

SERIES 63 SOLENOIDS

PILOT OPERATED SPOOL CONTROL

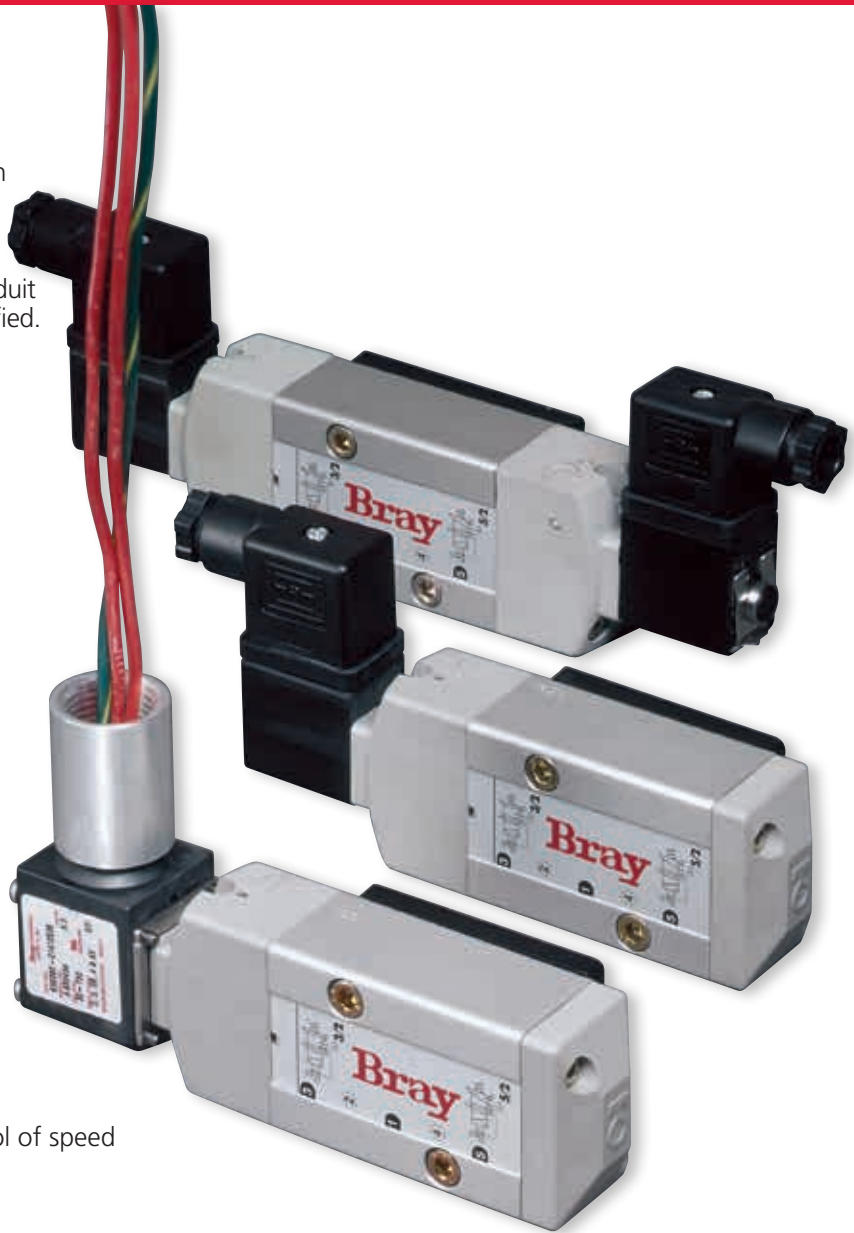
These units can be used with either spring return or double acting actuators where on/off electrical operation is required. Units have 1/2" NPT conduit connections and IP65 DIN units have cable gland PG9 connectors, also available with 1/2" NPT conduit adapters. The coils are UL recognized and CSA certified. All Series 63 solenoids carry the CE mark.

FEATURES

- Compact
- Modular
- Pilot Operated
- Spool Control Valve
- Convertible From 3-Way (3/2) to 4-Way (5/2)
- Spring Return or Double Acting

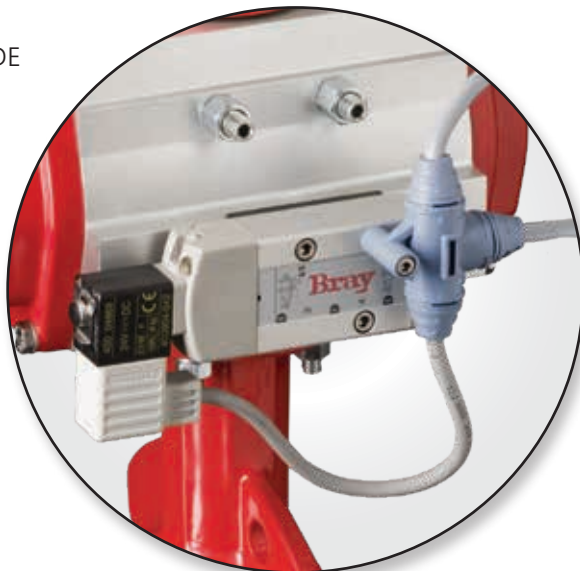
SOLENOID OPTIONS

- Stainless steel housings
- Low-powered units
- Intrinsically safe units
- BUS solenoids are available for DeviceNet and Profibus-PA protocols
- AS-I Interface solenoids with IP65 DIN/PG9 cable gland connectors are available
- All direct mount to Bray pneumatic actuators
- Speed controls that allow independent control of speed in both directions



DIRECT MOUNTING

Meeting NAMUR (VDI/VDE 3845) standards, all Bray Series 63 solenoid valves direct mount to the integral porting system of Bray Series 92/93 pneumatic actuators. No external piping is required. Bray's direct mounting permits quick and simple field installation.



MANUAL OVERRIDE

Each unit contains as standard a mechanical manual override located on the solenoid valve block. In the event of electrical power failure, over-riding is accomplished by rotating the manual override screw which will divert the air from one chamber of the pneumatic actuator to the other.

VALVE DESIGN

Pilot Operated Spool

MEDIA

Dry or lubricated air or inert gases

COIL HOUSINGS

Three standard coil housings are offered.

1. Watertight (NEMA 4, 4x) housing with flying leads offers a molded and potted coil with UL recognized components and CSA certification.
2. Watertight & Explosion Proof (NEMA 4, 4x, 7, 9) housing with flying leads is UL listed and C.S.A. certified for hazardous locations Class I, Div.1 (Groups A-D) and Class II, Div.1 (Groups E-G).
3. IP65 DIN coil housing.

Standard solenoid valves are supplied as single coil units. Dual coil units are also available for customers who require actuators to remain in last position during electrical power failure.

SPRING RETURN ACTUATORS

The Series 63 Solenoid Valve fills the spring chamber with supply air rather than drawing air from the surrounding atmosphere. This keeps the spring chamber clean and dry, and improves the performance and service life of the actuator.

STANDARD MATERIALS SELECTION

Body	Anodized Aluminum
Spring	Phosphate treated Black Steel
Shading Coil	Copper
Seals	NBR + PUR
Core / Tube	Stainless / Brass
End Covers & Plate	6/6 glass filled polyamide (PA/FV)
Spool	Aluminum
Internal Parts	Zamak, Steel, Acetal
Pneumatic Ports	1/4" NPT
Electrical Connections	NEMA Housings: 1/2" NPT DIN Housing: Cable Gland PG9

MECHANICAL CHARACTERISTICS	
Mounting	NAMUR (VDI/VDE 3845), mountable in any position, hardware included.
CONSTRUCTION	
Standard construction is molded and potted coil with 18" leads, Class F insulation. Other insulation classes available. The IP65 DIN coil and magnet structure are epoxy encased. Molded cordsets and connectors are available for IP65 DIN coil housings, please consult Bray representative or factory for further information.	
NORMAL AMBIENT TEMPERATURE RANGE	
NEMA Housings	AC: -13°F (-25°C) to +140°F (+60°C) DC: -13°F (-25°C) to +77°F (+25°C)
ELECTRICAL COIL	
NEMA Housings with flying leads	12, 24, 120, 220 VAC, 50-60 HZ 12, 24, 120 VDC
IP65 DIN Housings Type "I" Connection	24, 120, 240 VAC, 50-60 HZ 24 VDC
NEMA & IP65 DIN Coil Insulation-Class F Max Temperature Rating: 311°F (155°C) Max Ambient Temperature Rating: 158°F (70°C)	
FLOW	
1/4" (6.35 mm) PIPE CV = .7	Flow = 30 scfm, 150 psi (10.4 bar) max.
Bray S92/93 actuation times are very dependent on the flow capacity of their air supply. It is strongly recommended that only the Bray S63 high flow solenoid be used with the Bray S92/93 actuators. The use of smaller port solenoids, solenoid manifolds, small I.D. air supply tubing and/or extended lengths of tubing can significantly reduce the actuation time and/or the initial response to the command signal. Please see TB-1140 for pneumatic flow testing recommendations.	
NOMINAL POWER	
NEMA Housing	AC - 6.3W, DC - 6.9W
DIN Housing	AC - 2.5W, DC - 3.0W
Operating Speed	10 cycles per minute - with more if needed
Duty Cycle	Continuous