

Type 140 Electrically Actuated Butterfly Valve

Standard Features

- **Size**
2"-12"
- **Voltage**
24 AC or DC
100-230 AC
- **Emergency Manual Override**
- **Body**
Glass filled Polypropylene Compatible with ANSI or DIN flanges
- **Wetted Materials**
PVC, CPVC, PVDF, or PROGEF®
Standard Polypropylene
- **Disc**
PVC, CPVC, PVDF, or PROGEF
Standard Polypropylene
- **Stem**
304 Stainless Steel
- **Seal**
EPDM or FPM
- **Duty Cycle**
2"-6" 50%
8"-12" 35%

Optional Features

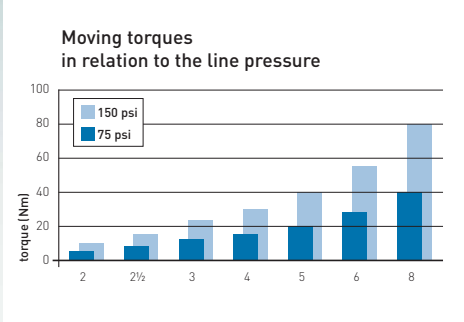
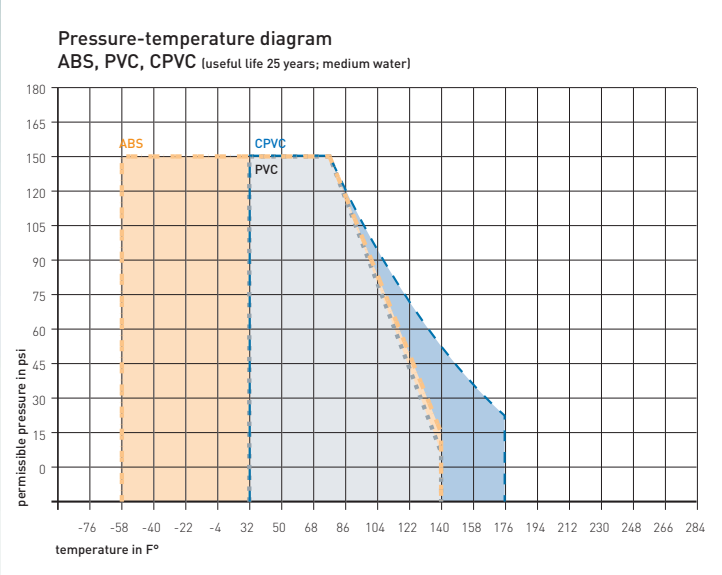
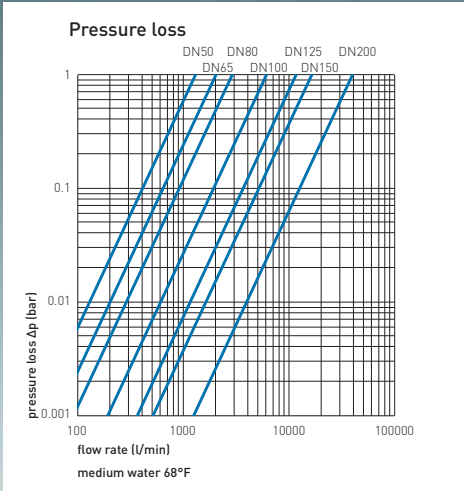
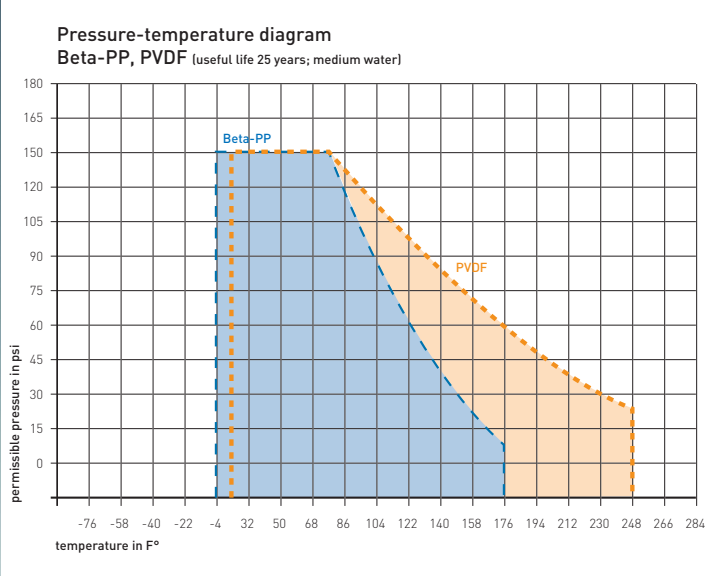
- **Limit switches**
- **Positioner (voltage or current)**
- **Position feedback**
- **Fail safe return**
Back up battery pack
- **Heating element**
- **RS 232 Configuration tool**
- **Smart modules**
Cycle monitoring, cycle counter, cycle extension, motor current monitoring

General

The Type 140 electrically actuated butterfly valve from GF Piping Systems is adaptable to a variety of conditions and applications. It is available in PVC, CPVC, Polypropylene, and PVDF materials. With the optional positioner, it goes from being a simple on/off valve to a precise flow control device integrated into systems controlled by PLCs and other computerized instrumentation.



Product data for butterfly valves type 140



For non-GF actuators, breakaway torques 2.5 to 4 times the value of the moving torque must be taken into consideration, depending on the application conditions (e.g. control time, medium, temperature, etc.).

One system - many options

Georg Fischer presents the new 567/568 type series of butterfly valves with a comprehensive range of products and a multitude of interesting combination possibilities.

We can offer you, for example, manual valves with hand lever or reduction gear. The program also includes pneumatically or electrically actuated valves from DN50 to DN200.

Our system's modular design principle allows you to exchange

individual system components – fast, easily and at very little expense.

You also have a choice of materials: PVC, CPVC, ABS, or β -PP and PVDF.

Our standard sealing materials are EPDM and FPM, but other materials are available on request.

All the customary installation pipe standards are supplied:

- metric: DIN, EN, ISO
- inch: BS, ASTM

• JIS (only wafer-type valves)
With this wide range of products to choose from you can always be sure of having the best possible solution for your application.

The new butterfly valves type 567/568 from Georg Fischer Pip- ing Systems conform to the following international standards:

prEN ISO 16136

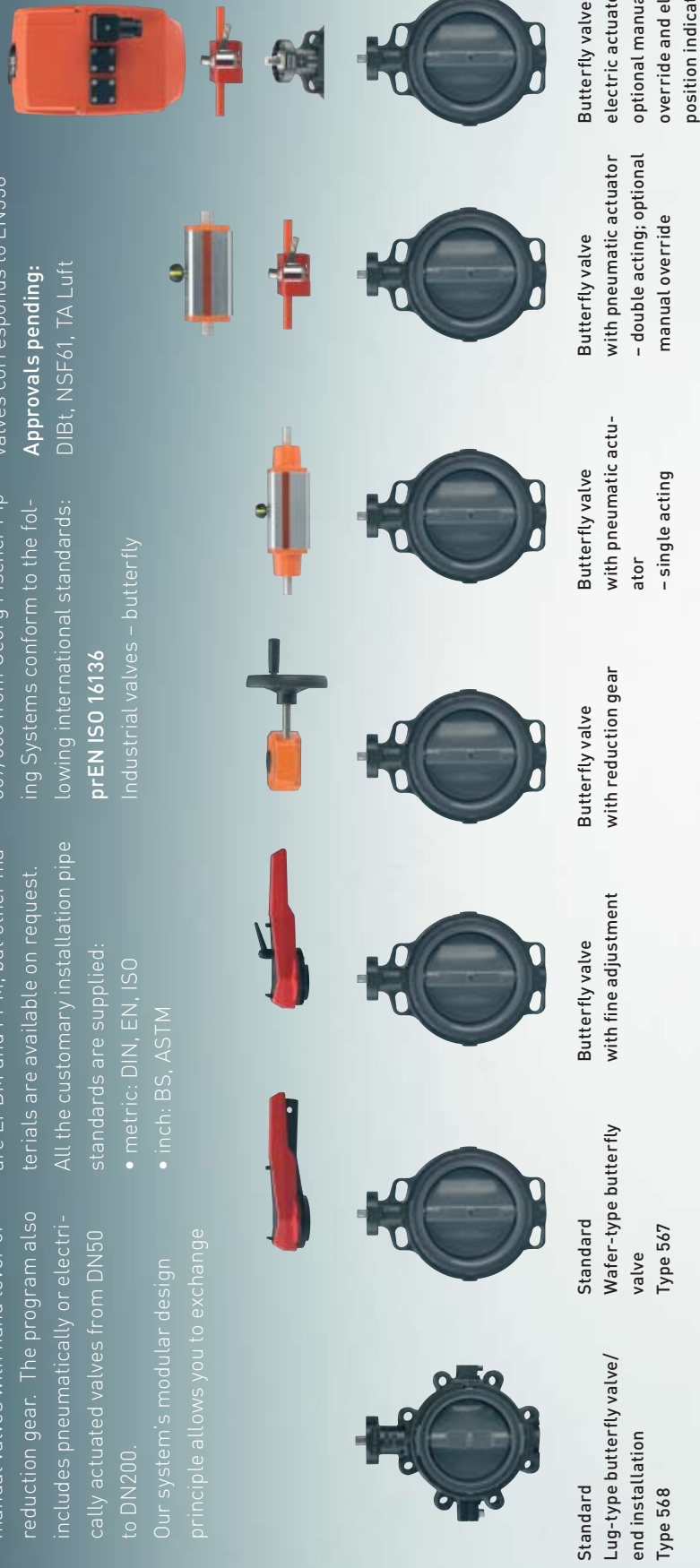
Industrial valves – butterfly

valves in thermoplastic materials **ISO9393**

Thermoplastic valves – pressure test methods and requirements **EN558**

Face-to-face length of butterfly valves corresponds to EN558

Approvals pending:
DIBt, NSF61, TA Luft



Standard Lug-type butterfly valve/end installation Type 568

Standard Wafer-type butterfly valve Type 567

Butterfly valve with fine adjustment

Butterfly valve with reduction gear

Butterfly valve with pneumatic actuator – single acting

Butterfly valve with pneumatic actuator – double acting; optional manual override

Butterfly valve with electric actuator; optional manual override and electric position indicator

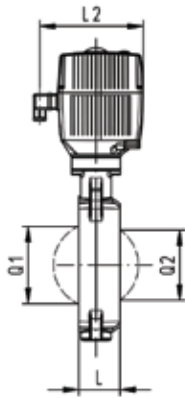
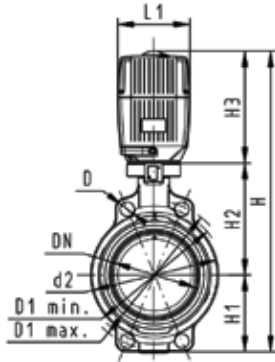
Technical Specifications

	EA 31	EA 42
Size	2" - 8"	10" - 12"
Nominal torque Mdn	60 Nm/530 in-lbs	100 Nm/885 in-lbs
Peak torque	120 Nm/1060 in-lbs	200 Nm/1770 in-lbs
Control time	15 s/90° at Nominal Torque	25 s/ 90° at Nominal Torque
Actuating angle	max. 180° set to 90°	max. 180° set to 90°
L/W/H (dimensions in mm)	150/122/190	150/122/208
Cycles at 68° and Nominal Torque	100,000	75,000
Flange Pattern	F07	F07
Housing Materials	PP fiberglass reinforced, flame retardant, captive stainless steel screws externally	PP fiberglass reinforced, flame retardant, captive stainless steel screws externally
Position indicator	optical, integrated	optical, integrated
Emergency manual override	integrated	integrated
Rated voltage	100-230V, 50/60 Hz 24V = /24V, 50/60Hz	100-230V, 50/60 Hz 24V = /24V, 50/60 Hz
Rated voltage tolerance	+/- 10%	+/- 10%
Rated output	32 Watts	42 Watts
Direct impedance	230V, 100k 24V, 4k7	230V, 100k 24V, 4k7
Duty cycle	50%	35%
Protection class	IP 65 per EN 60529 (3): CSA for interior use UL pending	IP 65 per EN 60529 (3): CSA for interior use UL pending
Overload protection	current/time dependent (resting) (1), temperature dependent	current/time dependent (resting) (1), temperature dependent
Overvoltage category (5)	II	II
Electrical connections	connector plug 3 P+E per DIN EN 175301-03 (formerly DIN 43650), screw cable gland 20x1.5per ISO 724	connector plug 3 P+ E per DIN EN 175301- 03 (formerly DIN 43650), screw cable gland M20x1.5 per ISO 724
Pollution grade (5)	2	2
Height over NN (UL/CSA)	<200m	<200m
Ambient temperature	14° to +122°F	14° to +122°F
Allowable humidity	max. 90% relative humidity, non-condensing	max. 90% relative humidity, non-condensing
[1] Overload protection of the motor is di-	[2] At temperatures below 14°F and if there	[3] Protection class IP67 for use of cable
mensioned so that the motor and the power	is condensation, the heating element No.	glands and vertical installation
supply board are protected. As soon as the	198 190 086 should be built in	humidity at 104°F
load is in the torque range, the actuator		[4] Linear decrease up to 50% relative
runs again		[5] According to DIN EN 61010-1

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With manual override

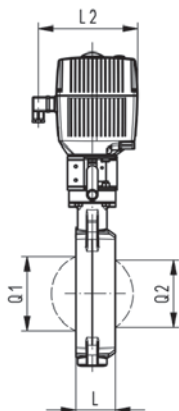
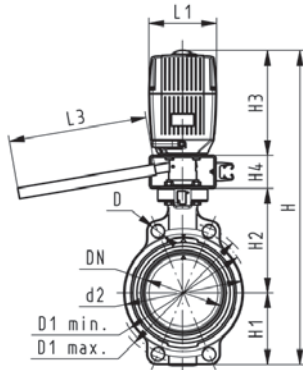
Note: 12" available on request



Inch	Cv-value [gal/min]	psi	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]
2	103	150	EA-31	19	120.0	125.0	104	400	77
2½	154	150	EA-31	19	139.7	145.0	115	413	83
3	210	150	EA-31	19	150.0	160.0	131	428	89
4	455	150	EA-31	19	175.0	190.5	161	460	104
5	805	150	EA-31	23	210.0	215.9	187	487	117
6	1162	150	EA-31	24	241.3	241.3	215	508	130
8	2772	150	EA-42	23	290.0	295.0	267	575	158
10	3865	150	EA-42	25	353.0	362.0	329	677	205

H2 [mm]	H3 [mm]	L [mm]	L1 [mm]	L2 [mm]	Q1 [mm]	Q2 [mm]
134	188	45	122	180	35.74	
140	188	46	122	180	50.93	30.62
146	188	49	122	180	64.01	46.24
167	188	56	122	180	84.46	69.96
181	188	64	122	180	110.71	94.50
189	188	72	122	180	136.08	121.54
210	208	73	125	180	175.62	166.23
264	208	113	122	180	256	207

With declutchable manual override



Inch	Cv-value [gal/min]	psi	Actuator unit type	D [mm]	D1 min. [mm]	D1 max. [mm]	d2 [mm]	H [mm]	H1 [mm]
2	103	150	EA-31	19	120.0	125.0	104	460	77
2½	154	150	EA-31	19	139.7	145.0	115	473	83
3	210	150	EA-31	19	150.0	160.0	131	488	89
4	455	150	EA-31	19	175.0	190.5	161	520	104
5	805	150	EA-31	23	210.0	215.9	187	547	117
6	1162	150	EA-31	24	241.3	241.3	215	568	130
8	2772	150	EA-42	23	290.0	295.0	267	635	158

H2 [mm]	H3 [mm]	H4 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	Q1 [mm]	Q2 [mm]
134	188	60	45	122	180	200	35.74	
140	188	60	46	122	180	200	50.93	30.62
146	188	60	49	122	180	200	64.01	46.24
167	188	60	56	122	180	250	84.46	69.96
181	188	60	64	122	180	250	110.71	94.50
189	188	60	72	122	180	250	136.08	121.54
210	208	60	73	125	180	250	175.62	166.23

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