



**Bray**<sup>®</sup>

Series 1: 1"-12" (25mm-300mm)  
Series 4: 2"-54" (50mm-1400mm)  
Series 4 Stainless Steel: 1"-16" (25mm-400mm)  
Series 5: 2"-36" (50mm-900mm)

**Manual Operators**  
Handle / Gear Operator / S.S. Gear Operator / Dec clutchable Gear Operator

Bray Controls proudly offers four 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.

#### **SERIES 1 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 2 1/2"-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 an 8 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 4 GEAR OPERATOR**

For heavy duty on-off and throttling service of 2"-54" (50mm-1400mm) valves, the Series 4 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 4 STAINLESS STEEL GEAR OPERATOR**

Bray Controls is proud to introduce the Series 4 quarter-turn stainless steel gear operator for manual control of valve position. The weatherproof stainless steel housing is ideal for applications in highly corrosive environments as well as in breweries, pharmaceutical and sanitary industries.

#### **SERIES 5 DECLUTCHABLE GEAR OPERATOR**

Available for 2"-36" (50mm-900mm) valves, the Series 5 offers the same superior features as the Series 4 gear operator with the added ability to manually override pneumatic actuators or rotate the valve when air pressure is not available. 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 5 can be installed in the field with existing Bray pneumatic actuators.

 The  
High  
Performance  
Company



**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 8 Position Plate for high pressure valves is not shown.*



**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.



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

A **Padlock Kit** and a **2" Square Nut** version for buried service are also available with the Series 4 (*not shown*).



**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.*



**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.



**Operation** Any residual air pressure in the pneumatic actuator must be vented before operation of the Declutchable Gear Operator. Bray recommends the use of a vent valve to block the incoming air supply and vent residual air. Then engage the declutching lever and rotate the valve using the handwheel. When returning to automatic operation, disengage the manual override by rotating the declutching lever, turning the vent valve to off, then restoring air pressure to the actuator.



**Handle and 180° Notch Plate** allows the operator to switch the handle to either side without removing the notch plate from the valve.



**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 04 STAINLESS STEEL FEATURES**

For on-off and throttling service of 1"-16" (25mm-400mm) butterfly valves. Torque range is 1,100 to 8,800 lb-in. The self-locking worm and worm gear drive holds the valve in the desired position. Features include an aluminum or stainless steel handwheel, a valve position indicator and mechanical travel stops that permit field adjustment of valve movement to specific degrees of rotation. Offered with a double "D" connection for 1"-12" valves and keyway for 14"-16" valves. Additionally, the Series 4 mounts directly to Bray valves, no brackets or adapters are required.

**Bray** CONTROLS

A Subsidiary of BRAY INTERNATIONAL, INC.  
13333 Westland East Blvd., Houston, Texas 77041  
Phone: 281.894.5454 Fax: 281.894.9499  
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