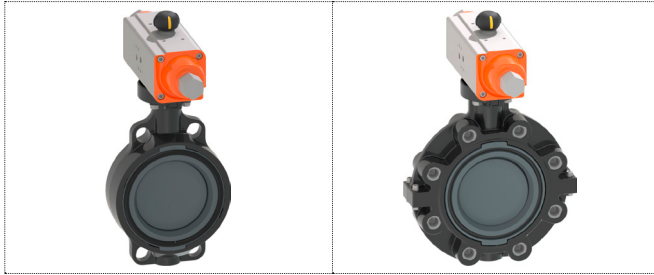


Butterfly Valve Type 240/243/244



Type 240
With pneumatic actuator
PA30 – PA90

Type 243/244
With pneumatic actuator
PA30 – PA90

Product description

The pneumatically actuated Butterfly Valves of types 240, 243 and 244 from GF Piping Systems consist of the valve body of the butterfly Valve Types 567 or 578, combined with the pneumatic actuator series PA30-90. They can be used under the most varied conditions and enable a broad range of applications.

The pneumatic butterfly valves are of modular construction and ideal for process automation. Together with the optionally available pilot valves and the position feedback, they comprise a compact and simultaneously reliable process valve.

Applications

- Industrial water treatment
- Chemical process industry
- Seawater desalinization
- Swimming pools
- Aquariums/oceanariums
- Surface Treatment

Benefits/features

Type 240

- Valve body: PP-GF30
- Low operating torque and low wear on gasket due to double-eccentric operating principle
- Dimension range DN50/2" to DN600/24"
- Low weight and excellent corrosion resistance
- Reliable pneumatic valve control

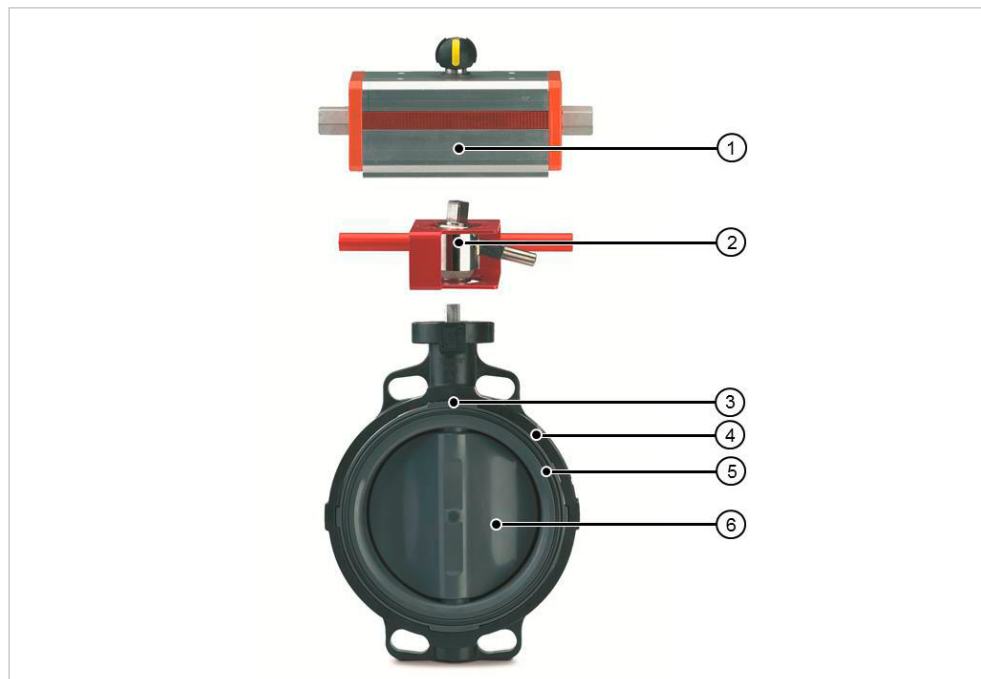
Type 243/244

- Valve housing: PP-GF30 with stainless steel (1.4408) threaded inserts
- Low operating torque and low wear on gasket through double-eccentric operating principle
- Lugged installation possible
- Low weight and excellent corrosion resistance
- Reliable pneumatic valve control

Flow media

- Very well suited for liquid media
- Suited for gaseous media
- Conditionally suited for media containing solids
- Conditionally suited for viscous media

Technical data



- ① Pneumatic actuator, double-acting (optional: single-acting)
- ② Manual override (optional)
- ③ Inner housing
- ④ Outer housing
- ⑤ Flange seal
- ⑥ Disc

Specification

Dimensions	Type 240	d63/DN50 – d630/DN600, 2" – 24"
	Type 243/244	d63/DN50 – d300/DN315, 2" – 12"
Base type	Type 567	
	Type 578	
Materials	Disc / inner housing	PVC-U, PVC-C, ABS, PP-H, PVDF
	Outer housing	PP-GF30
Gasket materials	EPDM, FKM, FKM/PTFE	
Pressure ratings	Type 240, 243, 244	PN4 – PN10
Actuator type	Type 240, 243, 244	PA30 – 90
Connections	Flanges	PVC-U, PVC-C, ABS, PP-H, PVDF, PE according to ISO 7005 PN 10, EN 1092 PN 10, DIN 2501 PN 10, ANSI/ASME B 16.5 Class 150, BS 1560: 1989, BS 4504, JIS B 2220
	Flange adapters	PVC-U, PVC-C, ABS, PP-H, SDR 11: PE100 SDR 11 or SDR 17.6, PVDF
	Backing flange	PVC-U, PP-St / PP-V
Standards	Type 240	All standards
	Type 243	ISO/DIN
	Type 244	ANSI
Approvals	ACS, ABS, DIBt, TA Luft, BV, TSSA, DNV, GL, LR, NSF61, NSF 1970	

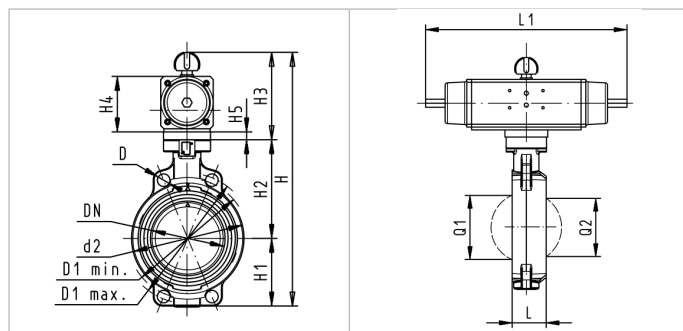


The following technical data can be found in the Planning Fundamentals under Butterfly Valve Type 567/578, manually operated:

- Pressure-temperature diagram
- Pressure loss
- Flow characteristics
- Kv values
- Reference values for screw fastenings

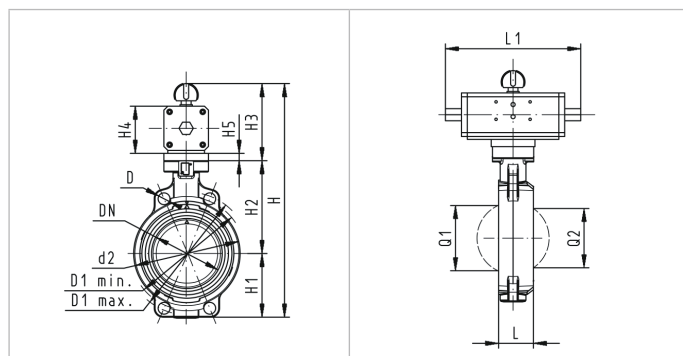
Dimensions

Butterfly Valve Type 240 FC/FO with pneumatic actuator DN50 – DN600



d	d	DN	Act.type	d2	D	D1 _{min}	D1 _{max}	H	H1	H2	H3	H4	H5	L	L1	Q1	Q2
(mm)	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
63	2	50	PA30	104	19	120	125	327.2	77	134	116.2	70.4	18	45	274.4	40	
75	2 ½	65	PA30	115	19	140	145	339.2	83	140	116.2	70.4	18	46	274.4	54	35
90	3	80	PA35	131	19	150	160	364.1	89	146	129.1	83.3	18	49	325.2	67	50
110	4	100	PA40	161	19	175	191	385.8	104	167	114.8	87		56	359.5	88	74
140	5	125	PA45	187	23	210	216	447.5	117	181	149.5	107.5		64	418	113	97
160	6	150	PA50	215	24	241	241	472.1	130	189	153.1	111.1		72	433.9	139	123
225	8	200	PA55	267	23	290	295	528	158	210	160	118		73	498.3	178	169
280	10	250	PA60 FC	329	25	353	362	663.9	205	264	194.9	135	18	113	547.3	210	207
280	10	250	PA70 FO	329	25	353	362	702.1	205	264	233.1	168	23	113	681	210	207
315	12	300	PA65 FC	379	25	400	432	721	228	285	208	148	18	113	646	256	253
315	12	300	PA70 FO	379	25	400	432	746.1	228	285	233.1	168	23	113	681	256	253
355	14	350	APS190	535	29	445	477	863	268	410	185	155	27	129	360	325	305
400	16	400	APS210	595	29	510	540	941	300	435	206	176	27	169	380	353	350
450	18	450	APS240	635	32	565	578	1'046	320	520	206	176	36	179	380	393	390
500	20	500	APS240	700	32	620	635	1'130	350	550	230	200	36	190	462	444	440
630	24	600	APS270	813	35	725	750	1'330	420	610	300	250	36	209	530	530	527

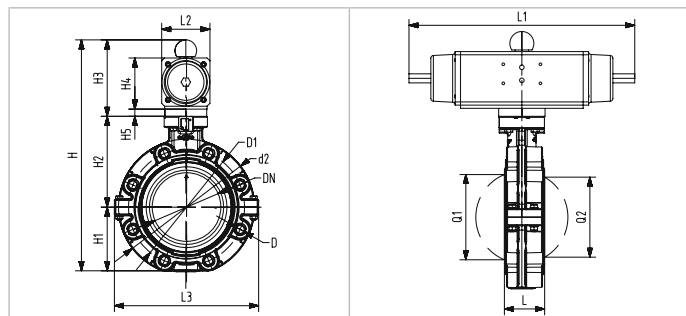
Butterfly Valve Type 240 DA with pneumatic actuator DN50 – DN600



d	d	DN	Act. type	d2	D	D1 _{min}	D1 _{max}	H	H1	H2	H3	H4	H5	L	L1	Q1	Q2
(mm)	(inch)	(mm)		(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
63	2	50	PA35	104	19	120	125	321.3	77	134	110.3	64.5	18	45	196.1	40	
75	2 ½	65	PA35	115	19	140	145	333.3	83	140	110.3	64.5	18	46	196.1	54	35
90	3	80	PA40	131	19	150	160	351.2	89	146	116.2	70.4	18	49	205.6	67	50
110	4	100	PA45	161	19	175	191	382.1	104	167	111.1	83.3		56	242	88	74
140	5	125	PA45	187	23	210	216	409.1	117	181	111.1	83.3		64	242	113	97
160	6	150	PA55	215	24	241	241	468.5	130	189	149.5	107.5		72	290.2	139	123
225	8	200	PA55	267	23	290	295	517.5	158	210	149.5	107.5		73	290.2	178	169
280	10	250	PA65	329	25	353	362	647	205	264	178	118	18	113	339.6	210	207
315	12	300	PA65	379	25	400	432	691	228	285	178	118	18	113	339.6	256	253

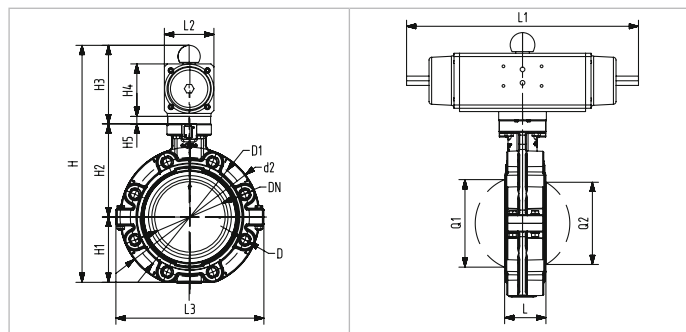
d (mm)	d (inch)	DN (mm)	Act. type	d2 (mm)	D (mm)	D1 _{min} (mm)	D1 _{max} (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	L (mm)	L1 (mm)	Q1 (mm)	Q2 (mm)
355	14	350	APD140	535	29	445	477	863	268	410	185	155	27	129	360	325	305
400	16	400	APD160	595	29	510	540	941	300	435	206	176	27	169	380	353	350
450	18	450	APD160	635	32	565	578	1046	320	520		176	36	179	380	393	390
500	20	500	APD190	700	32	620	635	1130	350	550		200	36	190	462	444	440
600	24	600	APD190	813	35	725	750	1330	420	610		250	36	209	530	530	527

Butterfly Valve Type 243 FC/FO with pneumatic actuator DN50 – DN300



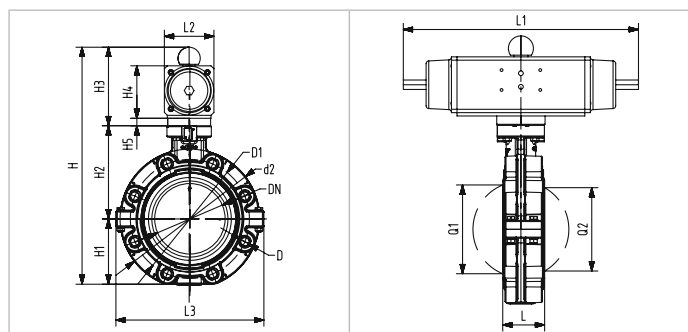
d (mm)	DN (mm)	Act. type	d2 (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Q1 (mm)	Q2 (mm)
63	50	PA30	160	M16	125	327.2	77	134	116.2	70.4	18	45	274.4	70.4	165	40	
75	65	PA30	180	M16	145	339.2	83	140	116.2	70.4	18	46	274.4	70.4	182	54	35
90	80	PA35	195	M16	160	364.1	89	146	129.1	83.3	18	49	325.2	83.3	210	67	50
110	100	PA40	226	M16	180	387.8	106	167	114.8	87		56	359.5	87	240	88	74
140	125	PA45	258	M16	210	451.5	121	181	149.5	107.5		64	418	107.5	272	113	39
160	150	PA50	284	M20	240	475.1	133	189	153.1	111.1		72	433.9	111.1	300	139	123
225	200	PA55	341	M20	295	529	159	210	160	118		73	498.3	118	360	178	169
280	250	PA60 FC	412	M20	350	663.9	205	264	194.9	135	18	113	547.3	134.9	440	210	207
280	250	PA70 FO	412	M20	350	702.1	205	264	233.1	168	23	113	681	168	440	210	207
315	300	PA65 FC	482	M20	400	727	234	285	208	148	18	113	646	148	510	256	253
315	300	PA70 FO	482	M20	400	752.1	234	285	233.1	168	23	113	681	168	510	256	253

Butterfly Valve Type 243 DA with pneumatic actuator DN50 – DN300



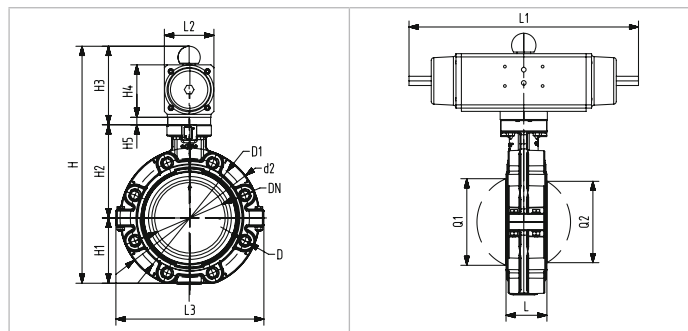
d (mm)	DN (mm)	Act. type	d2 (mm)	D (mm)	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Q1 (mm)	Q2 (mm)
63	50	PA35	160	M16	125	321.3	77	134	110.3	64.5	18	45	196.1	64.5	165	40	
75	65	PA35	180	M16	145	333.3	83	140	110.3	64.5	18	46	196.1	64.5	182	54	35
90	80	PA40	195	M16	160	351.2	89	146	116.2	70.4	18	49	205.6	70.4	210	67	50
110	100	PA45	226	M16	180	384.1	106	167	111.1	83.3		56	242	83.3	240	88	74
140	125	PA45	258	M16	210	413.1	121	181	111.1	83.3		64	242	83.3	272	113	39
160	150	PA55	284	M20	240	471.5	133	189	149.5	107.5		72	290.2	107.5	300	139	123
225	200	PA55	341	M20	295	518.5	159	210	149.5	107.5		73	290.2	107.5	360	178	169
280	250	PA65	412	M20	350	647	205	264	178	118	18	113	339.6	118	440	210	207
315	300	PA65	482	M20	400	697	234	285	178	118	18	113	339.6	118	510	256	253

Butterfly Valve Type 244 FC/FO with pneumatic actuator DN50 – DN300



Inch (inch)	DN (mm)	Act.type	d2 (mm)	D ANSI	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Q1 (mm)	Q2 (mm)
2	50	PA30	160	UNC 5/8	121	327.2	77	134	116.2	70.4	18	45	274.4	70.4	165	40	
2 1/2	65	PA30	180	UNC 5/8	140	339.2	83	140	116.2	70.4	18	46	274.4	70.4	182	54	35
3	80	PA35	195	UNC 5/8	152	364.1	89	146	129.1	83.3	18	49	325.2	83.3	210	67	50
4	100	PA40	226	UNC 5/8	191	387.8	106	167	114.8	87		56	359.5	87	240	88	74
5	125	PA45	258	UNC 3/4	216	451.5	121	181	149.5	107.5		64	418	107.5	272	113	97
6	150	PA50	284	UNC 3/4	241	475.1	133	189	153.1	111.1		72	433.9	111.1	300	139	123
8	200	PA55	341	UNC 3/4	298	529	159	210	160	118		73	498.3	118	360	178	169
10	250	PA60 FC	412	UNC 7/8	362	663.9	205	264	194.9	135	18	113	547.3	135	440	210	207
10	250	PA70 FO	412	UNC 7/8	362	702.1	205	264	233.1	168	23	113	681	168	440	210	207
12	300	PA65 FC	482	UNC 7/8	432	727	234	285	208	148	18	113	646	148	510	256	253
12	300	PA70 FO	482	UNC 7/8	432	752.1	234	285	233.1	168	23	113	681	168	510	256	253

Butterfly Valve Type 244 DA with pneumatic actuator DN50 – DN300



Zoll (inch)	DN (mm)	Act.type	d2 (mm)	D ANSI	D1 (mm)	H (mm)	H1 (mm)	H2 (mm)	H3 (mm)	H4 (mm)	H5 (mm)	L (mm)	L1 (mm)	L2 (mm)	L3 (mm)	Q1 (mm)	Q2 (mm)
2	50	PA35	160	UNC 5/8	121	321.3	77	134	110.3	64.5	18	45	196.1	64.5	165	40	
2 1/2	65	PA35	180	UNC 5/8	140	333.3	83	140	110.3	64.5	18	46	196.1	64.5	182	54	35
3	80	PA40	195	UNC 5/8	152	351.2	89	146	116.2	70.4	18	49	205.6	70.4	210	67	50
4	100	PA45	226	UNC 5/8	191	384.1	106	167	111.1	83.3		56	242	83.3	240	88	74
5	125	PA45	258	UNC 3/4	216	413.1	121	181	111.1	83.3		64	242	83.3	272	113	97
6	150	PA55	284	UNC 3/4	241	471.5	133	189	149.5	107.5		72	290.2	107.5	300	139	123
8	200	PA55	341	UNC 3/4	298	518.5	159	210	149.5	107.5		73	290.2	107.5	360	178	169
10	250	PA65	412	UNC 7/8	362	647	205	264	178	118	18	113	339.6	118	440	210	207
12	300	PA65	482	UNC 7/8	432	697	234	285	178	118	18	113	339.6	118	510	256	253

Dimensions in accordance with ANSI/ASME B16.5 Class 150

Standard design butterfly valve with pneumatic actuator

d (mm)	Inch (inch)	DN (mm)	Butterfly valve interface	Actuator type single-acting	Actuator type double-acting
63	2	50	F07/11 mm	PA30	PA35
75	2 ½	65	F07/11 mm	PA30	PA35
90	3	80	F07/11 mm	PA35	PA40
110	4	100	F07/14 mm	PA40	PA45
140	5	125	F07/14 mm	PA45	PA45
160	6	150	F07/17 mm	PA50	PA55
225	8	200	F07/17 mm	PA55	PA55
280	10	250	F10/22 mm	PA65	PA65
315	12	300	F10/22 mm	PA70	PA65
355	14	350	F10/22 mm	Revac AG190 SR	Revac AG-DA 127
400	16	400	F12/27 mm	Revac AG190 SR	Revac AG-DA 143
450	18	450	F14/35 mm	Revac AG210 SR	Revac AG-DA 160
500	20	500	F14/35 mm	Revac AG210 SR	Revac AG-DA 160
600	24	600	F14/35 mm	Revac AG254 SR	Revac AG-DA 190

Accessories

- Pilot valve detached or directly installed in voltages 24 V DC/AC, 110 V AC and 230 V AC
- Positioner
- Limit switch (mechanical, AG/NI, inductive, integrated in valve body or via additional limit switch box)
- Stroke limiter
- Manual override for all sizes up to d225/DN200 mm
- AS interface module with integrated position feedback and pilot solenoid valve
- Electric-pneumatic positioner (4 – 20 mA) or 3 – 15 PSI
- Detachable manual override