

# **2419** Series

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

Port size: Rc1/8 to Rc1/4

JIS symbol







# **Specifications**

F.R.L.

F.R.

F (Filtr)

R (Reg) 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

Electro

Air Flo

TotAirSys

(Gamma)

RefrDry

DesicDry

HiPolymDry

MainFiltr

Dischrg

Ending

Gas generator

other

1 MPa = 10 bar

•		
Item		2419-1C/2C
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	0.04 (≈5.8 psi) to 0.83 (≈120 psi)
Pressure relief		With relief mechanism
Port size	Rc	1/8 / 1/4
Weight	kg	0.2

Option weight

\* Add to the weight of the standard accessories

Unit: kg

	Panel mount		
Code	Р	G	В
2419	0	0.086	0.035

#### Flow characteristics

0.6

0.5

0.4

0.3

0.2

0.1

Secondary pressure

#### Pressure characteristics

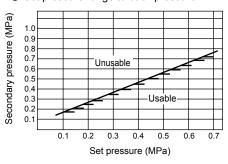
Code

#### ● 2419-1C/2C Rc1/8 / 1/4 **2419** Secondary pressure (MPa) Primary pressure 0.7 MPa 0.26 ---1C 0.24 Set point 0.22 0.20 0.18 0.2 0.3 0.4 0.5 0.6 0.7 1.0 Primary pressure (MPa) Air flow rate (m3/min (ANR))

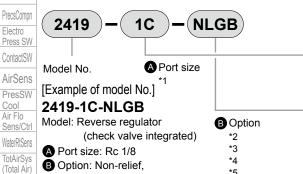
#### Note on model No. selection

Always refer to the following graph for the set pressure range for back pressure. For example, if the set pressure is 0.3 MPa and the secondary side back pressure exceeds 0.35 MPa, the secondary side pressure is not released to the primary side.

Set pressure range to back pressure



## How to order



APC	ort Size	
	1C	Rc1/8
	2C	Rc1/4
B Option		
	Blank	Standard
llator	N	Non-relief

Regulator		Blank	Standard		
		N	Non-relief		
}	L Low pressure (0.02 to 0.34 MPa)		Low pressure (0.02 to 0.34 MPa)		
ď		Р	Panel mount		
Included product		Blank	Not included		
	odr	G	Pressure gauge		
	pr	В	Bracket		

Description

#### bracket included A Precautions for model No. selection

low pressure, pressure

gauge included,

- : If port size NPT thread is required, do not indicate nominal size C. (Example) 2419-1
  - If a pressure gauge is selected, the NPT thread pressure gauge is enclosed.

\*5

- \*2 :Options can be combined.
- \*3 : If option codes "B" and "G" are indicated, a pressure gauge and a bracket are enclosed.

The pressure gauge supplied is G49D-6-P10 (G49D-6-P04 for low pressure). Refer to related products (page 363) for pressure gauge specifications.

- \*4 : Contact CKD when assembly products are required.
- \*5 :If option B (bracket) is selected, a 6506 bracket is enclosed, while if PB (bracket for panel mount) is selected, a 6166 bracket is enclosed. Refer to page 421 for the included product "B" bracket.

<sup>\*1:</sup> Refer to the following graph for the set pressure range for back pressure.

<sup>\*2:</sup> Pressure gauge for "LG" is 0 to 0.4 MPa.

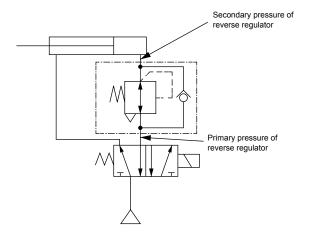
#### Internal structure/Dimensions

#### Internal structure

# **Applications**

#### Circuit diagram

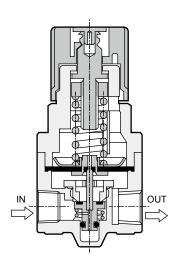
When cylinder head side and rod side pressures differ



### **Functions**

#### 2419 (non-balanced type)

Since the primary pressure is received under the main valve (valve assembly), if the primary pressure is discharged, the main valve is no longer held by the primary pressure and opens. This enables reverse use.

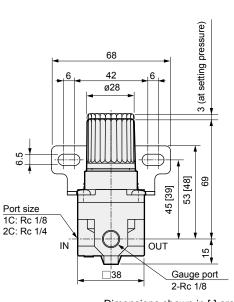


Non-balanced type

# **Dimensions**



2419

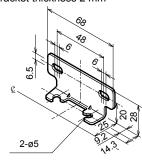


Mounting dimensions ø31 when panel mounted t = 4 or less 28.5

Dimensions shown in [] are for PB (bracket for panel mount)

Wall bracket: 6506 ·Material: Steel Zinc plated

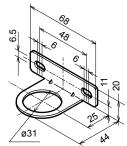
Bracket thickness 2 mm



\* Tapping screw attached

Wall bracket: 6166 ·Material: Steel Zinc plated

Bracket thickness 2 mm



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R (Reg)

L (Lub) Drain Separ

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Oil-ProhR Med Press FR No Cu/ PTFE FRL

Outdrs FRL

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Air Unit

PrecsCompn

Electro Press SW ContactSW

AirSens

PresSW Cool Air Flo

Sens/Ctrl

WaterRtSens

TotAirSys (Total Air) TotAirSys

(Gamma) generator

RefrDry

DesicDry

HiPolymDry MainFiltr

Dischrg

**Ending**