# 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<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> - Maximum Output Torque – 2700 inch-pounds ISO 5211 Bolt Circle – F07/F10 Gear Ratio – 38 : 1 Turns to Close – 9.5 Maximium Handwheel Force – 70 Foot-pounds Weight – 5 lbs. Type-243 Plasgear<sup>™</sup> – 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<sup>™</sup> Gear-Operators shall be provided by Asahi/America, Inc. of Lawrence, 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<sup>™</sup> would either come factory equipped on Asahi Type-57/57IL/57LIS or 56 Butterfly valves, or can be fitted to any manufacturer's butterfly valves utilizing either a mounting bracket assembly or direct ISO mount.