

BRAY SERIES 52 VALVE STATUS MONITOR

Bray's 2N1 ProxSensor has combined 2 proximity sensors in 1 self-contained, fully sealed, compact enclosure. DeviceNet, PROFIBUS DP and AS-i BUS network units with solenoid drive are also available.

The Series 52 offers the bounce-free electronic valve signaling required for all PLC, computer and solid state circuitry vital to process control and information networks. Costly external junction boxes are eliminated and field wiring costs are greatly reduced. Bray's approach delivers the most compact, reliable and economical valve position monitoring system available.

MOISTURE, CHEMICAL AND CORROSION PROTECTION:

The two proximity sensors are completely encapsulated with epoxy resin in a rigid polymer enclosure that is impervious to moisture and most chemical and corrosive agents. Once the multi-pin connection is made, the cable link to plant wiring is completely sealed eliminating the possibility of failure due to moisture. These protections make the Series 52 the best choice for hostile environments.

ELECTRICAL CONNECTION: A multi-pin electrical connector is designed for full compatibility with today's industrial wiring requirements.

POLYMER ENCLOSURE: Bray's design of 2 sensors in 1 rugged enclosure greatly reduces space requirements and expensive housings needed for previous dual switch applications. The epoxy resin encapsulation protects the sensors against vibration or shock.

LOCAL POSITION INDICATION: A Valve Position Pointer, made of highly visible yellow ABS material, shows valve position locally throughout the full range of travel.

- **LED Indicators** give positive verification that the sensors are electrically functioning and show the target position has been reached.
- **High Visibility Valve Position Display** (optional) Prominently labeled and color coded – yellow for open, black for closed – the display indicates valve position throughout the full range of travel.



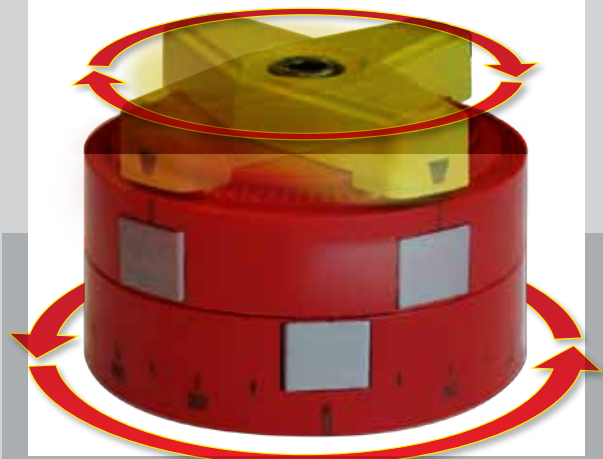
2N1
ProxSensor™



VALVE POSITION TARGETS

Unique, symmetrically designed targets are mounted inside the valve position carrier. The targets are factory pre-aligned for Bray products. No cams or set screws are required and time consuming field adjustment is eliminated. Standard targets are Stainless Steel and non-magnetic. The sensors will not attract and be falsely tripped by loose metal objects. Magnetic targets are used for BUS network sensors. Standard non-adjustable targets are preset at 90° travel.

Adjustable Target (optional) allows the customer to individually set the valve position signal of both open and closed directions at incremental positions.



SERIES 52 MODELS

Inductive Proximity Sensors: These sensors are solid state electronic controls which provide high resolution, are spark free and contain no moving electrical parts to wear out.

DC Inductive Proximity Sensors: The standard DC sensors, offered as either PNP or NPN, have an economical internal amplifier and operate on 10 VDC (200mA) to 30 VDC (600mA). A NAMUR Intrinsically Safe DC sensor can be supplied for use with an IS barrier amplifier. The DC connector is M12, 4-pin.

AC Inductive Proximity Sensors: AC sensors operate on 20 VAC (200mA) to 250 VAC (500mA). No external switching amplifier is needed for AC applications. The AC connector is 7/8", 5-pin.

BUS Network Powered Proximity Sensors with Solenoid Drive:

Bray's BUS valve status monitors offer all the standard Series 52 features plus network communication and remote access to valve position and diagnostics. AS-i, DeviceNet and PROFIBUS DP units are available.

All network units contain two BUS powered proximity sensors, applicable network pin connection and a solenoid drive connection. They can be supplied with a Bray solenoid which may be powered by the network.

SERIES 52 ADVANTAGES

2N1 ProxSensor offers reduced installation cost as well as the following advantages:

vs. Mechanical Snap Acting Switches

- No switch sparking (arcing or wear)
- No contact bounce
- No moving switch elements
- Fully sealed enclosure

vs. Magnetic Reed Switches

- No switch sparking (wear)
- No contact bounce
- No moving switch elements
- Not fragile to vibration or shock

vs. Externally Mounted

Proximity Switches

- 2 sensors in 1 enclosure
- No brackets required
- More compact design

vs. Two Inductive Proximity Switches in standard switchbox

- Lower cost
- More compact design
- Fully encapsulated enclosure



QUICK-CONNECT ACCESSORIES:

- Cordsets
- Extension Cords & Receptacles
- Cordsets (AC Sensors only)

INTEGRAL Y-CONNECTION

Bray offers a "Y" cable to combine a Series 52 and DIN solenoid into a single connection. The Y-Connection can be wired to a remote electrical junction box by either cordset, extension cord or conduit adapter. Bray can supply a Series 52, solenoid and actuator as a completely assembled system.

