price/E	Anodized A Part #	Description	Female Thread	Male Thread
	\$620.15 702.05 104.50	HN HN-P HN-PLUG	hydraulic nozzle hydraulic nozzle with plug hydraulic nozzle plug	3/4" NPT 3/4" NPT	
	104.50	HN-PLUG	Trydradiic Hozzle plug		

Male Thread	Female Thread	Description	Anodized A	<i>lluminum</i> Price/E	Receivers
¾" NPT ¾" NPT 		hydraulic receiver hydraulic receiver with cap hydraulic receiver cap	HR HR-C HR-CAP	\$500.45 583.80 104.50	E E

Transmission Fluid (violet)

- nickle-plated stainless steel nose and base
- 6 steel dog latching mechanism

- ergonomically engineered pullbacks and caps
- bright violet anodized aircraft grade aluminum

Male Thread	Female Thread	Description	Anodized A	<i>lluminum</i> Price/E	Nozzles
½" NPT ½" NPT 	 	transmission nozzle transmission nozzle with plug transmission nozzle plug	TN TN-P TN-PLUG	\$549.95 633.30 104.50	O E

3/8" NPT transmission receiver TR \$288.75 3/8" NPT transmission receiver with cap transmission receiver cap TR-C 372.10	Male Thread	Female Thread	Description	Anodized A	<i>luminum</i> Price/E	Receivers
		3/8" NPT	transmission receiver	TR	\$288.75	
transmission receiver can TP-CAP 104.50		3/8" NPT	transmission receiver with cap	TR-C	372.10	
liansinission receiver cap TR-CAF 104.30			transmission receiver cap	TR-CAP	104.50	

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

B

standard roll-pin locking mechanism

- ergonomically engineered pullbacks and caps
- bright red anodized aircraft grade aluminum

I hread I hread Part # Price	Nozzles	Male	Female	Description	Anodized A	luminum
³ / ₄ " NPT R-series engine nozzle R-EN \$482.	NOZZIES	Thread	Thread	Description	Part #	Price/E
			3/4" NPT	R-series engine nozzle	R-EN	\$482.35
3/4" NPT R-series engine nozzle with plug R-EN-P 564.			3/4" NPT	R-series engine nozzle with plug	R-EN-P	564.55
R-series engine nozzle plug R-EN-PLUG 104.				R-series engine nozzle plug	R-EN-PLUG	104.50

Receivers	Male	Female	Description	Anodized A	luminum
Receivers	Thread	Thread	Description	Part #	Price/E
		1.312-12 UN-2B	R-series engine receiver R-series engine receiver with cap R-series engine receiver cap	R-ER R-ER-C R-ER-CAP	\$206.25 289.60 104.50
		ı	1		

Coolant (teal)

- all metal construction
- standard roll-pin locking mechanism

- ergonomically engineered pullbacks and caps
- bright teal anodized aircraft grade aluminum

Nozzles	Male	Female	Description	Anodized A	luminum
	Thread	Thread	2 000.154.01.	Part #	Price/E
		1/2" NPT	R-series coolant nozzle	R-CN	\$454.85
6		½" NPT	R-series coolant nozzle with plug	R-CN-P	537.05
			R-series coolant nozzle plug	R-CN-PLUG	104.50

Receivers	Male Thread	Female Thread	Description	Anodized A. Part #	<i>luminum</i> Price/E
			R-series coolant receiver R-series coolant receiver with cap R-series coolant receiver cap	R-CR R-CR-C R-CR-CAP	\$165.00 248.35 104.50

Flomax R Series Connectors

B Dry Disconnect

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

Male	Female	Description	Anodized A	luminum	Nozzles
Thread	Thread	Description	Part #	Price/E	NOZZIES
	1" NPT 1" NPT	R-series hydraulic nozzle R-series hydraulic nozzle with plug	R-HN R-HN-P	\$530.70 614.05	
		R-series hydraulic nozzle plug	R-HN-PLUG	104.50	

Male Thread	Female Thread	Description	Anodized A Part #	<i>luminum</i> Price/E	Receivers
		R-series hydraulic receiver R-series hydraulic receiver with cap R-series hydraulic receiver cap	R-HR R-HR-C R-HR-CAP	\$261.25 344.60 104.50	

Transmission Fluid (violet)

- all metal construction
- standard roll-pin locking mechanism

- · ergonomically engineered pullbacks and caps
- bright violet anodized aircraft grade aluminum

Male	Female	Description	Anodized A	luminum	Nozzles
Thread	Thread	Description	Part #	Price/E	14022163
 	3/4" NPT 3/4" NPT 	R-series transmission nozzle R-series transmission nozzle with plug R-series transmission nozzle plug	R-TN R-TN-P R-TN-PLUG	\$426.25 509.55 104.50	Q1 &1
		, t conso transmission no prag		101100	

Thread Thread Part # Price/E 1.312-12 UN-2A 1.062-12 UN-2B R-series transmission receiver R-TR R-TR-C 281.35	Male	Female	Description	Anodized A	luminum	Receivers
To the second se	Thread	Thread	Description	Part #	Price/E	Neceivers
R-series transmission receiver cap R-TR-CAP 104.50		1.062-12 UN-2B	R-series transmission receiver with cap	R-TR-C	281.35	

B Dry

Dry Disconnect Fittings

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 ¾" female NPT and for the receiver is a 3/4" male NPT.

Nozzles	Female Thread	Description	Anodized Alu Part #	<i>ıminum</i> Price/E
S S S S S S S S S S S S S S S S S S S	3⁄4" NPT	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	\$702.05 702.05 702.05 702.05 702.05 702.05

Receivers	Male	Description	Anodized Al	
100017013	Thread	Boothpaton	Part #	Price/E
	¾" NPT	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	\$344.60 344.60 344.60 344.60 344.60

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

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 Al Part #	<i>luminum</i> Price/E
	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	\$812.05 812.05 812.05 812.05 812.05 812.05 812.05
Receivers	Male NPT	Description	Anodized Al	luminum

Receivers	size	Description	Allouizeu Alullillulli	
			Part #	Price/E
	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	\$509.55 509.55 509.55 509.55 509.55 509.55 509.55