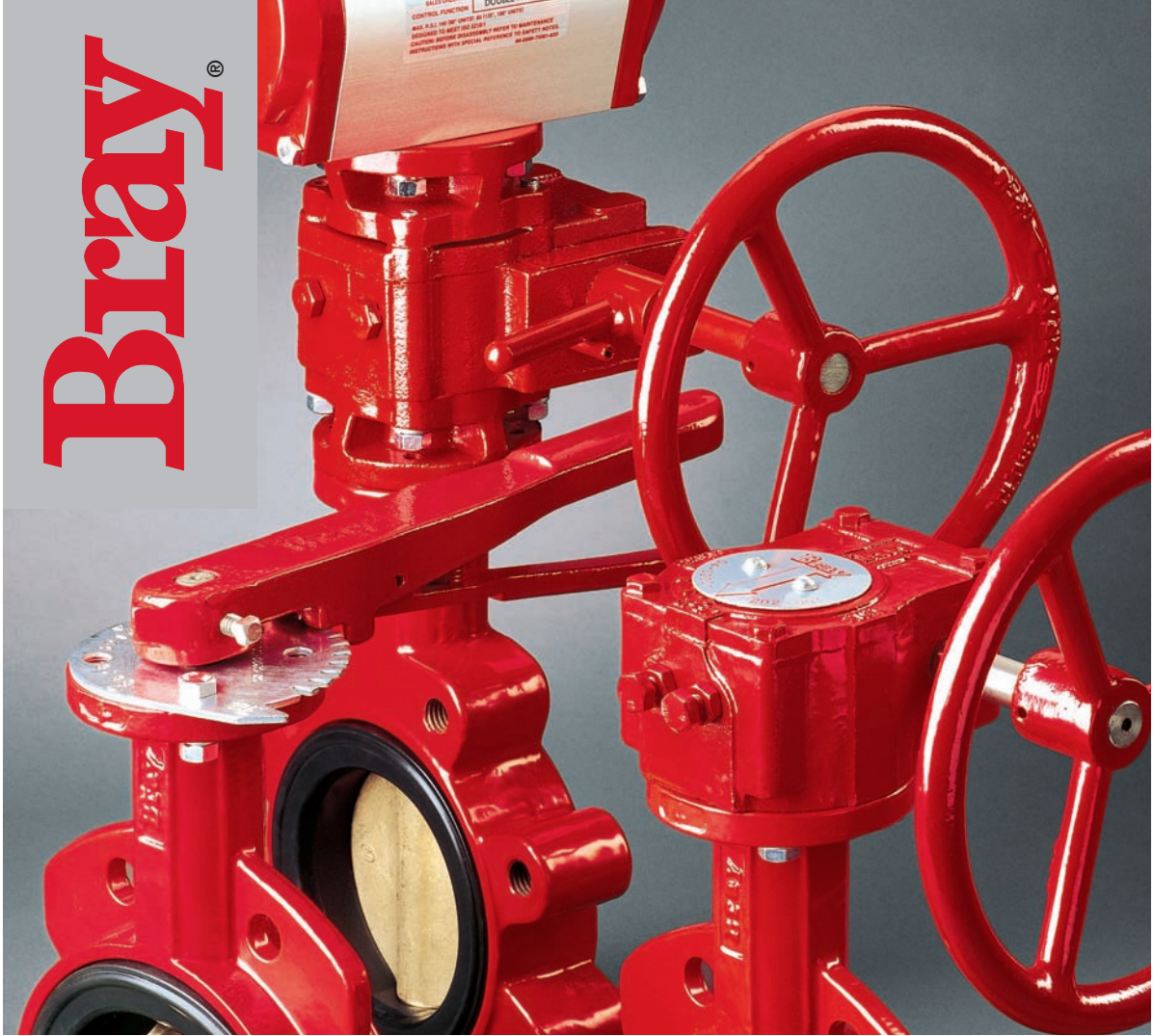


# Bray®



Bray Controls proudly 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.

#### **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"-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, 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.

## **MANUAL OPERATORS**

HANDLE / GEAR OPERATOR / DECLUTCHABLE GEAR OPERATOR

**SERIES 1** 1"-12" (25mm - 300mm)  
**SERIES 4** 2"-48" (50mm - 1200mm)  
**SERIES 5** 2"-36" (50mm - 900mm)

## 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 8 Position Plate for high pressure valves is 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.*



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



**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.



**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.



**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.

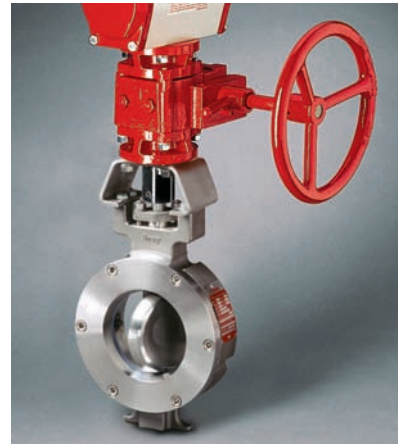
## SERIES 4



**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*).

## SERIES 5



**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.



All statements, technical information, and recommendations in this bulletin are for general use only. Consult Bray representatives or factory for the specific requirements and material selection for your intended application. The right to change or modify product design or product without prior notice is reserved.

Patents applied for in U.S. and foreign countries. Bray® is a registered trademark of BRAY INTERNATIONAL, Inc.

DISTRIBUTOR

# Bray CONTROLS

A Division of BRAY INTERNATIONAL, Inc.  
13333 Westland East Blvd. Houston, Texas 77041  
281.894.5454 FAX 281.894.9499 www.bray.com  
© 2009 Bray International. All rights reserved.  
B-1025\_S1-4-5\_EN\_2008-08