

## Butterfly Valve with ANSI Class 300 Lug types

- Disc 316 stainless steel
- Bubble tight shut-off
- Teflon seat
- Valve face-to-face dimensions comply with API 609 & MSS-SP-67
- For use with dead-end service
- Completely assembled and tested, ready for installation
- The SHP series are Flowseal® valves manufactured by the Crane Company.



5-year warranty

Picture may differ from product

## Type overview

Type	DN
F6100-300SHP	100

## Technical data

Functional data	Valve size [mm]	4" [100]
Fluid		chilled or hot water, up to 60% glycol, steam
Fluid Temp Range (water)		-22...400°F [-30...204°C]
Body Pressure Rating		ANSI Class 300
Close-off pressure Δps		285 psi
Flow characteristic		modified equal percentage, unidirectional
Leakage rate		0%
Pipe connection		Flange for use with ASME/ANSI class 300
Servicing		maintenance-free
Flow Pattern		2-way
Controllable flow range		quarter turn, mechanically limited
Cv		451
Maximum Inlet Pressure (Steam)		50 psi
Maximum Velocity		32 FPS
Lug threads		3/4-10 UNC
Materials	Valve body	Carbon steel full lug (ASME B16.34)
	Stem	17-4 PH stainless steel
	Seat	RPTFE
	Bearing	glass backed PTFE
	Disc	316 stainless steel
Suitable actuators	Non Fail-Safe	GMB(X) 2*GMB(X) PRB(X)
	Electronic fail-safe	2*GKB(X) PKRB(X)

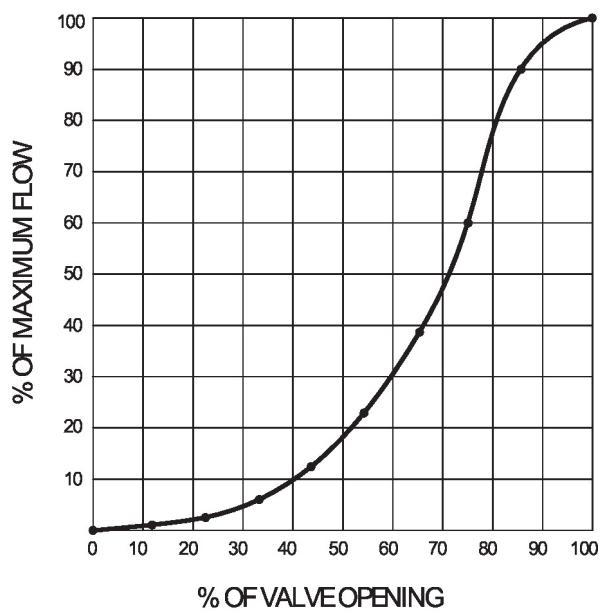
## Safety notes



- WARNING: This product can expose you to lead which is known to the State of California to cause cancer and reproductive harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

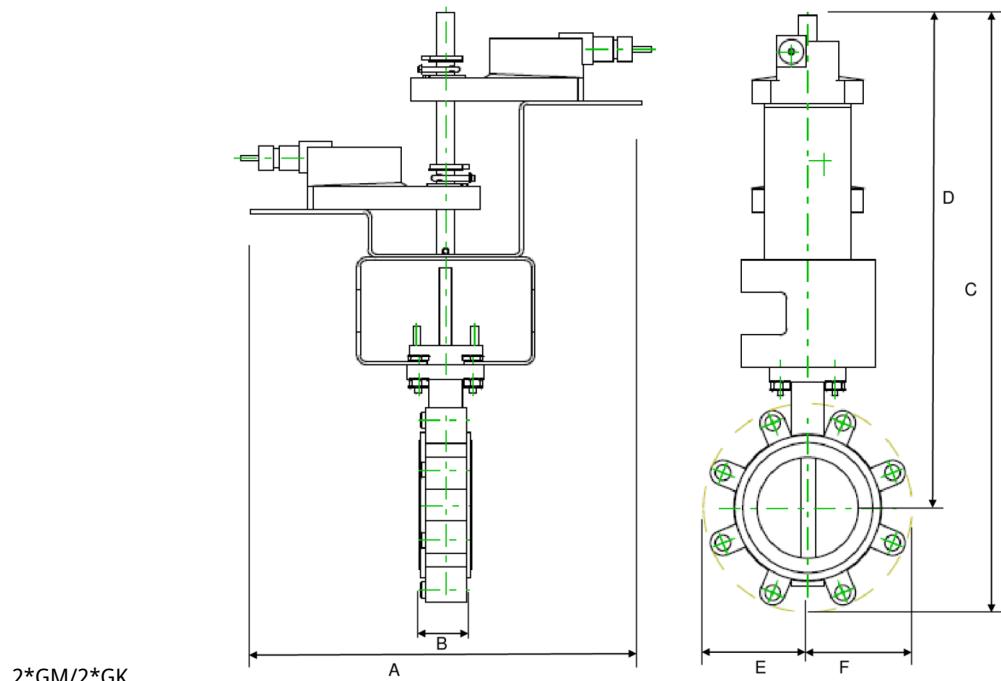
## Product features

## Flow/Mounting details

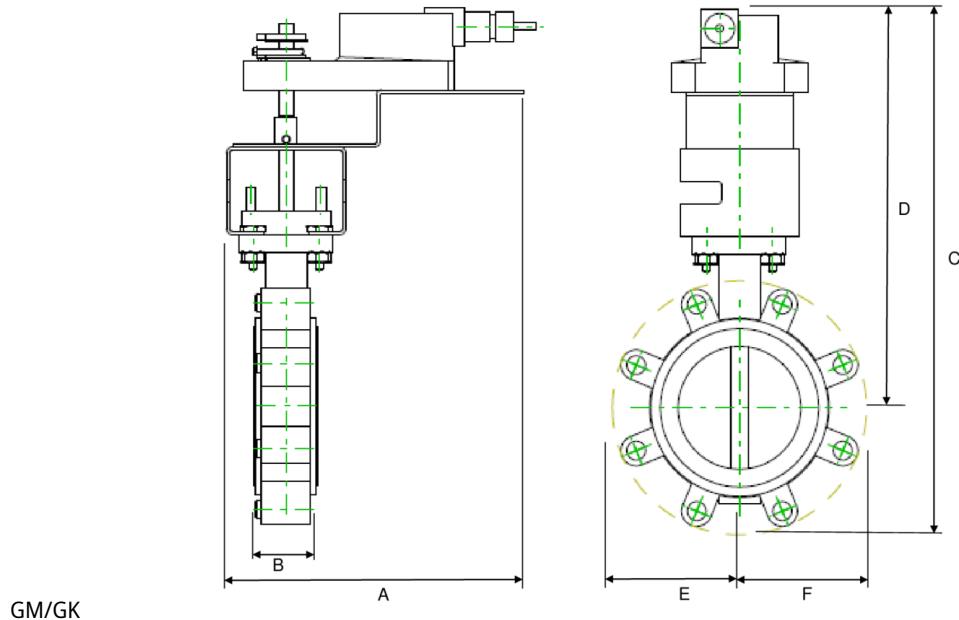


## Dimensions

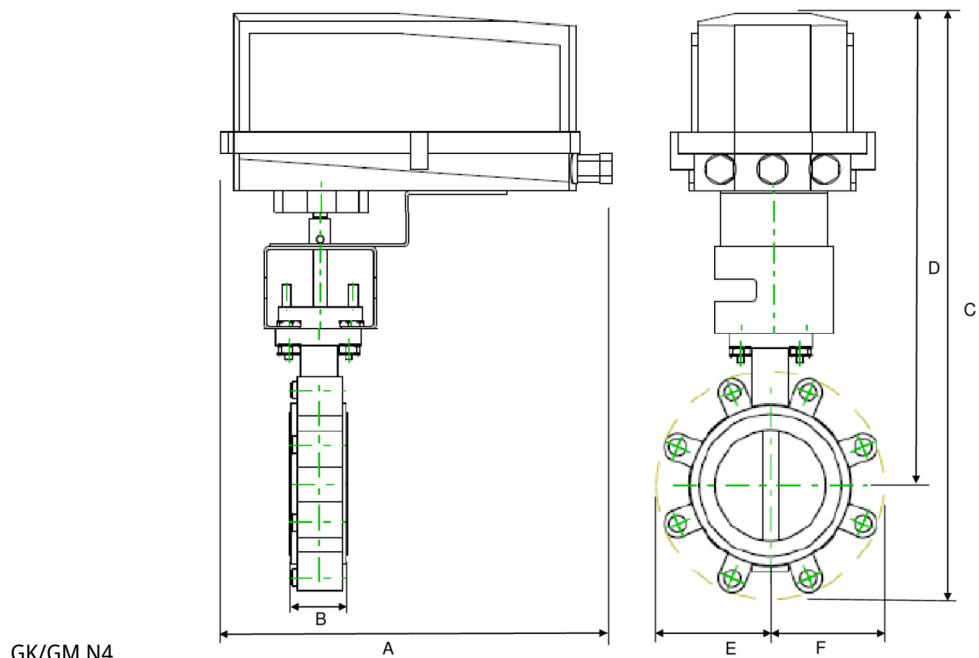
Type	DN	Weight
F6100-300SHP	100	29 lb [13 kg]



A	B	C	D	E	F	Number of Bolt Holes
23.8" [605]	2.2" [56]	25.1" [638]	20.9" [530]	4.4" [113]	4.4" [113]	8

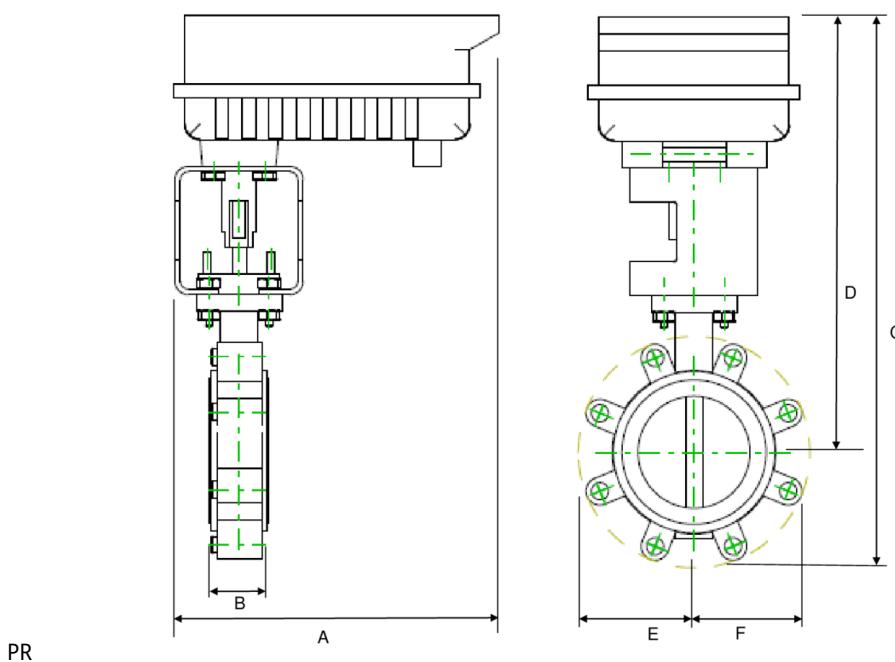


A	B	C	D	E	F	Number of Bolt Holes
15.3" [388]	2.2" [56]	16.8" [426]	13.0" [331]	3.9" [100]	3.9" [100]	8

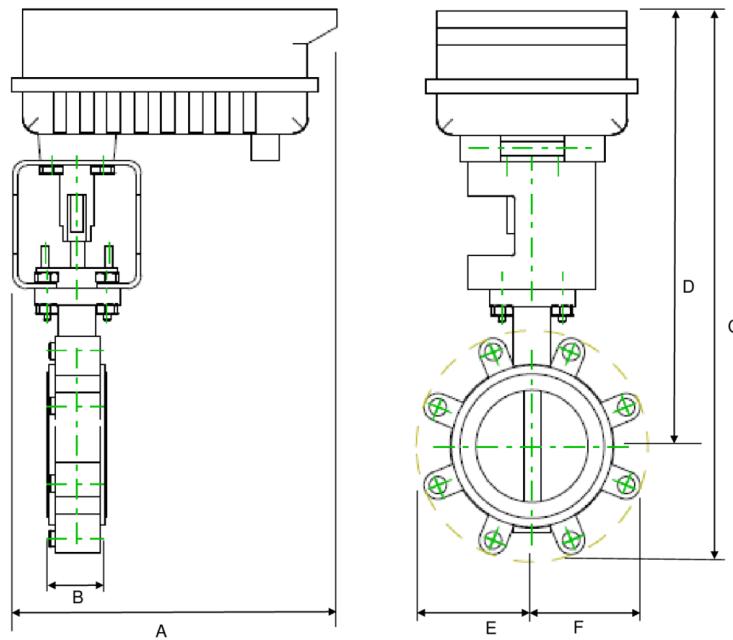


A	B	C	D	E	F	Number of Bolt Holes
10.9" [277]	2.2" [56]	18.7" [476]	14.0" [355]	4.9" [124]	4.9" [125]	8

## Dimensions



A	B	C	D	E	F	Number of Bolt Holes
9.1" [231]	2.2" [56]	17.2" [438]	13.5" [342]	3.9" [100]	3.9" [100]	8



A	B	C	D	E	F	Number of Bolt Holes
14.1" [358]	2.2" [56]	20.6" [523]	15.3" [388]	5.4" [137]	5.4" [137]	8
A	B	C	D	E	F	Number of Bolt Holes
12.0" [304]	2.2" [56]	23.0" [584]	18.3" [464]	4.9" [124]	4.9" [125]	8



5-year warranty



## Technical data

<b>Electrical data</b>	Nominal voltage	AC/DC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V / DC 21.6...28.8 V
	Power consumption in operation	8 W
	Power consumption in rest position	2.5 W
	Transformer sizing	11 VA
	Electrical Connection	Terminal blocks
	Overload Protection	electronic throughout 0...95° rotation
<b>Functional data</b>	Direction of motion motor	selectable with switch 0/1
	Manual override	under cover
	Angle of rotation	Max. 95°
	Angle of rotation note	adjustable with mechanical stop
	Running Time (Motor)	35 s / 90°
	Running time motor note	constant, independent of load
	Noise level, motor	45 dB(A)
	Position indication	Mechanical, 5...20 mm stroke
<b>Safety data</b>	Power source UL	Class 2 Supply
	Degree of protection IEC/EN	IP66/67
	Degree of protection NEMA/UL	NEMA 4X
	Enclosure	UL Enclosure Type 4X
	Agency Listing	cULus acc. to UL60730-1A/-2-14, CAN/CSA E60730-1:02, CE acc. to 2014/30/EU and 2014/35/EU
	Quality Standard	ISO 9001
	Ambient humidity	Max. 100% RH
	Ambient temperature	-22...122°F [-30...50°C]
	Ambient temperature note	-40...50°C for actuator with integrated heating
	Storage temperature	-40...176°F [-40...80°C]
	Servicing	maintenance-free
<b>Weight</b>	Weight	5.2 lb [2.3 kg]
<b>Materials</b>	Housing material	Die cast aluminium and plastic casing

**Footnotes** †Rated Impulse Voltage 800V, Type action 1, Control Pollution Degree 3.

## Accessories

Electrical accessories	Description	Type
	Battery backup system, for non-spring return models Battery, 12 V, 1.2 Ah (two required)	NSV24 US NSV-BAT
Factory add-on option only	Description	Type
	Heater, with adjustable thermostat	ACT_PACK_H

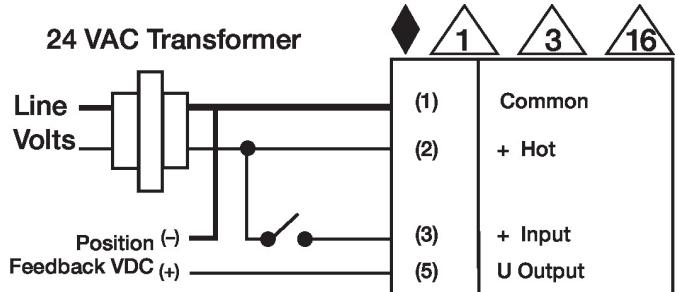
## Electrical installation

## ☒ INSTALLATION NOTES

- ⚠ 1 Provide overload protection and disconnect as required.
- ⚠ 3 Actuators may also be powered by DC 24 V.
- ⚠ 10 For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.
- ⚠ 12 IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).
- ⚠ 16 Actuators are provided with a numbered screw terminal strip instead of a cable.
- ◆ Meets cULus requirements without the need of an electrical ground connection.
- ⚠ Warning! Live electrical components!  
During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

## Wiring diagrams

## On/Off



## Floating Point

