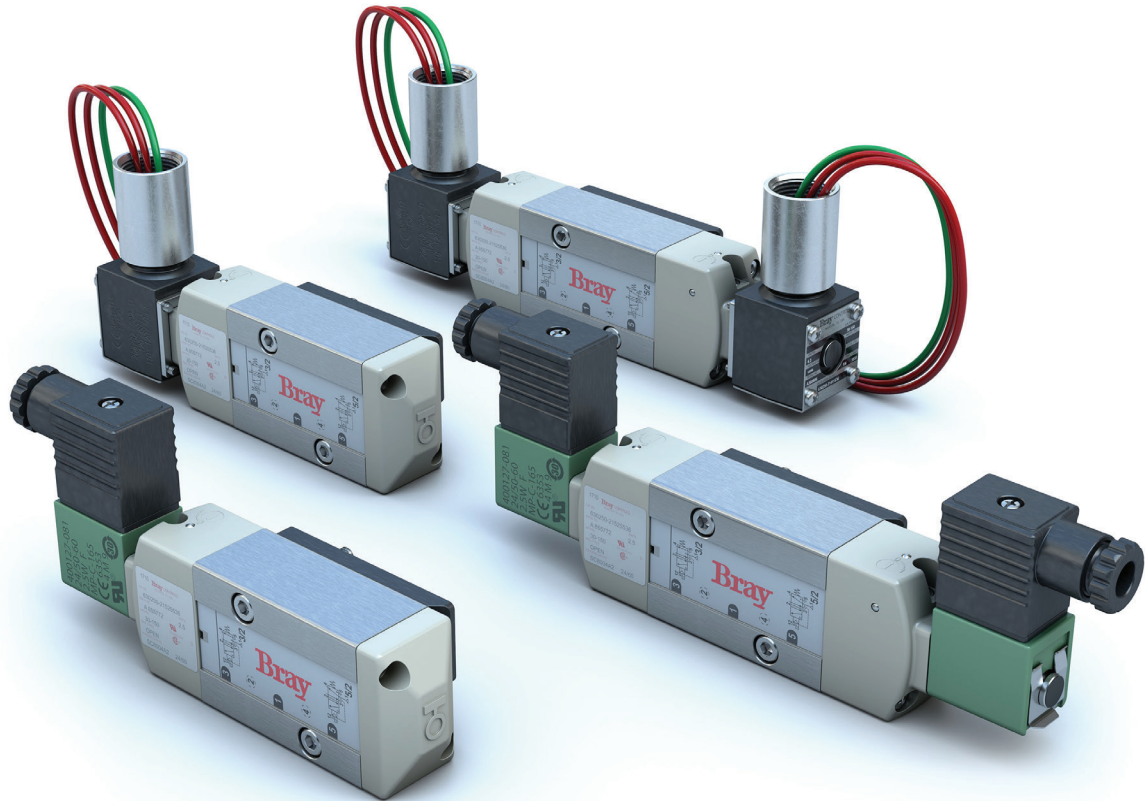

SERIES 63
SOLENOID VALVES
TECHNICAL SALES MANUAL



 **Bray**[®]

CONTENTS

CONTENTS 2

OVERVIEW 3

TECHNICAL DATA 4

SCHEMATICS 5

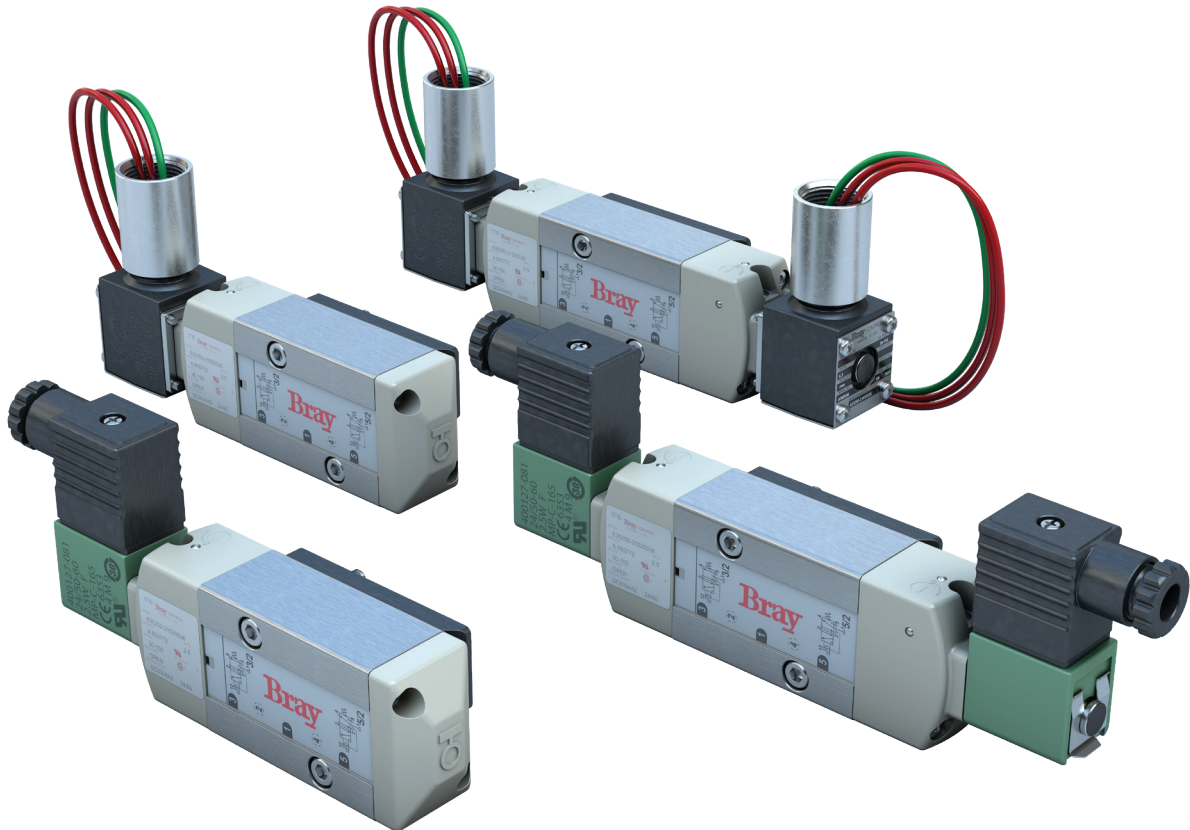
SERIES 63 UL RECOGNIZED 6

SERIES 63 HIGH-FLOW 7

ACCESSORIES 8

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

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

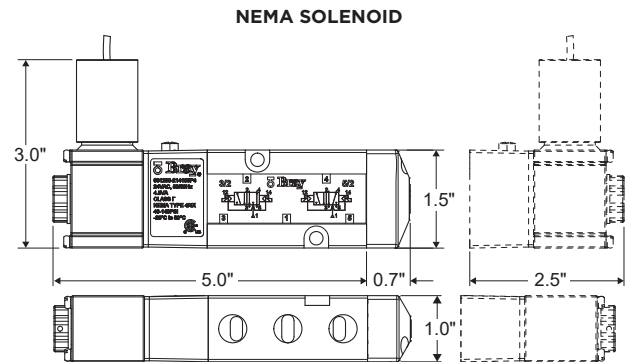
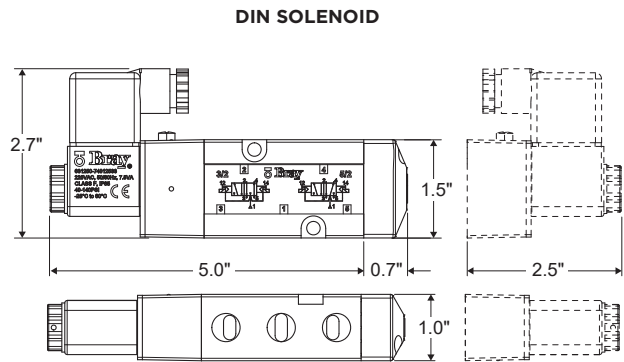
MATERIALS OF CONSTRUCTION

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

MODEL SPECIFICATIONS

	High-Flow	UL-Recognized
Hazardous Locations (Optional)	-	NEMA 7, 9 Class I, Division 1 (Groups A-D) Class II, Division 1 (Groups E-G)
Temperature Range	-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]
Coil Voltage	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
Nominal Power	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)
Flow Coefficient (1/4" pipe)	Cv=1.4	Cv=0.7
Operating Pressure	Min. 22 psi [1.5 bar] Max. 130 psi [9 bar]	Min. 30 psi [2 bar] Max. 130 psi [9 bar]
Operating Pressure	5 cycles per minute	10 cycles per minute
Certifications	cCSAus (Flying Leads), CE (DIN coil)	UL, CSA, CE (DIN coil)

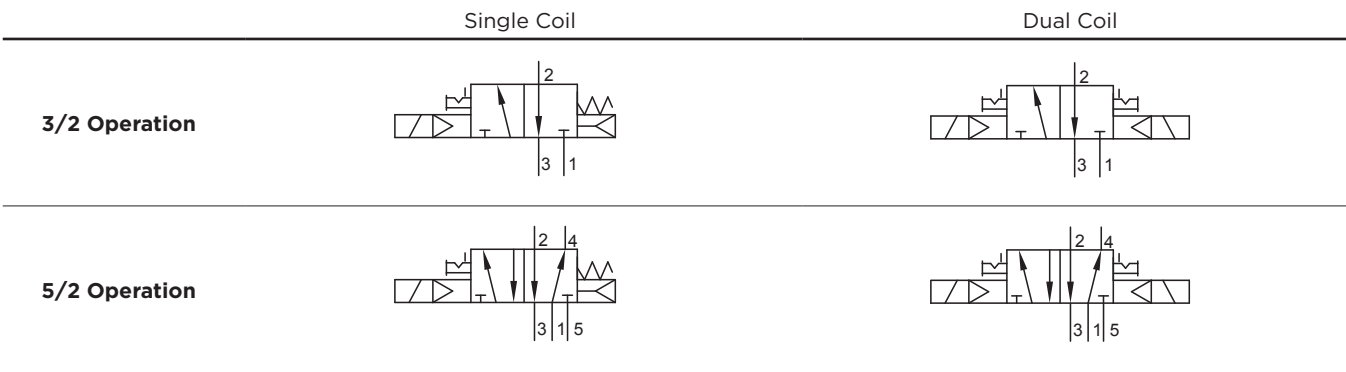
DIMENSIONS



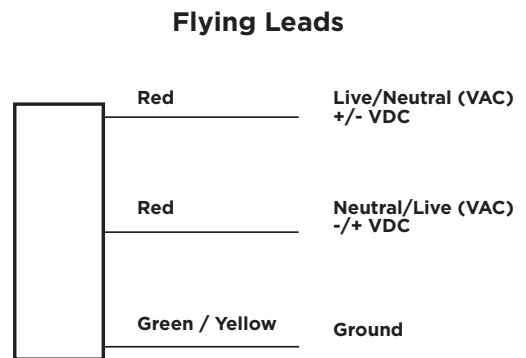
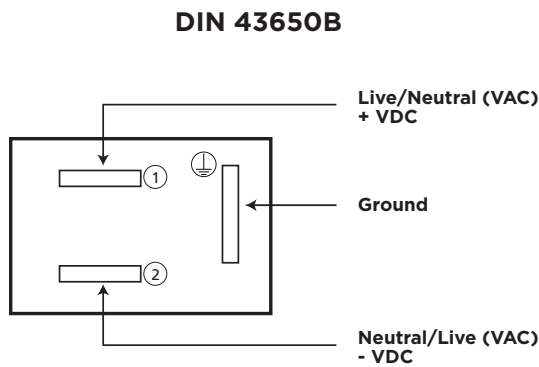
NOTES

1 : Some dimensions may vary depending on model

PNEUMATIC SCHEMATICS

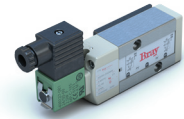


ELECTRICAL CONNECTIONS



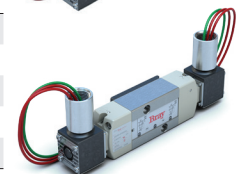
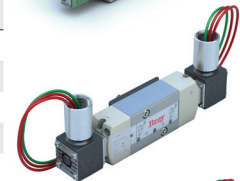
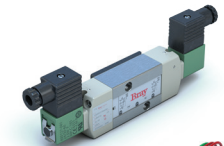
SINGLE COIL

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 COIL¹

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



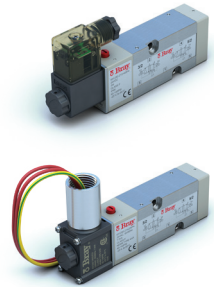
NOTES

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

SERIES 63 HIGH-FLOW

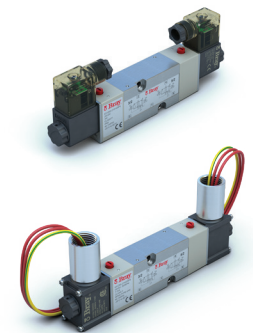
SINGLE COIL

Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "I" 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 COIL¹

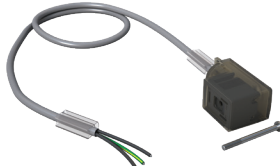
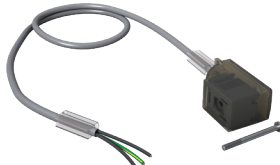
Type	Voltage	Watt/ VA	Enclosure	CV	Certification	Integral Re-Breather	Manual Override	Part Number
DIN "I" Type	12 VDC	4.5 W	IP65	1.4	CE	NO	YES	63125A-215235P4
	24 VDC	3 W	IP65	1.4	CE	NO	YES	63125A-215245P4
	24 VAC	4.5 VA	IP65	1.4	CE	NO	YES	63125A-215205P4
	110 VAC	6 VA	IP65	1.4	CE	NO	YES	63125A-215215P4
	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

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

ACCESSORIES

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

SINCE 1986, BRAY HAS PROVIDED FLOW CONTROL SOLUTIONS
FOR A VARIETY OF INDUSTRIES AROUND THE WORLD.

VISIT **BRAY.COM** TO LEARN MORE ABOUT
BRAY PRODUCTS AND LOCATIONS NEAR YOU.

HEADQUARTERS

Bray International, Inc.

13333 Westland East Blvd.

Houston, Texas 77041

Tel: +1.281.894.5454

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 issued and applied for worldwide. Bray® is a registered trademark of Bray International, Inc.

© 2023 BRAY INTERNATIONAL. ALL RIGHTS RESERVED. BRAY.COM

EN_TEMP_TSM_VALVE_20230302



THE HIGH PERFORMANCE COMPANY

BRAY.COM