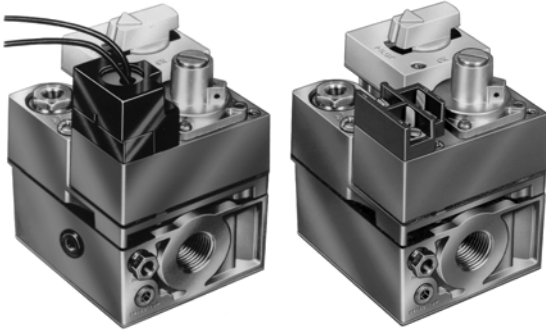


Combination Gas Controls

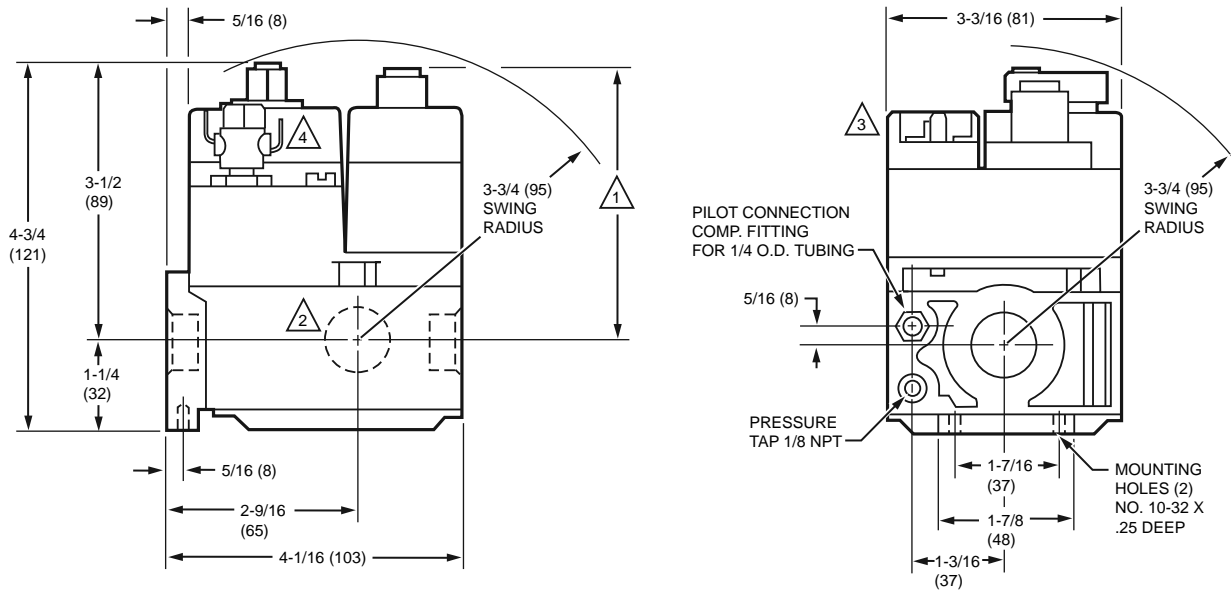
V400 Line Voltage; V800 Low Voltage Combination Gas Controls



Used on gas fired standing pilot appliances with 30 mV thermocouple. These gas controls include a manual gas valve, safety shutoff, single millivoltage automatic operator, and pressure regulator, pilot gas filter and flow adjustment, pressure tapping, and thermocouple connector. V800 is used on 24V systems.

- Include pilot flow adjustment screw.
- Easy to install, adjust and service; all adjustments and connections are accessible from top of control.
- Add separate energy cutoff (ECO) where codes call for dual safety shutoff.
- Complete safety shutoff on pilot flame failure.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.
- ECO connector for V800 models. Part No. 392451-1.

Dimensions in inches (millimeters)



1 WITH V5306 (ILLUSTRATED), V5307 OR 5390 PRESSURE REGULATOR: 24V MODELS—3-1/2 (89), 120V MODEL—3-5/8 (92) MANUAL MODELS—2-13/16 (71), FOR V5308 ADD 5/8 (16) TO DIMENSIONS GIVEN.

2 SIDE OUTLETS—LEFT AND RIGHT HAND. STANDARD ONLY ON TRADELINE MODELS.

3 CONTROL WITH 24V VALVE OPERATOR SHOWN. LINE VOLT MODEL HAS COVER FOR CONDUIT CONNECTION (TOP SURFACE).

M16547A

4 ECO CONNECTOR ON STANDARD CAPACITY V800 ONLY.

Type: Single Stage

Body Pattern: Straight-through, multi-tapped with 1/2 in. right and left outlets plugged

Capacity @ 1 in. p.d. 335,000 BTU/hr; 295,000 BTU/hr minimum

Ignition Type: Standing Pilot

Ambient Temperature Range: 32 F to 175 F (0 C to 79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certified; File No. L2025003, CGA Design Certified; File No. L2025003, UL Component Recognized.

Underwriters Laboratories, Inc. UL Component Recognized.

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Electrical Ratings	Includes
				(psi)	(kPa)		
• V400A1095	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	120 Vac	Two 3/4 x 1/2 in.; One 1/2 x 3/8 in. Reducer Bushing/Adapters
V400C1036	Natural	Step Opening	3/4 in. x 3/4 in.	Full Rate: 3.5 in. wc; Step Setting: 0.7 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.17 kPa	120 Vac	—
* V800A1070	Natural or LP	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	24 Vac	One 1/2 in. x 3/8 in. reducer bushing, One 3/4 in. x 1/2 in. reducer bushing, Q340 Thermocouple, Natural to LP Conversion Kit

* TRADELINE models • SUPER TRADELINE models

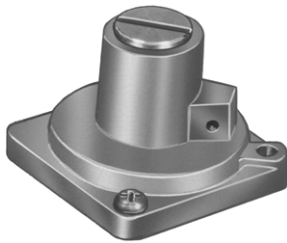
Residential
Combustion Controls

Combination Gas Controls

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Electrical Ratings	Includes
				(psi)	(kPa)		
• V800A1088	Natural or LP	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	24 Vac	One 1/2 in. x 3/8 in. reducer bushing, One 3/4 in. x 1/2 in. reducer bushing, Q340 Thermocouple, Natural to LP Conversion Kit
* V800A1476	Natural or LP	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	24 Vac	Natural to LP Conversion Kit
* V800A1591	Natural or LP	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	24 Vac	Natural to LP Conversion Kit, Two 3/4 x 1/2 in. reducer bushings
* V800C1052	Natural	Step Opening	3/4 in. x 3/4 in.	Full Rate: 3.5 in. wc; Step Setting: 0.9 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.22 kPa	24 Vac	Two 3/4 x 1/2 in.; One 1/2 x 3/8 in. Reducer Bushing/Adapters

* TRADELINE models • SUPER TRADELINE models

Pressure Regulators—Standard and Step Opening



Servo gas pressure regulator for add-on or replacement use on Honeywell V400, V800, VR400, VR800 and VR8440 Combination gas controls. Utilizing the servo principle of operation, it controls burner manifold pressure by repositioning the main valve diaphragm.

- Interchangeable and adapt to all pipe sizes and capacities.
- Mount on top surface of control. Installation and adjustment readily accomplished with a screwdriver.

Mounting: Top surface of combination gas control (two mounting screws and a gasket).

Pressure Ratings: 1/2 psi (3.5 kPa)

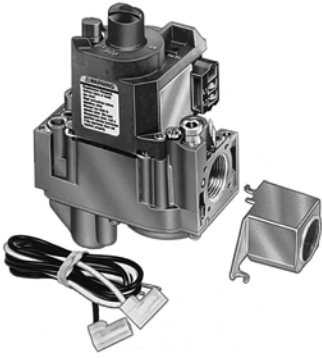
Temperature Range: -40 F to +175 F (-40 C to +79 C)

Product Number	Type of Gas	Opening Characteristics (standard, step)	Pressure Regulator Setting
* V5306B1009	Natural	Standard Opening	3.5 in. wc; adj. range 3-5 in. wc
V5306B1033	LP	Standard Opening	11.0 in. wc; adj. range 8-12 in. wc

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

VR4300 Continuous Pilot Dual Automatic Valve Combination Gas Control

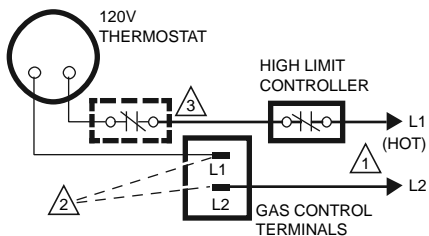


Combination gas control for use in 120 Vac, gas-fired, standing pilot appliances with capacities from 30 to 300 cfh.

- Control includes safety shutoff, manual valve, two automatic operators, pressure regulator and pilot adjustment.
- Compact size.
- Provides two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat, closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meets codes requiring dual safety shut-off.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.

Residential
Combustion Controls

Wiring connections for 120 volt control



1 POWER SUPPLY. PROVIDE DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.

2 DO NOT JUMPER THESE TERMINALS. THIS SHORTS VALVE COIL AND MAY BURN OUT ANTICIPATOR IN THERMOSTAT.

3 OPTIONAL HIGH LIMIT.

M3092B

Type: Single Stage

Body Pattern: Straight-through with flange

Capacity @ 1 in. p.d. 300,000 BTU/hr; 30,000 BTU/hr minimum

Anticipator Setting: 0.13 A

Ignition Type: Standing Pilot

Ambient Temperature Range: 0 F to 175 F (-18 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 120 Vac

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Electrical Connections: 1/4 in. male quick connects; 24 in. (610 mm) leadwire.

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Includes: One 1/2 in. x 3/8 in. reducer bushing, Two 3/4 x 1/2 in. reducer bushings, 393691 Natural to LP gas conversion kit.

Approvals:

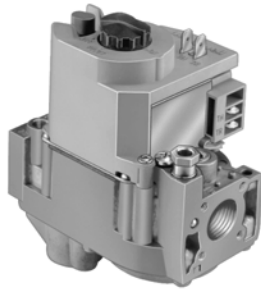
American Gas Association: AGA Design Certified: File No. L2025006;
CGA Design Certified: File No. L2025006

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Electrical Ratings
				(psi)	(kPa)	
* VR4300A4502	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	120 Vac

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

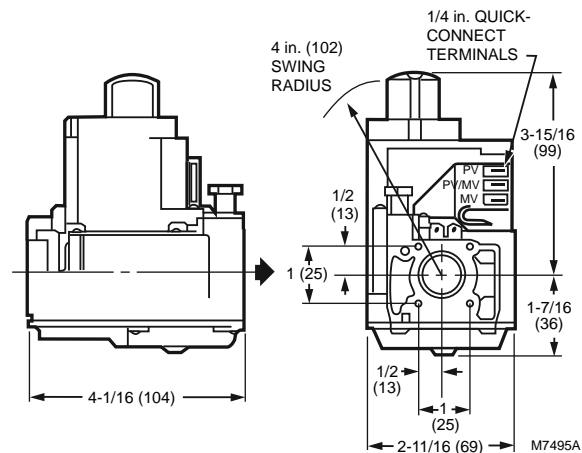
VR8200 Continuous Pilot Dual Automatic Valve Combination Gas Controls



Combination gas controls for use in 24 Vac, gas-fired, standing pilot appliances with capacities from 20 to 200 cfh.

- Controls include manual valve, two automatic operators, servo pressure regulator and pilot adjustment.
- Compact size.
- Provide two automatic valves.
- Solenoid-operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meet codes requiring dual safety shutoff.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.

Dimensions in inches (millimeters)



Body Pattern: Straight-through

Capacity @ 1 in. p.d. 130,000 BTU/hr; 20,000 BTU/hr minimum

Anticipator Setting: 0.5 A

Ignition Type: Standing Pilot

Ambient Temperature Range: 0 F to 175 F (-18 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Electrical Connections: Combination screw and 1/4 in. male quick connects.

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certificate: L2025006

Australian Gas Association: Australian Gas Assoc. Design

Certificate: 4214; Approved for Delta C Applications

Canadian Gas Association: CGA Design Certificate: L2025006

Underwriters Laboratories, Inc. UL Component Recognized: MH5323

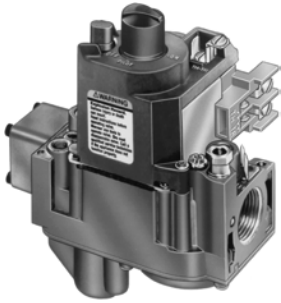
Type: Single Stage

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Includes
				(psi)	(kPa)	
• VR8200A2124	Natural	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	One 3/4 in. straight flange One 1/2 in. x 3/8 in. reducer bushing Q340 Thermocouple Natural to LP Conversion Kit
* VR8200A2132	Natural	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	One 3/4 in. straight flange One 1/2 in. x 3/8 in. reducer bushing Natural to LP Conversion Kit
* VR8200H1251	Natural	Slow Opening	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	One 3/4 in. straight flange One 1/2 in. x 3/8 in. reducer bushing Natural to LP Conversion Kit

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

VR8300 Continuous Pilot Dual Automatic Valve Combination Gas Control

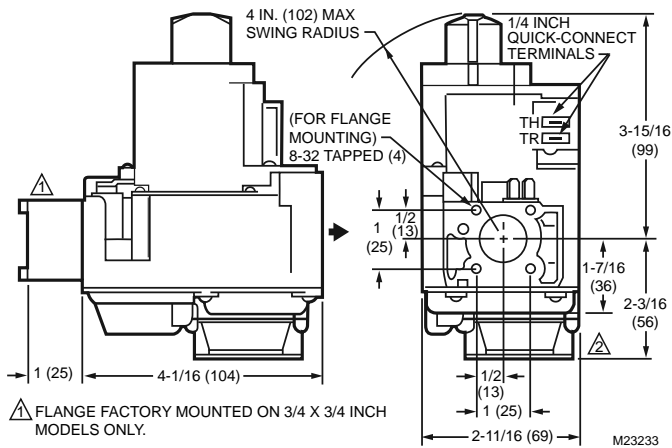


Combination gas control for use in 24 Vac, gas-fired, standing pilot appliances with capacities from 30 to 300 cfh.

- Controls include safety shutoff, manual valve, two automatic operators, pressure regulator and pilot adjustment.
- Compact size.
- Provide two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meets codes requiring dual safety shutoff.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.

Residential
Combustion Controls

Dimensions in inches (millimeters)



Type: Single Stage

Body Pattern: Straight through with integral tapping; with flange Capacity @ 1 in. p.d. 190,000 BTU/hr; 30,000 BTU/hr minimum

Anticipator Setting: 0.7 A

Ignition Type: Standing Pilot

Ambient Temperature Range: 0 F to 175 F (-18 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certified: File No. L2025006.

Canadian Gas Association: CGA Design Certified: File No. L2025006.

Underwriters Laboratories, Inc. UL Component Recognized.

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Includes
				(psi)	(kPa)	
* VR8300A3500	Natural	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	One 3/4 x 1/2 in. reducer bushing 393691 Natural to LP gas conversion kit.
• VR8300A3518	Natural	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	One 3/4 x 1/2 in. reducer bushing 393691-14 bag assembly, 3/4 in. straight flange with O ring, screws and wrench 393200 ECO adapter Q340 (36 in.) thermocouple with adapters 393691 Natural to LP gas conversion kit.
VR8300A3567	Natural	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	One 3/4 x 1/2 in. reducer bushing 393691 Natural to LP gas conversion kit.
* VR8300A4508	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	Two 3/4 x 1/2 in. reducer bushing 393691 Natural to LP gas conversion kit.
• VR8300A4516	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	Two 3/4 x 1/2 in. reducer bushing 393200 ECO adapter Q340 (36 in.) thermocouple with adapters 393691 Natural to LP gas conversion kit.
VR8300A4557	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	Two 3/4 x 1/2 in. reducer bushing 393691 Natural to LP gas conversion kit.
VR8300A4565	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	Two 3/4 x 1/2 in. reducer bushing 393200 ECO adapter Q340 (36 in.) thermocouple with adapters 393691 Natural to LP gas conversion kit.

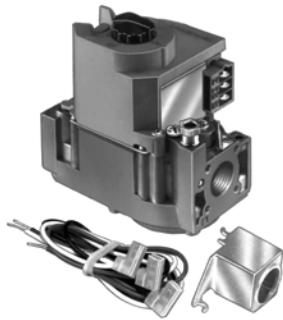
* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

	Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Includes
					(psi)	(kPa)	
*	VR8300C4506	Natural	Step Opening	3/4 in. x 3/4 in.	Full Rate: 3.5 in. wc; Step Setting: 0.9 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.22 kPa	Two 3/4 x 1/2 in. reducer bushings
	VR8300H2109	Natural	Slow Opening	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	—
	VR8300H4501	Natural	Slow Opening	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	—

* TRADELINE models • SUPER TRADELINE models

VR4304 Intermittent Pilot Dual Automatic Valve Combination Gas Controls



Type: Single Stage

Dimensions, Approximate: 5 3/8 in. high x 4 1/16 in. wide x 2 11/16 in. deep (135 mm high x 104 mm wide x 69 mm deep)

Body Pattern: Straight-through

Capacity @ 1 in. p.d. 300,000 BTU/hr; 30,000 BTU/hr minimum

Anticipator Setting: 0.1 A

Ignition Type: Intermittent Pilot

Ambient Temperature Range: -40 F to +175 F (-40 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 120 Vac

Combination gas control for use in 120 Vac, gas-fired, intermittent pilot appliances with capacities from 30 to 415 cfh.

- Controls include safety shutoff, manual valve, two automatic operators, pressure regulator and pilot adjustment.
- Use with S86F,H; S860D; S8600F,H; S8610 and S90A,B Control Modules.
- Compact size. Provide two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meet codes requiring dual safety shutoff.
- Standard and slow opening natural gas models include natural to LP gas conversion kit; LP to natural gas conversion kit also available.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.
- ON-OFF lighting sequence.

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Includes: One 1/2 in. x 3/8 in. reducer bushing, Natural to LP Conversion Kit, Two 3/4 x 1/2 in. reducer bushings

Approvals:

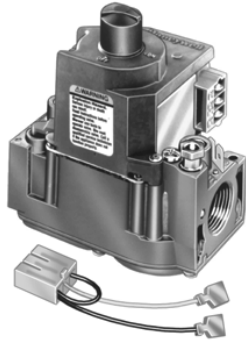
American Gas Association: AGA Design Certified: File No. L2025007;
CGA Design Certified: File No. L2025007

	Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Electrical Ratings
					(psi)	(kPa)	
*	VR4304M4519	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	120 Vac

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

VR8245 Intermittent Pilot Combination Gas Control



These universal electronic ignition gas controls are used in gas-fired appliances with capacities up to 150 cu ft/hour at 1 inch wc pressure drop (4.2 cu m/hour at 0.25 kPa) for natural gas. The VR8245M will operate with a direct spark (DSI), hot surface (HSI) or intermittent pilot ignition. The control includes a manual valve, two automatic operators, a pressure regulator, pilot adjustment, pilot plug and ignition adapter.

Type: Single Stage
Body Pattern: Straight-through
Capacity @ 1 in. p.d. 150,000 BTU/hr
Ignition Type: Intermittent Pilot
Ambient Temperature Range: -40 F to +175 F (-40 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)
Electrical Ratings: 24 Vac
Frequency: 60 Hz, 50 Hz
Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Includes
				(psi)	(kPa)	
VR8245M2530	Natural or LP	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.9 kPa	One 1/2 in. x 3/8 in. reducer bushing Natural to LP Conversion Kit

Combination Gas Controls

VR8304 Intermittent Pilot Dual Automatic Valve Combination Gas Control

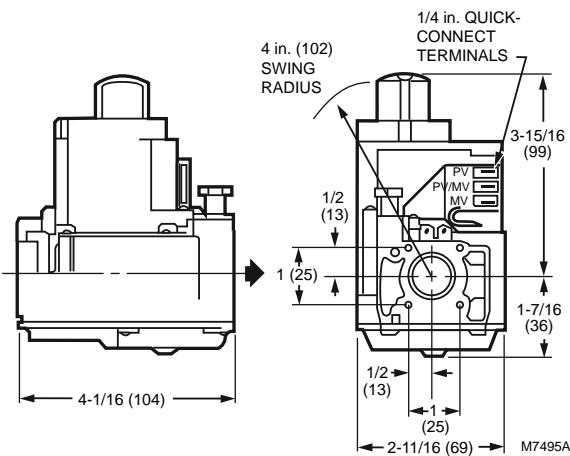


Combination gas control for use in 24 Vac, gas-fired, intermittent pilot appliances with capacities from 30 to 415 cfh.

- Controls include safety shutoff, manual valve, two automatic operators, pressure regulator and pilot adjustment.
- Use with S86F,H; S860D; S8600F,H; S8610 and S90A,B Control Modules.
- Compact size.
- Provide two automatic valves. Solenoid operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meet codes requiring dual safety shutoff.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- Compatible with ECO connector.
- ON-OFF lighting sequence.

Residential
Combustion Controls

Dimensions in inches (millimeters)



Type: Single Stage

Body Pattern: Straight-through

Capacity @ 1 in. p.d. 300,000 BTU/hr; 30,000 BTU/hr minimum

Anticipator Setting: 0.7 A

Ignition Type: Intermittent Pilot

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certified: File No. L2025007.

Canadian Gas Association: CGA Design Certified: File No. L2025007.

Underwriters Laboratories, Inc. UL Component Recognized.

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Ambient Temperature Range		Includes
				(psi)	(kPa)	(F)	(C)	
VR8304H4503	Natural	Slow Opening	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	0 F to 175 F	-18 C to +79 C	393691 Natural to LP gas conversion kit.
VR8304M2501	Natural	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	393691 Natural to LP gas conversion kit.
* VR8304M3509	Natural	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	One 3/4 in. x 1/2 in. reducer bushing; 393691 Natural to LP gas conversion kit.
* VR8304M4507	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C	Two 3/4 in. x 1/2 in. reducer bushing; 393691 Natural to LP gas conversion kit.
VR8304P4330	LP	Step Opening	3/4 in. x 3/4 in.	Full Rate: 10.0 in. wc; Step Setting: 2.5 in. wc	Full Rate: 2.49 kPa; Step Setting: 0.62 kPa	-40 F to +175 F	-40 C to +79 C	—
VR8304P4504	Natural	Step Opening	3/4 in. x 3/4 in.	Full Rate: 3.5 in. wc; Step Setting: 0.9 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.22 kPa	-40 F to +175 F	-40 C to +79 C	—
VR8304Q4511	Natural	Standard	3/4 in. x 3/4 in.	1.7 in. wc low; 3.5 in. wc high	0.48 kPa low; 0.87 kPa high	-40 F to +175 F	-40 C to +79 C	Natural to LP Conversion Kit Two 3/4 x 1/2 in. reducer bushings

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

VR4305 Direct Ignition Dual Automatic Valve Combination Gas Control



Type: Single Stage
Body Pattern: Straight-through
Capacity @ 1 in. p.d. 300,000 BTU/hr; 30,000 BTU/hr minimum
Anticipator Setting: 0.13 A
Ignition Type: Direct Ignition
Ambient Temperature Range: -40 F to +175 F (-40 C to +79 C)
Pressure Ratings: 1/2 psi (3.5 kPa)
Pressure Tapping: 1/8 in. NPT with plug
Electrical Ratings: 120 Vac
Frequency: 60 Hz

Combination gas control for use with hot surface/direct spark systems in 120 Vac, gas-fired appliances, with capacities from 30 to 415 cfh.

- Controls include manual valve, two automatic operators and pressure regulator.
- Compact size.
- Provides two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meets codes requiring dual safety shut-off.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- ON/OFF lighting sequence.

Electrical Connections: 1/4 in. male quick-connects; 24 in. (610 mm) leadwires.

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Includes: One 1/2 in. x 3/8 in. reducer bushing, Natural to LP Conversion Kit, Two 3/4 x 1/2 in. reducer bushings

Approvals:

American Gas Association: AGA Design Certified: File No. L2025007.

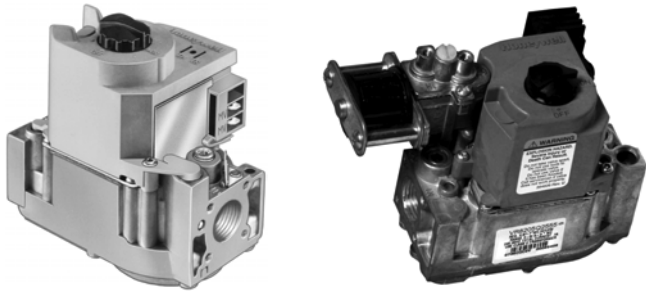
Canadian Gas Association: CSA Design Certified: File No. L2025007.

Underwriters Laboratories, Inc. UL Component Recognized.

	Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Electrical Ratings
					(psi)	(kPa)	
*	VR4305M4532	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	120 Vac
* TRADELINE models • SUPER TRADELINE models							

Combination Gas Controls

VR8205 Direct Ignition Dual Automatic Valve Combination Gas Controls

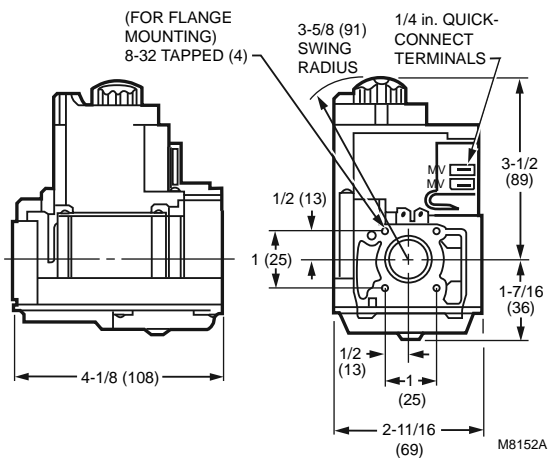


Combination gas controls for use with hot surface/direct spark systems in 24 Vac, gas-fired appliances with capacities from 20 to 200 cfh.

- Controls include manual valve, two automatic operators, and pressure regulator.
- Provide two automatic valves.
- Solenoid operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm operated second automatic valve opens under control of the regulator; closes if gas or power supply is interrupted.
- Meet codes requiring dual safety shutoff.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.
- Adjustments and wiring connections are accessible from top of the control.
- ON-OFF lighting sequence.

Residential
Combustion Controls

Dimensions in inches (millimeters)



Body Pattern: Straight-through

Capacity @ 1 in. p.d. 150,000 BTU/hr; 20,000 BTU/hr minimum

Anticipator Setting: 0.5 A

Ignition Type: Direct Ignition

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certified: File No. L2025006.

Canadian Gas Association: CGA Design Certified: File No. L2025006.

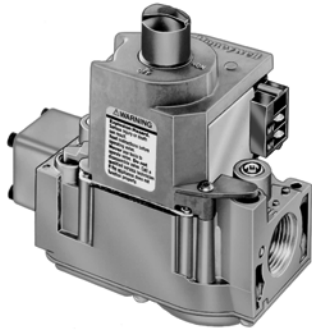
Underwriters Laboratories, Inc. UL Component Recognized.

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Ambient Temperature Range		Type	Includes
				(psi)	(kPa)	(F)	(C)		
* VR8205A2024	Natural	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	0 F to 175 F	-18 C to +79 C	Single Stage	One 3/4 in. straight flange One 1/2 in. x 3/8 in. reducer bushing Natural to LP Conversion Kit
VR8205C1024	Natural	Step Opening	1/2 in. x 1/2 in.	Full Rate: 3.5 in. wc; Step Setting: 1.2 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.30 kPa	0 F to 175 F	-18 C to +79 C	Single Stage	—
VR8205H1003	Natural	Slow Opening	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	0 F to 175 F	-18 C to +79 C	Single Stage	—
VR8205Q2555	Natural	Standard	1/2 in. x 1/2 in.	1.7 in. wc low; 3.5 in. wc high		-40 F to +175 F	-40 C to +66 C	Two Stage	One 1/2 in. x 3/8 in. reducer bushing Natural to LP Conversion Kit

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

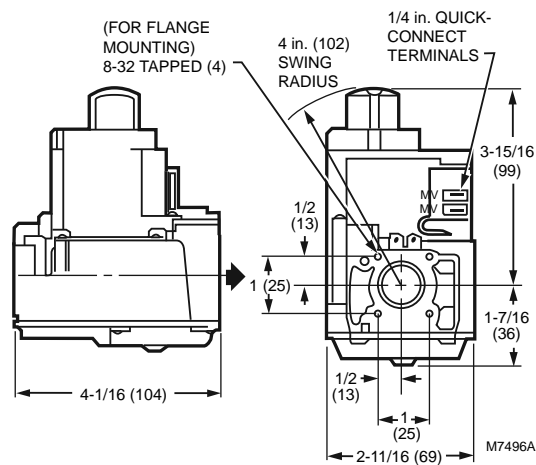
VR8305 Direct Ignition Dual Automatic Valve Combination Gas Control



Combination gas control for use with hot surface/direct spark systems in 24 Vac, gas-fired appliances, with capacities from 30 to 415 cfh.

- Controls include manual valve, two automatic operators, and pressure regulator.
- Use with S89C,E,F and S87 series 5 and later.
- Compact size.
- Provide two automatic valves.
- Solenoid-operated first automatic valve opens on thermostat call for heat; closes when call for heat ends.
- Diaphragm-operated second automatic valve opens under control of regulator; closes if gas or power supply is interrupted.
- Meet codes requiring dual safety shut-off.
- All adjustments, wiring connections and pilot outlet are accessible from top of control.
- Adjustable servo regulator effectively maintains almost constant gas output pressure under wide fluctuations in gas supply pressure.
- ON-OFF lighting sequence.
- Natural to LP and LP to Natural conversion kits available for standard and slow opening gas valves.

Dimensions in inches (millimeters)



Body Pattern: Straight-through

Capacity @ 1 in. p.d. 240,000 BTU/hr; 30,000 BTU/hr minimum

Anticipator Setting: 0.62 A

Ignition Type: Direct Ignition

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Ambient Temperature Range: -40 F to +175 F (-40 C to +79 C)

Frequency: 60 Hz

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certificate: L2025006

Australian Gas Association: Australian Gas Assoc. Design Certificate: 4214; Approved for Delta C Applications

Canadian Gas Association: CGA Design Certificate: L2025006

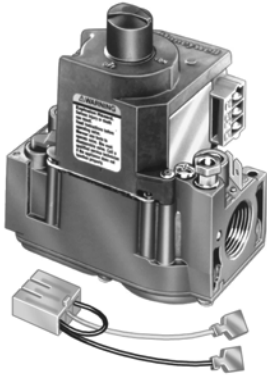
Underwriters Laboratories, Inc. UL Component Recognized: MH8191

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Type	Includes
				(psi)	(kPa)		
VR8305M2102	Natural	Standard	1/2 in. x 1/2 in.	3.5 in. wc	0.87 kPa	Single Stage	—
* VR8305M3506	Natural	Standard	1/2 in. x 3/4 in.	3.5 in. wc	0.87 kPa	Single Stage	One 3/4 in. straight flange One 3/4 in. x 1/2 in. reducer bushing Natural to LP Conversion Kit
VR8305P2224	LP	Step Opening	1/2 in. x 1/2 in.	Full Rate: 10.0 in. wc; Step Setting: 4.0 in. wc	Full Rate: 2.49 kPa; Step Setting: 1.0 kPa	Single Stage	—
VR8305P4279	Natural	Step Opening	3/4 in. x 3/4 in.	Full Rate: 3.5 in. wc; Step Setting: 0.9 in. wc	Full Rate: 0.87 kPa; Step Setting: 0.22 kPa	Single Stage	—
VR8305Q4500	Natural	Standard	3/4 in. x 3/4 in.	1.7 in. wc low; 3.5 in. wc high	0.48 kPa low; 0.87 kPa high	Two Stage	Natural to LP Conversion Kit Two 3/4 x 1/2 in. reducer bushings

* TRADELINE models • SUPER TRADELINE models

Combination Gas Controls

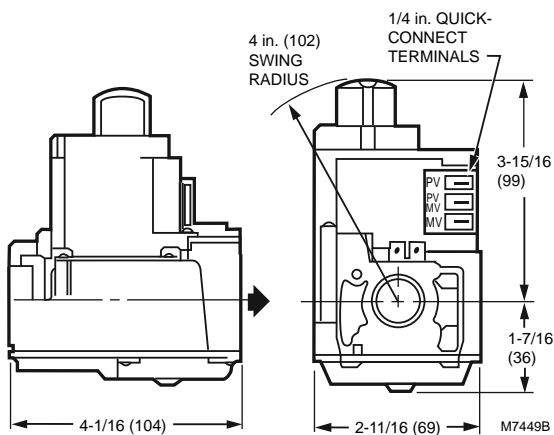
VR8345 Universal Electronic Ignition Combination Gas Control



Universal electronic ignition combination gas control for use with direct spark ignition, hot surface ignition or intermittent pilot ignition in 24 Vac, gas-fired appliances, with capacities from 30 to 415 cfh.

- Control includes manual valve, two automatic operators, pressure regulator, pilot adjustment, pilot plug and ignition adapter.
- Replaces virtually any IP, HSI, or DSI gas control.
- For use with natural or manufactured gas or LP gas.
- Includes converter kit to adapt from natural to LP gas.
- Compact size.
- All adjustments and wiring connections accessible from top of control.
- Four-inch swing radius allows easy rotation into position inside the tightest furnace vestibules.
- Clearly marked, keyed terminal block allows quick attachment of wires and IP/DSI/HSI jumper.
- Internal inlet screen blocks contaminants in gas line from entering valve.

Dimensions in inches (millimeters)



Type: Single Stage

Body Pattern: Straight-through

Capacity @ 1 in. p.d. 300,000 BTU/hr; 30,000 BTU/hr minimum

Ignition Type: Direct Ignition; Intermittent Pilot

Ambient Temperature Range: -40 F to +175 F (-40 C to +79 C)

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. NPT with plug

Electrical Ratings: 24 Vac

Frequency: 60 Hz

Electrical Connections: 1/4 in. quick-connect male terminals

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Includes: Natural to LP Conversion Kit, Two 3/4 x 1/2 in. reducer bushings

Approvals:

American Gas Association: AGA Design Certified: File No. L2025007.

Canadian Gas Association: CGA Design Certified: File No. L2025007.

Underwriters Laboratories, Inc. UL Component Recognized.

Residential
Combustion Controls

Product Number	Type of Gas	Opening Characteristics (standard, step)	Inlet/Outlet Size (in.)	Pressure Regulator Setting		Ambient Temperature Range	
				(psi)	(kPa)	(F)	(C)
• VR8345H4555	Natural	Slow Opening	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	0 F to 175 F	-18 C to +79 C
VR8345M4302	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C
VR8345M4336	Natural	Standard	3/4 in. x 3/4 in.	3.5 in. wc	0.87 kPa	-40 F to +175 F	-40 C to +79 C
• VR8345Q4563	Natural	Standard	3/4 in. x 3/4 in.	1.7 in. wc low; 3.5 in. wc high	0.48 kPa low; 0.87 kPa high	-40 F to +175 F	-40 C to +79 C

* TRADELINE models • SUPER TRADELINE models

Millivoltage Combination Gas Controls

VS820 Millivoltage Combination Gas Controls



Application: Self-powered automatic control. Use with 750 mV pilot generator.

Dimensions, Approximate: 4 3/4 in. high x 4 1/16 in. wide x 3 3/16 in. deep (121 mm high x 103 mm wide x 81 mm deep)

Body Pattern: Straight-through. Multi-tapped with 1/2 in. right and left outlets plugged, except as noted.

Pressure Ratings: 1/2 psi (3.5 kPa)

Pressure Tapping: 1/8 in. npt with plug.

Temperature Range: 32 F to 175 F (0 C to 79 C)

Electrical Ratings: 750 mV

These gas controls combine a Lite-Rite manual gas cock, safety shutoff Pilotstat assembly, millivoltage automatic valve operator, and optional gas pressure regulator. They require the use of a 750 mv Powerpile generator (thermopile). The generator, heated by the pilot burner flame, provides the electrical energy to operate the combination gas control. A millivoltage thermostat with suitable accessory controls completes the automatic control system for the heating appliance.

- Include pilot flow adjustment screw.
- Easy to install, adjust and service; all adjustments and connections are accessible from top of control.
- Add separate energy cutoff (ECO) where codes call for dual safety shutoff.
- Complete safety shutoff on pilot flame failure.
- LITE-RITE (OFF-PILOT-ON) lighting sequence.
- ECO connector for V800 models, Part No. 392451-1.

Pilot Gas Outlet: Compression fitting for 1/4 in. OD tubing.

Electrical Connections: Terminal block has 3 combination screw and 1/4 in. quick connect terminals.

Mounting: 0 to 90 degrees in any direction from the upright position of the gas control knob, including vertically.

Approvals:

American Gas Association: AGA Design Certified: File no. L2025003

Canadian Gas Association: CGA Design Certified: File no. L2025003

Underwriters Laboratories, Inc. UL Component Recognized

	Product Number	Type of Gas	Inlet/Outlet Size (in.)	Pressure Regulator	Pressure Regulator Setting		Includes
					(psi)	(kPa)	
*	VS820A1047	Natural	1/2 in. NPT x 3/4 in. NPT with 1/2 in. NPT side outlets	Standard	3.5 in. wc Reg. Set/ 3-5 in. Adj. Range	0.87 kPa	One 3/4 in. x 1/2 in. reducer bushing; one 1/2 in. x 3/8 in. reducer bushing One 1/2 in. x 3/8 in. reducer bushing One 3/4 in. x 1/2 in. reducer bushing
*	VS820A1054	Natural	3/4 in. NPT x 3/4 in. NPT with 1/2 in. NPT side outlets	Standard	3.5 in. wc Reg. Set/ 3-5 in. Adj. Range	0.87 kPa	Two 3/4 in. x 1/2 in. reducer bushings One 1/2 in. x 3/8 in. reducer bushing
•	VS820A1088	Natural	3/4 in. NPT x 3/4 in. NPT with 1/2 in. NPT side outlets	Standard	3.5 in. wc Reg. Set/ 3-5 in. Adj. Range	0.87 kPa	Remote Rod Adapter One Natural to LP Conversion Kit Two 3/4 in. x 1/2 in. reducer bushings One 1/2 in. x 3/8 in. reducer bushing
*	VS820A1336	LP	3/4 in. NPT x 3/4 in. NPT with 1/2 in. NPT side outlets	Standard	10.0 in. wc Reg. Set/ 8-12 in. Adj. Range	2.49 kPa	One 1/2 in. x 3/8 in. reducer bushing One 3/4 in. x 1/2 in. reducer bushing
*	VS820C1100	Natural	3/4 in. NPT x 3/4 in. NPT with 1/2 in. NPT side outlets	Step Opening	Step: 0.9 in. wc non-adjustable; Full rate: 3.5 in. wc, 3-5 in. adjustable	Step: 0.22 kPa; Full rate: 0.87 kPa	One 1/2 in. x 3/8 in. reducer bushing One 3/4 in. x 1/2 in. reducer bushing

* TRADELINE models • SUPER TRADELINE models