



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.

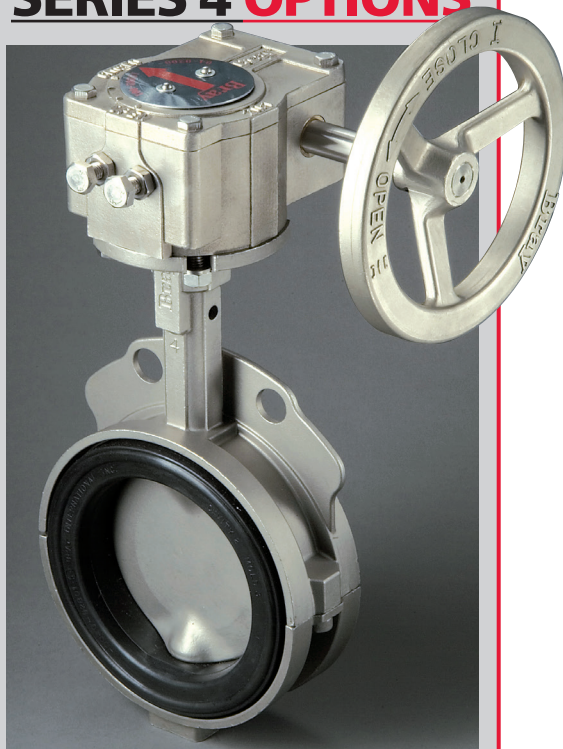
MANUAL OPERATORS	
SERIES 1 - Handle	1"-12" (25mm -300mm)
SERIES 4 - Gear Operator	2"-48" (50mm -1200mm)
SERIES 5 - Declutchable Gear Operator	2"-36" (50mm -900mm)

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 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 4 GEAR OPERATOR For heavy duty on-off and throttling service of 2"-48" (50mm-1200mm) 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 5 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 5 can be installed in the field with existing Bray pneumatic actuators.

SERIES 4 OPTIONS

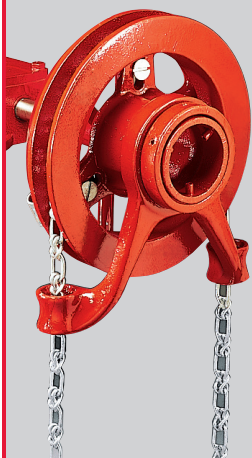


316 Stainless Steel for sanitary & corrosive applications

Bray Controls proudly offers the Series 4 Stainless Steel Gear Operator for manual operation of quarter turn valves. With stainless steel housings, input shafts and handwheels, the Series 4 is designed for service in highly corrosive environments, sanitary, breweries and pharmaceutical applications. The units are suitable for on-off and throttling service.

Series 4 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 4 (not shown)

SERIES 1

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.



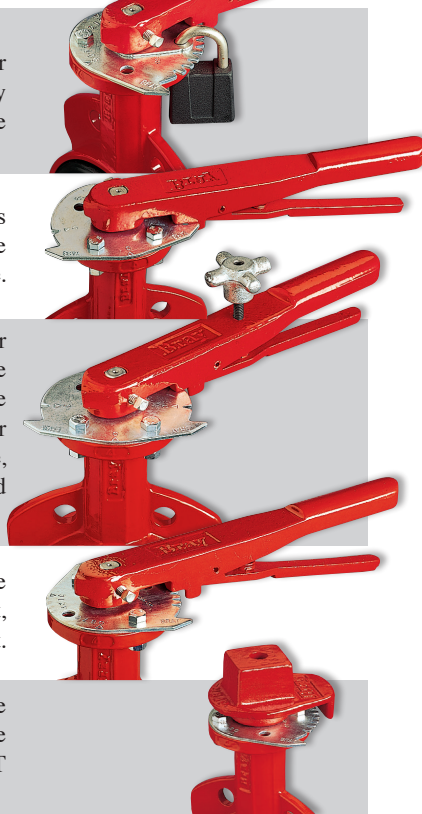
PADLOCK KIT allows the customer to lock the valve in the full open or closed position, tamper proofing the valve. By drilling a new hole in the top plate, the handle can be locked in mid travel.

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.

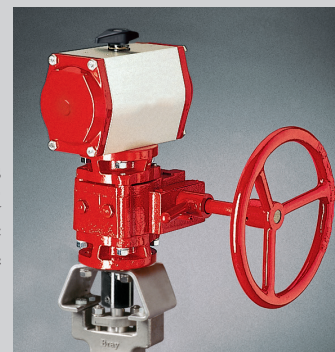
2" SQUARE NUT is used where the valve is buried under the surface. To rotate valve disc position, the nut is reached with a T handle wrench.



SERIES 5

DECLUTCHABLE GEAR OPERATOR

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.



Bray CONTROLS

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