



# Submersible Gear Operator

SGOP-2-0222



## **SUBMERSIBLE GEAR OPERATOR**

(Gear Operator sold separately or can be purchased assembled on Butterfly Valve)

### **Enclosure Rating**

Sealed thermoplastic enclosure conforms to IPx7 rating as defined by international standard UNE EN 60529 and can withstand temporary immersion up to a depth of 1 meter for 30 minutes. All moving internal parts are permanently lubricated to maintain continuous service-free functionality.

### **Low Profile, Light Weight Body**

Low profile Submersible Gear Operator comes standard on 1-1/2" and larger butterfly valve sizes and utilizes high efficiency Acme screw. Thermoplastic enclosure provides a corrosion-free, light-weight alternative to standard metal gear operators.

### **Easy Application**

Gear Operator features a mounting pattern in accordance with ISO5211/MSS-SP-101 for easy butterfly valve interface. Bolt-on conversion or replacement unit for all Spears® Butterfly Valves and other brand valves. Includes all components and hardware for direct mount.

## **Patented Product Design**

Spears® has developed a patented Submersible Gear Operator for butterfly valves perfect for use in harsh environments. With a unique, light-weight, sealed body design, the Spears® Submersible Gear Operator provides extended service life and conforms to IPx7 ingress protection.

The robust 1/4 turn (90°) worm gearbox assists valve disc travel and is ideal for use with Spears® Standard and Wafer Butterfly Valves and other brand valves. The Spears® Submersible Gear Operator is well suited in industrial, commercial and marine applications where butterfly valves are required for control and throttling applications.

### **Polypropylene Handwheel**

High impact red polypropylene handwheel conveys adequate torque necessary to cycle large diameter butterfly disc with ease.

### **Buna-N O-rings & Gasket Seals**

Operator housing is sealed with resilient Buna-N sealing o-rings & gasket material for resistance to most environments.

### **Position Indicator**

Built-in position indicator is top mount with high visibility red color allowing for quick position location at a distance.

### **Limited Lifetime Warranty**

Spears® Lifetime Limited Warranty covers defects in material and workmanship for the life of the product.

### **Sample Engineering Specification**

All thermoplastic components utilized in the Spears® Submersible Gear Operator enclosure shall be produced from PVC Type I, Cell Classification 12454 or CPVC Type 4, Cell Classification 23447 per ASTM D1784. Handwheel and position indicator shall be produced from polypropylene material in accordance with ASTM D4101. All thermoplastic Gear Operators shall be submersible to IPx7 requirements in accordance with UNE EN 60529. Submersible Gear Operators shall have Buna-N O-rings and sealing gaskets for appropriate applications. Mounting platform dimensions shall conform to ISO5211/MSS-SP-101. Mounting hardware shall be provided.



## SGOP1 & SGOPW1 Submersible Gear Operators

feature:

- (1) Rugged Thermoplastic Housed Gear Operator Assembly
- (1) Polypropylene Handwheel
- (4) SS High Grade Bolts
- (4) SS High Grade Plate Washers
- (4) SS High Grade Lock Washers
- (4) SS High Grade Nuts

### Part Numbers for Standard Butterfly Valve (SGOP)

Part Number	Size	Std Pk	Mstr Ctn	Prod Code
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#### Suitable for Submersible Use

Standard Butterfly Valve  
Buna O-rings and Gasket

SGOP1-015	1-1/2	1	4	299
SGOP1-025	2 & 2-1/2	1	4	299
SGOP1-030	3	1	4	299
SGOP1-040	4	1	4	299
SGOP1-060	6	1	4	299
SGOP1-080	8	1	4	299
SGOP1-100	10	1	0	299
SGOP1-120	12	1	0	299
SGOP1-140	14 & 16	1	0	299

For SGOP(W) Gear Operator less handwheel, add "0" to prefix end. Ex: SGOP1"0"-025.  
For CPVC enclosure add a "C" at end of part number.

### Part Numbers for Wafer Butterfly Valve (SGOPW)

Part Number	Size	Std Pk	Mstr Ctn	Prod Code
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#### Suitable for Submersible Use

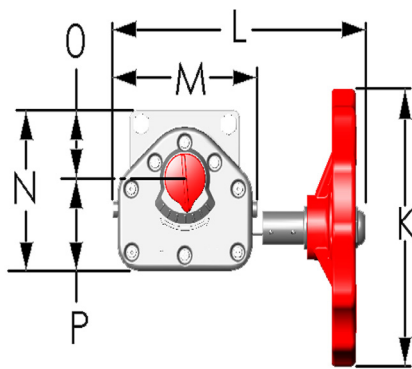
Wafer Butterfly Valve  
Buna O-rings and Gasket

SGOPW1-025	2 & 2-1/2	1	2	299
SGOPW1-030	3	1	2	299
SGOPW1-040	4	1	2	299
SGOPW1-060	6	1	2	299
SGOPW1-080	8	1	2	299
SGOPW1-100	10	1	2	299
SGOPW1-120	12	1	2	299

For SGOP(W) Gear Operator less handwheel, add "0" to prefix end. Ex: SGOP1"0"-025.  
For CPVC enclosure add a "C" at end of part number.

## Submersible Gear Operator Dimensional Information

Information listed represents Submersible Gear Operator dimensions for "SGOP" Standard Butterfly Valves and "SGOPW" for Wafer Butterfly Valves



Size	K	L	M	N	O	P
2	8	8-7/8	4-3/8	4-3/8	2	2-3/8
2-1/2	8	8-7/8	4-3/8	4-3/8	2	2-3/8
3	8	9-1/4	4-7/8	4-11/16	2	2-11/16
4	8	9-1/4	4-7/8	4-11/16	2	2-11/16
6	8	9-1/4	4-7/8	4-11/16	2	2-11/16
8	8	9-1/4	4-7/8	4-11/16	2	2-11/16
10	7-15/16	10-7/8	6-13/16	6-5/16	2-3/8	2-1/8
12	7-15/16	10-7/8	6-13/16	6-5/16	2-3/8	2-1/8

Contact Spears® for availability on 14" & Larger Valves

Refer to BF-3C for more information on Submersible Gear Operator installation.



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