

**Series 1207A
Pressure Regulating Valves
Direct Type
for ANSI 150-600
DIN/BS 4504 PN10-PN100
JIS 10K-40K**

Direct Type Pressure Regulating Valves

General

The KOMOTO PR-1207A pressure reducing regulators precisely control downstream pressure to a predetermined set-pressure. Thanks to the innovative design, they provide quick response to sudden pressure changes. The PR-1207A series regulators offer maximum capacity, quick response, and accurate pressure control. The optimized design for fast and easy maintenance will minimize the total cost of ownership.

Features

- Top-entry design for ease of maintenance
- Variable actuator sizes for all pressure control ranges
- Sufficient balanced diaphragm for increased sensitivity
- Full port design for high capacity
- Stable guiding piston design
- Tight shut-off with soft seat at all pressure differentials
- Excellent pressure control rangeability
- Light weight and compact design

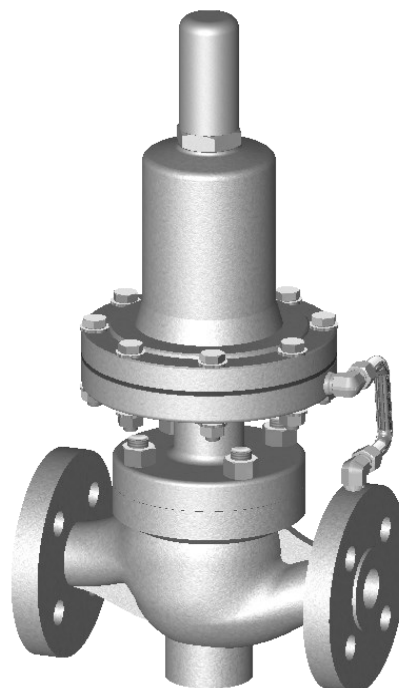


Figure 1. Series 1207A

Control range:

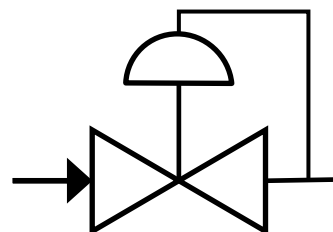
- 0.005 to 45 BarG

Temperature Range :

- -25 ~ 200 °c

Size :

- 1/2" ~ 2"



< Downstream Pressure Control >

Pressure Reducing Regulators

Pressure Reducing Regulators maintain designed pressure of downstream while providing the required fluid flow.

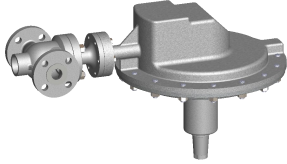
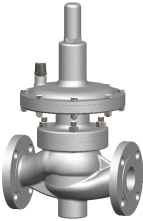
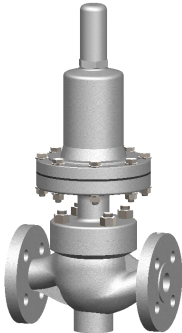
Direct-Operated Regulators are the simplest type of regulators. It senses downstream pressure and control it by the force of a spring in the actuator.

Series 1207A Specifications

| | | | | | | |
|---------------------|--|-----|-----|-------|------|--|
| Valve Type | Pressure Regulating Valve (Direct Type) | | | | | |
| Valve Model | Series 1207A | | | | | |
| Body Type | Globe | | | | | |
| Trim Type | Balanced | | | | | |
| Valve Size (Inch) | 1/2 | 3/4 | 1 | 1-1/2 | 2 | |
| (mm) | 15 | 20 | 25 | 40 | 50 | |
| Valve Cv | 1.6 | 3.4 | 5.7 | 10.3 | 18.2 | |
| Pressure Rating | ANSI 150Lb ~ 600Lb, JIS 10K ~ 40K, PN10 ~ PN100 | | | | | |
| End Connection | RF, FF, SW, BW, RTJ, etc | | | | | |
| Body Materials | A216 WCB, A351CF8/CF8M, A351CF3/CF3M, A105 and etc. | | | | | |
| Trim Materials | Stainless steel, Monel [®] and Hastelloy [®] C | | | | | |
| Bonnet Type | Plain | | | | | |
| Diaphragm Materials | Nitrile (NBR), Fluorocarbon (FKM) and Ethylenepropylene (EPDM) | | | | | |
| Disk/Seat Material | Nitrile (NBR), Fluorocarbon (FKM) and PTFE | | | | | |

* Other special materials are available upon request. Please consult with KOMOTO technical sales representatives.

Pressure Reducing Regulators Outlet Pressure Control Range

| PRV Type | | Outlet Pressure Range (BarG) | | Spring Type |
|--|---------|------------------------------|----------|---------------|
|  | EP | 0.004 | ~ 0.0072 | Silver Type 1 |
| | | 0.0048 | ~ 0.018 | Silver Type 2 |
| | | 0.012 | ~ 0.036 | Silver Type 3 |
| | | 0.024 | ~ 0.06 | Silver Type 4 |
|  | LP & LT | 0.04 | ~ 0.12 | Silver Type 5 |
| | | 0.08 | ~ 0.3 | Silver Type 6 |
| | | 0.2 | ~ 0.6 | Silver Type 7 |
|  | MP & HT | 0.4 | ~ 1.8 | Yellow Type 1 |
| | | 1.2 | ~ 4.2 | Yellow Type 2 |
| | | 2.8 | ~ 7.2 | Blue |
| | | 4.8 | ~ 10.8 | Red |
| | HP & HT | 7.2 | ~ 15.6 | Green Type 1 |
| | | 10.4 | ~ 20.4 | Green Type 2 |
| | | 17.6 | ~ 36 | Green Type 3 |
| | | 24 | ~ 44.4 | Green Type 4 |
| | | 29.6 | 54 | Green Type 5 |

Model Selection Guide

| Model | Code | Type | Set Pressure Range (BarG) |
|----------|------|----------------------------------|---------------------------|
| PR-1207A | EP | Very Low Pressure | 0.005 ~ 0.05 |
| | LP | Low Pressure | 0.05 ~ 0.5 |
| | MP | Medium Pressure | 0.5 ~ 10 |
| | HP | High Pressure | 10 ~ 45 |
| | LT | Low Pressure & High Temperature | 0.05 ~ 0.5 |
| | HT | High Pressure & High Temperature | 0.5 ~ 45 |

1. PR-1207AEP — Very Low Pressure (Tank Blanketing Valve)

PR-1207AEP tank blanketing pressure regulators are used for accurate pressure control on very low pressure of gas blanketing systems, which is introducing an inert gas into a storage tank.

Tank blanketing regulators reduce a high-pressure gas, such as Nitrogen, and maintain positive pressure in a tank which is slightly higher than atmospheric pressure. By maintaining the pressure, they reduce possibility of tank collapse while the liquid in the tank is being pumped out.

Temperature Range

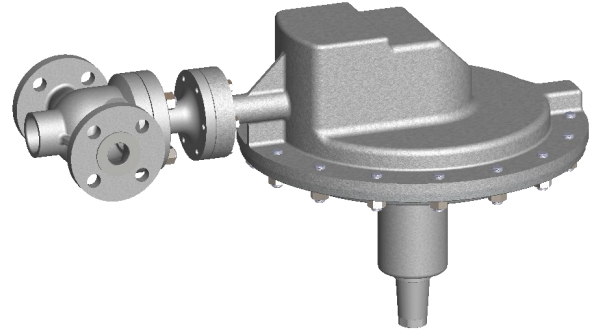
- -25 ~ 80 °C

Diaphragm Material

- Nitrile (NBR), Fluorocarbon (FKM)

Disk & Elastomer Seal Material

- Nitrile (NBR), Fluorocarbon (FKM)



Set Pressure Range (BarG) : 0.005 ~ 0.05

2. Diaphragm Type

PR-1207ALP — Low Pressure, PR-1207AMP — Medium Pressure

Introduction

PR-1207ALP/MP series direct-operated, spring-loaded, diaphragm type regulators provide precise downstream pressure control at low and medium set pressures. The large diaphragm area of PR-1207ALP provides more accurate control at low-pressure settings.

Temperature Range

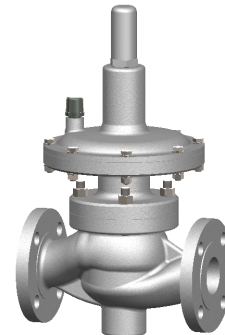
- -25 ~ 80 °C Nitrile (NBR)
- -25 ~ 120 °C Fluorocarbon (FKM)

Diaphragm Material

- Nitrile (NBR), Fluorocarbon (FKM)

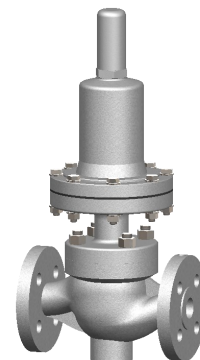
Disk & Elastomer Seal Material

- Nitrile (NBR), Fluorocarbon (FKM)



PR-1207ALP

Set Pressure Range (BarG) : 0.05 ~ 0.5



PR-1207AMP

Set Pressure Range (BarG) : 0.5 ~ 10

3. Piston Type

PR-1207AHP — High Pressure

Introduction

PR-1207AHP Series direct-operated, spring-loaded, piston type regulators provide precise downstream pressure control at high set pressures.

Temperature Range

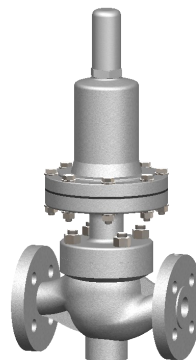
- -25 ~ 120 °c

Piston Elastomer Seal Material

- Nitrile (NBR), Fluorocarbon (FKM)

Disk & Elastomer Seal Material

- Nitrile (NBR), Fluorocarbon (FKM)



PR-1207AHP

Set Pressure Range (BarG) : 10 ~ 45

4. Piston Type

PR-1207ALT — Low Pressure & High Temperature, PR-1207AHT — High Pressure & High Temperature

Introduction

PR-1207ALT/HT Series direct-operated, spring-loaded, piston type regulators are designed for high temperature services. The large pressure sensing area of PR-1207ALT provides more accurate control at low-pressure settings.

Temperature Range

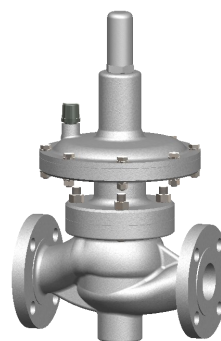
- -25 ~ 200 °c

Piston Elastomer Seal Material

- Fluorocarbon (FKM)

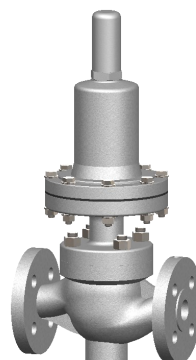
Disk & Elastomer Seal Material

- Fluorocarbon (FKM)



PR-1207ALT

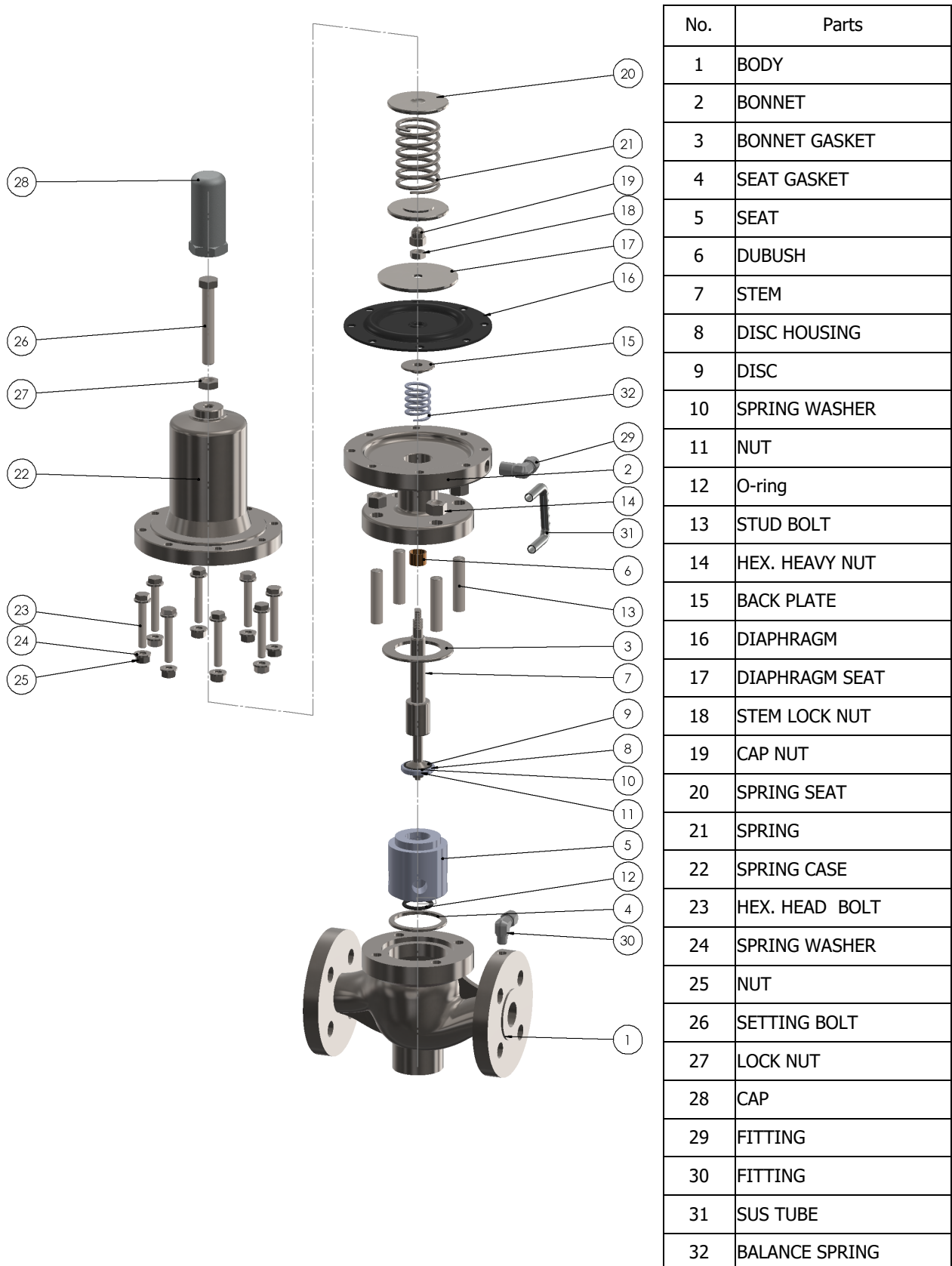
Set Pressure Range (BarG) : 0.05 ~ 0.5



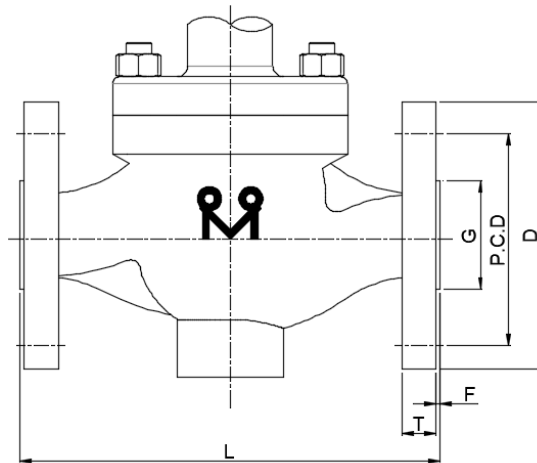
PR-1207AHT

Set Pressure Range (BarG) : 0.5 ~ 45

General Parts List



Dimension List



ANSI 150

| Valve Size | L* | T | F | I.D | G | P.C.D | D | Diameter of Bolt | Number of Bolts | Diameter of Bolts, in |
|------------|-----|------|---|------|------|-------|-----|------------------|-----------------|-----------------------|
| 3/4 | 184 | 11.2 | 2 | 19.1 | 42.9 | 69.9 | 100 | 5/8 | 4 | 1/2 |
| 1 | 184 | 12.7 | 2 | 25.4 | 50.8 | 79.4 | 110 | 5/8 | 4 | 1/2 |
| 1 1/2 | 222 | 15.9 | 2 | 38.1 | 73 | 98.4 | 125 | 5/8 | 4 | 1/2 |
| 2 | 254 | 17.5 | 2 | 50.8 | 92.1 | 120.7 | 150 | 3/4 | 4 | 5/8 |

ANSI 300

| Valve Size | L* | T | F | I.D | G | P.C.D | D | Diameter of Bolt | Number of Bolts | Diameter of Bolts, |
|------------|-----|------|---|------|------|-------|-----|------------------|-----------------|--------------------|
| 3/4 | 194 | 14.3 | 2 | 19.1 | 42.9 | 82.6 | 115 | 3/4 | 4 | 5/8 |
| 1 | 197 | 15.9 | 2 | 25.4 | 50.8 | 88.9 | 125 | 3/4 | 4 | 5/8 |
| 1 1/2 | 235 | 19.1 | 2 | 38.1 | 73 | 114.3 | 155 | 7/8 | 4 | 3/4 |
| 2 | 267 | 20.7 | 2 | 50.8 | 92.1 | 127 | 165 | 3/4 | 8 | 5/8 |

ANSI 600

| Valve Size | L* | T | F | I.D | G | P.C.D | D | Diameter of Bolt | Number of Bolts | Diameter of Bolts, in |
|------------|-----|------|---|------|------|-------|-----|------------------|-----------------|-----------------------|
| 3/4 | 206 | 15.9 | 7 | 19.1 | 42.9 | 82.6 | 115 | 3/4 | 4 | 5/8 |
| 1 | 210 | 17.5 | 7 | 25.4 | 50.8 | 88.9 | 125 | 3/4 | 4 | 5/8 |
| 1 1/2 | 251 | 22.3 | 7 | 38.1 | 73 | 114.3 | 155 | 7/8 | 4 | 3/4 |
| 2 | 286 | 25.4 | 7 | 50.8 | 92.1 | 127 | 165 | 3/4 | 8 | 5/8 |

* Face to Face dimension is based on RF flange.

Warranty / Remedy

Korea Motoyama Inc. warrants goods of its manufacture as being free of defective materials and faulty workmanship for 12 months from the date of shipment, unless otherwise specified. In this period, all of our products claimed by original defects may be returned to our factory after notice and authorization by us. If warranted goods are returned to Korea Motoyama Inc. during the period of coverage, it will be repaired or replaced without charge for those items it finds defective. Such defects shall be exclusive of the effects of corrosion, erosion, normal wear or improper handling and storage. In case our engineers have field service, the user shall detach and install valves by his cost. Determination of the suitability of the Products for the use contemplated by the buyer or buyer's customer(s) is the sole responsibility of the buyer in connection therewith. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose.

Specifications are subject to change without notices.

 **KOMOTO**
VALVES & CONTROLS

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