

Actuated Valves Price List

Effective March 1, 2001



**Electrically and Pneumatically Actuated
Butterfly Valves**

GEORGE FISCHER +GF+

How to order

Example - The part number for a 1" Type 116 PVC Ball Valve (2-way), electrically actuated, without manual override, in 120 VAC, with socket connectors and EPDM seals is:

$$\frac{199.116}{1} \quad \frac{205}{2}$$

Type 116



Type 346 ball valve

Type EA 20 actuator sizes - 3/8-2"

PVC Ball Valve (2-way) – Electrically Actuated (C) without manual override 120/240 VAC/50-60Hz

Size ID Inch	Part Number 199.116 ()										
	Socket				Threaded				Flanged		
	EPDM	\$	Viton	\$	EPDM	\$	Viton	\$	EPDM	\$	Viton
3/8	(202)		(212)		(332)		(342)		NA		NA
1/2	(203)		(213)		(333)		(343)		NA		NA
3/4	(204)		(214)		(334)		(344)		NA		NA
1	(205)		(215)		(335)		(345)		NA		NA
1 1/4	(206)		(216)		(336)		(346)		NA		NA
1 1/2	(207)		(217)		(337)		(347)		NA		NA
2	(208)		(218)		(338)		(348)		NA		NA

How to order Specials

When ordering a special actuator package use an "S" before the part number of the standard actuator package followed by a description of the accessory or modification needed.

Example — You want to order the assembled valve described above in the "How to order" example except it needs to have the PE22P positioner installed (reference page 30).

S199.116.205 with PE22P installed

Polypropylene and SYGEF-PVDF Sizes

The outside pipe diameter (d) and the inside pipe diameter (DN) are commonly referred to for a complete description of the piping system. In addition, the equivalent nominal ID inches is also used. Below is a complete chart showing the correlation between all three forms of measurement.

OD d mm	ID DN mm	ID inch	OD d mm	ID DN mm	ID inch
16	10	3/8	75	65	2 1/2
20	15	1/2	90	80	3
25	20	3/4	110	100	4
32	25	1	140	125	5
40	32	1 1/4	160	150	6
50	40	1 1/2	225	200	8
63	50	2	280	250	10

Butterfly Valves Electrically Actuated



Electric Actuator

Intermediate Kit

Butterfly Valve

Type 035



Type 367 Butterfly Valve
(short shaft)

Type EA30 Actuator
Sizes 2 1/2"-3"

Type EA41 Actuator
Sizes 4"-8"

Type EA50 Actuator
Size 10"

Selectable Voltage:
100/120, 200/240 VAC/
50 - 60 Hz or 24 VAC/DC

Control Range: 90°
Control Time: 2 1/2"-3" 12 sec.
4"-8" 8 sec.
10" 25 sec.

Duty: 2 1/2"-3" 100%
4"-10" 50%

Accessories: page 10
additional switches
potentiometer
speed control
heater
positioner
controller
fail safe

Intermediate Kit: page 9
without manual override
with manual override

Butterfly Valve - Electrically Actuated

PVC without manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(143) 1009.-	(153) 1049.-	(103) 1009.-	(113) 1049.-
3	(144) 1015.-	(154) 1061.-	(104) 1015.-	(114) 1061.-
4	(723) 1155.-	(733) 1199.-	(743) 1155.-	(753) 1199.-
5	(724) 1201.-	(734) 1263.-	(744) 1201.-	(754) 1263.-
6	(725) 1220.-	(735) 1274.-	(745) 1220.-	(755) 1274.-
8	(726) 1291.-	(736) 1364.-	(746) 1291.-	(756) 1364.-
10	(727) 2526.-	(737) 2728.-	(740) 2526.-	(750) 2728.-

PP without manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(303) 1044.-	(313) 1091.-	(263) 1044.-	(273) 1091.-
3	(304) 1091.-	(314) 1141.-	(264) 1091.-	(274) 1141.-
4	(783) 1249.-	(793) 1307.-	(803) 1249.-	(813) 1307.-
5	(784) 1303.-	(794) 1455.-	(804) 1303.-	(814) 1455.-
6	(785) 1357.-	(795) 1470.-	(805) 1357.-	(815) 1470.-
8	(786) 1467.-	(796) 1556.-	(806) 1467.-	(816) 1556.-
10	Inquire about availability			

PVDF without manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	FPM	\$	FPM	\$
2 1/2	(473)	1320.-	(433)	1320.-
3	(474)	1421.-	(434)	1421.-
4	(853)	1653.-	(873)	1653.-
5	(854)	1816.-	(874)	1816.-
6	(855)	2021.-	(875)	2021.-
8	(856)	2275.-	(876)	2275.-

FPM seals are made of Viton® or equal materials.
Viton® is a registered trademark of DuPont Dow Elastomers.

Type 035



Type 367 Butterfly Valve
(short shaft)

Type EA30 Actuator
Sizes 2 1/2"-3"

Type EA41 Actuator
Sizes 4"-8"

Type EA50 Actuator
Size 10"

Control Range: 90°

Control Time:

2 1/2"-3" 12 sec.

4"-8" 8 sec.

10" 16 sec.

Duty:

2 1/2"-3" 100%

4"-8" 50%

Accessories: page 10

additional switches

potentiometer

speed control

heater

positioner

controller

fail safe

Intermediate Kit: page 9

without manual override

with manual override

Butterfly Valve - Electrically Actuated

PVC with manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(123) 1206.-	(133) 1246.-	(083) 1206.-	(093) 1246.-
3	(124) 1212.-	(134) 1258.-	(084) 1212.-	(094) 1258.-
4	(523) 1352.-	(533) 1396.-	(543) 1352.-	(553) 1396.-
5	(524) 1398.-	(534) 1460.-	(544) 1398.-	(554) 1460.-
6	(525) 1416.-	(535) 1471.-	(545) 1416.-	(555) 1471.-
8	(526) 1488.-	(536) 1561.-	(546) 1488.-	(556) 1561.-

PP with manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(283) 1241.-	(293) 1288.-	(243) 1241.-	(253) 1288.-
3	(284) 1288.-	(294) 1338.-	(244) 1288.-	(254) 1338.-
4	(583) 1446.-	(593) 1504.-	(603) 1446.-	(613) 1504.-
5	(584) 1500.-	(594) 1652.-	(604) 1500.-	(614) 1652.-
6	(585) 1554.-	(595) 1667.-	(605) 1554.-	(615) 1667.-
8	(586) 1664.-	(596) 1753.-	(606) 1664.-	(616) 1753.-

PVDF with manual override

(C)

Size ID inch	Part Number 199.035 ()			
	120/240 VAC/50-60Hz		24 VAC/DC	
	FPM	\$	FPM	\$
2 1/2	(453)	1516.-	(423)	1516.-
3	(454)	1618.-	(424)	1618.-
4	(653)	1849.-	(673)	1849.-
5	(654)	2013.-	(674)	2013.-
6	(655)	2218.-	(675)	2218.-
8	(656)	2472.-	(676)	2472.-

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Type 037-E



Type 037 Butterfly Valve
(bare shaft)

Type EA30 Actuator
Sizes 2"-3"

Type EA41 Actuator
Sizes 4"-8"

Type EA50 Actuator
Size 10"-12"

Selectable Voltage:
100/120, 200/240 VAC/
50 - 60 Hz

Control Range: 90°

Control Time:

2 1/2"-3" 12 sec.

4"-8" 8 sec.

10" 25 sec.

Duty:

2 1/2"-3" 100%

4"-10" 50%

Accessories: page 10

additional switches
potentiometer
speed control
heater
positioner
controller
fail safe

Intermediate Kit: page 10
without manual override
with manual override

Aluminum Butterfly Valve - Electrically Actuated

with Rilsan®-coated Disc

(A)

Size	Part Number 199.037 ()	
ID	120/240 VAC/50-60Hz	
inch	EPDM \$	FPM \$
2	(130) 1250.-	(143) 1376.-
2 1/2	(131) 1261.-	(144) 1400.-
3	(132) 1271.-	(145) 1466.-
4	(133) 1463.-	(146) 1751.-
5	(134) 1502.-	(147) 1821.-
6	(135) 1499.-	(148) 1865.-
8	(136) 1557.-	(149) 2496.-
10	(137) 2667.-	(150) 4028.-
12	(138) 3014.-	(151) 4745.-

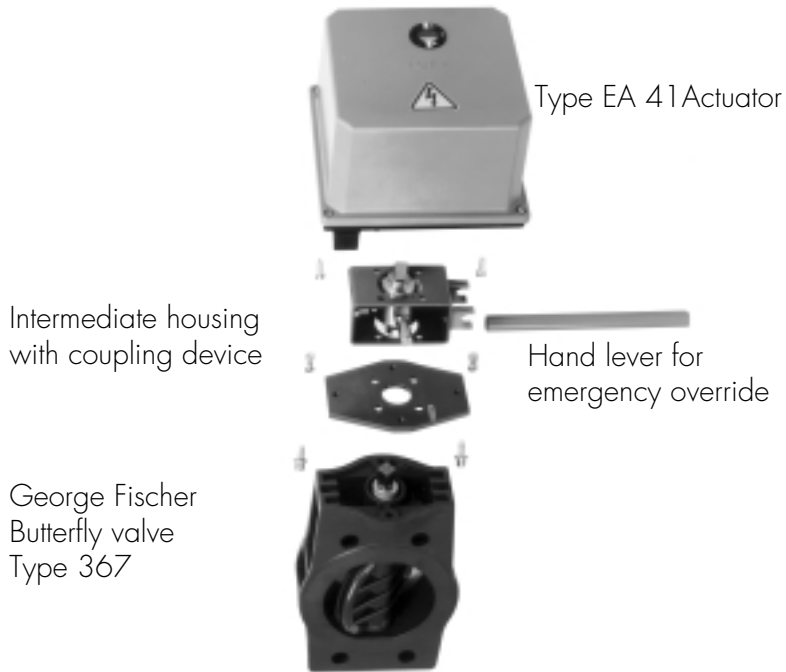
with Stainless Steel Disc

(A)

Size	Part Number 199.037 ()	
ID	120/240 VAC/50-60Hz	
inch	EPDM \$	FPM \$
2	(330) 1250.-	(343) 1376.-
2 1/2	(331) 1261.-	(344) 1400.-
3	(332) 1271.-	(345) 1466.-
4	(333) 1463.-	(346) 1751.-
5	(334) 1502.-	(347) 1821.-
6	(335) 1499.-	(348) 1865.-
8	(336) 1557.-	(349) 2496.-
10	(337) 2667.-	(350) 4028.-
12	(338) 3014.-	(351) 4745.-

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Butterfly Valve Electric Actuators and Accessories



Short Shaft Butterfly Valves for Actuation

PVC

(A)

PP

(C)

Size ID inch	Part Number		161.367 ()		Size ID inch	Part Number		167.367 ()	
	EPDM	\$	FPM	\$		EPDM	\$	FPM	\$
2 1/2	(045)	195.-	(065)	259.-	2 1/2	(045)	156.-	(065)	202.-
3	(166)	204.-	(186)	283.-	3	(166)	202.-	(186)	253.-
4	(047)	224.-	(067)	297.-	4	(047)	234.-	(067)	292.-
5	(048)	300.-	(068)	398.-	5	(048)	288.-	(068)	439.-
6	(049)	329.-	(069)	417.-	6	(049)	341.-	(069)	455.-
8	(050)	442.-	(070)	560.-	8	(050)	452.-	(070)	540.-
10	(171)	1457.-	(191)	1782.-	10	(171)	1100.-	(191)	1290.-
12	(172)	1771.-	(192)	2093.-	12	(172)	1355.-	(192)	1560.-

PVDF

(C)

Size ID inch	Part Number		175.367 ()	
	FPM	\$		
2 1/2	(065)	431.-		
3	(186)	532.-		
4	(067)	637.-		
5	(068)	801.-		
6	(069)	1005.-		
8	(070)	1260.-		

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Electric Actuators for Butterfly Valves

Type EA30



Sizes: 2 1/2"-3"
 Duty: 100%
 Control Range: 270°
 Control Time: 12 sec./90°
 Torque: 221/442 in./lbs.
 Electric Connection:
 DIN cable plug

Accessories: page 10
 limit switches
 potentiometer
 speed control (vario)
 heater
 positioner
 controller

electric actuator only

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(711)	786.-	(710)	786.-

with positioner (PE 22P)

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(712)	1232.-	(713)	1232.-

with controller (PE 22C)

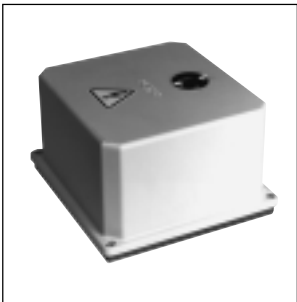
(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(714)	1157.-	(715)	1157.-

Adder prices

PE22P positioner \$433 list
 PE22C controller \$360 list

Type EA41



Sizes: 4"-8"
 Duty: 50%
 Control Range: 220°
 Control Time: 8 sec./90°
 Torque: 530/1768 in./lbs.
 Electric Connection:

Accessories: page 10
 limit switches
 potentiometer
 speed control (vario)
 heater
 positioner
 controller

electric actuator only

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(470)	912.-	(471)	912.-

with positioner (PE 22P)

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(701)	1434.-	(702)	1434.-

with controller (PE 22C)

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(703)	1346.-	(704)	1346.-

Adder prices

PE22P positioner \$506 list
 PE22C controller \$421 list

Electric Actuators for Butterfly Valves

Type EA50



Sizes: 10"
 Duty: 50%
 Control Range: 220°
 Control Time: 163/90°
 Torque: 884/2652 in./lbs.
 Electric Connection:
 DIN cable plug

Accessories: page 10
 limit switches
 potentiometer
 speed control (vario)
 heater
 positioner
 controller

electric actuator only

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(660)	1462.-	(661)	1462.-

with positioner (PE 22P)

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(706)	1968.-	(707)	1968.-

with controller (PE 22C)

(C)

Part Number 198.150 ()			
120/240 VAC/50-60 Hz	\$	24 VDC-AC/50-60 Hz	\$
(708)	1883.-	(709)	1883.-

Adder prices

PE22P positioner \$506 list
 PE22C controller \$421 list

Type 035



Type 367 Butterfly Valve
 (short shaft)

Intermediate Kits for Butterfly Valve Electric Actuators (C)

Size	Part number 198.000 ()			
	Coupler only	\$	with manual override	\$
2 1/2	(126)	82.-	(120)	279.-
3	(127)	82.-	(121)	279.-
4	(128)	82.-	(122)	279.-
5	(129)	82.-	(123)	279.-
6	(130)	82.-	(124)	279.-
8	(131)	82.-	(125)	279.-
10	(209)	82.-		

Type 037-E



Type 037 Butterfly Valve

Intermediate Kits for Butterfly Valve Electric Actuators (A)

Size	Part number 198.000 ()			
	Coupler only	\$	with manual override	\$
2"-3"	(313)	56.-	(338)	448.-
4"-5"	(314)	56.-	(339)	462.-
6"-8"	(315)	4.-	(340)	476.-
10"-12"	(316)	10.-	NA	

Accessories for Butterfly Valves – Electrically Actuated

Electric Actuators Types EA30/EA41/EA50

Butterfly Valves Electrically Actuated Type 035 (C)

Part Number	199.190 ()	\$
Limit Switches (2)	250 VAC, 10A	(138) 77.-
Limit Switches (4)	250 VAC, 10A	(139) 108.-
Inductive Switches (2) with diode light NPN	9.6-55 VDC, 0.2A	(146) 286.-
Inductive Switches (2) with diode light PNP	9.6-55 VDC, 0.2A	(147) 286.-
Inductive Switches (2) Namur	5-24V, 10mA	(148) 189.-
Limit Switches (2) with gold contacts	4-30 VDC, 1-100mA	(149) 104.-
Potentiometer	1000 Ω	(140) 87.-
Speed Control (Vario)	10-80,sec.	(144) 147.-
Heater and Thermostat (EA 20/30/41/50)	100-240 VAC/50-60Hz	(142) 108.-
Heater and Thermostat (EA 20/30/41/50)	24 VDC-AC/50-60Hz	(143) 108.-
FR 10 230V for 24 Volt actuators		(366) 424.-
FR 10 115V for 24 Volt actuators		(365) 424.-

\$20.00— List each charge for factory installation of any of the actuator accessories listed above.

Butterfly Valves Pneumatically Actuated



General Features

- a) Extremely sturdy and safe actuator unit
- b) Intermediate housing with or without manual override
- c) Installation position independent of flow direction
- d) Optimum flow characteristics
- e) Long maintenance-free working life
- f) Simple assembly
- g) The valves are airtight
- h) Shaft made from stainless steel (X5 Cr Ni 1911) completely encapsulated
- i) Corrosion resistant

Type 036



Type 367 Butterfly Valve
(short shaft)

Type PA35 for 2 1/2" valve

Type PA40 for 3" valve

Type PA45 for 4" valve

Type PA50 for 5" valve

Type PA55 for 6" valve

Type PA60 for 8" valve

Type PA65 for 10" valve

Control Range: 90°
Control Time: 5-1 sec
depending on available air

Accessories: page 17
limit switches
Speed control

PV 93 Pilot Valve:
see Pilot Valves

Intermediate Kit: page 16
without manual override

Butterfly Valve - Pneumatically Actuated

PVC without manual override

(C)

Size	Part Number 199.036 ()					
ID	Fail Safe to Close		Fail Safe to Open		Double Acting	
inch	EPDM \$	FPM \$	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(720) 634.-	(730) 675.-	(740) 634.-	(750) 675.-	(760) 469.-	(770) 511.-
3	(728) 680.-	(738) 726.-	(748) 680.-	(758) 726.-	(768) 484.-	(778) 531.-
4	(722) 811.-	(732) 856.-	(742) 811.-	(752) 856.-	(762) 547.-	(772) 593.-
5	(723) 972.-	(733) 1035.-	(743) 972.-	(753) 1035.-	(763) 642.-	(773) 705.-
6	(724) 1204.-	(734) 1260.-	(744) 1204.-	(754) 1260.-	(764) 747.-	(774) 803.-
8	(725) 1395.-	(735) 1469.-	(745) 1395.-	(755) 1469.-	(765) 907.-	(775) 982.-
10	(729) 2522.-	(739) 2728.-	(749) 2522.-	(759) 2728.-	(769) 1732.-	(779) 1938.-

PP without manual override

(C)

Size	Part Number 199.036 ()					
ID	Fail Safe to Close		Fail Safe to Open		Double Acting	
inch	EPDM \$	FPM \$	EPDM \$	FPM \$	EPDM \$	FPM \$
2 1/2	(292) 669.-	(312) 717.-	(332) 669.-	(352) 717.-	(252) 505.-	(272) 553.-
3	(408) 757.-	(428) 808.-	(448) 757.-	(468) 808.-	(368) 561.-	(388) 613.-
4	(294) 907.-	(314) 966.-	(334) 907.-	(354) 966.-	(254) 644.-	(274) 703.-
5	(295) 1076.-	(315) 1231.-	(335) 1076.-	(355) 1231.-	(255) 746.-	(275) 901.-
6	(296) 1344.-	(316) 1460.-	(336) 1344.-	(356) 1460.-	(256) 887.-	(276) 1003.-
8	(297) 1575.-	(317) 1665.-	(337) 1575.-	(357) 1665.-	(257) 1087.-	(277) 1178.-
10	Inquire about availability					

PVDF without manual override

(C)

Size	Part Number 199.036 ()					
ID	Fail Safe to Close		Fail Safe to Open		Double Acting	
inch	FPM	\$	FPM	\$	FPM	\$
2 1/2	(552)	951.-	(592)	951.-	(512)	786.-
3	(668)	1094.-	(708)	1094.-	(628)	898.-
4	(554)	1319.-	(594)	1319.-	(514)	1056.-
5	(555)	1600.-	(595)	1600.-	(515)	1271.-
6	(556)	2022.-	(596)	2022.-	(516)	1565.-
8	(557)	2400.-	(597)	2400.-	(517)	1913.-
10	N/A		N/A		N/A	

With manual override on request.

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Type 037-P



Type 037 Butterfly Valve
(bare shaft)

Type PA30
Size: 2"-2 1/2"

Type PA40
Size: 3"-4"

Type PA50
Size: 5"-6"

Type PA60
Size: 8"-10"

Type PA70
Size: 12"

Control Range: 90°
Control Time: 5-1 sec
depending on available air

Accessories: page 17
limit switches
Speed control

Intermediate Kit: page 16
without manual override

Aluminum Butterfly Valve - Pneumatically Actuated

with Rilsan®-coated Disc

(A)

Size	Part Number 199.037 ()					
ID	Fail Safe to Close		Fail Safe to Open		Double Acting	
inch	EPDM \$	FPM \$	EPDM \$	FPM \$	EPDM \$	FPM \$
2	(052) 600.-	(065) 727.-	(078) 600.-	(091) 727.-	(104) 430.-	(117) 556.-
2 1/2	(053) 611.-	(066) 750.-	(079) 611.-	(092) 750.-	(105) 441.-	(118) 580.-
3	(054) 788.-	(067) 983.-	(080) 788.-	(093) 983.-	(106) 529.-	(119) 724.-
4	(055) 810.-	(068) 1099.-	(081) 810.-	(094) 1099.-	(107) 551.-	(120) 840.-
5	(056) 1144.-	(069) 1463.-	(082) 1144.-	(095) 1463.-	(108) 707.-	(121) 1026.-
6	(057) 1198.-	(070) 1563.-	(083) 1198.-	(096) 1563.-	(109) 761.-	(122) 1127.-
8	(058) 1635.-	(071) 2574.-	(084) 1635.-	(097) 2574.-	(110) 1013.-	(123) 1953.-
10	(059) 1978.-	(072) 3338.-	(085) 1978.-	(098) 3338.-	(111) 1366.-	(124) 2726.-
12	(060) 3398.-	(073) 5128.-	(086) 3398.-	(099) 5128.-	(112) 2067.-	(125) 3798.-

*Larger sizes available upon request

with Stainless Steel Disc

(A)

Size	Part Number 199.037 ()					
ID	Fail Safe to Close		Fail Safe to Open		Double Acting	
inch	EPDM \$	FPM \$	EPDM \$	FPM \$	EPDM \$	FPM \$
2	(252) 655.-	(265) 781.-	(278) 655.-	(291) 781.-	(304) 484.-	(317) 610.-
2 1/2	(253) 673.-	(266) 812.-	(279) 673.-	(292) 812.-	(305) 502.-	(318) 641.-
3	(254) 858.-	(267) 1052.-	(280) 858.-	(293) 1052.-	(306) 599.-	(319) 794.-
4	(255) 907.-	(268) 1956.-	(281) 907.-	(294) 1956.-	(307) 648.-	(320) 937.-
5	(256) 1270.-	(269) 1589.-	(282) 1270.-	(295) 1589.-	(308) 833.-	(321) 1152.-
6	(257) 1363.-	(270) 1729.-	(283) 1363.-	(296) 1729.-	(309) 927.-	(322) 1292.-
8	(258) 1856.-	(271) 2797.-	(284) 1856.-	(297) 2797.-	(310) 1235.-	(323) 2176.-
10	(259) 2254.-	(272) 3613.-	(285) 2254.-	(298) 3613.-	(311) 1642.-	(324) 3001.-
12	(260) 3681.-	(273) 5411.-	(286) 3681.-	(299) 5411.-	(312) 2351.-	(325) 4081.-

*Larger sizes available upon request

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Butterfly Valves Pneumatic Actuators and Accessories



Pneumatic Actuator

Intermediate Kit

Butterfly Valve

Short Shaft Butterfly Valves for Actuation

PVC

(A)

Size ID inch	Part Number		161.367 ()	
	EPDM	\$	FPM	\$
2 1/2	(045)	195.-	(065)	259.-
3	(166)	204.-	(186)	283.-
4	(047)	224.-	(067)	297.-
5	(048)	300.-	(068)	398.-
6	(049)	329.-	(069)	417.-
8	(050)	442.-	(070)	560.-
10	(171)	1457.-	(191)	1782.-
12	(172)	1771.-	(192)	2093.-

PP

(C)

Size ID inch	Part Number		167.367 ()	
	EPDM	\$	FPM	\$
2 1/2	(045)	156.-	(065)	202.-
3	(166)	202.-	(186)	253.-
4	(047)	234.-	(067)	292.-
5	(048)	288.-	(068)	439.-
6	(049)	341.-	(069)	455.-
8	(050)	452.-	(070)	540.-
10	(171)	1100.-	(191)	1290.-
12	(172)	1355.-	(192)	1560.-

PVDF

(C)

Size ID inch	Part Number		175.367 ()	
	FPM	\$		
2 1/2	(065)	431.-		
3	(186)	532.-		
4	(067)	637.-		
5	(068)	801.-		
6	(069)	1005.-		
8	(070)	1260.-		

FPM seals are made of Viton® or equal materials. Viton® is a registered trademark of DuPont Dow Elastomers.



for Type 367 Butterfly Valve
(short shaft)

Pneumatic Actuators for Butterfly Valves Type PA35 - PA70

(C)

Size	Type	Part Number		198.800 ()	
ID Inch		Anodized FC and FO	\$	Anodized Double Acting	\$
2-1/2"	PA35	(037)	350.-	(038)	227.-
3"	PA40	(728)	375.-	(732)	233.-
4"	PA45	(039)	482.-	(040)	276.-
5"	PA50	(729)	592.-	(733)	319.-
6"	PA55	(041)	746.-	(042)	391.-
8"	PA60	(730)	848.-	(734)	462.-
10"	PA65	(043)	1236.-	(044)	595.-
12"	PA70	(731)	1604.-	(003)	724.-



Intermediate Kits for Type 036 Butterfly Valve Pneumatic Actuators

(C)

Size ID Inch	Type	Part Number 198.000 ()	
		Fail Safe to Close/Fail Safe to Open	Double Acting
2-1/2"	PA35	(342) 89.-	(343) 89.-
3"	PA40	(344) 91.-	(345) 91.-
4"	PA45	(346) 97.-	(347) 97.-
5"	PA50	(348) 100.-	(349) 100.-
6"	PA55	(350) 138.-	(351) 113.-
8"	PA60	(352) 153.-	(353) 126.-
10"	PA65	(354) 191.-	(355) 170.-
12"	PA70	(356) 191.-	(357) 170.-

Type 037-P



Intermediate Kits for Type 037 Butterfly Valve Pneumatic Actuators

(A)

Size ID Inch	Part Number 198.000 ()	
	FC/FO	Double Acting
2	(301) 64.-	(300) 45.-
2 1/2	(301) 64.-	(300) 45.-
3	(302) 64.-	(301) 64.-
4	(304) 67.-	(303) 67.-
5	(305) 67.-	(304) 67.-
6	(307) 73.-	(306) 73.-
8	(309) 83.-	(308) 73.-
10	(310) 174.-	(311) 174.-
12	(311) 174.-	(310) 174.-

Type PV 93



Pilot Valve

See Pilot Valves

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Type 036/037



Type 367 Butterfly Valve
(short shaft)

Accessories for Butterfly Valves – Pneumatically Actuated

Pneumatic Actuators Type PA40/PA50/PA60/PA70 Butterfly Valves Pneumatically Actuated Type 036/037 (C)

Part Number		199.190 ()	\$
2 auxiliary switches	mech.	250 VAC, 10 A	(282) 201.-
2 inductive switches with luminous diode	NPN	10...30 VDC, 0.1 A	(283) 233.-
2 inductive switches with luminous diode	PNP	10...30 VDC, 0.1 A	(284) 233.-
2 inductive switches	Namur	5...15 V	(285) 226.-
2 auxiliary switches	EExd	250 VAC/5 A	(286) 442.-
Namur connecting plate (1/4" NPT)			(292) 19.-
Namur mounting flange (Bracket for 981/986 Positioners)			(281) 19.-
Speed control			(150.101.347) 59.-
1/8 BSP male x 1/8" NPT female brass adapter			(150.101.037) 4.-
3-way solenoid valve (PV 93) - include cable plug (for fail close and fail open actuators, only)		120 VAC	(199.190.300) see Pilot Valves
4-way pilot valve (solenoid) with speed control		115 VAC	(370) 79.-
Types 5470 (for PA30 - 70 double acting, only)		230 VAC	(371) 79.-
*Requires Namur Plate		24 VAC	(369) 79.-
*Namur mounting plate for 5470 Solenoid			(275) 19.-
Cable Plug for 5470 Solenoid Valve			(150.101.065) 6.-

Westlock switches



Westlock Switches

See Actuated Valves Spare Parts

Type 981/986



Pneumatically Actuated
Butterfly Valves 2 1/2" - 10"

Positioner and Mounting Flange for PA40/70 (C)

Pneumatic

Type	Part number	150.981 ()	\$
	Control Signal	Actuator Function	
981	3-15 psi	DA (air-air)	(003) 1071.-
981	3-15 psi	FO/FC (air-spring)	(004) 855.-

Electro-Pneumatic

Type	Part number	150.986 ()	\$
	Control Signal	Actuator Function	
986	4-20 mA	DA (air-air)	(003) 1754.-
986	4-20 mA	FO/FC (air-spring)	(004) 1542.-

Explosion-proof Electro-Pneumatic

Type	Part number	150.983 ()	\$
	Control Signal	Actuator Function	
983	4-20 mA	DA (air-air)	(003) 2580.-
983	4-20 mA	FO/FC (air-spring)	(004) 1778.-

\$20.00 — List each charge for factory installation of any actuator accessories listed above.

General Terms and Conditions of Sale

These Terms and Conditions (Rev. 6/2003) supercede all previous Terms and Conditions.

It is the responsibility of the Distributor, Dealer, Agent to provide a current copy of these Terms and Conditions to the Consumers of George Fischer products.

• Acceptance of Terms and Conditions

Acceptance by Customer of George Fischer, Inc.'s (hereinafter "Seller" or "GFI") offer of Products for sale is hereby expressly conditioned upon Customer's acceptance of these General Terms and Conditions of Sale and these General Terms and Conditions of Sale will be deemed accepted, as written, despite any language in Customer's purchase order and/or other documentation which is either conflicting or supplemental, unless promptly after receipt of this offer, Customer specifically advises Seller of each term and condition not so accepted and Seller accepts Customer's conflicting and/or supplemental term(s) in writing.

• Order Acceptance

Seller reserves the right to accept or reject any order. Possession of a price list by Customer does not constitute an offer to sell.

• Credit Approval/Minimum Order Charge

Customer credit approval is required prior to any shipments. The minimum order charge is \$100.00 net.

• List Price, Discount or Freight Charges

List prices, discount, and freight terms are subject to change without notice. All prices are F.O.B., Seller's factory or authorized warehouse at Seller's discretion. Products listed hereon will be invoiced at price prevailing at time of shipment.

• Standard Terms

Net 30, 2% 15 days from date the invoice is issued from GFI. **No unauthorized deductions allowed, such as deductions for pending Returned Materials Transactions that are subject to review.** GFI reserves the right to apply a finance charge to the balance of any past-due invoice (over 30 days from date of invoice) at a rate of 1.5% per month, 18% per annum. Invoices past due forty-five (45) days will be subject to review and account status may be put on hold.

• Mode of Shipment or Packaging

Seller reserves the right to ship orders in the most economical manner. However

• Taxes

Any and all sales taxes, Manufacturer's taxes and/or other charges levied or imposed by any governmental authority, foreign or domestic, upon any merchandise sold or contracted to be sold shall be paid by Customer and added to the purchase price unless satisfactory and appropriate tax exemption certificates are supplied to the Seller.

• Cancellations or Add-ons

Cancellation or modifications of orders must be consented to by Manufacturer in writing. Since all orders are individually entered for processing immediately upon receipt, Seller reserves the right to charge back to the Customer costs incurred from either cancellation of the order, change of the order or of any item on the order. Seller also reserves the right to consider all order add-ons as new orders and subject to all terms and conditions. Products can only be added to orders the same day the order was entered. Distributors may cancel stock items that are **NOT** non-cancelable or non-returnable up to the day it ships.

• Product Changes

Seller reserves the right to alter, modify or redesign its products without any obligation to replace Products previously shipped.

• Delivery

Customer is advised that quoted delivery dates or schedules are based on estimates at the time of quotation and that Seller will devote its best efforts to meet such schedules. However, Seller assumes no liability for additional cost or damages resulting from late deliveries.

• Freight Terms

In the continental USA and Canada: Full freight will be paid on pipe, valve, and fitting orders \$1,500 net or more, except PVDF pipe in which full freight will be paid on orders of \$4,000 net or more. Freight allowed orders will be sent by a designated carrier of Seller's choice. Additional charges will be made for special handling and air freight when requested.

All Signet products are shipped F.O.B. factory. Unless otherwise specified, shipments are UPS surface; prepaid and added to the invoice.

• Transfer of Ownership

Title to merchandise passes at point of shipment. Claims for damaged merchandise should be made to carrier.

• Damage, Loss or Shortage Claims

Common carrier or motor freight shipment must be inspected for damage, loss or shortage upon receipt by consignee prior to acceptance from carrier.

Any damage or loss claims must be made to the carrier. Seller will not be liable in any manner for damage or loss caused to a shipment by a common carrier.

Shortage of material claims regardless of "mode of shipment" must be submitted in writing to Seller within fifteen (15) days of invoice date. In the event of such claims, Customer shall be required to make timely payment to Seller of any amount which is undisputed or not subject to such claims.

• Returned Materials – Restock and Evaluations

The standard restocking charge is 25%. Products denoted with a caret (^) symbol have a 40% restocking charge and products with an asterisk (*) symbol are non-cancelable/non-returnable. Only items identified on the current Master Distributor Price list shall be considered for returns and credits. All products qualifying for return are subject to review for marketability (quantities and stock movement) before issuance of an RMA number.

All merchandise returned for credit must have been purchased from George Fischer within the past twelve (12) months, and must be in original packaging (full carton quantities), in "like new," re-sellable, condition.

Credit will be allowed at the lowest price in effect during the previous twelve (12) months, unless a higher price can be substantiated by the distributor. The minimum acceptable return is \$100 net. **No deductions may be taken prior to GFI issuing a credit memo.**

All material returns must be accompanied by a valid GFI Return

Material Authorization (RMA) number. Obtain the RMA number by contacting the GFI Customer Service department. When requesting restock, the original purchase order number or GFI Sales Order number and date of purchase from GFI must be provided. When requesting an RMA for material evaluation, the customer must first complete a Material Safety Disclosure sheet and Request For Evaluation form; both are obtained from GFI Customer Service.

Material arriving at George Fischer without a valid RMA number will be returned to the customer/distributor, freight collect. RMA numbers must be clearly referenced on all shipping documents and shipping container.

All material returns must be received within thirty (30) days of the RMA issuance from GFI. **RMA numbers are void after 30 days.**

All material returns must be shipped freight prepaid. **No collect shipments will be accepted by George Fischer.** Restocking charges and prepaid freight do not apply to warranty defective merchandise or returns due to GFI

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• Force Majeure

Seller shall not be liable for any delays in making delivery where occasioned by strikes or difference with workmen or by any causes beyond the control of Seller, such as but not limited to fires, floods, accidents, action of any governmental authority, or shortages of labor, energy, raw materials, production facilities or transportation. Where delays or failures of delivery are caused by labor difficulties, Seller shall not be obligated to seek or obtain any settlement which, in Seller's sole judgment is not in Seller's best interest.

• WARRANTY

Seller's Products are carefully inspected for manufacturing defects; however, it is not always possible to detect hidden defects.

Said Products are warranted only to the extent that Seller will repair or replace without charge. (No credits will be issued.) Products proved to have manufacturing defects within six (6) months, Signet products twenty-four (24) months, of the date of tender of delivery thereof and provided Seller has been given an opportunity to inspect the Product alleged to be defective and the installation and/or use thereof. Seller does not warrant any Products obtained through an unauthorized Distributor, Dealer or Agent; therefore any and all warranties are void in the event that Seller's Products are obtained through an unauthorized Distributor, Dealer or Agent.

• LIMITATIONS OF REMEDY

Damages, warranties and liability in the event of any breach of warranty by seller, the exclusive remedy of the customer shall be the repair or replacement of the non-conforming goods in the manner and for the period of time as provided in the "warranty" section above. No warranty is included against any expense for removal, reinstallation or consequential damages of any nature arising from any defect. Seller shall not be liable for special, incidental or consequential damages, such as (but not limited to) damage or loss of other property or equipment, business interruption, or loss of profits or revenue. The warranties set out above are the only warranties made by seller and are expressly in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for a particular purpose. Any and all warranties implied by any course of dealing or usage of trade between the parties are expressly excluded. Any action for breach of any contract made by seller for the sale of goods must be commenced within twelve (12) months (Signet Products twenty-four (24) months) of seller's tender of delivery of the subject goods.