Dry Link® Dry Disconnect Couplings

Safer, Faster, Cleaner

- Mechanical interlock prevents accidental opening

- Easy operation and maintenance; up to 50% lighter than comparable dry disconnect units

GUYSON

Dry Link

bsi ISO 9001 Quality Management Systems CERTIFIED

FS 28046

Protects both the environment and employees while conserving every drop of your precious commodity.

Product Information

"The ultimate Dry Disconnect designed for critical applications where any spillage must be avoided. Patented valve design gives a remarkably lightweight, low maintenance unit, while a mechanical interlock prevents accidental openings. With very low pressure drop, ideal for fluid transfer where the prevention of spillage is all important."

High flow through open valve

Drip-free design

- Minimises exposure to fluids in the line
- Eliminates costly clean-ups
- Offers greater protection for workers and the environment

No spills

- Identical disc halves securely seal flow in the line
- Mechanical interlock prevents accidental opening
- Disc must be sealed and closed before coupler and adaptor can be separated

Better flow

- Fewer internal components create a better flow rate
- Smooth bore, simple configuration of Dry Link assembly results in lowest pressure drop available
- Ideal for higher viscosity fluids

Easy operation and maintenance

- Up to 50% lighter than comparable dry disconnect units
- Coupler has built-in swivel which eases alignment
- Parts are accessible for easy maintenance

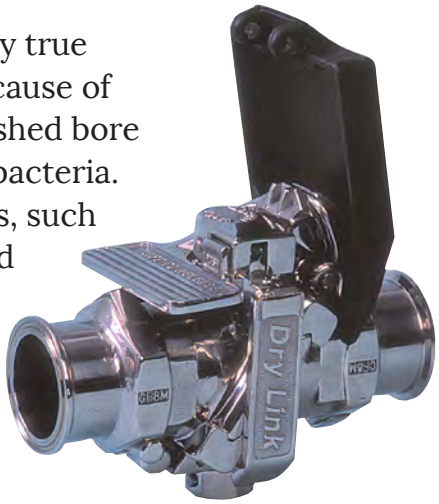
Dry Link dry-disconnect couplings (also called “dry-break couplings”) can be used anywhere a hose is used to transfer fluids, especially where the fluids are hazardous, toxic, corrosive or flammable. This includes bulk fluid transfer applications such as tank trucks, railway wagons and portable tank containers.

Standard couplings

Standard Dry Link can consist of a coupler that can be attached to a hose and an adaptor that can be fixed to a tank, manifold, pipe, or other equipment. An automatic interlocking mechanism shuts off both the coupler and the adaptor when the coupling is connected.

Standard couplings are available in several sizes, end connections and seal materials.

Sanitary couplings



Dry Link sanitary couplings in ½” to 4” sizes that are the only true sanitary, high purity, drip-free couplings available today because of their simple butterfly valve design. The smooth mirror-polished bore has no voids, dead space, crevices or fillers that could trap bacteria. Easily drainable and sanitized using steam or other methods, such as CIP, SIP etc, our sanitary couplings are routinely specified in pharmaceutical, biotech, semi-conductor, food and cosmetic industries, where ultra cleanliness is required.

Dry Link sanitary couplings are usually specified with wetted internal components polished to 20RA micro-inch mirror finish. Wide choices of sizes, body and seal materials and end connections with full material test certifications. MTR, FDA and USP certifications are available.

Body material

All wetted parts of standard and sanitary couplings are Type 316 stainless steel. For services where severe corrosives are a concern, Dry Link couplings are also available with Alloy 20 (Carpenter 20) or Hastelloy C wetted parts construction.

Selection Guide

Body Material	Size, inch (DN)*					Body Style		
	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary
Stainless Steel 316	●	●	●	●	●	●	●	●
Alloy 20 (Carpenter 20)			●	●		●	●	
Hastelloy C	●	●	●			●	●	

**1/2" and 3/4" sizes are also available by special order. These use a 1" body and are adapted down to the relevant size.*

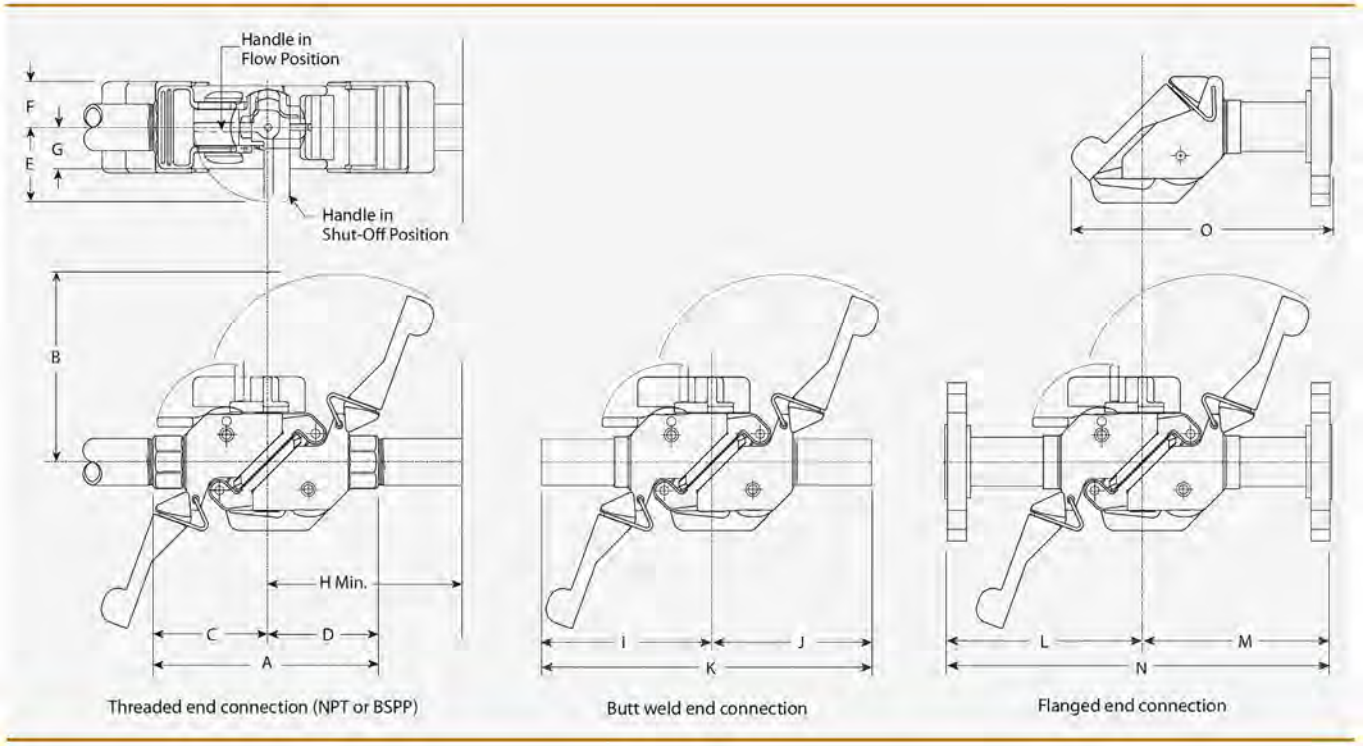
Seal Material	Size, inch (DN)*					Body Style		
	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary
Fluoroelastomer®	●	●	●	●	●	●	●	●
EPDM	●	●	●	●	●	●	●	●
PTFE (Teflon®)	●	●	●	●	●	●	●	●
Perfluoroelastomer (FFKM, Chemraz®, Kalrez®)	●	●	●	●	●	●	●	●

End Connection	Size, inch (DN)*					Body Style		
	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary
Female threaded (NPT or BSPP)	●	●	●	●	●	●	●	●
Butt weld	●	●	●	●	●	●	●	●
Flanged	●	●	●	●	●	●	●	●
Triclover**	●	●	●	●	●	●	●	●

***Triclover end connections are normally made to US standard. By special request, they can be made to DIN standard.*

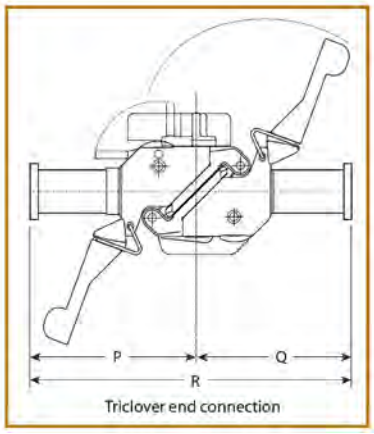
Standard and Sanitary Couplings 1 and 1½" inch (25 and 40 DN)

Couplers include a standard built-in swivel. Optional swivel is available for adaptors.
Available in Stainless Steel 316 body material.



Weight lb/kg

	Threaded End		Butt Weld		Flanged		Triclover	
Nominal Size	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**
1 in.	2	1.8	3.1	2.8	5.3	5	3.1	2.8
25DN	0.9	0.8	1.4	1.3	2.4	2.3	1.4	1.3
1 1/2 in.	3.4	3.1	5	4.6	7.4	7	5	4.6
40 DN	1.5	1.4	2.3	2.1	3.4	3.4	2.3	2.1



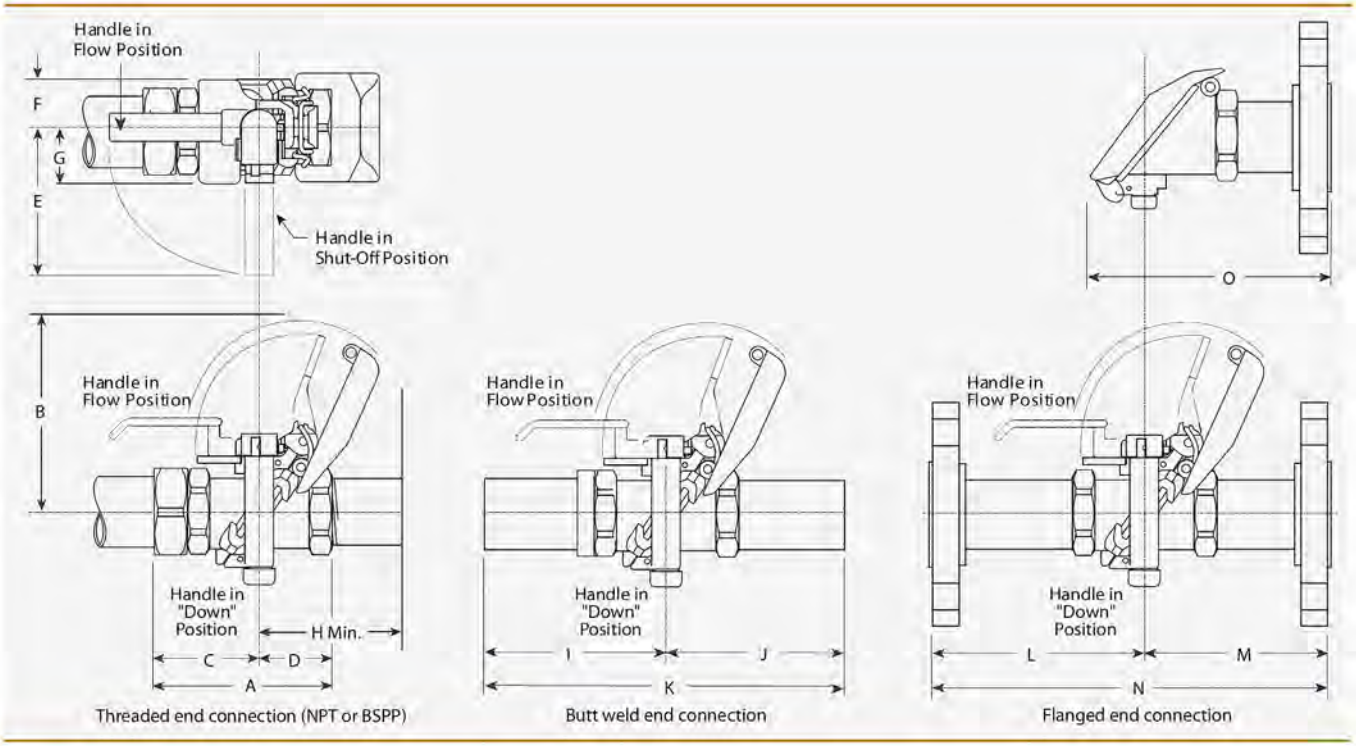
Dimensions inches/mm

	All Units								Butt Weld			Flanged				Triclover		
Nominal Size	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
1 in.*	6.26	5.31	3.16	3.1	2.1	1.17	1.17	3.1	6.25	5.85	12.1	5.55	5.13	10.68	6.8	4.56	4.56	9.12
25 DN	159	135	80	79	53	30	30	79	169	149	307	141	130	271	173	116	116	232
1 1/2 in.	7.4	6.76	3.75	3.65	2.5	1.42	1.42	3.65	8.03	8.03	15.66	7.03	6.63	13.66	8.75	5.12	5.12	10.25
40 DN	188	171	96	93	64	36	36	93	204	204	398	179	168	347	222	130	130	260

**1/2" and 3/4" sizes are also available by special order. These use a 1" body and are adapted down to the relevant size.*

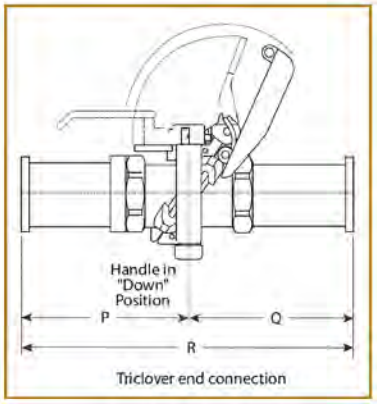
Standard and Sanitary Couplings 2, 3 and 4 inch (50, 80 and 100 DN)

Couplers include a standard built-in swivel. Optional swivel is available for adaptors.
Available in Stainless Steel 316 and Alloy 20 body material.



Weight lb/kg

	Threaded End		Butt Weld		Flanged		Triclover	
Nominal Size	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**	**Coupler**	**Adaptor**
2 in.	5.0	3.0	7.0	5.0	11.5	9.0	7.0	5.0
50 DN	2.3	1.4	3.2	2.3	5.2	4.1	3.2	2.3
3 in.	14.0	9.0	16.5	11.5	21.5	15.8	16.5	11.5
80 DN	6.4	4.1	7.5	5.2	9.8	7.2	7.5	5.2
4 in.	17.0	13.0	18.3	13.3	27.0	21.3	18.3	13.3
100 DN	7.7	5.9	8.3	6.1	12.3	9.7	8.3	6.1



Dimensions inches/mm

	All Units								Butt Weld			Flanged				Triclover		
Nominal Size	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**
2 in.	6.26	6.50	3.73	2.53	5.25	1.70	2.00	5.00	8.90	8.56	17.46	8.00	6.56	14.59	8.40	4.00	4.00	8.00
50 DN	159	165	95	64	133	43	51	127	278	217	495	255	167	421	203	102	102	204
3 in.	8.54	9.88	5.04	3.50	7.38	2.35	2.65	7.00	13.27	12.56	25.83	11.06	7.56	18.62	10.25	7.29	5.75	13.04
80 DN	217	251	130	89	187	60	67	178	337	319	656	281	192	473	241	185	146	331
4 in.	12.54	9.88	7.04	5.50	7.38	2.35	2.65	7.00	13.27	12.56	25.83	11.06	7.56	18.62	10.25	9.54	8.00	17.54
100 DN	319	251	179	140	187	60	67	178	337	319	656	281	192	473	241	242	203	446

Technical Information

This product is not recommended for use with gases!

Pressure Data

Maximum Working Pressure

1”	(DN 25)	size - 210 psi	(14.3 bar)
1 ½”	(DIN 40)	size - 210 psi	(14.3 bar)
2”	(DN 50)	size - 150 psi	(10.3 bar)
3”	(DN 80)	size - 120 psi	(8.3 bar)
4”	(DN 100)	size - 120 psi	(8.3 bar)

WARNING

FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1.5 times the figures shown. Vacuum: Tested to 28” (711mm Hg) vacuum in all positions without leakage.

MISCELLANEOUS TEST DATA

Bending Moments (coupled assembly): Maximum 200 ft-lbs. (271 n*m) at the swivel.

TEMPERATURE DATA

The Dry Link Adaptor/Coupler assembly has an operating temperature range of: -20° F to +230° F (-29° C to +110° C), using Fluoroelastomer or EPDM seals and +20° F to +230° F (-7° C to +110° C) using PTFE seals.

Seals made of Perfluoroelastomer material may be related to higher temperatures.

Materials Data

Wetted Metal Parts:

All 316 Stainless Steel (standard), Alloy 20 (Carpenter 20 CB-3) and Hastelloy C (Optional)

*Disc is electroless nickel plated (ENP) to minimize wear and galling.

Main Seals:

Fluoroelastomer: Typically used for oxidising acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, or organic liquids.

EPDM: Typically used with dilute acids, ketones, or alcohol.

PTFE: Typically used with most chemicals and solvents.

Perfluoroelastomer (FFKM/Chemraz®/ Kalrez®): Typically used for higher temperatures and for fluids that have suspended grit.

Product Guidance Chart

Dry Link® Couplings are available in a variety of standard and special features as shown below.

Type	Size	Body Material	Main Seal Material	End Connection	Special Features
Coupler (Style 250)	1" (DIN 25) 1.5" (DIN 40) 2" (DIN 50) 3" (DIN 75) 4" (DIN 100)	SS 316 Alloy 20 Hastelloy C	PTFE Viton EPDM Chemraz	BSPP (female) NPT (female) Butt weld Flanged (ANSI Class 150) Triclover	Sanitary with 20 RA polished internals FDA approved seals Keyed couplings As specified by the customer
Adaptor (Style 260)	1" (DIN 25) 1.5" (DIN 40) 2" (DIN 50) 3" (DIN 75) 4" (DIN 100)	SS 316 Alloy 20 Hastelloy C	PTFE Viton EPDM Chemraz	BSPP (female) NPT (female) Butt weld Flanged (ANSI Class 150) Triclover	Sanitary with 20 RA polished internals FDA approved seals Keyed Couplings Safety pressure cap with back-up seal Staging accessory for vertical loading As specified by the customer

Certification Documentation

All our couplings are individually and rigorously tested for leaks before being released for sale. In addition, we can provide certification documentation for our couplings.

- Material test certification (heat lot codes with chemical and physical properties)
- Seal material certification (FDA and USP certifications)
- Certificates of conformance
- Production test certificates (pressure test certificates)
- Certified drawings

Chemicals can be inexpensive until they leak or drip, and then cost thousands to clean up! You can avoid this expense and associated legal actions - just use Dry Link.

Dry Link uses a unique drip-free design to trap chemicals before they leak onto the floor. Protect your workforce, the environment and your budget.

Dry Link products are also lightweight for ease of handling and use fewer internal components for maximum flow.

For more information, contact us at:

Guyson International Limited, Hose & Couplings Division
Southview Business Park, Guiseley, Leeds LS20 9PR

Tel: +44 (0)1943 870044
Email: leeds@guyson.co.uk | www.guyson.co.uk

GUYSON

bsi ISO 9001 Quality Management Systems CERTIFIED
FS 28046

Dry Link

NOTE: all technical information shown corrrect at time of print and may be subject to change without notice. For specific applications, please consult Guyson Technical Department.