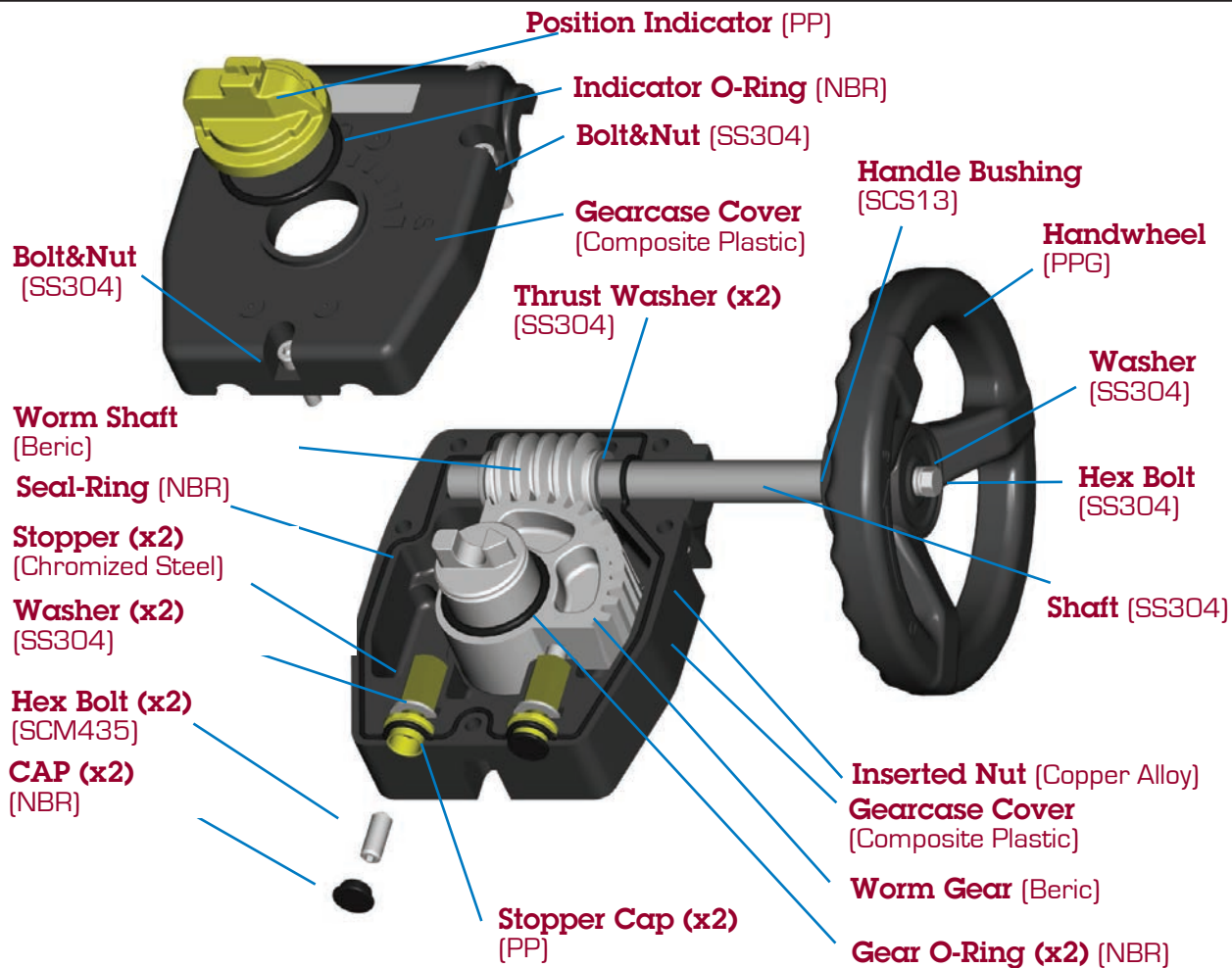
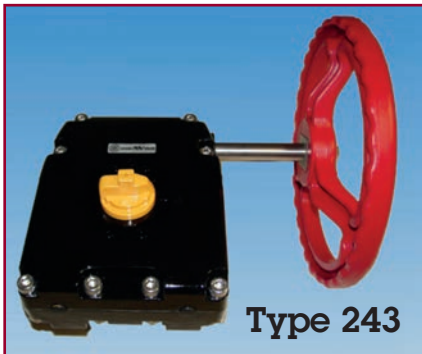
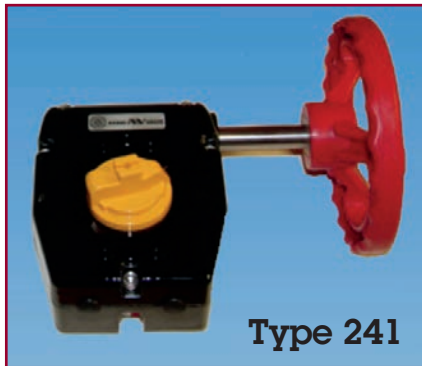


Plasgear™ - Plastic Gear Operator



Specifications



Type	Series 241	Series 243
Max Output Torque	300 N-m (2,700 in-lbs.)	900 N-m (8,000 in-lbs.)
Mechanical Advantage	12	15
Max Input Torque	25 N-m (220 in-lbs.)	60 N-m (530 in-lbs.)
Max Input Handwheel Force	300 N (70 lbf)	400 N (90 lbf)
Gear Ratio	38 : 1	38 : 1
Gear Efficiency	32%	39%
Turns to Close	9.5	9.5
Adjustable Travel	90+5°, -5°	90+5°, -5°
Valve Mounting Flange (ISO 5211)	F07, F10	F14
Weight	5 lbs.	18 lbs.
Weather Resistance	IP67	IP67
Enclosure	0.2 barg (3 psig) Submersible	0.2 barg (3 psig) Submersible
Temperature	-20 to 120°C (-5 to 250°F)	-20 to 120°C (-5 to 250°F)
Rated Cycle Life	100,000 cycles	100,000 cycles

Valve Mounting Flange

Valve Mounting Flange	Series 241		Series 243
Type	F07	F10	F14
ISO	2.756	4.016	5.512
P.C.D	M8	M10	M16
Threaded Size	4	4	4
Number of Bolts	4	4	4

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 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™ 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.

