



# MANUAL OPERATORS

Bray Controls offers three operators for manual control of valve position. All manual operators mount directly to Bray valves, and all are epoxy coated for excellent corrosion, abrasion and impact resistance.

MANUAL OPERATORS	
<b>SERIES 01 - Handle</b>	1"-12" (25mm -300mm)
<b>SERIES 04 - Gear Operator</b>	2"-48" (50mm -1200mm)
<b>SERIES 05 - Declutchable Gear Operator</b>	2"-36" (50mm -900mm)

## SERIES 01 - HANDLE & NOTCH PLATE

Bray offers two handles for on-off and throttling service – one for resilient seated valves from 1"-12" (25mm-300mm), and a high torque handle for high pressure valves from 2½"- 8" (65mm-200mm). These quarter turn handles have a locking spring and a directional pointer for valve disc position indication. Bolted notch plates are offered. For resilient seated valves a 10 position plate is standard. For high pressure valves a 9 position plate is standard. Both contain on-off stops to prevent over rotation of the valve. Optionally available are an infinite position plate, a 180° notch plate, a memory stop, a padlock kit, and a 2" square nut version.

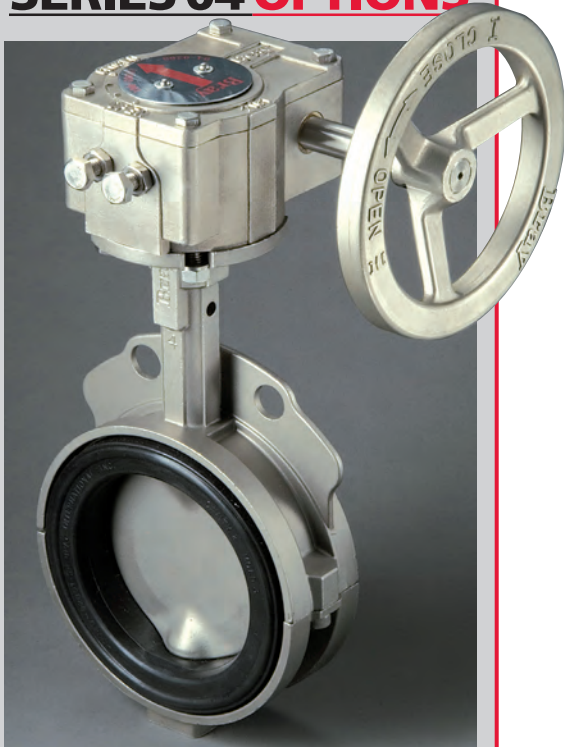
## SERIES 04 - GEAR OPERATOR

For heavy duty on-off and throttling service of 2"-48" (50mm-1200mm) valves, the Series 04 is self lubricated for smooth, trouble-free operation. The rugged, cast iron body with O-ring body seals is weatherproof to IP65. A self-locking worm and worm gear drive holds the valve in the desired position. Features include a readily accessible handwheel, a valve position indicator and mechanical travel stops which permit field adjustment of valve movement to specific degrees of rotation. Optionally available are chainwheel accessories, padlock kits and 2" square nut versions. A Gear Operator with a stainless steel housing is also available for valve sizes 1"-16".

## SERIES 05 - DECLUTCHABLE GEAR OPERATOR

Available for 2"-36" (50mm-900mm) valves. This operator is excellent for the safe handling of spring return actuators. During pneumatic operation, the worm of the gear unit is disengaged. Should the valve require opening or closing in the event of power loss, manual rotation of the declutch lever will provide a camming action and engage the worm to the segmented worm gear, allowing rotation of the valve using the handwheel. The Series 05 can be installed in the field with existing Bray pneumatic actuators.

## SERIES 04 OPTIONS

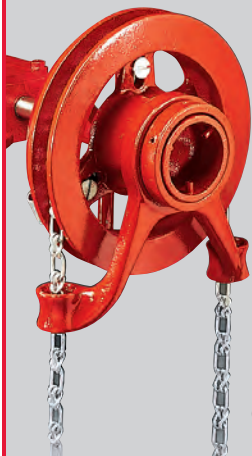


### 316 Stainless Steel for sanitary & corrosive applications

Bray Controls proudly offers the Series 04 Stainless Steel Gear Operator for manual operation of quarter turn valves. With stainless steel housings, input shafts and handwheels, the Series 04 is designed for service in highly corrosive environments, sanitary, breweries and pharmaceutical applications. The units are suitable for on-off and throttling service.

Series 04 Stainless Steel Gear Operator units have different gear ratios – providing a torque output range of 2,000 to 24,000 lb-in. The temperature range is -4°F (-20°C) to 250°F (120°C).

These weatherproof gear operators meet NEMA 4, 4x and IP 65 specifications.



**CHAINWHEEL** for remote access to valve positioning when the handwheel is not accessible, such as valves positioned high out of reach.

**A PADLOCK KIT & 2" SQUARE NUT** version for buried service are also available with the Series 04 (not shown).

## SERIES 01

**STANDARD 10 POSITION NOTCH PLATE** has been designed to lock the handle securely in place, preventing position change of disc due to line pressure, vibration or shock. Standard 9 Position Plate for high pressure valves is not shown.



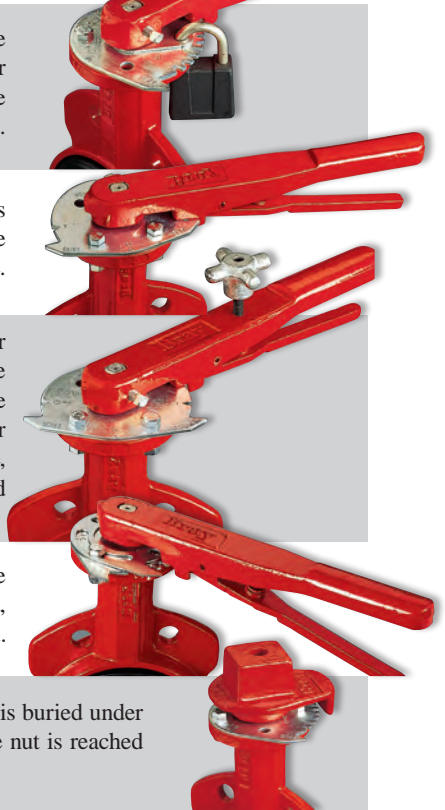
**PADLOCK KIT** allows the customer to lock the valve in the full open or closed position, tamper proofing the valve. By drilling a new hole in the top plate, the handle can be locked in mid travel.

**HANDLE AND 180° NOTCH PLATE** allows the operator to switch the handle to either side without removing the notch plate from the valve.

**INFINITE POSITION NOTCH PLATE** for throttling applications, allows for very precise adjustments of valve disc positioning anywhere from 0° to 90°. Positioning is simply a matter of loosening the set knob, moving the handle, then retightening the knob. For resilient seated valves only.

**MEMORY STOP** allows the operator to set the maximum amount the valve can open. When set, this limit will remain fixed until the stop is reset.

**2" SQUARE NUT** is used where the valve is buried under the surface. To rotate valve disc position, the nut is reached with a T-handle wrench.



## SERIES 05

### DECLUTCHABLE GEAR OPERATOR

The Series 05 offers the same superior features as the Series 04 gear operator with the added ability to manually override pneumatic actuators or rotate the valve when air pressure is not available.



 **Bray** CONTROLS

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