

DIXON VALVE DRY DISCONNECT FITTINGS - MANN-TEK DESIGN

Features & Benefits

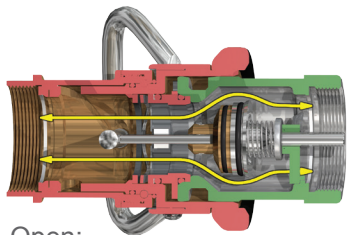
Dry disconnect couplings are designed for the quick and spill free connection and disconnection of hoses and pipelines when transferring expensive hazardous product that is costly to clean up, reprocess or dispose of. Dry disconnects are used by producers of ink, adhesives, fatty acids, pharmaceuticals, 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 properly 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, selective versions of the couplers and adapters are available. Contact the factory for further information.
- produced according to NATO standard STANAG 3756 and ATOFINA SGM 2049.TUY.C.
- interchanges with Avery Hardoll and Todo-matic® STANAG 3756
- Working Pressure (at ambient temperature 70°F) -
 - aluminum: **230 PSI** up to 4"
 - brass/ gunmetal *: **230 PSI** up to 4"
 - stainless steel: **360 PSI**
- Optional seals:
 - EPDM
 - NBR - nitrile
 - FFPM
 - FKM

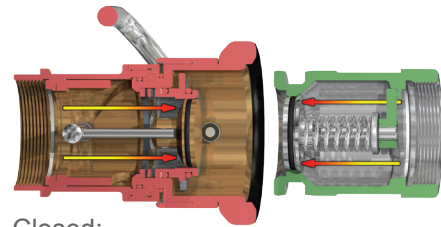
* produced to U.S. government bronze specification G

How It Works



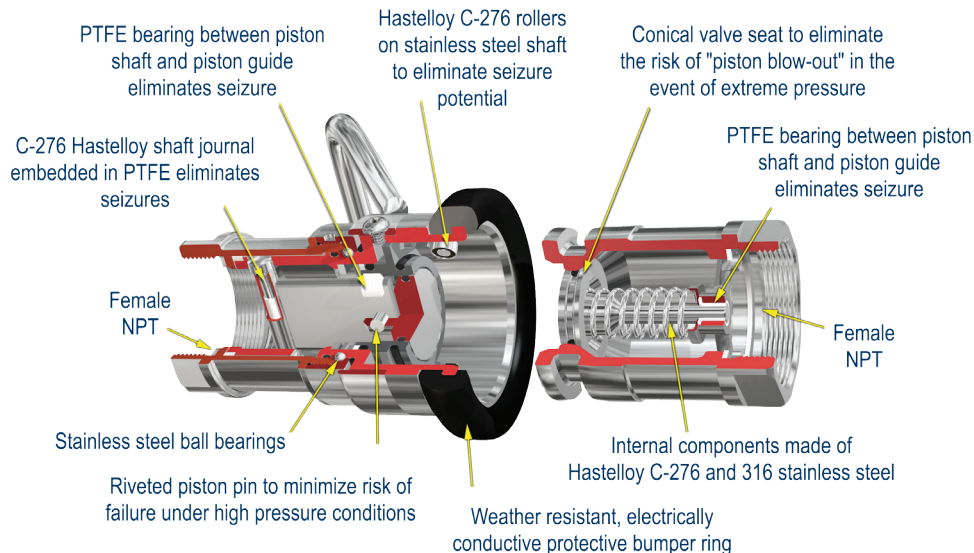
Open:

- Push and turn
it's coupled - full flow



Closed:

- Turn and pull
it's released - no spillage



DDC200SS pictured

Dry Gas Couplings

Coupler - Hose Unit

Applications: Dry gas couplings are designed for safe loading and discharge of bulk delivery trucks and rail cars. They are quick and easy to connect and can be connected to a tank unit with pressures up to **225 PSI**. 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.

Features:

- stainless steel and brass / gunmetal (produced to U.S. government bronze specification G)
- FKM (FPM) seals
- female NPT, female ACME and ASA flanges
- **360 PSI** working pressure at ambient temperature (70°F)
- safe handling of LPG
- reliable and easy to maintain
- can be coupled against higher pressure
- minimizes the risk of cold burns
- minimizes spillage and product loss
- minimizes health risks
- keeps the environment free of hazardous vapors and liquids



female NPT x coupler
DGC300SS

coupler x female NPT with FKM (FPM) seals

Female NPT	Body Size	Stainless Steel
1"	56 mm	DGC100SS
2"	71 mm	DGC200SS
3"	119 mm	DGC300SS

Dust Plugs for Couplers

Feature:

- Composite (Polyeten PE-HD 300) plugs provide good protection against corrosion and withstand hot and cold environments



composite plug

composite dust plug

Size	Body Size	Polyeten PE-HD 300
1"	56 mm	DGDP100
2"	71 mm	DGDP200
3"	119 mm	DGDP300

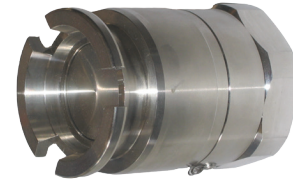
Dry Gas Couplings Adapter - Tank Unit

DRY GAS

Applications: Dry gas couplings are designed for safe loading and discharge of bulk delivery trucks and rail cars. They are quick and easy to connect and can be connected to a hose unit with pressures up to **225 PSI**. 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.

Features:

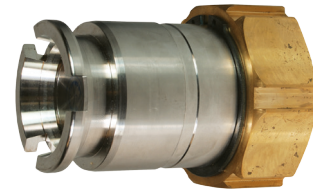
- safe handling of LPG
- reliable and easy to maintain
- can be coupled to a hose unit with pressures up to **225 PSI**
- minimizes the risk of cold burns
- minimizes spillage and product loss
- minimizes health risks
- keeps the environment free of hazardous vapors and liquids
- stainless steel and brass / gunmetal (produced to U.S. government bronze specification G)
- FKM (FPM) seals
- female NPT, female ACME thread and ASA flanges
- **360 PSI** working pressure



adapter x female NPT - DGA200SS

adapter x female NPT with FKM (FPM) seals

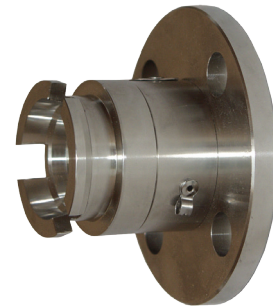
Female NPT	Body Size	Stainless Steel
1"	56 mm	DGA100SS
2"	71 mm	DGA200SS
3"	119 mm	DGA300SS



adapter x female ACME - DGA200SS325

adapter x female ACME thread with FKM (FPM) seals

Female ACME	Body Size	Stainless Steel
1¼"	56 mm	DGA100SS175
3¼"	71 mm	DGA200SS325



adapter x 150# ASA flange - DGA200SSFL

adapter x 150# ASA flange with FKM (FPM) seals

150# ASA	Body Size	Stainless Steel
1"	56 mm	DGA100SSFL
2"	71 mm	DGA200SSFL
3"	119 mm	DGA300SSFL

Dust Caps

dust caps

Size	Body Size	Polyeten PE-HD 300	Rubber
1"	56 mm	DGDC100	---
2"	71 mm	---	DGDC200
3"	119 mm	---	DGDC300

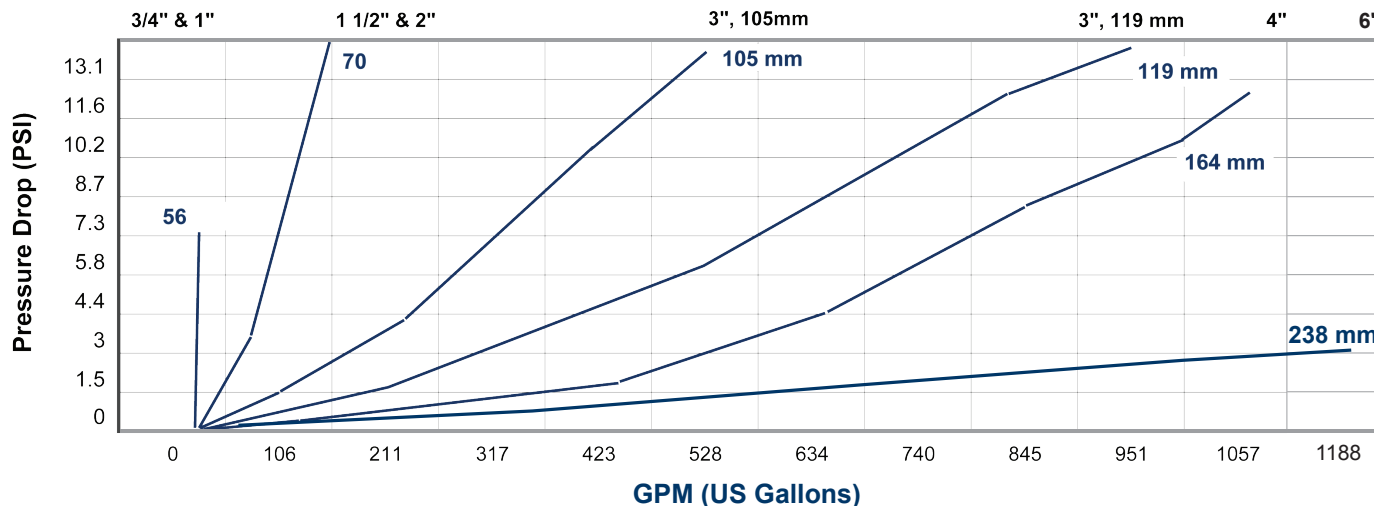


rubber cap

Dry Disconnect Couplings

DRY DISCONNECTS

Flow Rate
Media: Water Temp: 60° F



Spillage on Disconnection

The test was made by coupling and uncoupling 10 times under pressures between one (1) and ten (10) bars. The result we got is a total spillage over 10 coupling cycles and an average spillage on each coupling cycle. The test was carried out with water under ambient temperature.

Size	Socket diameter	Total spill 10 cycles	Average spill 1 cycle
1" – DN 25	56 mm	1 ml	0.1 ml
2" – DN 50	70 mm	3 ml	0.3 ml
2½" – DN 65	105 mm	8 ml	0.8 ml
3" – DN 80	119 mm	10 ml	1.0 ml
4" – DN 100	164 mm	35 ml	3.5 ml

Options for Hose and Tank Units



Electronic Sensors

Electronic Sensors detect the position of the driving plate inside of the hose unit.

No modification on the tank is required. This makes it possible to identify if the hose unit is connected to a tank unit and if they are in an open position.

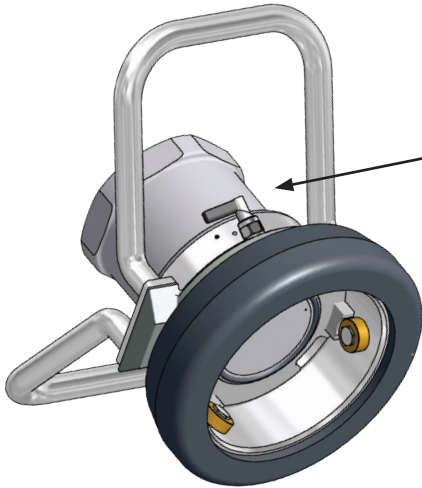


Dry Disconnect Couplings
Options for Hose and Tank Units

DRY DISCONNECTS

Locking Devices

Locking Devices eliminate the unintentional disconnection when subjected to vibration from transfer pumps



4" Hose unit with locking device



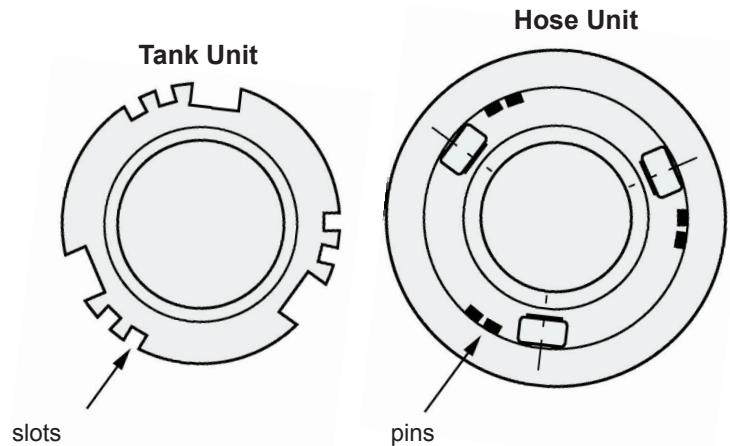
2" Hose unit with locking device

Selectivity Options

Selectivity versions of Hose and Tank units are available to prevent the accidental mixing of media.

The Tank units are furnished with slots and the Hose unit with pins that interlock upon connection.

A number of selectivity options are possible depending on coupling size.



Handle Options

Optional handles are available for 1"- 4" Hose couplers. 2" Hose unit shown.

