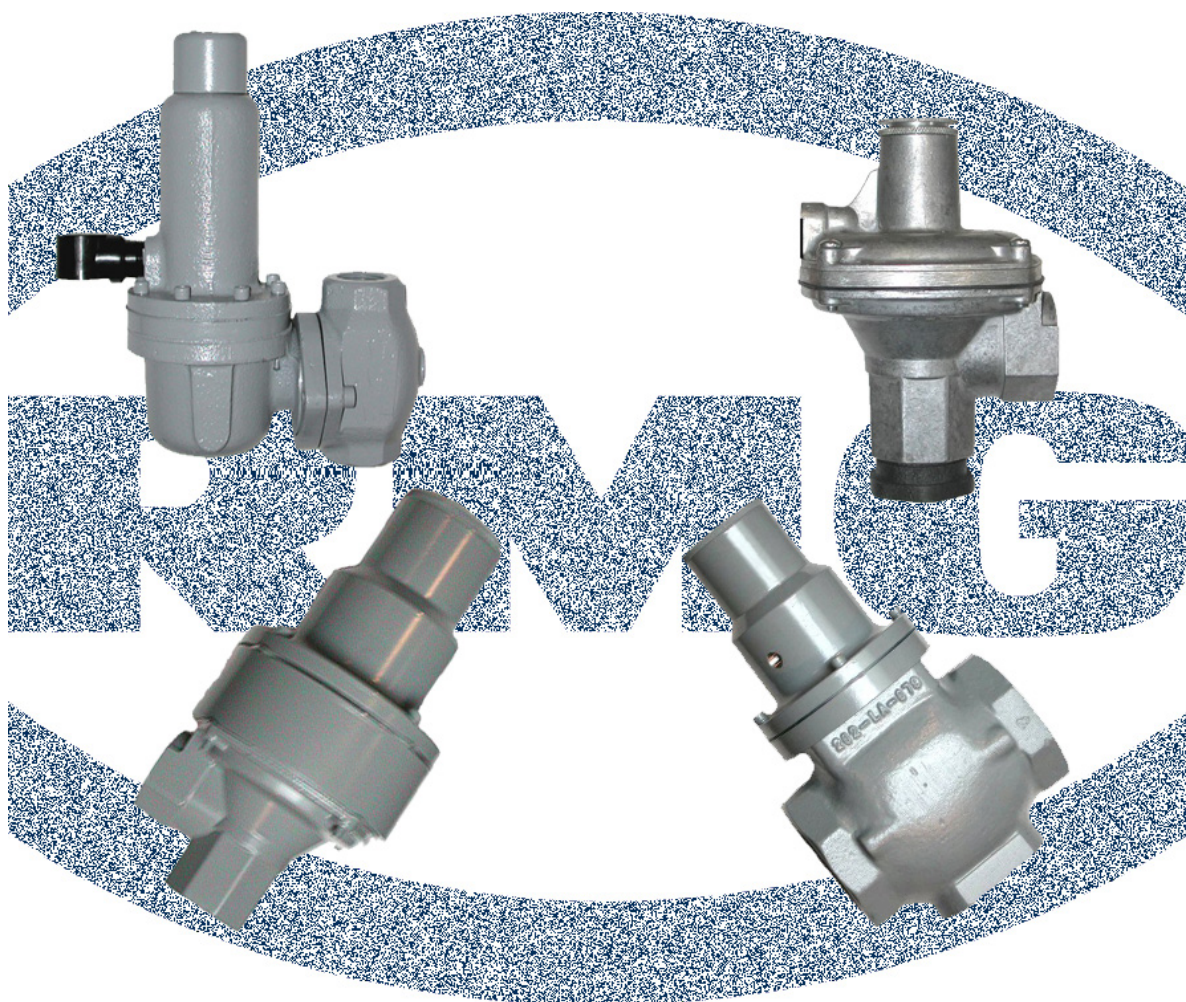




# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

Edition  
GDRV.06



**BRYAN DONKIN RMG CANADA LIMITED**  
Serving the Gas Industry—WORLDWIDE



# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

### Applications

- Specifically designed to protect the downstream system or equipment from over pressure conditions by discharging excess gas pressure through the valve to a safe location
- For natural gas and all non-corrosive gaseous media

### Characteristics

- Specifically designed to measure downstream pressure then vent gas if a predetermined pressure limit is reached
- Model 201 Safety Relief Valve is a high pressure version
- Models 225LP, 225LP2 and 225LP4 Safety Relief Valves are low pressure versions
- Maximum operating pressure of the 201 is 375 psig (25.5 bar)
- Maximum operating pressure of the 225LP is 30 psig (2 bar)
- Maximum operating pressure of the 225LP2 is 30 psig (2 bar)
- Maximum operating pressure of the 225LP4 is 150 psig (10 bar)
- Angle body (90°) design with Models 225LP and 225LP2
- Inline body (180°) design with Model 201 and 225LP4
- ¾" & 1" screwed connections NPT, BSPT or BSPP available with 201, 225LP and 225LP2
- 1¼", 1½" & 2" screwed connections NPT, BSPT or BSPP available with Model 225LP4
- 2" flanged version available in ANSI150 or PN16 with flat or raised face profiles
- Ease of maintenance due to interchangeable diaphragm casing cartridge accessible via a union nut to the body
- Custom designed and pre-fabricated regulator assemblies and pressure reducing stations available



# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

### Available Relief Pressure Ranges

201: High pressure safety relief valve

- Relief pressure range 3 – 150 psig (0.21 – 10 bar)

225LP: Low pressure relief valve

- Relief pressure range 12" w.c. – 5 psig (30 – 350 mbar)

225LP2: Low pressure relief valve

- Relief pressure range 5 – 15 psig (0.35 – 1.0 bar)

225LP4: Low pressure relief valve

- Relief pressure range 5 – 75 psig (0.35 – 5.1 bar)

### Materials of Construction

|  |  |
|--|--|
| Screwed Body (¾" & 1")                       | Die-Cast Aluminum                            |
| Screwed Body (1¼", 1½" & 2" )                | Cast Iron                                    |
| Flanged Body                                 | Cast Iron                                    |
| Diaphragm Casings                            | Die Cast Aluminum                            |
| Diaphragm                                    | Molded Nitrile Rubber with Nylon Reinforcing |
| Valve Head (Seat) for 225LP2, 225LP4 and 201 | Polyurethane                                 |
| Diaphragm Plates                             | Steel  |
| Fasteners                                    | Steel  |
| Top Cap (standard)                           | Aluminum                                     |

### Weights

- Model 201 (¾" & 1") – 14 lb. (6.4 kg)
- Model 225LP (¾" & 1") – 2 lb. (0.9 kg)
- Model 225LP2 (¾" & 1") – 5 lb. (2.3 kg)
- Model 225LP4 (1¼", 1½" & 2") – 18 lb. (8.2 kg)
- Model 225LP4 (2" flanged) - 25 lb. (11.4 kg)

### Temperature Rating

- -40° to 60° Celsius
- -40° to 140° Fahrenheit



# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

### Spring Selection and Cut-Off Ranges

#### Model 201 Safety Relief Valve

| Range (imperial) | Range (metric) | Spring Number/Colour |
|------------------|----------------|----------------------|
| 3 – 10 psig      | 0.21 – 0.7 bar | 1030 (brown)         |
| 8 – 20 psig      | 0.5 – 1.4 bar  | 1031 (green)         |
| 15 – 25 psig     | 1.0 – 1.7 bar  | 1032 (blue)          |
| 20 – 40 psig     | 1.4 – 2.7 bar  | 1033 (silver)        |
| 30 – 75 psig     | 2.0 – 5.1 bar  | 1036 (red)           |
| 50 – 100 psig    | 3.4 – 6.8 bar  | 1037 (white)         |
| 80 – 150 psig    | 5.4 – 10 bar   | 1034 (yellow)        |

#### Model 225LP Safety Relief Valve

|                |                |               |
|----------------|----------------|---------------|
| 12” – 40” w.c. | 30 – 100 mbar  | 861 (brown)   |
| 27” – 67” w.c. | 67 – 167 mbar  | 868 (green)   |
| 2 – 3 psig     | 140 – 210 mbar | 1254 (red)    |
| 3 – 4 psig     | 210 – 280 mbar | 1047 (purple) |
| 4 – 5 psig     | 280 – 350 mbar | 1255 (green)  |

#### Model 225LP2 Safety Relief Valve

|             |                |              |
|-------------|----------------|--------------|
| 5 – 15 psig | 0.35 – 1.0 bar | 1030 (brown) |
|-------------|----------------|--------------|

#### Model 225LP4 Safety Slam-Shut Valve

|              |                |                  |
|--------------|----------------|------------------|
| 5 – 30 psig  | 0.35 – 2.0 bar | 1030 (brown)     |
| 30 – 45 psig | 2.0 – 3.0 bar  | 1031 (green)     |
| 45 – 75 psig | 3.0 – 5.1 bar  | 1032 (dark blue) |

# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

### Relief Performance

#### Model 201 Safety Relief Valve

TYPICAL PERFORMANCE DATA

| SPRING |        | SET POINT | OVER-PRESSURE LEVEL |        |        |        |
|--------|--------|-----------|---------------------|--------|--------|--------|
| NUMBER | COLOUR |           | 10%                 | 20%    | 50%    | 100%   |
| 1030   | BROWN  | 6 psig    | 100                 | 1,150  | 3,500  | 4,500  |
|        |        | 9 psig    | 150                 | 1,500  | 4,000  | 5,000  |
| 1031   | GREEN  | 16 psig   | 1,200               | 2,300  | 5,500  | 8,400  |
| 1032   | BLUE   | 20 psig   | 1,300               | 2,500  | 8,900  | 12,400 |
| 1033   | SILVER | 30 psig   | 1,500               | 2,700  | 9,000  | 13,800 |
|        |        | 40 psig   | 1,600               | 4,700  | 12,200 | 18,750 |
| 1036   | RED    | 50 psig   | 1,800               | 4,000  | 16,500 | 27,000 |
|        |        | 60 psig   | 2,100               | 5,800  | 18,000 | 30,000 |
| 1037   | WHITE  | 75 psig   | 3,000               | 6,000  | 18,000 | 31,000 |
| 1034   | YELLOW | 100 psig  | 5,300               | 15,500 | 29,750 | 38,000 |
|        |        | 130 psig  | 4,500               | 12,000 | 36,000 | 45,000 |

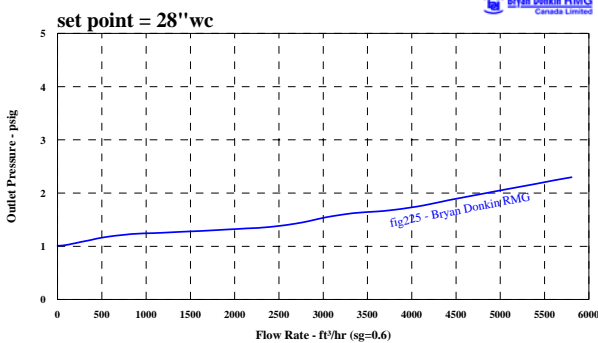
Natural Gas, 0.6 sg at 1.013 barA and 15 C.

1" x 1" body connections.

Free discharge to atmosphere through 5 feet of 1" straight pipe.

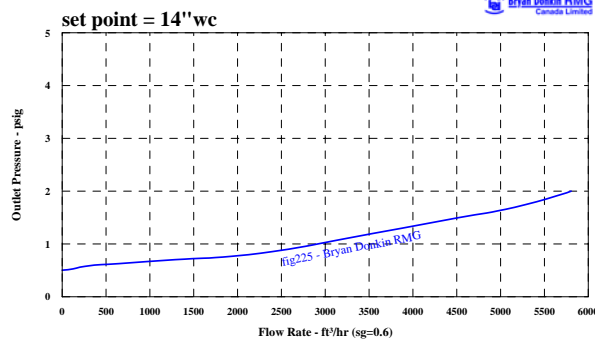
#### Model 225LP Safety Relief Valve

BD-RMG Model 225 - Relief Valve  
WORKS PERFORMANCE TEST



January 2001

BD-RMG Model 225 - Relief Valve  
WORKS PERFORMANCE TEST



January 2001

#### Model 225LP2 Safety Relief Valve

- Relief capacity 6000 ft<sup>3</sup>/hr (170 m<sup>3</sup>/hr)

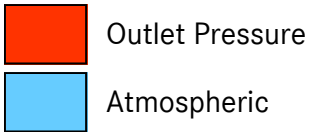
#### Model 225LP4 Safety Relief Valve

- Relief capacity 24000 ft<sup>3</sup>/hr (680 m<sup>3</sup>/hr)

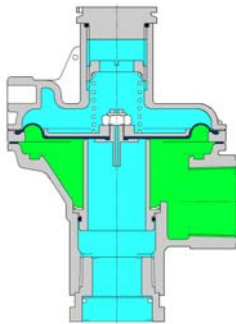
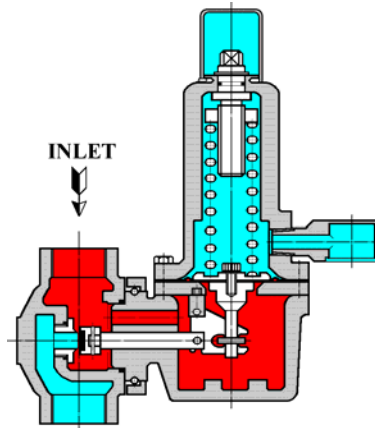
# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

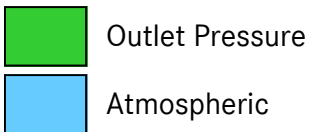
## Sectional Drawings



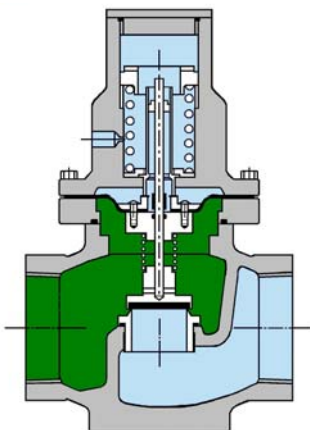
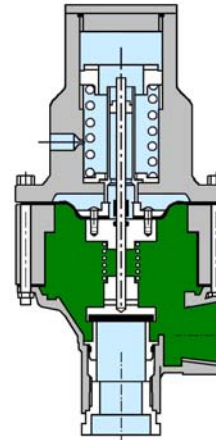
201 (3/4" & 1" body)



225LP (3/4" & 1" body)



225LP2 (3/4" & 1" body)



225LP4 (1/4", 1/2" & 2" screwed body)

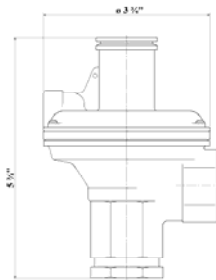
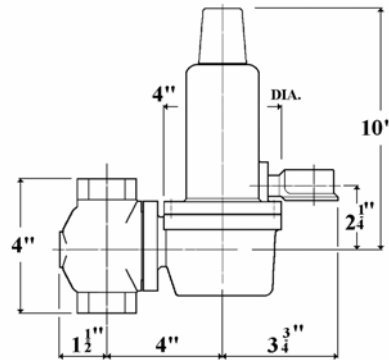


# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

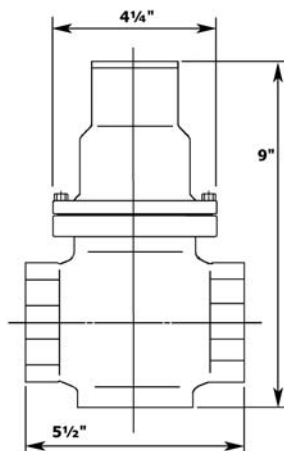
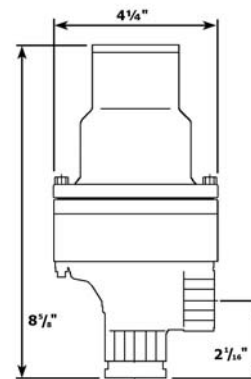
## Dimensional Drawings

201 ( $\frac{3}{4}$ " & 1" body)



225LP ( $\frac{3}{4}$ " & 1" body)

225LP2 ( $\frac{3}{4}$ " & 1" body)



225LP4 ( $1\frac{1}{4}$ ",  $1\frac{1}{2}$ " & 2" screwed body)



# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

## Commissioning and Installation Instructions

Please contact one of our representatives for the installation and commissioning instructions. Additionally, the commissioning and installation instructions are found in each box that the equipment is shipped in and can be downloaded from the website.

## Ordering Information

1. Inlet pressure (minimum and maximum)
2. Relief pressure requirements
3. Flow requirement (minimum and maximum)
4. Type of gas
5. Temperature
6. Pipe connections (inlet and outlet)
7. Pressure regulator options or requirements (SRV and/or SSV)
8. Other critical information (system design or description)
9. Shipping and billing information

## Product Portfolio

- Pressure regulators for every application from domestic, commercial, industrial to transmission line, city gate stations and other gas utility applications.
- Safety relief valves
- Safety slam shut valves
- Metering equipment (rotary displacement, turbine, vortex shedding, ultrasonic)
- Volume correctors (temperature and pressure)
- Filters
- Underground pressure regulator and metering modules
- Ball valves
- Station design and assembly (prefabricated stations, skid-mounted assemblies, small regulator/meter-set assemblies)
- Flame arrestors
- Data logging and software
- Check and non-return valves
- Training and after-sales service





# MODEL 201 – 225LP – 225LP2 – 225LP4 Safety Relief Valves

## General Description

---

## Contact Information



Bryan Donkin RMG Canada Limited  
50 Clarke Street South, Woodstock, Ontario, Canada N4S 7Y5  
Phone: +1-519-539-8531  
Fax: +1-519-537-3339  
Email: [neil@bdrmgcanada.com](mailto:neil@bdrmgcanada.com)  
Website: [www.rmg.com](http://www.rmg.com)



RMG Regel + Messtechnik GmbH  
Osterholzstrasse 45, D-34123, Kassel, Germany  
Phone: +49-561-5007-0  
Fax: +49-561-5007-107  
Website: [www.rmg.com](http://www.rmg.com)



Bryan Donkin RMG Gas Controls Limited  
Enterprise Drive, Holmewood, Chesterfield S42 5UZ England  
Phone: +44-1246-501501  
Fax: +44-1246-501-500  
Website: [www.rmg.com](http://www.rmg.com)

## Distributor Information