

# DESPONIA® plus - Butterfly valve Sizes 1" to 24"

## Description

Centric butterfly valve with elastomer liner for liquids and gases in the industrial range, general services, water treatment, ...

## Product features

- Body construction DP1 Wafer Sizes 1" to 24"  
DP3 Lug Sizes 2" to 24"
- Face to face dimension according to ISO 5752/20, EN 558-1/20
- Top flange according to EN ISO 5211
- Max. working pressure 232/290 psi
- Rating PN 6, PN 10, PN 16, PN 25, ANSI cl. 150
- Temperature range -40°F to 392°F according to material
- Tightness test according to EN 12266-1/P12 leakage rate A, test fluid water

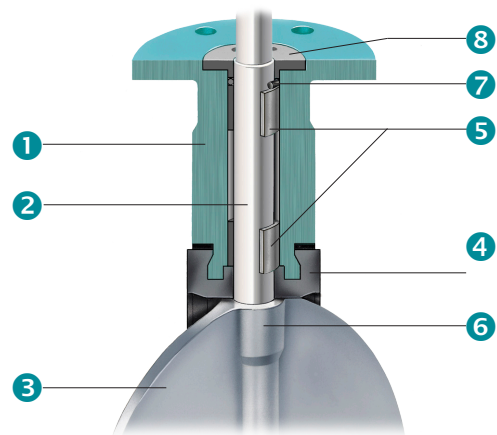
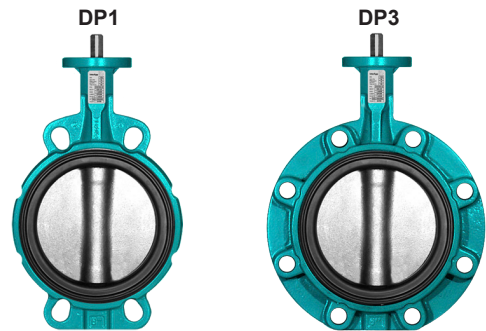


The butterfly valves DESPONIA® plus meet the safety requirements of the pressure Equipments Directive 2014/68/UE (PED) appendix 1 for fluids of the groups 1 and 2.

Butterfly valves DESPONIA® plus are suitable to be operated in safety related systems according to IEC 61508 / 61511, Safety Integrity Level SIL 2

## Construction

1	Body (extended valve neck allowing insulation)
2	Blow out proof shaft with position indication
3	Disc
4	Exchangeable liner with sealing grooves on the tightening face
5	Self-lubricating shaft bushing
6	Square driven disc
7	External shaft sealing
8	Retaining washer (blow out protection)



## Type code

DP1	100	. 3	3	. 2AE	. 4A	. 2AR	. E	-	xx
1	2	3	4	5	6	7	8		9

1	Body type	DP1	Wafer	Sizes 1" - 24"
		DP3	Lug	Sizes 2" - 24"
2	Nominal diameter	025-600	mm (1" - 24")	
3	Working pressure	→	1 = 6 bar (87 psi), 2 = 10 bar (145 psi), 3 = 16 bar (232 psi), 4 = 20 bar (290 psi) (with body 3HE or 4C0, for 2AE body consult our technical department)	
4	Rating	→	1 = PN 6, 2 = PN 10, 3 = PN 16, A = ANSI cl. 150, 5 = PN 25 on request	
5	Body	2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 80 µ	<284 °F DP1+DP3, Sizes 1" - 16"
		3HE	Cast steel GP240GH, 1.0619, Polyurethan coated 80 µ	<284 °F DP1 Sizes 2" - 24", DP3 Sizes 2" - 24"
		4C0	Stainless steel 1.4408, AISI316	DP1 Sizes 2" - 24", DP3 Sizes 2" - 24"
6	Shaft	41	Stainless steel 1.4021, AISI420 (max. 232 psi)	Sizes 1" - 12"
		42	Stainless steel 1.4542 / 17-4PH	Sizes 1" - 12"
		4A	Stainless steel 1.4021, AISI420 (max. 232 psi)	Sizes 14" - 24"
		4L	Stainless steel 1.4542 / 17-4PH	Sizes 14" - 24"
7	Disc	2AR	Ductile iron EN-GJS-400-15, Riisan coated 250 µ (max. 232 psi)	<194 °F <16 bar Sizes 1" - 24"
		2AE	Ductile iron EN-GJS-400-15, Polyurethan coated 80 µ (max. 232 psi)	<248 °F Sizes 1" - 24"
		3HE	Cast steel GP240GH, 1.0619, Polyurethan coated 80 µ	<248 °F Sizes 10" - 24"
		3OD	Carbon steel 1.0552 / GS52.3, Ultralene Coating™ coated <176 °F, pmax. 145 psi ≤ Size 16" / 87 psi >Size 16"	Sizes 3" - 12"
		4C0	Stainless steel 1.4408, AISI316	Sizes 1" - 24"
		4CP	Stainless steel 1.4408, AISI316, polished (max. 232 psi)	Sizes 1" - 24"
		4S0	Super austenitic steel 1.4588	Sizes 1.57" - 24"
		5C0	Alubronze ASTM B148 C95800 / G-Cu Al 10 Ni	Sizes 1" - 24"
8	Liner	→	E = EPDM <203 °F EC = EPDM HT <266 °F V = FPM (Viton®) <392 °F <232 psi N = Nitril (NBR) <212 °F H = CSM (Hypalon) <230 °F <232 psi Other materials and white and blue liners (FDA & EC 1935/2004) on request S = MVQ (Silicone) <392 °F <87 psi	
		9	Special execution	BL

Max. pressure and temperature limits of application are dependent of the working conditions.



When mounting the valve at the end of a line please note:

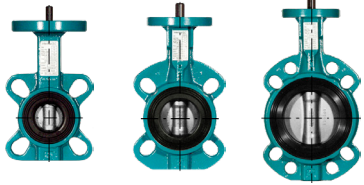
- Body type	DP3
- Medium	only for liquids, 50+86 °F
- Max. working pressure	Sizes 1" - 8" 145 psi
(with 232 psi disc)	Sizes 10" - 24" 87 psi
- no water hammer !!!	
please consult our document "Flanges"	

A dedicated member of the **AVR** Group

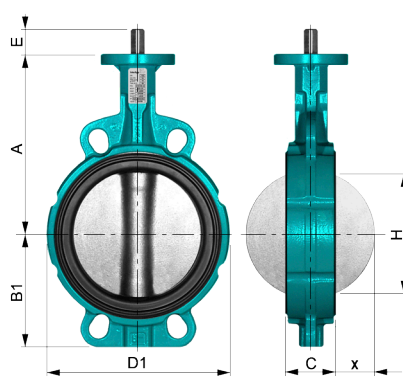
## Dimensions

### DP1 Wafer, Sizes 1" to 24"

Sizes 1"/1.25" Sizes 1.5"/2"/2.5" Sizes 3"/4"



Sizes 5"/6"/8"



Sizes 10" - 16"



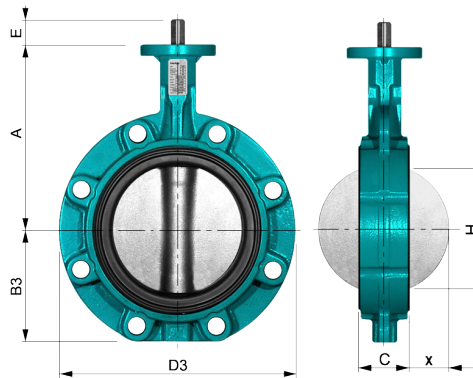
Sizes 18" - 24"



Inch	A	B1	C	D1	E	H*	x*	[lb]
(1) 1 1/4	4.33	2.01	1.18	3.98	0.47	0.75	0.12	3.09
1 1/2	5.12	2.13	1.30	4.25	0.47	1.10	0.24	4.41
2	5.31	2.83	1.69	4.72	0.47	1.26	0.24	6.61
2 1/2	5.91	3.23	1.81	5.28	0.47	1.97	0.43	7.94
3	6.30	3.62	1.81	5.59	0.47	2.72	0.75	8.82
4	7.09	4.33	2.05	6.54	0.47	3.46	1.02	12.13
5	7.68	5.04	2.20	7.44	0.63	4.53	1.42	16.53
6	8.27	5.55	2.20	8.43	0.63	5.55	1.89	18.96
8	9.45	6.85	2.36	10.63	0.75	7.64	2.83	28.00
10	10.98	7.91	2.68	12.76	0.94	9.45	3.58	48.94
12	12.40	9.21	3.07	14.88	0.94	11.42	4.41	67.90
14	12.99	10.55	3.15	16.73	1.57	12.99	5.12	91.49
16	14.37	11.77	4.02	18.70	1.57	14.84	5.71	126.10
18	15.63	13.98	4.45	21.18	2.56	16.73	6.46	209.44
20	17.20	15.47	4.96	23.43	2.56	18.66	7.17	264.55
24	20.55	18.27	6.02	27.36	3.15	22.40	8.58	396.83

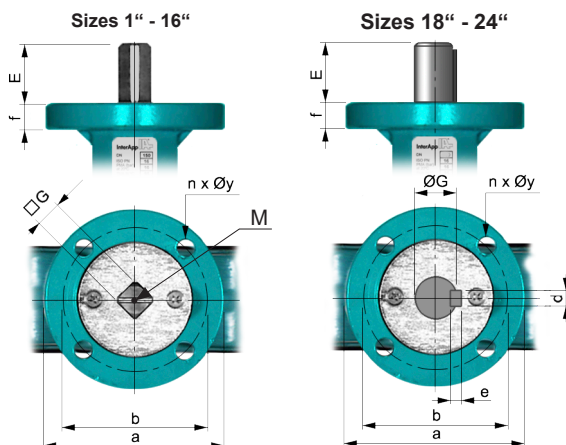
\* When using plastic stubs please check dimension H/x to avoid disc damaging

### DP3 LUG body, Sizes 2" to 24"



Inch	A	B3	C	D3	E	H*	x*	[lb]
2	5.31	2.83	1.69	4.57	0.47	1.26	0.24	7.05
2 1/2	5.91	3.23	1.81	5.16	0.47	1.97	0.43	8.82
3	6.30	3.46	1.81	7.40	0.47	2.72	0.75	13.45
4	7.09	4.02	2.05	8.62	0.47	3.46	1.02	18.74
5	7.68	4.57	2.20	9.76	0.63	4.53	1.42	22.05
6	8.27	5.04	2.20	10.79	0.63	5.55	1.89	24.25
8	9.45	6.34	2.36	13.07	0.75	7.64	2.83	43.21
10	10.98	7.83	2.68	15.83	0.94	9.45	3.58	63.27
12	12.40	9.21	3.07	18.58	0.94	11.42	4.41	90.83
14	12.99	10.16	3.15	20.47	1.57	12.99	5.12	136.69
16	14.37	11.42	4.02	22.99	1.57	14.84	5.71	165.35
18	15.63	13.98	4.45	25.79	2.56	16.73	6.46	315.26
20	17.20	15.51	4.96	28.03	2.56	18.66	7.17	343.92
24	20.55	18.27	6.02	32.64	3.15	22.40	8.58	529.11

### Top flange according to EN ISO 5211



Inch	E	G	M	d	e	f	ISO	a	b	n x øy
(1) 1 1/4	0.47	□ 0.31	M4	-	-	0.47	F07	3.54	2.76	4 x 0.35
1 1/2	0.47	□ 0.31	M4	-	-	0.47	F07	3.54	2.76	4 x 0.35
2	0.47	□ 0.43	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
2 1/2	0.47	□ 0.43	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
3	0.47	□ 0.43	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
4	0.47	□ 0.43	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
5	0.63	□ 0.55	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
6	0.63	□ 0.55	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
8	0.75	□ 0.67	M6	-	-	0.47	F07	3.54	2.76	4 x 0.35
10	0.94	□ 0.87	-	-	-	0.71	F10/F12	6.10	4.02/4.92	4x0.39/4x0.51
12	0.94	□ 0.87	-	-	-	0.71	F10/F12	6.10	4.02/4.92	4x0.39/4x0.51
14	1.57	□ 0.87	-	-	-	0.71	F12	6.10	4.92	4 x 0.51
16	1.57	□ 1.06	-	-	-	0.71	F12	6.10	4.92	4 x 0.51
18	2.56	ø 1.77	-	0.550	0.350	0.98	F14	6.89	5.51	4 x 0.71
20	2.56	ø 1.77	-	0.550	0.350	0.98	F14	6.89	5.51	4 x 0.71
24	3.15	ø 2.76	-	0.790	0.470	0.98	F16	8.66	6.50	4 x 0.87

### Further documentation

Pneumatic actuators, Electric actuators, Accessories according separate data sheets.

Installation guide, Maintenance guide, Flanges: Please consult these guides for the installation and maintenance of our butterfly valves.