

# Robertshaw®

**UNITROL®  
7000  
700 SERIES**

**STANDARD  
GAS  
VALVES**



The Robertshaw® Unitrol® 7000 is Simply the Right Choice™ for gas cooking controls. The Unitrol 7000 models combine a manual main and pilot gas valve, a separate automatic safety pilot valve, pilot adjustment valve, and a diaphragm valve. The regulated models also feature “straight line” gas pressure regulation.

Robertshaw diaphragm gas valves are single function, and are excellent replacements for solenoid gas valves. Models are available with or without a gas cock and regulated or non-regulated. Standard features include pilot outlet, pilot gas filter and pilot adjustment key.

## Features and Benefits

- Normally closed solenoid
- Compact size with high flow rates
- Standard NEMA terminals
- Inlet filtered screen
- Various gas types: natural, manufactured, mixed, LP, and LP/air mixtures
- Multiple actuators available
- RoHS compliant

## Specifications

- Sequentially controlled lighting
- Soft ignition available
- Built-in self protection
- Various inlet and outlet sizes available
  - 3/8, 1/2, 3/4, 1”
- Works with various ignition types
  - Hot Surface Ignition (HSI)
  - Direct Spark Ignition (DSI)
  - Intermittent Pilot Ignition (IPI)
  - Standing Pilot
- Agency Certification
  - CE0085
  - AGA, CSA and British Gas Certified



An ISO 9001 – 2008 Certified Company

# Robertshaw®

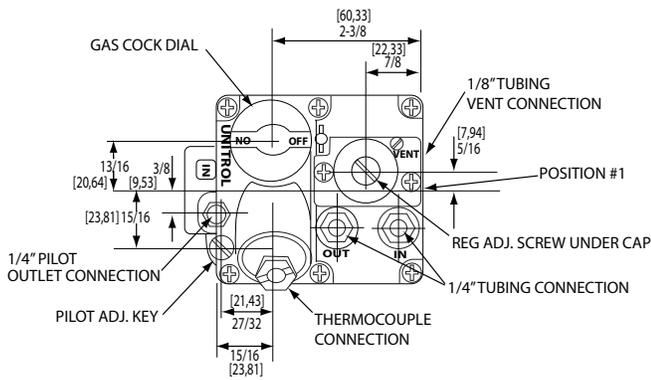
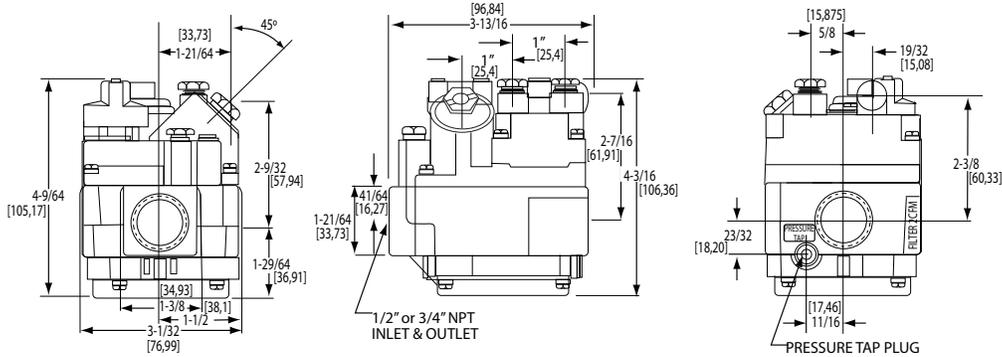
**UNITROL®  
7000  
700 SERIES**

**STANDARD  
GAS  
VALVES**

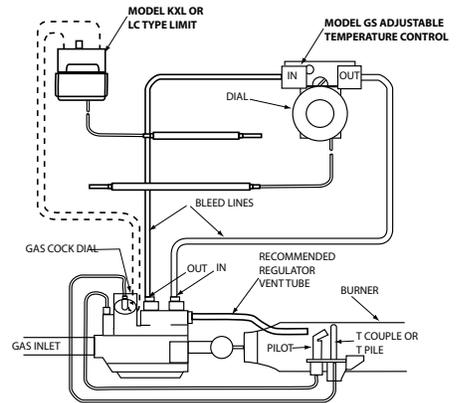
## PRODUCT DIMENSIONS

Dimensions are inches and [millimeters].

Drawings reflect 7000 GO bleed gas model.



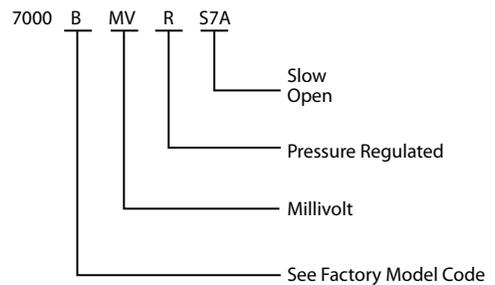
SCHEMATIC SKETCH SHOWS ARRANGEMENT OF THERMOSTATS AND UNITROL 7000BGO IN TYPICAL FRYER APPLICATION



## REGULATION CAPACITIES

Factory Model	Inlet x Outlet"	Natural Gas BTU @ 1" WC PD	Natural Gas Min - Max BTU Capacity	LP BTU @ 1" WC PD	LP Min - Max BTU Capacity
7000	3/4 x 3/4	300,000	10,000-720,000	485,000	10,000-900,000
7000 HC	1 x 1	600,000	200,000-800,000	972,000	300,000-1,150,000
7000 LC	1/2 x 1/2	40,000	5,000-70,000	65,000	5,000-100,000
7000 ER	1/2 x 1/2	240,000	29,000-290,000	377,000	45,000-455,000
7500	1/2 x 1/2	100,000	6,700-160,000	162,000	12,000-226,000

## PART NUMBER NOMENCLATURE



1" WC PD Pressure Drop (PD)  
Capacity – BTU Per Hour



**UNITROL®  
7000  
700 SERIES**

**STANDARD  
GAS  
VALVES**

**FACTORY MODEL CODE IDENTIFICATION**

Factory Model Number			DESCRIPTION
7000	2000	7200	
•			<b>A</b> Unitrol 7000 Body with small diameter valve seat. 100,000 BTU
•			<b>B</b> Unitrol 7000 Body with large diameter valve seat. 240,000 or 300,000 BTU
•			<b>BB</b> Unitrol 7000 Body with medium diameter valve seat - Intrinsicly "non-hunting"
•			<b>7010</b> Unitrol 7000 Body without a gas cock
•			<b>CSTR</b> Convertible Hydraulic Actuator - From natural to LP gas
•	•	•	<b>D</b> Solenoid Valve - Pilot Gas - Single coil operated on AC
•	•	•	<b>E</b> Electric Actuator - 24VAC
•			<b>E12</b> Electric Actuator - 12VAC
•	•	•	<b>E120</b> Electric Actuator - 120VAC
•		•	<b>E240</b> Electric Actuator - 240VAC
•			<b>EH</b> Electric Heat Motor Actuator (obsolete)
•			<b>EM</b> Electric Actuator with manual override (obsolete)
•			<b>ESTR-SS</b> Electric Solid-State Actuator (obsolete)
•			<b>F</b> Factory Fixed (not adjustable regulator setting (3.5° to 5.0° W.C.))
•			<b>GO</b> Bleed Gas Operated Actuator
•			<b>GS</b> Gas Cock Safety - with gas cock and safety valve - no main valve
•			<b>GV</b> Gas Valve without a safety valve - No Safety Magnet
•			<b>-1H</b> Remote dual hydraulic type - dual bellows
•	•		<b>HC</b> High Capacity Body
•			<b>HHC</b> High Capacity Body AGA rated for side ways or vertical mounting. Can be replaced by HC model
•	•	•	<b>IPER</b> Intermittent Pilot Ignition Gas Valve - regulated
•			<b>L</b> Relight Interlock type. A European requirement
•	•		<b>LC</b> Low Capacity Body - 710 Series
•	•	•	<b>LP</b> For Liquefied Petroleum Gases
•			<b>M</b> Manual Actuator
•			<b>MS</b> Millivolt Safety Magnet - uses thermopile type safety
•			<b>MV</b> Millivolt Actuator
•		•	<b>P</b> Pulse Combustion
•	•	•	<b>R</b> Regulator Type
•		•	<b>RS</b> Adjustable (High - Low) pressure regulator adjusts percentage of output. -3 = 50% of full flow -4 = 60% of full flow -5 = 70% of full flow -6 = 80% of full flow

Factory Model Number			DESCRIPTION
7000	2000	7200	
•			<b>RB</b> High/Low
•	•	•	<b>RC</b> Convertible regulator from natural gas to LP and back
		•	<b>RN</b> Negative Pressure Regulator
•			<b>R1</b> Class I and II Natural Gas Pressure Regulator
•	•	•	<b>R2</b> Two-Stage pressure regulator valve opens to percentage of full flow as indicated by the number -1 = 30% of full flow -2 = 40% of full flow -3 = 50% of full flow -4 = 60% of full flow -5 = 70% of full flow -6 = 80% of full flow
•			<b>S</b> Hydraulic Snap-Acting Actuator - non regulated
		•	<b>S0</b> Step-opening regulated with factory fixed setting 30 seconds max. To full flow: -1 = 30% of full flow -2 = 40% of full flow -3 = 50% of full flow -4 = 60% of full flow -5 = 70% of full flow
•			<b>SR</b> Hydraulic Regulated Snap-Acting Actuator
•			<b>ST</b> Hydraulic Snap - Throttle Actuator, but set-up for use on a specific gas; natural gas only or LP gas only. Non-regulated number indicates percentage of By-Pass flow. -1 = 30% of full flow -2 = 40% of full flow -3 = 50% of full flow -4 = 60% of full flow -5 = 70% of full flow
•			<b>STR</b> Hydraulic Snap-Throttle Actuator, regulator number indicates percentage of By-Pass flow. -2 = 40% of full flow -3 = 50% of full flow -4 = 60% of full flow -5 = 70% of full flow
•	•	•	<b>S7</b> Slow Opening devices with either a plastic body or a metal body Orifice Valve Assembly A = 0 to 5 seconds to full flow B = 5 to 10 seconds to full flow C = 10 to 30 seconds to full flow
•			<b>S13</b> Slow Opening Control with .0135 orifice in body, but no other "Slow Opening" device. 0 to 5 seconds to full flow.
•			<b>S36</b> Slow Opening Control with two .018" orifice - one in Body and one in Cover, but no other Slow Opening device. 5 to 10 seconds to full flow.

### ACTUATORS AVAILABLE FOR ALL UNITROL 7000 VALVES (STD, HC, LC, E, ER MODELS)

FEATURES	24 VOLT	LINE VOLTAGE	MILLIVOLT	HYDRAULIC
Model	7000E	7000E120 or 7000E240	7000MV	7000S
Ambient Temp	-40°F to 175°F (-40°C to 80°C)	40°F to 175°F (-40°C to 80°C)	40°F to 225°F (-40°C to 107°C)	STD: 58°F to 90°F (14°C to 32°C) HI: 100°F to 250°F (38°C to 120°C)
Power	5 Watts	4 Watts	Pull-in Voltage 100mV Drop-out Voltage 15mV	
Current	0.2 Amps @ 24 VAC	0.034 Amps @ 120V 0.017 Amps @ 240V		
NEC	Class 2	Class 1		

Note: All the above models are available in regulated (R), high/low (RB) or convertible (RC).

