

# 8500 Series

## Gas Valves



Direct Spark Ignition



Negative Regulation



Intermittent Pilot



High-Capacity

## Description

The Robertshaw® 8500 Series Gas Valves are designed for light commercial and residential applications with direct ignition, positive and negative pressure (DER & DERN) or intermittent pilot ignition (IPER) systems such as central heating units, space heaters, wall heaters, boilers, mobile home furnaces, and commercial cooking appliances. The 8500 Series Gas Valves also includes high-capacity options for each model as well. Setting this valve apart from the competition is its excellent regulation control, compact size and ON/OFF electrical switch.

## Features and Benefits

- Ground wire connection
- Pressure taps for checking inlet and outlet gas pressure
- CSA certified
- Instantaneous and slow opening
- Multi-poise mounting, (any angle between 0° and 90° from upright. Note the Valve cannot be mounted upside down.)
- Quick connect for convenient wiring
- Available in Natural Gas or LP Gas configurations



Customer Service  
+1 800 304 6563  
HVACCustomerService  
@robertshaw.com

www.robertshaw.com  
©2026 Robertshaw  
03/26 150-2912 Rev D

# Specifications

<b>Electrical Rating</b>	.28 Amps
<b>Operating Voltage</b>	24VAC 60Hz
<b>Temperature Operating Range</b>	-40°F to 175°F (-40°C to 80°C)
<b>Maximum Pressure Rating</b>	1/2 PSI
<b>Inlet and Outlet Pressure Taps</b>	1/8" NPT
<b>Mounting</b>	Multipoise
<b>Agency Approvals</b>	CSA
<b>Outlet sizes</b>	Straight out: 1/2", 3/4" NPT female threads
<b>Inlet Sizes</b>	Straight in: 1/2", 3/4" NPT female threads, flange
<b>Power Consumption</b>	5 Watts
<b>Type</b>	N.E.C. Class 2

Model No.	Size (Inlet x Outlet)	Outlet Side	1" Pressure Drop Capacity BTU / HR		Range of Regulation BTU / HR	
			Natural Gas	LP Gas	Natural Gas	LP Gas
8500DER	1/2" x 1/2"	Straight	150,000	230,000	10,000 - 250,000	40,000 - 440,000
	3/4" x 3/4"	Straight	150,000	230,000	10,000 - 250,000	40,000 - 440,000
8500DERN	1/2" x 1/2"	Straight	-	-	10,000 - 250,000	40,000 - 440,000
	3/4" x 3/4"	Straight	-	-	10,000 - 250,000	40,000 - 440,000
8500IPER	1/2" x 1/2"	Straight	150,000	230,000	10,000 - 250,000	40,000 - 440,000
	3/4" x 3/4"	Straight	150,000	230,000	10,000 - 250,000	40,000 - 440,000
8600DER	1/2" x 1/2"	Straight	170,000	275,500	40,000 - 240,000	40,000 - 320,000
	1/2" x 3/4"	Straight	260,000	421,000	50,000 - 300,000	40,000 - 320,000
	3/4" x 3/4"	Straight	300,000	486,000	50,000 - 400,000	40,000 - 320,000

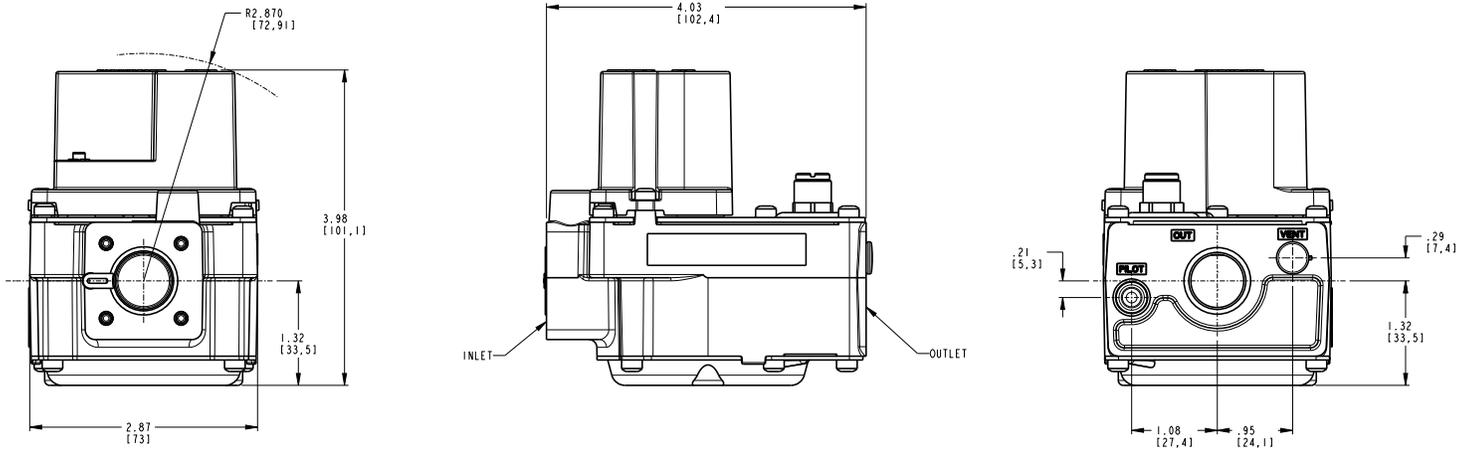
\*Specifications subject to change

# Regulator Settings

Model No.	Opening Characteristic	Type of Gas	Standard Factory Regulation Settings (WC)	Range of Optional Factory Regulator Settings (WC)
8500DER Direct Spark Ignition	Standard	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0
	Slow	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0
8500DERN Negative Regulation	Standard	Natural Gas	-0.2	+0.5 to -1.0
		LP Gas	-0.2	+0.5 to -1.0
	Slow	Natural Gas	-0.2	+0.5 to -1.0
		LP Gas	-0.2	+0.5 to -1.0
8500IPER Intermittent Pilot	Standard	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0
	Slow	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0
8600DERHC High Capacity	Standard	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0
	Slow	Natural Gas	3.5	3.0 to 5.5
		LP Gas	10	8.0 to 12.0

# Product Dimensions

Model: 8500DER and 8500DERN



Model: 8500IPER

