Sanitary

High-Containment
Split-Butterfly Valves
for **powders** in the
Pharmaceutical &
Biotech Industries







Stainless Steel 316 and Hastelloy C materials

Safe, Easy, Fast Transfer of Powders
Protect employees & environment



www.drylink.com



Providing Solutions for the Pharmaceutical & Biotech Markets

Whether you are a small-scale lab, medium sized batch processor, or large manufacturer, we offer the right High-Containment Valve to safely transfer powders to suit your needs – with full support and validation from start to finish.

Since 1992, Dry Link's patented dry-disconnect couplings have been specified throughout the chemical and pharmaceutical industries for the safe transfer of hazardous liquids. We now introduce sanitary, High-Containment Split-Butterfly Valves that can assure safe and secure transfer of **hazardous powders** in the pharmaceutical, biotechnology, cosmetic and food manufacturing processes.

These valves are available in sizes 1" (DN 25), $1\frac{1}{2}$ " (DN 40), 2" (DN 50), 3" (DN 75) and 4" (DN 100). Addition of this product line will now compliment our standard line of dry-disconnects for liquids renowned worldwide for their unique features.

The High-Containment Valve features a split-butterfly valve design consisting of two halves of a body. Two identical, thin-profile disc halves rotate in unison to create an excellent flow path. A single flow-control handle opens both halves simultaneously. Our patented triple sealing design ensures clean, secure and safe product transfer of powders. Built-in safety interlocks prevent accidental separation. The Coupler half and the Adapter half are bidirectional meaning that either half of the valve can be used as *Active* or *Passive*.

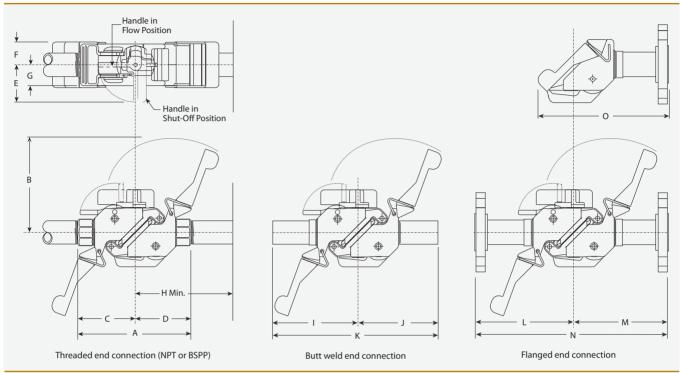
High-Containment Valves are available in SS316 and Hastelloy C materials with PTFE Seals. We recommend all internal surfaces to be polished to 20 RA micro-inch smooth finish to minimize adhesion of solids to the valve, although we also offer unpolished internals at economy prices. The smooth bore has no voids, dead spaces, crevices, or fillers to trap material. Efficient cleaning can be done using CIP/SIP methods. We offer wide choices of sizes, body materials, end connections and surface finishes. Valves can be supplied with removable dust covers. Please visit www.dry.link.com for details.





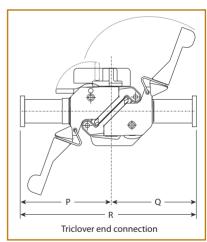
High-Containment Split-Butterfly Valve 1 and 1 ½ inch 25 and 40 DN

Coupler half includes a Flow Control Handle. Adapter half does not have a Handle. Available in Stainless Steel 316 housing material. For Hastelloy C, please see page 5.



Weight lb/kg

	Thread	led 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 ¹ /2 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

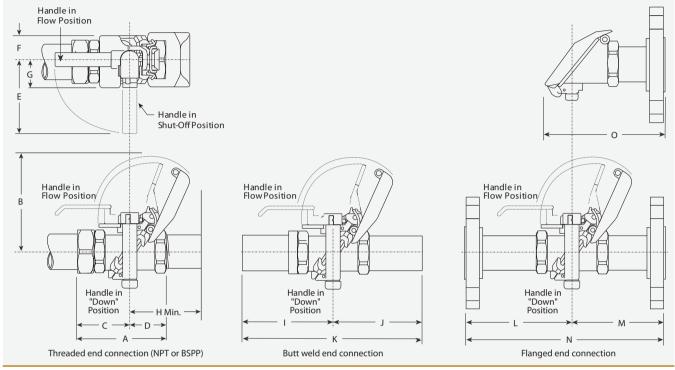
	All units									Butt wel	d	Flanged				Triclover		
Nominal size	Α	В	C	D	Е	F	G	Н	- 1	J	K	L	М	N	0	Р	Q	R
1 in.*	6.26	5.31	3.16	3.10	2.10	1.17	1.17	3.10	6.25	5.85	12.10	5.55	5.13	10.68	6.80	4.56	4.56	9.12
25 DN	159	135	80	79	53	30	30	79	169	149	307	141	130	271	173	116	116	232
1 ¹ /2 in.	7.40	6.76	3.75	3.65	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

^{*1}-inch couplings with smaller end connections such as 1/2" and 3/4" are available by special order.

Safe · Clean · Fast

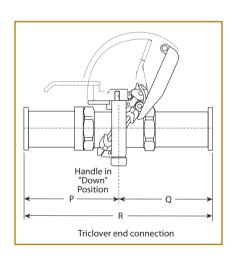
: [YZŽ5a] fS[] _ Wf Elo [fŽ4off Wk HS hW 2, 3, and 4 inch 50, 80, and 100 DN





Weight lb/kg

	Thread	led 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	27.5	21.3	16.5	11.5	
80 DN	6.4	4.1	7.5	5.2	12.2	9.7	7.5	5.2	
4 in.	17.0	13.0	18.3	13.3	32.5	26.8	8.3	13.3	
100 DN	7.7	5.9	8.3	6.1	12.3	9.7	8.3	6.1	

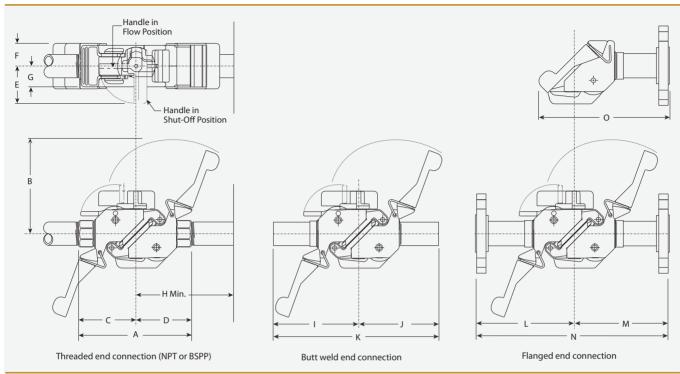


Dimensions inches/mm

				Allι	ınits				I	Butt wel	d	Flanged				Triclover		
Nominal size	Α	В	C	D	E	F	G	Н	-1	J	K	L	М	N	0	Р	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

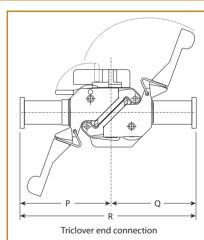
Hastelloy C High-Containment Butterfly Valve 1, 1 ½, and 2 inch 25, 40, and 50 DN

Dry Link valves with Hastelloy C contact parts are especially designed for highly corrosive applications. Coupler half includes a Flow Control Handle. Adapter half does not have a Handle.



Weight lb/kg

	Thread	ed end	Butt 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 ¹ /2 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								Butt wel	d	Flanged				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	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.

Vacuum

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

Operating temperature range

PTFE Seals $+20^{\circ}F$ to $+230^{\circ}F$ $(-7^{\circ}C$ to $+110^{\circ}C)$

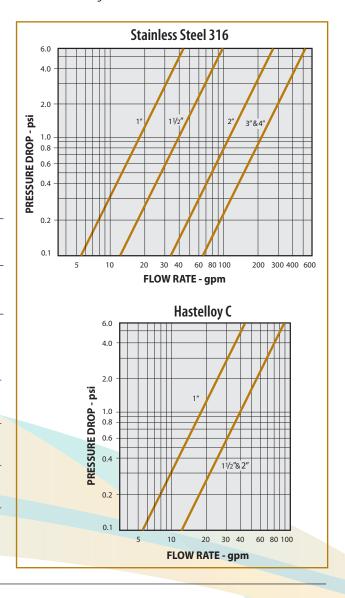
Contact Dry Link for higher or lower temperature limit requirements.

Powder contact metal parts

Standard All 316 stainless steel ASTM A351, Grade CF8M

Optional Hastelloy C ASTM A494, Grade CW2M

Disc is electroless nickel plated to reduce galling.



Seals

PTFE

Typically used with most chemicals and solvents.

For special applications and optional materials, please contact Dry Link.

How to Order

Please order using the Part Numbering System shown below. For optimum service, specify the following options: polished inside body, triclover end connection, and a standard handle on coupler.

Part	Numberi	ng System	for Dry L	ink High-Cont	ainment Valves fo	or Powder App	lications
Prefix for	Size	Body	Main	Type of End	Surface	Type of	Optional
Type of		Material	Seal	Connection	Finish ⁺	Handle	Requirements
Valve			Material				
Half*							
C-Coupler	050 – ½"	S- SS316	T- PTFE	T-Triclover	P-Polished body	0- Not	If FDA seals are
A-Adapter	$075 - \frac{3}{4}$ "	H-Hast C		N-FNPT	inside	applicable	required
	010 - 1"			B-BSPP			
	015 – 1.5"			F-Flanged	O-Polished body	1- Standard,	Optional built-in
	020 - 2"			ANSI 150 #	outside	longer handle	Swivel**
	030 – 3"			D-DIN		on Coupler	
	040 – 4"			Flanged	A-Polished body		Please specify
				W-Butt-Weld	inside & outside	2- Shorter	any special
				A-As specified		Handle on	requirements on
				on PO	U-Unpolished	Coupler	Purchase Order
					•	•	

^{*} Either Coupler half or Adapter half can be made Active or Passive unit.

Example: Coupler Half/size 2"/SS316 body/PTFE Main Seal/Triclover end/Polished inside/Standard Handle

C 020 S T T P 1

Example: Adapter Half/size 2"/SS316 body/PTFE Main Seal/Triclover end/Polished inside

Α	020	S	Т	Т	Р	0	
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Certfication documentation

All our valves 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

Special requirements

We understand that you may have special requirements not covered by our standard products. Our engineering staff welcomes the challenge of your unique requirements. Please contact us.

^{**}A swivel is supplied as *standard* on all Couplers with FNPT, BSPP, Flanged and Butt-weld end connections. It can be supplied as *optional* on units with triclover end connection.

[†] Polished discs are supplied as standard on all couplers and adapters at no extra charge.

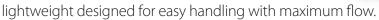
www.drylink.com

Help keep our planet green

Dry Link is a global company, with products in place on all continents. As responsible citizens of this planet, our customers are choosing environmentally friendly products such as Dry Link valves & couplings to help reduce global warming, improve deteriorating ecology, and save disappearing wildlife. We can't solve the climate crisis alone, but we can take small steps together. Dry Link products help keep the planet green ... Go for the GREEN!



You can avoid big fines by using Dry Link's highcontainment valves for powders, and dry-disconnect couplings for liquids. These products use a unique patented leak-tight design to trap chemicals before they leak on the ground or floor. You will avoid costly cleanups while protecting both workers and the environment. Plus, our products are compact and





Dry Link, Inc.

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