

# Plasgear™ Gear-Operator

## 1.0 SCOPE:

All requirements are for valves requiring Gear-Operators for general usage, corrosive environments and freshwater submersible applications.

## 2.0 MATERIALS:

Enclosure housing – Composite Plastic  
Position Indicator - Polypropylene  
Handwheel – Polypropylene Glass Filled  
Output Coupling and Handwheel Bush – SCS13 (Cast SS)  
Fasteners – 300 SS  
Shaft - 300 SS  
O-rings – Nitrile (Buna-n)  
Worm & shaft gears – Beric

## 3.0 Plasgear™ Operators:

The Plasgear™ is the industry's first all plastic enclosure gear-operator. It is designed for highly corrosive environments and fresh water submersible applications. The housing is sealed to the equivalent of Nema 6 submersible rating with IP67 corrosion resistance. The Plasgear™ is designed for use on ¼ turn butterfly valves requiring up to a maximum output torque of 8,000 inch-pounds.

## 4.0 Models:

2 models are available:

Type-241 Plasgear™ - Maximum Output Torque – 2700 inch-pounds  
ISO 5211 Bolt Circle – F07/F10  
Gear Ratio – 38 : 1  
Turns to Close – 9.5  
Maximum Handwheel Force – 70 Foot-pounds  
Weight – 5 lbs.

Type-243 Plasgear™ – Maximum Output Torque – 8,000 inch-pounds  
ISO 5211 Bolt Circle – F14  
Gear Ratio – 38 : 1  
Turns to Close – 9.5  
Maximum Handwheel Force – 90 foot-pounds  
Weight – 18 lbs.

## 4.1 Approved Manufacturer

Plasgear™ Gear-Operators shall be provided by Asahi/America, Inc. of Malden, MA with no approved equals. Manufacturer must be ISO-9001 certified.

## 4.2 Working Temperature:

-5°F to 250°F

## 5.0 INSTALLATION PROCEDURES:

The Plasgear™ would either come factory equipped on Asahi Type-57/57L or 56 Butterfly valves, or can be fitted to any manufacturer's butterfly valves utilizing either a mounting bracket assembly or direct ISO mount.