# **Dry Disconnect Couplings**





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

#### No drips

- Protect environment and employees
- Minimize exposure to fluids
- Eliminate costly clean up

#### No spills

- Secure flow shut-off
- Flow stopped and components sealed before coupling can be separated
- Interlock prevents accidental opening
- Helps meet EPA standards



High flow through open valve

#### **Better flow**

- Smooth bore
- Simple configuration
- Low pressure drop
- Ideal for higher viscosity fluids

#### **Smaller and lighter**

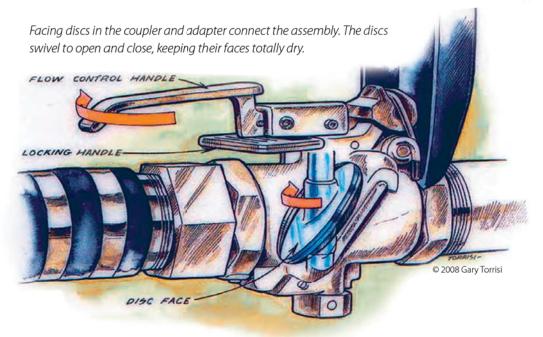
- Compact and lightweight
- Easy to manoeuvre
- Fits in tight spaces
- Yet still drip free and high flow



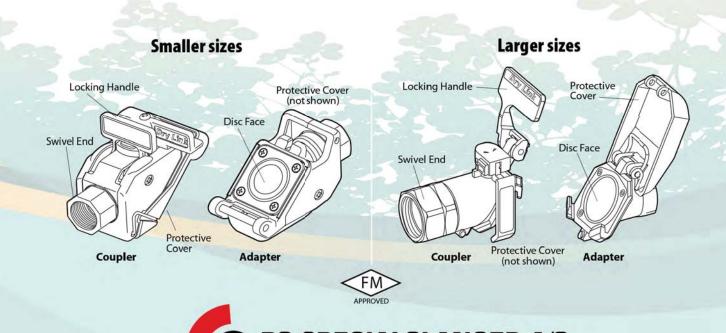


#### No drips, no spills

Dry Link couplings trap fluids before they drip onto the floor or ground. Even small drips can pollute or be dangerous or expensive. Disconnected Dry Link couplings are completely drip free.



The flow shut-off mechanism resembles a butterfly valve with very low flow restriction. This design enhances flow while also reducing the risk of internal gunk-ups that can lead to connection malfunctions. A safety interlock prevents accidental opening, and a unique sealing arrangement results in the world's most drip-free dry disconnect.

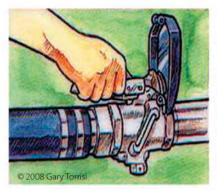


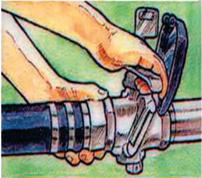
SMEDELAND 14 2600 GLOSTRUP TLF: 43 444 614 WWW.BSSP.DK

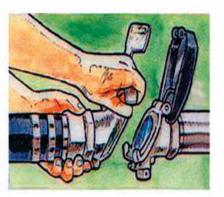


#### No-hassle operation

- Built-in swivel end in coupler for easy hose alignment.
- Up to 50% lighter than comparable dry disconnect couplings.
- Easy maintenance. Accessible parts.







Turn flow control handle.

Press release and lift locking handle.

Remove coupler.

Coupling disconnects totally dry, with no drips.

Dry Link is the premier manufacturer of dry-disconnect hose couplings for the chemical, petrochemical, pharmaceutical, biotechnology, and food industries. Ideal for hazardous, high viscosity, high-flow, and hygienic applications.

Dry Link's patented couplings are up to 50% lighter and more compact than comparable dry-disconnect couplings. Plus, Dry Link couplings use fewer internal components for maximum flow.

Couplings are available in five sizes, three body materials, four seal materials, and five end connections. We also offer sanitary and keyed couplings.

We understand that the modern world depends on substances that could cause harm if they are not stored or handled properly.

The only true drip-free coupling on the market. Offers a greater protection to workers, eliminates costly clean-ups, and helps you meet EPA standards. Dry Link couplings also help reduce green house gases.

Action-Sealtite are Dry Link's only authorised Euro distributor. Dry Link are the worldwide industry leader in dry-disconnect products. We place a high value on listening to our customers and building strong and lasting relationships. We are committed to superior service and quality. Our innovative products and attention to custom orders have earned us a leadership position in this business. We aim for a safer workplace and a cleaner world.

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

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

#### Sanitary couplings

Dry Link sanitary polished couplings in 1/2" to 4" sizes are the only true sanitary, high purity, drip-free couplings available today because of their simple butterfly design. The smooth mirror-polished bore has no voids, dead spaces, 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, although we also offer unpolished internals at economy prices. Wide choice of sizes, body and seal materials and end connections with full material test certifications. (MTR), FDA and USP certifications are available.

#### **Housing 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.

#### **Keyed couplings**

Keyed couplings are used in batch process plants and manifolds for preventing accidental cross-contamination of fluids.

A mechanical interlock allows only a matching coupler and adapter to be connected.







### Selection guide



Housing material		S	Size, inch (D	)N)*		Housing style				
iousing material	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary		
Stainless Steel 316	•	•	•	•	•	•	•	•		
Alloy 20 (Carpenter 20)			•	•		•	•			
Hastelloy C		•	•			•	•			

<sup>\*1</sup>-inch couplings with smaller end connections such as 1/2" and 3/4" are available by special order.

Seal material		S	ize, inch (C	N)		Housing style				
Jean Material	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary		
Fluoroelastomer (FKM, Viton®)	•	•	•	•	•	•	•	•		
EPDM	•	•	•	•	•	•	•	•		
PTFE (Teflon®)	•	•	•	•	•	•	•	•		
Perfluoroelastomer (FFKM, Chemraz®, Kalrez®)	•	•	•	•	•	•	•	•		

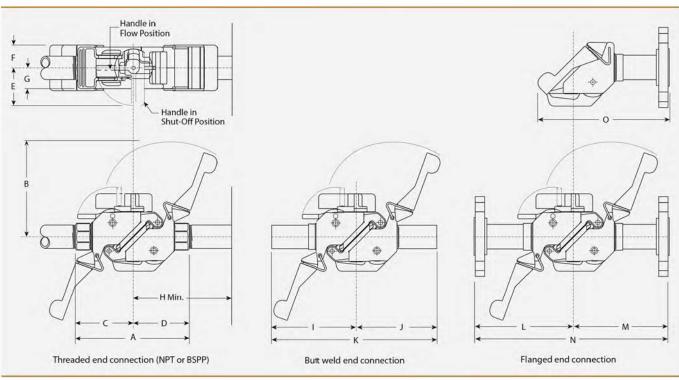
End connection		S		Housing style				
	1 (25)	1.5 (40)	2 (50)	3 (80)	4 (100)	Standard	Keyed	Sanitary
Female threaded (NPT or BSPP)	•	•	•	•	•	•	•	•
Butt weld	•	•	•	•	•	•	•	•
Flanged	•	•	•	•	•	•	•	•
Triclover**		•	•	•	•	•	•	•

<sup>\*\*</sup> Triclover end connections are normally made to US standard. By special request, they may be made to DIN standard.



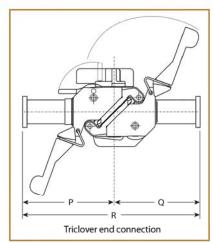
#### Standard and Sanitary Couplings 1 and 1 ½ inch 25 and 40 DN

Couplers include a standard built-in swivel. Optional swivel is available for adapters. Available in Stainless Steel 316 housing material. For Hastelloy C, please see page 9.



#### Weight lb/kg

	Thread	ed end	Butt	weld	Flan	ged	Triclover		
Nominal size	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	
1 in.	2.0	1.8	3.1	2.8	5.3	5.0	3.1	2.8	
25 DN	0.9	0.8	1.4	1.3	2.4	2.3	1.4	1.3	
1 <sup>1</sup> / <sub>2</sub> in.	3.4	3.1	5.0	4.6	7.4	7.0	5.0	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				Flar	nged		Triclover		
Nominal size	A	В	C	D	E	F	G	Н	1	J	K	L	М	N	0	P	Q	R
1 in.*	6.26	5.31	3.16	3.10	2.10	1.17	1.17	3.10	6.25	5.85	12.10	5.55	5.13	10.68	6.80	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 <sup>1</sup> /2 in.	7.40	6.76	3.75	3.65	2.50	1.42	1.42	3.65	8.03	7.63	15.66	7.03	6.63	13.66	8.75	5.12	5.12	10.25
40 DN	188	171	95	93	64	36	36	93	204	194	398	179	168	347	222	130	130	260

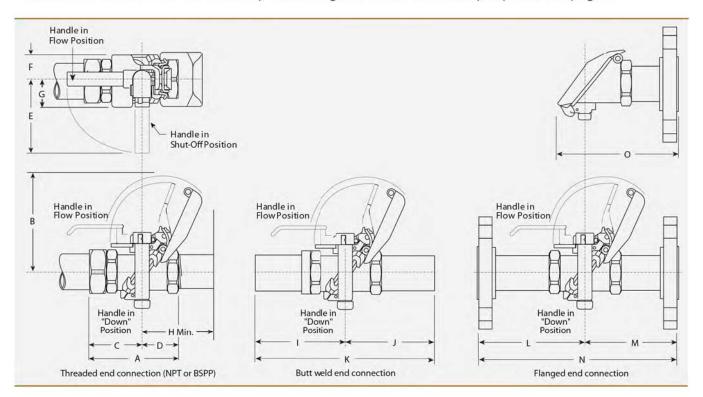
<sup>\*1-</sup>inch couplings with smaller end connections such as 1/2" and 3/4" are available by special order.





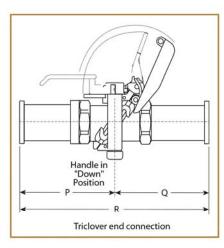
#### Standard and Sanitary Couplings 2, 3, and 4 inch 50, 80, and 100 DN

Couplers include a standard built-in swivel. Optional swivel is available for adapters. Available in Stainless Steel 316 and Alloy 20 housing materials. For Hastelloy C, please see page 9.



#### Weight lb/kg

	Threaded end		Butt	weld	Flar	nged	Triclover		
Nominal size	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	
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	



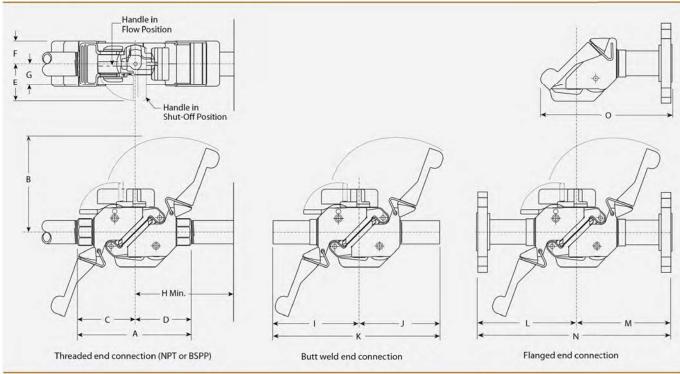
#### Dimensions inches/mm

	All units								Butt wel	d		Flai	nged		Triclover			
Nominal size	Α	В	C	D	E	F	G	Н	1	J	K	L	М	N	0	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



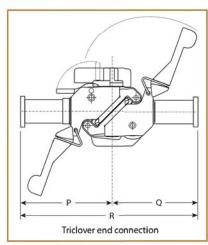
#### Hastelloy C Couplings 1, 1 ½, and 2 inch 25, 40, and 50 DN

Dry Link couplings with Hastelloy C wetted parts are especially designed for highly corrosive applications.



#### Weight lb/kg

	Thread	Threaded end		weld	Flan	ged	Triclover		
Nominal size	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	Coupler	Adapter	
1 in.	3.4	3.1	5.0	4.6	7.4	7.0	5.0	4.6	
25 DN	1.5	1.4	2.3	2.1	3.4	3.4	2.3	2,1	
1 ½ in.	3.4	3.1	5.0	4.6	7.4	7.0	5.0	4.6	
40 DN	1.5	1.4	2.3	2.1	3.4	3.4	2.3	2.1	
2 in.	4.9	3.5	5.7	5.3	9.4	9.0	Contact Dry Link	Contact Dry Link	
50 DN	2.2	1.6	2.6	2.4	4.3	4.1	Contact Dry Link	Contact Dry Link	



#### Dimensions inches/mm

	All units							- 1	Butt wel	d		Flar	iged		Triclover			
Nominal size	Α	В	C	D	E	F	G	Н	1	J	K	L	М	N	0	Р	Q	R
1 in.	7.40	6.76	3.75	3.65	2.50	1.42	1.42	3.65	8.03	7.63	15.66	7.03	6.63	13.66	8.75	5.12	5.12	10.25
25 DN	188	171	95	93	64	36	36	93	204	194	398	179	168	347	222	130	130	260
1 ½ in.	7.40	6.76	3.75	3.65	2.50	1.42	1.42	3.65	8.03	7.63	15.66	7.03	6.63	13.66	8.75	5.12	5.12	10.25
40 DN	188	171	95	93	64	36	36	93	204	194	398	179	168	347	222	130	130	260
2 in.	9.37	6.76	5.16	4.21	2.50	1.42	1.42	3.65	9.44	8.19	17.66	8.44	7.19	15.63	9.31	Contact Dry Link	Contact Dry Link	Contact Dry Link
50 DN	238	171	131	107	64	36	36	93	240	208	448	214	183	397	236	Contact Dry Link	Contact Dry Link	Contact Dry Link

#### ■ Maximum working pressure

Nominal size	Stainless 316 and Alloy 20	Hastelloy C
1" (DN 25)	210 psi (14.3 bar)	210 psi (14.3 bar)
1½" (DN 40)	210 psi (14.3 bar)	210 psi (14.3 bar)
2" (DN 50)	150 psi (10.3 bar)	210 psi (14.3 bar)
3" & 4" (DN 80 & DN 100)	120 psi (8.3 bar)	Not applicable

For one-time field test only, the maximum joint working pressure may be increased to 1½ times the figures shown.

#### ■ Bending moments (coupled assembly)

Maximum 200 ft-lb. (271 n·m) at the swivel

#### **■ Vacuum**

Tested to 28" (711 mm) Hg vacuum in all positions without leakage.

#### Operating temperature range

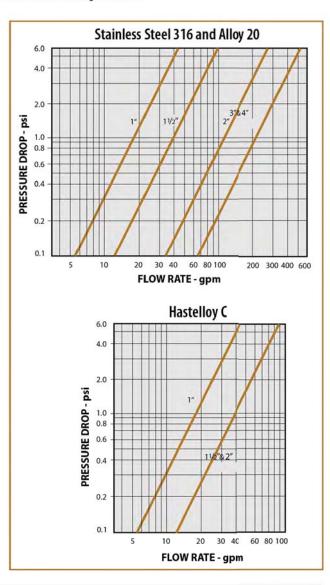
Fluoroelastomer	-20° to +230°F
(Viton®) or EPDM seals	(-29° to +110°C)
PTFE seals	+20°F to +230° F (−7° to +110°C)

Contact Action-Sealtite for higher or lower temperature limit requirements.

#### Wetted metal parts

Standard	All 316 stainless steel ASTM A351, Grade CF8M
Optional	Alloy 20 ASTM A351, Grade CN7M
Optional	Hastelloy C ASTM A494, Grade CW2M

Disc is electroless nickel plated to reduce galling.



#### Seals

Fluoroelastomer (FKM, Viton®)	Typically used for oxidizing 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.			



#### How to order

Please order by specifying component, size, housing material, main seal material, end connection, and any special requirements.

Component	Size	Housing material	Main Seal material	End connection	Special requirements
Coupler (Style 250)	1 inch (DN 25) 1 1/2 inch (DN 40) 2 inch (DN 50) 3 inch (DN 80) 4 inch (DN 100)	SS 316 Alloy 20 Hastelloy C	Fluoroelastomer (FKM, Viton®) EPDM PTFE Perfluoroelastomer (FFKM/Chemraz®/ Kalrez®)	NPT (female) BSPP (female) Butt weld* Flanged** (ANSI Class 150) Triclover***	Sanitary with 20 RA polished internals FDA or USP approved seals Keyed couplings Certification documentation Remote indication
Adapter (Style 260)	1 inch (DN 25) 1 1/2 inch (DN 40) 2 inch (DN 50) 3 inch (DN 80) 4 inch (DN 100)	SS 316 Alloy 20 Hastelloy C	Fluoroelastomer (FFKM, Viton®) EPDM PTFE Perfluoroelastomer (FFKM/Chemraz®/ Kalrez®)	NPT (female) BSPP (female) Butt weld* Flanged** (ANSI Class 150) Triclover***	Sanitary with 20 RA polished internals FDA or USP approved seals Keyed couplings Optional built-in swivel on adapter Certification documentation Remote indication
Repair Parts	Please refer to mai	ntenance manu	uals for ordering parts.		1

#### **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



<sup>\*</sup>Schedule 40 construction \*\*Metric (DN) flanges also available by special order.

<sup>\*\*\*</sup>Also available in sizes 1/2 and 3/4 inches.

# Safeguard your products, your employees and the environment

You can avoid major costs by using Dry Link couplings. These dry disconnect couplings use a unique patented drip-free design to trap chemicals before they leak on the ground or floor. You will avoid lost products (money) and costly cleanups, while protecting both workers and the environment.

Plus, our couplings are compact and lightweight for easy handling and use fewer internal components for maximum flow.













