R (Reg)

Reverse regulator (check valve integrated)

# 2415 Series

Smooth discharge of secondary pressure with check valve. No bypass circuit required and easy piping.

Port size: Rc <sup>3</sup>/<sub>4</sub> to Rc1 <sup>1</sup>/<sub>4</sub>

JIS symbol







## **Specifications**

F.R.L.

F.R.

F (Filtr)

L (Lub) Drain Separ

Press SW Res press

exh valve

SlowStart

Anti-bac/Bacremove Filt Film Resist FR

Oil-ProhR Med Press FR

No Cu/ PTFE FRL

Outdrs FRL

Adapter Press Gauge CompFRL LgFRL **PrecsR** 

VacF/R

Clean FR

ElecPneuR

AirBoost

Speed Ctrl

Silncr

CheckV

Fit/Tube

Nozzle

Air Unit

PrecsCompr

Electro

Press SW

ContactSW

AirSens

PresSW

Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys

(Total Air)

TotAirSys

(Gamma)

generator

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

Gas

other

Item		2415-6C/8C/10C	
Working fluid		Compressed air	
Max. working pressure	MPa	1.0 (≈150 psi, 10 bar)	
Proof pressure	MPa	1.5 (≈220 psi, 15 bar)	
Ambient / fluid temperatures	°C	5 (41°F) to 65 (149°F)	
Set pressure	MPa	0.07 (≈10 psi, 0.7 bar) to 0.83 (≈120 psi, 8.3 bar)	
Pressure relief		With relief mechanism	
Port size	Rc	<sup>3</sup> / <sub>4</sub> , 1, 1 <sup>1</sup> / <sub>4</sub>	
Weight	kg	2.5	

Option weight

\* Add to the weight of the standard accessories. Unit: kg Plastic knob Pressure gauge K G 0.01 0.114

Ozone-proof specifications (Ending Page 17)

2415— ..... P11

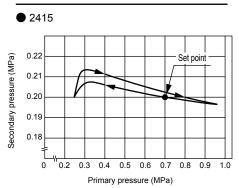
- \*1: Refer to the following graph for the set pressure range for back pressure.
- \*2: Pressure gauge for "LG" is 0 to 0.4 MPa.

### Flow characteristics

#### ● 2415-6C/8C/10C $Rc^3/_4$ , 1, 1 $^1/_4$ Primary pressure 0.7 MPa 0.5 pressure 0.4 0.3 Secondary 0.2 0.1 10 12 6 Air flow rate (m3/min (ANR))

#### Pressure characteristics

Code

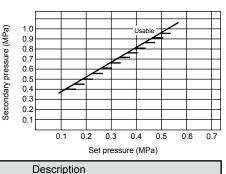


#### Note on model No. selection

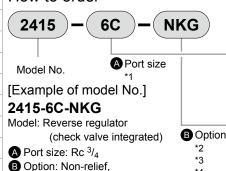
Always refer to the following graph for the set pressure range for back pressure. For example, if the set pressure of a model 2415 is set

to 0.67 MPa and the secondary side back pressure increases more than 0.42 MPa, the secondary pressure is not released to the primary side.

Set pressure range to back pressure



### How to order



plastic knob, pressure

gauge enclosed

A Port size 6C Rc3/4 8C Rc1 10C Rc1 <sup>1</sup>/<sub>4</sub>

**B** Option Blank Standard Regulator Non-relief Plastic knob Κ Included Blank Not included G Pressure gauge product

# Precautions for model No. selection

: If port size NPT thread is required, do not indicate nominal size C. (Example) 2415-6 If a pressure gauge is selected, the NPT thread pressure gauge is enclosed.

\*4

- : Options can be combined.
- \*3 :If the option code "G" is indicated, a pressure gauge is enclosed.

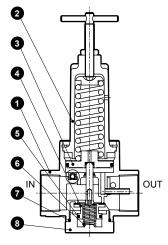
The pressure gauge supplied is G59D-8-P10 (G59D-8-P04 for low pressure). Refer to related products (page 363) for pressure gauge specifications.

\*4 : Contact CKD when assembly products are required.

Ending

### Internal structure/applications/dimensions

### Internal structure

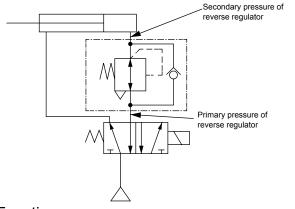


No.	Part name	Material		
NO.	ran name	2215	2216	
1	Body	Zinc alloy die-casting		
2	Cover	Zinc alloy die-casting		
3	Piston assembly	Zinc alloy die-casting/nitrile rubber		
4	Valve assembly	Copper alloy/hydrogenated nitrile rubber		
5	O-ring	Fluoro rubber		
6	Bottom spring	Stainless steel		
7	O-ring	Nitrile rubber		
8	Bottom plug	Zinc alloy	die-casting	

## **Applications**

### Circuit diagram

When cylinder head side and rod side pressures differ

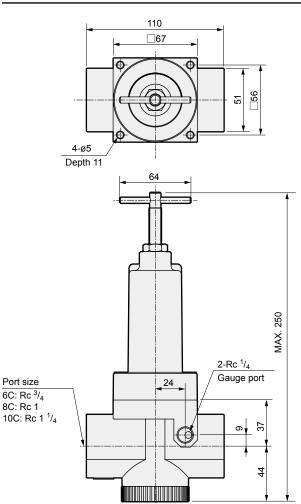


### **Functions**

If the primary pressure is applied from IN side, the check ball is forced upward to close as a regulator. If the pressure in the primary side is exhausted by the switching valve, the check ball is forced downward at the same time to exhaust the pressure in the piston chamber to the IN side, passing through the check valve. If the pressure in the piston chamber is exhausted, causing a pressure drop, the piston on the top is pushed down by the pressure adjustment spring and the valve seat section opens to exhaust the air on the OUT side.

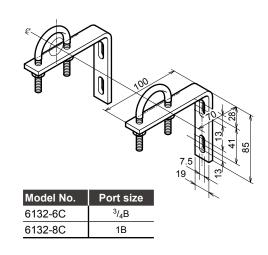
## **Dimensions**





Pipe bracket: 6132
 ·Material: Steel
 Zinc plated

Bracket - Pipe bracket thickness 4.5 mm



F.R.L.

F.R. F (Filtr)

R (Reg)

L (Lub) Drain Separ Mech Press SW

Res press exh valve SlowStart Anti-bac/Bacremove Filt

Film Resist FR Oil-ProhR Med

Press FR No Cu/ PTFE FRL Outdrs FRL Adapter

Adapter Joiner Press Gauge CompFRL

LgFRL

PrecsR VacF/R

Clean FR ElecPneuR

AirBoost

Speed Ctrl

Silncr CheckV/ other

Fit/Tube Nozzle

Air Unit

PrecsCompn Electro Press SW

ContactSW

AirSens
PresSW
Cool
Air Flo

Sens/Ctrl
WaterRtSens
TotAirSys

TotAirSys (Total Air) TotAirSys (Gamma) Gas generator

RefrDry DesicDry

HiPolymDry MainFiltr

Dischrg etc Ending