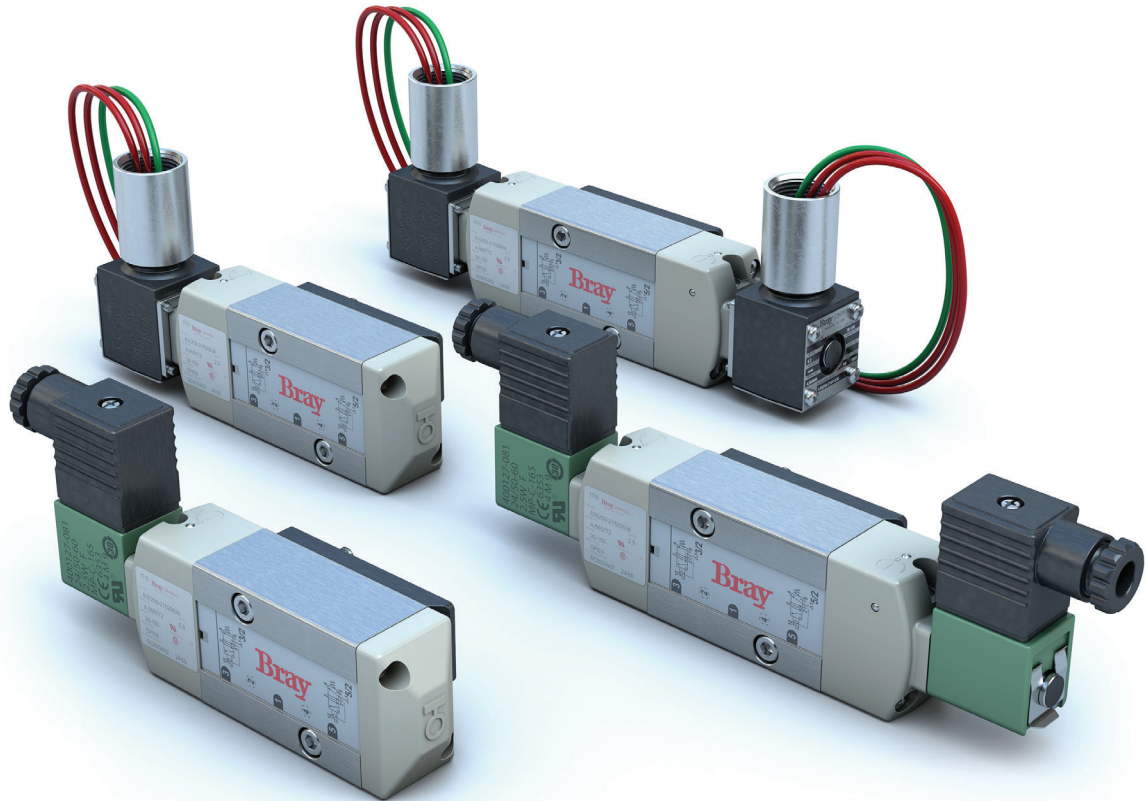


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**SERIES 63**  
**SOLENOID VALVES**  
TECHNICAL SALES MANUAL



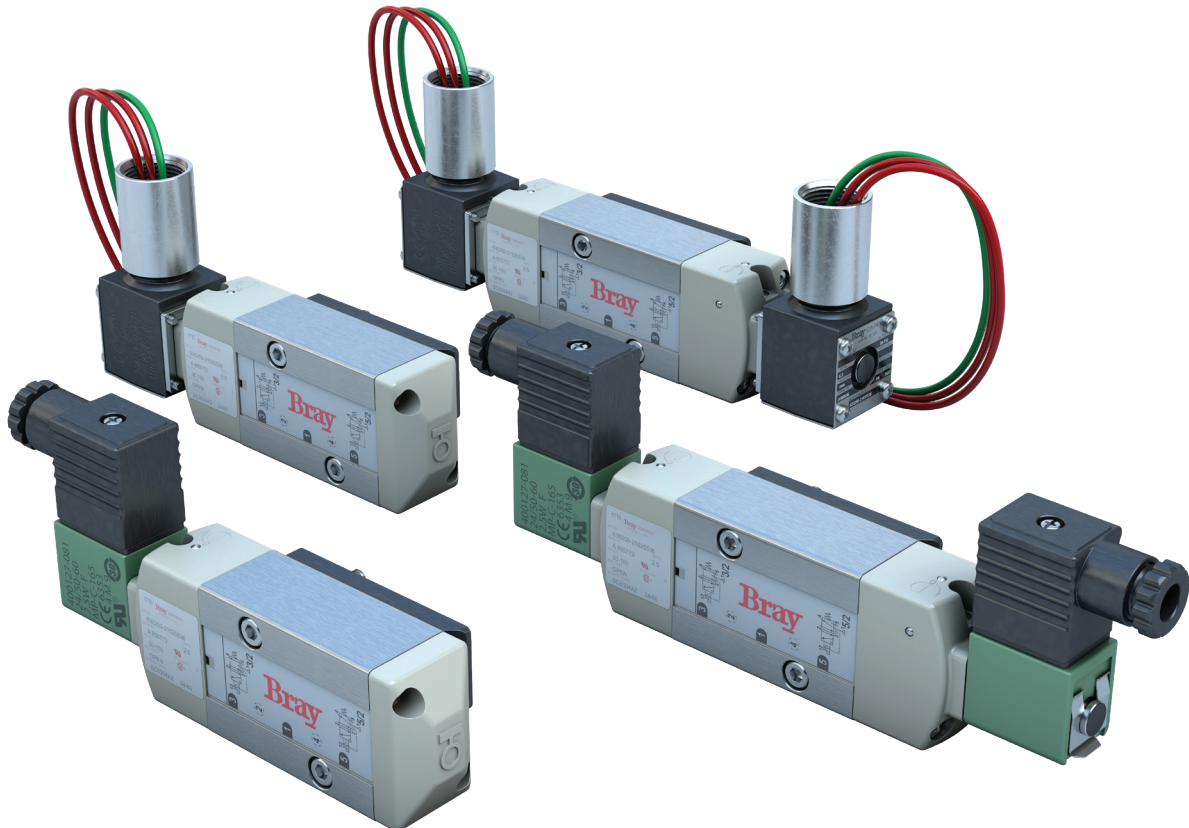
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## Pilot-Operated Spool Control

Bray Series 63 solenoid valves are used to control the flow of air to pneumatic actuators. The S63 is designed to be direct mounted to pneumatic actuators providing the optimal flow path and actuator speed. Units are watertight and explosion-proof units are also available. All series 63 solenoid valves carry the CE mark.



## FEATURES

- > Compact & modular design
- > Pilot operated spool control valve
- > Convertible from 3-way (3/2) to 4-way (5/2)
- > Mechanical manual override
- > NAMUR mounting design
- > Low-powered units available

## TECHNICAL DATA

### GENERAL SPECIFICATIONS

<b>Mounting</b>	NAMUR VDI/VDE 3845, hardware included
<b>Pneumatic Ports</b>	1/4" NPT G1/4 available for DIN Models
<b>Media</b>	Filtered Air or Inert Gas
<b>Connections</b>	NPT flying leads or DIN Form B Type I connections offered, both available with single and dual coils
<b>Electrical Connection</b>	NEMA Housings: 1/2" NPT connection and flying leads DIN Housing: Cable Gland PG9 and M15 threaded connector
<b>Coil Temperature Rating</b>	Insulation Class "F", Max. 311°F [155°C]
<b>General Purpose (watertight)</b>	NEMA 4, 4X (Flying Leads) IP65 (DIN coil)

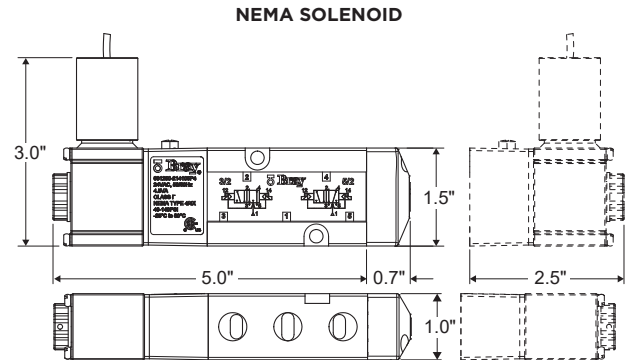
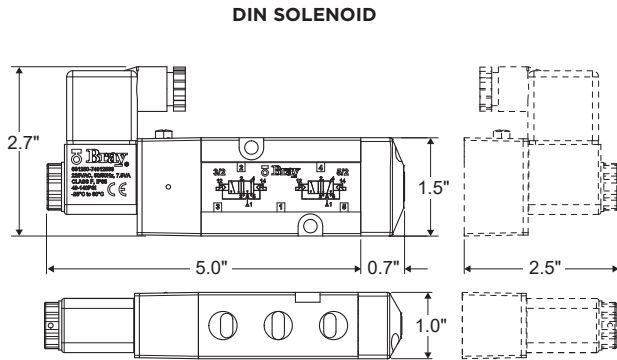
### MATERIALS OF CONSTRUCTION

<b>Body</b>	Anodized Aluminum
<b>Spring</b>	Phosphate treated black steel
<b>Shading Coil</b>	Copper
<b>Seals</b>	NBR + PUR
<b>Core / Tube</b>	Stainless / Brass
<b>End Covers &amp; Plate</b>	6/6 glass filled polyamide (PA/FV)
<b>Spool</b>	Aluminum
<b>Internal Parts</b>	Zamak, Steel, Acetal

### MODEL SPECIFICATIONS

	High-Flow	UL-Recognized
<b>Hazardous Locations (Optional)</b>	-	NEMA 7, 9 Class I, Division 1 (Groups A-D) Class II, Division 1 (Groups E-G)
<b>Temperature Range</b>	-13°F to +140°F [-25°C to +60°C]	AC: -13°F to +140°F [-25°C to +60°C] DC: -13°F to +77°F [-25°C to +25°C]
<b>Coil Voltage</b>	Flying Leads & DIN 24, 110, 220 VAC, 50-60 HZ; 12, 24 VDC	Flying Leads: 24, 120, 240 VAC, 50-60 HZ; 12, 24 VDC DIN: 24, 120, 240 VAC, 50-60 HZ; 24 VDC
<b>Nominal Power</b>	4.5 VA (24 VAC); 6 VA (110 VAC); 7.5 VA (220 VAC); 4.5 W (12 VDC); 3W (24 VDC)	Flying Leads: 6.3 VA (AC); 6.9W (DC) DIN: 3.5 VA (AC); 3.0W (DC)
<b>Flow Coefficient (1/4" pipe)</b>	Cv=1.4	Cv=0.7
<b>Operating Pressure</b>	Min. 22 psi [1.5 bar] Max. 130 psi [9 bar]	Min. 30 psi [2 bar] Max. 130 psi [9 bar]
<b>Operating Pressure</b>	5 cycles per minute	10 cycles per minute
<b>Certifications</b>	cCSAus (Flying Leads), CE (DIN coil)	UL, CSA, CE (DIN coil)

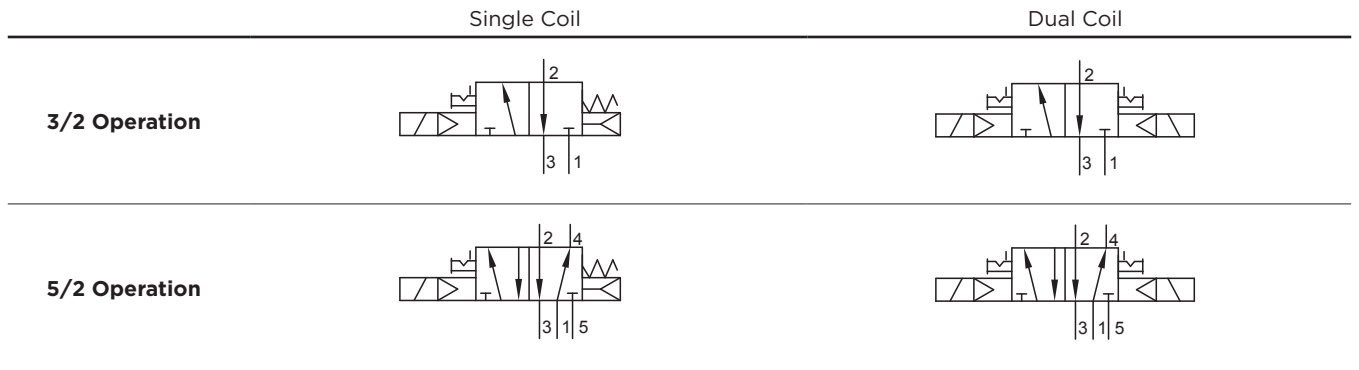
**DIMENSIONS**



**NOTES**

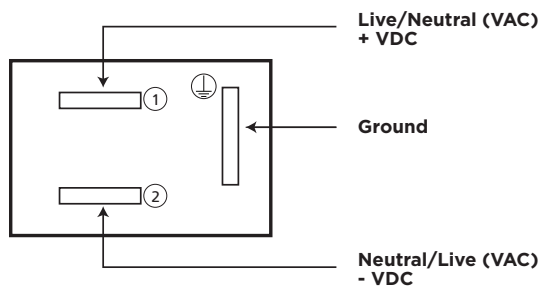
1 : Some dimensions may vary depending on model

**PNEUMATIC SCHEMATICS**

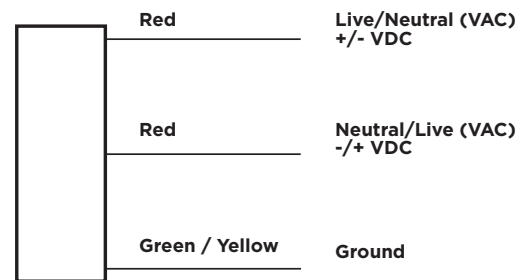


**ELECTRICAL CONNECTIONS**

**DIN 43650B**

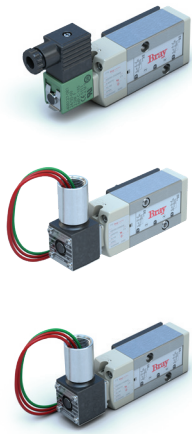


**Flying Leads**



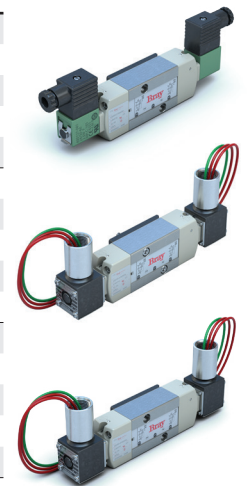
**SINGLE COIL**

Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "I" Type	12 VDC				CONSULT FACTORY			
	24 VDC	3 W	IP65	0.7	UL, CSA, CE	YES	YES	630250-21524536
	24 VAC	2.5 VA	IP65	0.7	UL, CSA, CE	YES	YES	630250-21525536
	120 VAC	2.5 VA	IP65	0.7	UL, CSA, CE	YES	YES	630250-21520536
	240 VAC	2.5 VA	IP65	0.7	UL, CSA, CE	YES	YES	630250-21522536
Flying Leads	12 VDC	6.9 W	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21400536
	24 VDC	6.9 W	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21401536
	24 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21440536
	120 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21410536
	240 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21430536
Exp. Proof Flying Leads	12 VDC	6.9 W	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21402536
	24 VDC	6.9 W	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21403536
	24 VAC				CONSULT FACTORY			
	120 VAC	6.3 VA	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21411536
	240 VAC	6.3 VA	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21431536



**DUAL COIL<sup>1</sup>**

Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "I" Type	12 VDC				CONSULT FACTORY			
	24 VDC				CONSULT FACTORY			
	24 VAC				CONSULT FACTORY			
	120 VAC				CONSULT FACTORY			
	240 VAC	2.5 VA	IP65	0.7	UL, CSA, CE	YES	YES	630250-21532536
Flying Leads	12 VDC	6.9 W	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21422536
	24 VDC	6.9 W	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21423536
	24 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21428536
	120 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21420536
	240 VAC	6.3 VA	NEMA 2, 3, 3S, 4 & 4X	0.7	UL, CSA	YES	YES	630250-21421536
Exp. Proof Flying Leads	12 VDC	6.9 W	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21426536
	24 VDC	6.9 W	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21427536
	24 VAC	6.3 VA	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21436536
	120 VAC	6.3 VA	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21424536
	240 VAC	6.3 VA	NEMA 4, 7 & 9	0.7	UL, CSA	YES	YES	630250-21425536

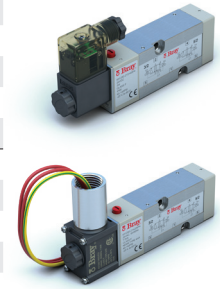


**NOTES**

<sup>1</sup> For dual coil, Watt/VA is provided per coil.

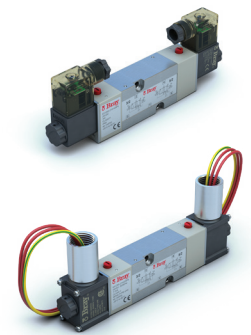
**SINGLE COIL**

Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "J" Type	12 VDC	4.5 W	IP65	1.4	CE	NO	YES	63125A-215135P4
	24 VDC	3 W	IP65	1.4	CE	NO	YES	63125A-215145P4
	24 VAC	4.5 VA	IP65	1.4	CE	NO	YES	63125A-215105P4
	110 VAC	6 VA	IP65	1.4	CE	NO	YES	63125A-215115P4
	220 VAC	7.5 VA	IP65	1.4	CE	NO	YES	63125A-215125P4
Flying Leads	12 VDC	4.5 W	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214135P4
	24 VDC	3 W	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214145P4
	24 VAC	4.5 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214105P4
	110 VAC	6 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214115P4
	220 VAC	7.5 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214125P4



**DUAL COIL<sup>1</sup>**

Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "J" Type	12 VDC	4.5 W	IP65	1.4	CE	NO	YES	63125A-215235P4
	24 VDC	3 W	IP65	1.4	CE	NO	YES	63125A-215245P4
	24 VAC	4.5 VA	IP65	1.4	CE	NO	YES	63125A-215205P4
	110 VAC	6 VA	IP65	1.4	CE	NO	YES	63125A-215215P4
	220 VAC	7.5 VA	IP65	1.4	CE	NO	YES	63125A-215225P4
Flying Leads	12 VDC	4.5 W	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214235P4
	24 VDC	3 W	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214245P4
	24 VAC	4.5 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214205P4
	110 VAC	6 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214215P4
	220 VAC	7.5 VA	NEMA 4/4X	1.4	CSA	NO	YES	63125A-214225P4



**NOTES**

<sup>1</sup> For dual coil, Watt/VA is provided per coil.

Connector	Description
600250-71106533	Form B Type I Plug Connector (DIN 43650) with Cable Gland PG9
600500-71106533	Form B Type I Plug Connector (DIN 43650) with 1/2" NPT Female Connection
090004-76146533	Form B Type I Plug Connector (DIN 43650), LED and Surge Protected 110-220 VAC, to Flying Leads, 4 meters
090004-76147533	Form B Type I Plug Connector (DIN 43650), LED and Surge Protected 24-30 VDC, to Flying Leads, 4 meters
600250-23663536	Y-Connector Cordset - Form B Type I Plug Connector (DIN 43650) to M12 female straight connector (4-pin sensor side) AND M12 male straight connector (5-pin system side)
600250-23667536	Y-Connector Cordset - Form B Type I Plug Connector (DIN 43650) to 7/8" female straight connector (5-pin sensor side) AND 7/8" male straight connector (6-pin system side)
090001-76159882	S-Connector Cordset - Form B Type I Plug Connector (DIN 43650) to M12 male right angle (2-pins + PE), 0.6 meters



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**Bray International, Inc.**

13333 Westland East Blvd.

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Tel: +1.281.894.5454

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