



**Disc** Liner Options
PVC-U (EPDM/FPM) **PVC-C** (EPDM/FPM)

PPH (EPDM/FPM) PVDF (EPDM/FPM) ABS (EPDM/FPM)

#### **Description**

The Extreme range of Electric Actuated Butterfly Valves are ideal for automatic on/off operation of flow in a fluid handling system. This valve is used for a range of chemical, water treatment and industrial applications that require high performance and long-term reliability. The valve body is manufactured in durable PP-H – GR and offered in sizes ranging from 2"-12" (DN65-DN300 & D63-D75 to D315).

Available with PVC-U, CPVC, PP-H, PVDF and ABS Discs and options of EPDM or FPM Liners, giving a choice to suit the fluid and working temperature (please check resistance tables and temperature/ pressure chart).

The actuator is supplied, fitted and tested to the valve and is a powerful yet compact unit. It offers high quality components and is supplied in various voltages. The actuator varies between two models type 3003 and 3005.

# **Extreme Series Butterfly Valve Electric Actuated**

#### PVC-C Disc with EPDM or FPM-Liner

- 2" to 12"
- Various Disc and Liner Options
- Corrosion Resistant
- Multi Voltage with Switches
- Fits between PN10/16 Flanges
- Pressure Range PN6/PN10

Technical Information					
Disc Material	C-U, <b>PVC-C,</b> PP-H, PVDF, ABS				
Seal Material	EPDM, FPM				
Body Material	PP-H-GR				
Media Temperature	See Temperature Chart				
Ambient Temperature	–10°C to + 55°C				
Mounting	Fits between PN6/10/16 Flanges				
On a supplied a supplied	D50 - D225 PN10 (150 PSI)				
Opperating pressure	D250 - D315 PN6 (90PSI)				
	15-30 V AC 50/60 Hz, 12-48 VDC,				
Operating Voltage	100-240 V AC 50/60 Hz, 100-350 V				
	DC				
Act 3003	DN65-DN100				
Act 3005	DN125-DN300				
Optical Indicator	Standard				
Limit Switches	Standard				
Condensation Resistor	Standard				
Torque Limiter	Standard				
Manual Override	Standard				

#### **Design Advantages**

A butterfly valve from our Extreme Range, that offers high performance, excellent flow characteristics and a minimal pressure drop.

#### Body in Polypropylene

Compounded with reinforced fibreglass (PP-GR) offering a high mechanical strength and resistant to UV rays.

#### **Disc Options**

PVC-U / PVC-C / PP-H / PVDF / ABS

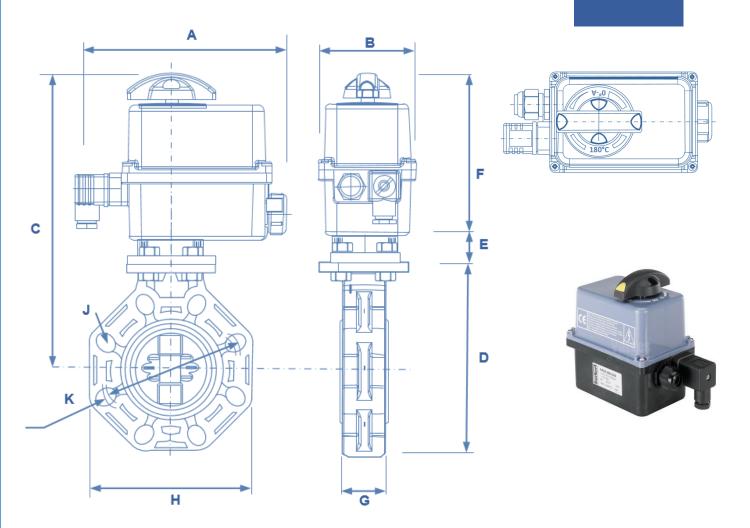
#### Drillings

Oval pattern slots that allow mating flanges to couple with ease.

#### Easy to Actuate

Our Purpose Built Mounting Kit for use with Electric, Pneumatic and Gearbox.





Actuator Type							
SIZE	TYPE	MODEL					
DN65	35	3003					
DN80	60	3003					
DN100	60	3003					
DN125	150	3005					
DN150	150	3005					
DN200	150	3005					
DN250	300	3005					
DN300	300	3005					

The 3003 series electric actuators are available in a composite body, wide range of voltages and control options to suit your specific requirements. Limit switches, optical indicator and manual override are fitted as standard. High quality electrical components and alloy gearing ensure reliability and extended life span. The actuator is supplied with DIN connector.

#### **FAIL SAFE OPTION**

The 3003 actuator can be supplied with an integrated fail safe option which offers security, ensuring the valve returns to the initial position in the case of a power failure.

#### **Advantages**

24/7 battery charge indicator with reporting relay

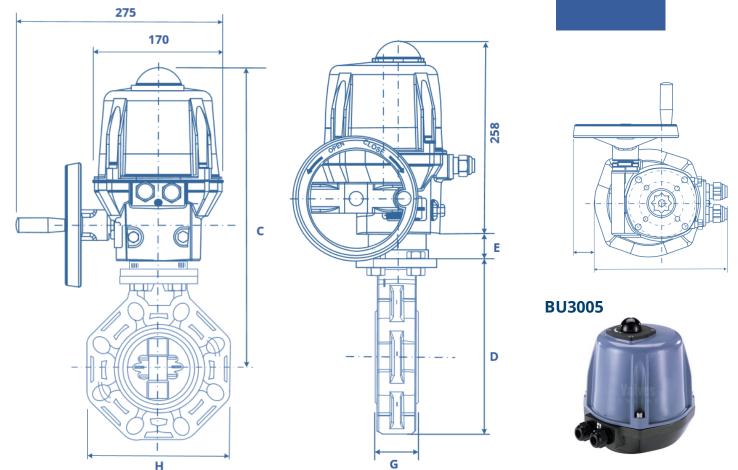
Power shut off after 3 minutes to avoid battery discharge.

Quick and easy replacement of battery.

2 initial settings either normally open or normally closed.

Dimensions												
D	DN	Α	В	F	С	D	Е	J	G	Н	K	Holes
63-75	65	204	128	177	347	201	50	18	48	156	125-145	4
90	80	204	128	177	363	232	50	19	52	190	150-170	8
110	100	204	128	177	375	255	50	19	59	212	180-192	8





Actuator Type							
SIZE	TYPE	MODEL					
DN65	35	3003					
DN80	60	3003					
DN100	60	3003					
DN125	150	3005					
DN150	150	3005					
DN200	150	3005					
DN250	300	3005					
DN300	300	3005					

3005 Electric actuator fitted on to a wafer pattern PN10/16 Butterfly Valve. The actuators fit directly onto a special purpose made mounting bracket, giving rigidity and strength. The valve has resistance to many inorganic chemicals and excellent flow characteristics.

## FAIL SAFE OPTION Description

The 3005 actuator can be supplied with an integrated fail safe option which offers security, ensuring the valve returns to the initial position in the case of a power failure.

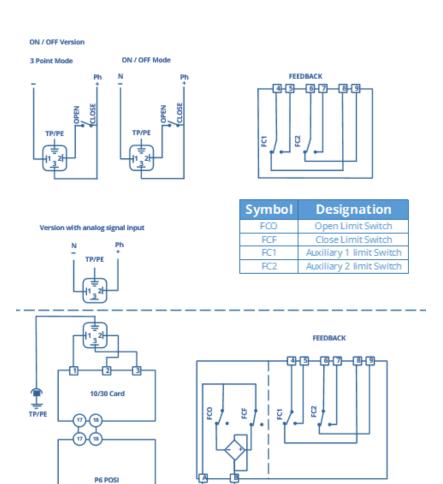
#### **Modulating Card for Control**

Offering 0-10V, 4-20 mA and 0-20mA input/output signals

	DIMENSIONS									
SIZE DI	D	Е	G	Н	J	K	HOLES			
125-140	DN125	472	284	50	66	238	22	190-215	8	
160	DN150	488	314	55	<b>7</b> 2	265	24	240	8	
200-225	DN200	525	378	55	73	320	23	270-298	8	
250	DN250	432	450	55	114	453	29	329-355	12	
315	DN300	432	545	55	114	477	29	384-427	12	



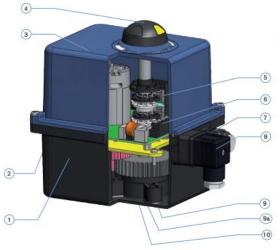
#### **BU3003 Electrical Information**



	Technical data						
Torque	25, 35, 60 AND 100 Nm						
Angle of rotation	90° (+/- 5°)						
90° rotation time	7 sec - 35 Nm , 60 Nm 12 sec						
Duty rating	At max. torque: 50% of the time Control actuator: 50% of max. torque						
Power supply	Tolerance 15-30 V AC 50/60 Hz / 12-48 V DC 100- 240 V AC 50/60 Hz / 100-350 V DC +/- 10%						
Power consumption	15 - 45 W						
Motor protection	Torque limitater						
Electrical connection	cable gland plug acc. EN 175301-803						
Mounting	acc. ISO 5211 F05/F07						
Drive Motor	35/60 Nm Female star 22 mm; conversion sleeve star 22/14 mm enclosed						
Limit Switches	4adjustable (2 for motor and 2 for feedback) Max. 250V AC5A						
Manual Override	Standard						
Mechanical Limit	Standard						
Optical Position	Standard						
Heating Resistor	Standard						
Protection	IP65						

### BU3003

Moto =



No.	Designation
1	Housing
2	Manual override
3	Cover
4	Visual position indicator
5	Limit switches
6	Terminal block
7	Cable gland
8	Cable plug
9	Connection flange
9a	Removable flange plate (20 Nm only; other interface according ISO5211)
10	Conversion sleeve

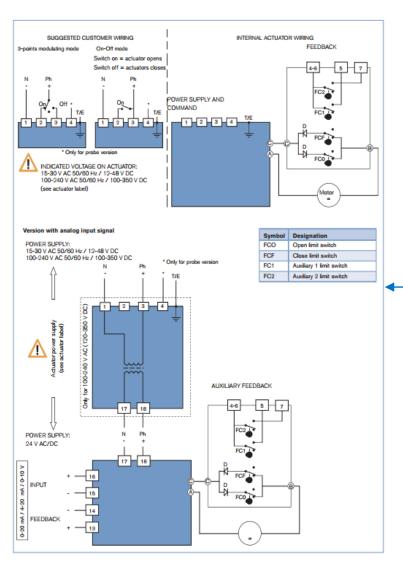
The resolution of control operation is 1° The input resistance for control of 0-10V is 10 k $\Omega$  The input resistance for control of 0-20 mA / 4-20 mA is 100 k $\Omega$ 

All information is sourced from our manufacturer's data and is intended for guidance only - Valves Online can accept no liability for changes, omissions or errors.

Output Signal



#### **BU3005 Electrical Information**

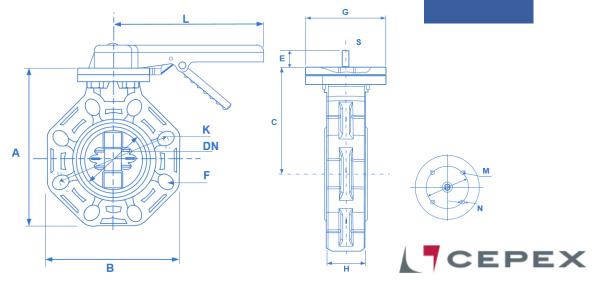


	Technical data
Torque	25 and 300 Nm (see ordering chart) (600 and
	1000 Nm on request)
Angle of rotation	90° (+/- 5°)
90° rotation time	7 up to 60 s (see ordering chart)
Duty rating	At max. torque: 50% of the time Control actuator:
Devisionalis	50% of max. torque Tolerance 15-30 V AC 50/60 Hz / 12-48 V DC 100-
Power supply	
-	240 V AC 50/60 Hz / 100-350 V DC +/- 10%
Power consumption	45 W
Motor protection	Electronic torque limitation
Electrical connection	2 cable glands ISO 20 (Cable plug acc. EN 175301-
	803 on request)
Mounting	acc. ISO 5211 F05/F07 , F07/F10
Drive Motor	25 Nm Female star 17 mm; conversion sleeve star 17/11 mm enclosed Motor 45, 75 Nm Female
	star 17 mm; conversion sleeve star 17/14 mm
	·
	enclosed Motor 100, 150, 300 Nm Female star 22
	mm; conversion sleeve star 22/17 mm enclosed
Limit Switches	4adjustable (2 for motor and 2 for feedback) Max. 250V AC5A
Manual Override	Handwheel
Warradi Override	Tanawieci
Mechanical Limit	Standard
Stops	
Optical Position	Standard
Indicator	
Heating Resistor	10 w
Protection	IP68

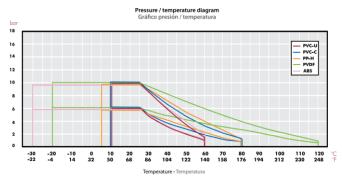
#### **BU3005**

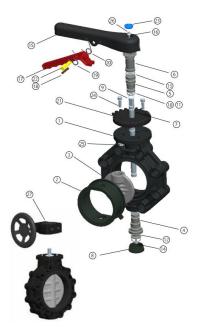






Dimensions															
Dimensions	DN	А	В	С	Е	F	G	Н	K	L	M	N	E'	S	Holes
63-75	65	201	156	120	40	18	112	48	125-145	220	70	9	35	10	4
90	80	232	190	136	40	19	112	52	150-170	245	70	9	35	12	8
110	100	255	212	148	40	19	112	59	180-192	245	70	9	35	16	8
125-140	125	284	238	164	40	22	112	66	190-215	320	70	9	35	20	8
160	150	314	265	180	40	24	112	72	240	320	70	9	35	20	8
200-225	200	378	320	217	50	23	136	73	270-298	391	102	11	47	26	8





No	PART	MATERIAL
1	Body	PP-GR
2	Sealing Gasket	EPDM / FPM
3	Disc	PVC-U, PPH,
]	Disc	CPVC, PVDF
4	Lower Bearing	POM
5	Upper Bearing	POM
6	Auxilliary Bearing	POM
7	Shaft	AISI-630
8	Сар	PP-GR
9	Ring DIN - 471	A2
10	O-Ring	EPDM / FPM
11	O-Ring	EPDM / FPM
12	Lower Washer	POM
13	O-Ring	EPDM / FPM
14	Screw DIN 912	A2
15	Handle	PP-GR
16	Washer	A2
17	Lever	PP-GR
18	Pin	AISI-304
19	Left Spring	AISI-304
20	Right Spring	AISI-304
21	Throttle Plate	PP-GR
22	Safety Lock	POM
23	Handle Cap	PP-GR
24	Screw DIN 912	A2
25	Nut DIN 934	A2
26	Screw DIN 912	A2
27	Gear Box	Aluminium

HEAD LOSS / FLOW								
DN	D	Kv (l/min)	Cv (GPM)					
65	63-75	1800	126					
80	90	4020	282					
100	110	8280	580					
125	125-140	11760	826					
150	160	16200	1134					
200	200-225	33000	2311					
250	250-280	5200	3655					
300	315	78571	5502					