

Butterfly Valve Type 038E/039E



Type 038E

Wafer or lug style with electric valve EA or smart electric valve dEA

Type 039E

Wafer style with electric valve EA or smart electric valve dEA

Product description

The butterfly Valve Types 038E and 039E consists of the basic valve body with the electric actuator EA or the smart electric valve dEA.

The metal butterfly Valve Types 038E and 039E can be used universally as open/close or control valves. The easy installation of the valve between pipe flanges ensures reliable operation and sealing. The Rilsan-coating of the valve body and the ductile iron valve disk provide a high resistance against corrosion. The butterfly valves are also available in a standard version with a stainless steel valve disk.

Function

Butterfly valves of types 038E and 039E are intended for shutting off, conveying and dosing media in the allowable pressure and temperature range or for controlling flow in piping systems into which they have been installed

Applications

- Water treatment
- Chemical process industry
- Cooling water facilities
- Power plant
- Shipbuilding

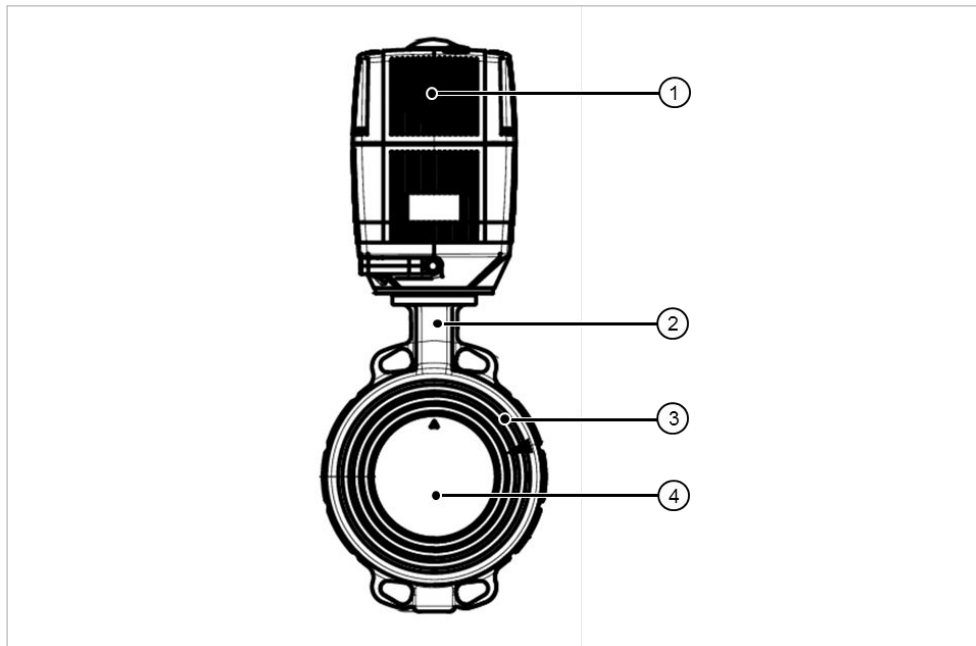
Benefits/features

- Good flow characteristics
- Simple installation
- Ductile cast iron Rilsan/epoxy-coated
- Reliable automatic open/close and control valves
- Lasting high temperature and pressure resistance
- Low maintenance costs and high cost efficiency
- KTW / DVGW / WRAS certification

Flow media

Not recommended for media containing solids

Technical data



- ① Electric actuator EA or dEA
- ② Outside housing
- ③ Flange seal
- ④ Disc

Specification			
Dimensions	Type 038E wafer style or lug style installation	DN50 – DN600, 2” – 24”	
	Type 039E wafer style installation	DN50 – DN1200, 2” – 48”	
Base type	Type 038		
	Type 039		
Materials	Disc	Ductile cast iron Rilsan/epoxy-coated	
		Stainless steel	
		Aluminum bronze	
	Outside housing	Ductile cast iron	
Gasket materials	EPDM, FKM, others upon request		
Pressure levels	Type 038E, 039E	PN10/16	
Actuator type	Type 038E wafer style or lug style installation	EA45/120/250	
	Type 039E wafer style installation	EA45/120/250, Auma	
Connections	Flange connections	EN1092-1	PN10/PN16
		DIN2501	PN10/PN16
		ANSI B16.5	Class 150
	Valve flange	ISO/DIN, BS, ASTM	
Standards	Type 038E	ISO/DIN, ASTM	
	Type 039E	All standards	
Approvals	KTW, DVGW, ACS, WRAS		

Kv 100 values

Nominal diameter DN		Opening angle (m³/h)							
(mm)	(inch)	20°	30°	40°	50°	60°	70°	80°	90°
50	2"	7	16	26	43	69	110	170	190
65	2 ½"	9	22	38	60	95	155	250	280
80	3"	14	33	57	95	150	240	370	430
100	4"	24	54	95	155	240	400	620	710
125	5"	38	86	155	240	390	640	950	1100
150	6"	52	120	220	345	550	950	1400	1600
200	8"	95	220	345	600	950	1600	2400	2800
250	10"	155	345	610	950	1600	2600	4000	4700
300	12"	220	510	860	1500	2300	3800	5900	6900
350	14"	290	660	1200	1900	2900	4800	7800	8600
400	16"	380	860	1600	2400	3900	6400	9500	11 200
450	18"	490	1100	2000	3100	5000	8300	12 900	15 500
500	20"	610	1400	2500	4000	6200	10 300	15 500	19 000
600	24"	860	2000	3400	5500	8600	14 700	22 400	25 900
650	26"	980	2300	4000	6100	10 400	16 650	25 850	31 500
700	28"	1100	2600	4600	6700	12 200	18 600	29 300	37 100
750	30"	1300	3100	5200	8500	13 800	22 400	34 500	40 500
800	32"	1800	3600	6600	9700	16 600	28 300	43 200	52 300
900	36"	2200	4500	7800	12 900	19 800	32 800	51 700	60 300
1000	40"	3100	5300	8700	16 000	24 100	42 200	62 100	78 400
1050	42"	3400	5900	9600	17 700	26 600	46 600	68 400	86 200
1100	44"	3800	6500	10 600	19 500	29 300	51 300	75 100	95 100
1200	48"	4500	7800	12 700	23 300	35 200	61 500	90 700	114 400

Reference values for tightening torque of screws

Use of PVC-U flange adapters

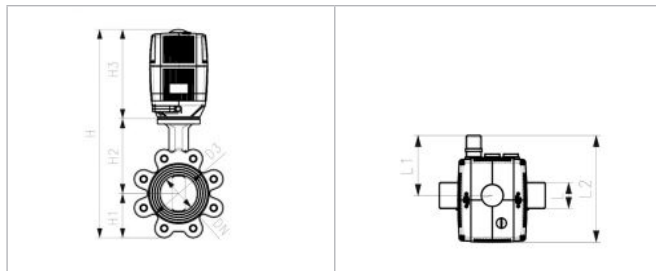
DIN PN16 and PN10 standard								Required screws for Type 039 wafer butterfly valve With PVC-U flange adaptors				Required screws for Type 038 lug style butterfly valve With PVC-U flange adaptors			
Butterfly valve				Flange (DIN-2632)				Studs		Nuts		Screws			
PN (bar)	DN (mm)	Inch (inch)	Housing width A	Flange thickness B	Hole distance øC	Number of holes N°	Outer ø D	Length L	Thread M	Number N°	Thread M	Number N°	Length L	Thread M	Number N°
16	50	2"	43	18	125	4	165	150	M16	4	M16	8	50	M16	-
16	65	2 ½"	46	18	145	4	185	155	M16	4	M16	8	55	M16	4
16	80	3"	46	20	160	8	200	155	M16	8	M16	16	55	M16	8
16	100	4"	52	20	180	8	220	165	M16	8	M16	16	60	M16	8
16	125	5"	56	22	210	8	250	180	M16	8	M16	16	65	M16	8
16	150	6"	56	22	240	8	285	190	M20	8	M20	16	70	M20	8
16	200	8"	60	24	295	12	340	220	M20	8	M20	16	80	M20	8
16	250	10"	68	26	355	12	405	230	M20	8	M20	16	90	M20	8
16	300	12"	78	28	410	12	460	255	M20	12	M20	16	100	M20	12
10	350	14"	78	30	470	16	520	275	M20	16	M20	32	-	-	-
10	400	16"	102	32	525	16	580	310	M24	16	M24	32	-	-	-

Use flanger adapter PP and PE100

DIN PN16 and PN10 standard								Required screws for Type 039 Wafer butterfly flange with flange adapter PP and PE100				Required screws type 038 with flange adapter PP and PE 100			
Butterfly valve				Flange (DIN-2632)				Studs		Nuts		Screws			
PN (bar)	DN (mm)	Inch (inch)	Housing width A	Flange thickness B	Hole spacing øC	Number of holes N°	Outer øD	Length L	Thread M	Number N°	Thread M	Number N°	Length L	Thread M	Number N°
16	50	2"	43	18	125	4	165	160	M16	4	M16	8	55	M16	4
16	65	2 ½"	46	18	145	4	185	165	M16	4	M16	8	60	M16	4
16	80	3"	46	20	160	8	200	170	M16	8	M16	16	60	M16	8
16	100	4"	52	20	180	8	220	175	M16	8	M16	16	65	M16	8
16	125	5"	56	22	210	8	250	200	M16	8	M16	16	80	M16	8
16	150	6"	56	22	240	8	285	210	M20	8	M20	16	80	M20	8
16	200	8"	60	24	295	12	340	230	M20	8	M20	16	90	M20	8
16	250	10"	68	26	355	12	405	250	M20	8	M20	16	100	M20	8
16	300	12"	78	28	410	12	460	270	M20	12	M20	16	110	M20	12
10	350	14"	78	30	470	16	520	340	M20	16	M20	32	-	-	-
10	400	16"	102	32	525	16	580	380	M24	16	M24	32	-	-	-
10	500	20"	126	34	650	20	715	470	M24	20	M24	40	-	-	-
10	600	24"	146	36	770	20	840	420	M27	20	M27	40	-	-	-

Dimensions

Butterfly Valve Type 038E

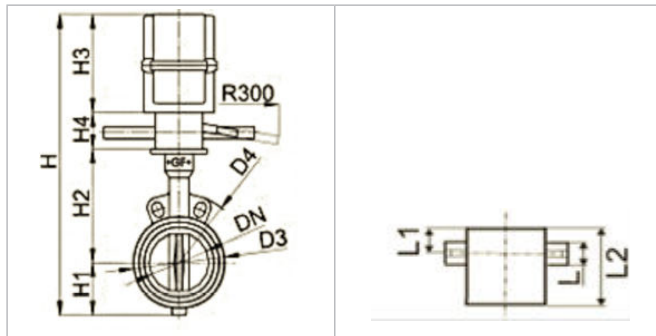


d (mm)	DN (mm)	Inch (inch)	PN (bar)	kv value(Δp=1bar) (l/min)	Cv value (Δp=1psi) (gal(US)/min)
63	50	2	10	3140	220
75	65	2 ½	10	4570	320
90	80	3	10	7140	500
110	100	4	10	11710	820
140	125	5	10	18570	1300
160	150	6	10	27130	1900
225	200	8	10	47130	3300
280	250	10	6	77110	5400
315	300	12	4	114240	8000

d (mm)	DN (mm)	inch (inch)	Type of actuator Type	D3 (mm)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)
63	50	2	EA45	65	43	28	122	393	63	140	190
75	65	2 ½	EA120	114	46	28	122	415	73	152	190
90	80	3	EA120	131	46	28	122	430	81	159	190
110	100	4	EA120	152	52	60	220	333	97	178	58
140	125	5	EA120	182	56	60	220	361	112	191	58
160	150	6	EA250	209	56	60	220	383	122	203	58
225	200	8	EA250	262	60	60	220	452	149	245	58
280	250	10	EA250	331	68	70	220	545	203	275	67

d (mm)	DN (mm)	inch (inch)	Type of actuator Type	D3 (mm)	L (mm)	L1 (mm)	l2 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)
315	300	12	EA250	380	78	70	220	623	241	315	67

Butterfly Valve Type 039E with manual override



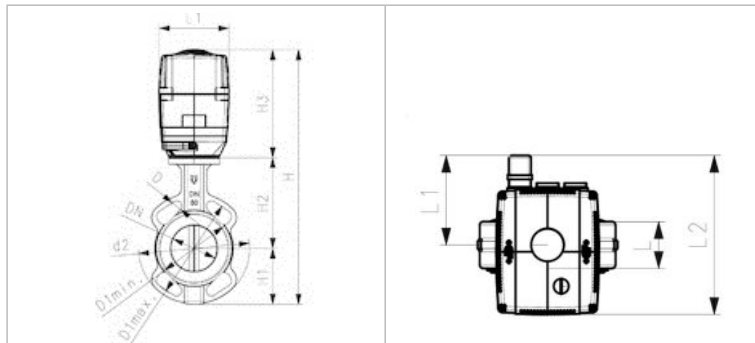
d (mm)	DN (mm)	Inch (inch)	PN (bar)	kv value ($\Delta p=1\text{bar}$) (l/min)	Cv value ($\Delta p=1\text{psi}$) (gal(US)/min)	Q
63	50	2	10	3140	220	32
75	65	2 ½	10	4570	320	51
90	80	3	10	7140	500	69
110	100	4	10	11 710	820	89
140	125	5	10	18 570	1300	115
160	150	6	10	27 130	1900	143
225	200	8	10	47 130	3300	194
280	250	10	10	77 110	5400	243
315	300	12	10	114 240	8000	293
355	350	14	10	143 360	-	332
400	400	16	10	186 700	-	382
450	450	18	10	258 390	-	432
500	500	20	10	316 730	-	478
630	600	24	10	431 750	-	585
700	700	28	10	618 333	-	683
800	800	32	10	675 000	-	755
900	900	36	10	1 005 200	-	852
1000	1000	40	10	1 306 930	-	958
1200	1200	48	10	1 907 050	-	958

d (mm)	DN (mm)	Inch (inch)	Actuator Type	D3 (mm)	D4 (mm)	L (mm)	L1 (mm)	l2 (mm)
63	50	2	EA45	96	165	43	64	181
75	65	2 ½	EA120	114	185	46	28	181
90	80	3	EA120	131	190	46	28	181
110	100	4	EA250	152	229	52	28	181
140	125	5	EA250	182	254	56	60	220
160	150	6	EA250	209	285	56	60	220
225	200	8	EA250	262	343	60	60	220
280	250	10	EA250	323	333	68	70	220
315	300	12	EA250	373	353	78	70	220
355	350	14	GS80	442	460	78	-	130
400	400	16	GS80	493	515	102	-	154
450	450	18	GS100	544	565	113	-	182
500	500	20	GS125	601	620	126	-	182
630	600	24	GS125	695	725	146	-	286
700	700	28	GS125	798	840	175	-	286
800	800	32	GS160	908	950	215	-	286
900	900	36	GS160	1004	1050	246	-	370
1000	1000	40	GS160	1114	1160	280	-	370

d (mm)	DN (mm)	Inch (inch)	Actuator Type	D3 (mm)	D4 (mm)	L (mm)	L1 (mm)	l2 (mm)
1200	1200	48	GS200	1330	1380	360	-	1133

d (mm)	DN (mm)	Inch (inch)	Actuator Type	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)
63	50	2	EA45	352	53	140	159	60
75	65	2 ½	EA120	374	63	152	159	60
90	80	3	EA120	389	71	159	159	60
110	100	4	EA250	415	87	178	149	60
140	125	5	EA250	443	102	191	149	60
160	150	6	EA250	475	122	203	149	60
225	200	8	EA250	540	149	241	149	60
280	250	10	EA250	671	201	273	197	-
315	300	12	EA250	739	231	311	197	-
355	350	14	GS80	905	291	307	307	-
400	400	16	GS80	974	325	342	307	-
450	450	18	GS100	1065	357	387	321	-
500	500	20	GS125	1127	381	425	321	-
630	600	24	GS125	1350	488	532	330	-
700	700	28	GS125	1409	506	573	330	-
800	800	32	GS160	1541	578	650	313	-
900	900	36	GS160	1673	643	707	323	-
1000	1000	40	GS160	1807	729	755	323	-
1200	1200	48	GS200	2103	855	900	348	-

Butterfly Valve Type 039E without manual override



d (mm)	DN (mm)	inch (inch)	PN (bar)	kv-Wert (Δp=1bar) (l/min)	Cv Wert (Δp=1psi) (gal(US)/min)	Q
63	50	2	10	3140	220	32
75	65	2 ½	10	4570	320	51
90	80	3	10	7140	500	69
110	100	4	10	11 710	820	89
140	125	5	10	18 570	1300	115
160	150	6	10	27 130	1900	143
225	200	8	10	47 130	3300	194
280	250	10	10	77 110	5400	243
315	300	12	10	114 240	8000	293
355	350	14	10	143 360	-	332
400	400	16	10	186 700	-	382
450	450	18	10	258 390	-	432
500	500	20	10	316 730	-	478
630	600	24	10	431 750	-	585
700	700	28	10	618 333	-	683
800	800	32	10	675 000	-	755
900	900	36	10	1 005 200	-	852

d (mm)	DN (mm)	inch (inch)	PN (bar)	kv-Wert ($\Delta p=1\text{bar}$) (l/min)	Cv Wert ($\Delta p=1\text{psi}$) (gal(US)/min)	Q
1000	1000	40	10	1 306 930	-	958
1200	1200	48	10	1 907 050	-	958

d (mm)	DN (mm)	inch (inch)	Actuator Type	D3 (mm)	D4 (mm)	L (mm)	L1 (mm)	L2 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)
63	50	2	EA45	96	165	43	64	181	352	53	140	159
75	65	2 ½	EA120	114	185	46	28	181	374	63	152	159
90	80	3	EA120	131	190	46	28	181	389	71	159	159
110	100	4	EA250	152	229	52	28	181	415	87	178	149
140	125	5	EA250	182	254	56	60	220	443	102	191	149
160	150	6	EA250	209	285	56	60	220	475	122	203	149
225	200	8	EA250	262	343	60	60	220	540	149	241	149
280	250	10	EA250	323	333	68	70	220	671	201	273	197
315	300	12	EA250	373	353	78	70	220	739	231	311	197
355	350	14	GS80	442	460	78	-	130	905	291	307	307
400	400	16	GS80	493	515	102	-	154	974	325	342	307
450	450	18	GS100	544	565	113	-	182	1065	357	387	321
500	500	20	GS125	601	620	126	-	182	1127	381	425	321
630	600	24	GS125	695	725	146	-	286	1350	488	532	330
700	700	28	GS125	798	840	175	-	286	1409	506	573	330
800	800	32	GS160	908	950	215	-	286	1541	578	650	313
900	900	36	GS160	1004	1050	246	-	370	1673	643	707	323
1000	1000	40	GS160	1114	1160	280	-	370	1807	729	755	323
1200	1200	48	GS200	1330	1380	360	-	1133	2103	855	900	348



More dimensions are available in the product range of butterfly Valve Types 038 and 039 at www.gfps.com.

Accessories

- Limit switch boxes



For further information on accessories, refer to the online product catalog at www.gfps.com.

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Tel. +41 52 631 11 11 • www.gfps.com • E-Mail: info.ps@georgfischer.com