Standard Specifications

Sensitivity	Within 0.2% of full span	
Repeatability	Within ±0.5% of full span	
Air consumption	NIR10□0	4.4 L/min (ANR) or less
	NIR20□0 NIR2120	4.4 L/min (ANR) or less
	NIR30□0 NIR3120	11.5 L/min (ANR) or less
Ambient and fluid temperature	−5 to 60°C (No freezing)	
Supply pressure	1.0 MPa	
Pressure gauge port	Rc 1/8 (2 locations)	

Note: Air filter (AF) and oil mist separator (AM, AFM) need to be installed on the air supply side.

Basic type · Air operated type

Specification Combinations

Model[Note]	Specifications			Accessory	
	Minimum supply pressure (Mpa)	Set pressure (MPa)	Connection	Pressure gauge	Bracket
NIR1000-01	Set pressure + 0.05	0.005~0.2	1/8	G33-2-01	P36201023
NIR1010-01		0.01~0.4		G33-4-01	
NIR1020-01		0.01~0.8		G33-10-01	
NIR2000-02		0.005~0.2	1/4	G43-2-01	P36202028
NIR2010-02		0.01~0.4		G43-4-01	
NIR2020-02		0.01~0.8		G43-10-01	
NIR3000-□	Set pressure + 0.01	0.01~0.2	1/4	G43-2-01	P362030-20
NIR3010-□		0.01~0.4	3/8	G43-4-01	
NIR3020-□		0.01~0.8	1/2		
NIR2120-02	Set pressure + 0.05	0.01~0.8	1/4	G43-10-01	P36202028
NIR3120-□	Set pressure + 0.1	0.01~0.8	1/4, 3/8, 1/2		P362030-20

(Basic type / Air operated type shown in left column groups)

Note)□-Representative takeover caliber, 02=Rc1/4, 03=Rc3/8, 04=Rc1/2。

Standard Specifications

NIR — 2 — 0 — 0 — 0 — — 02 — — — — — —

Precision regulator

Type of setting

0	Basic type (Knob)
1	Air operated type (only NIR2000/3000)

Note) Air operated type is NIR2120 and NIR3120 only.

Body size

1	NIR1000
2	NIR2000
3	NIR3000

Set pressure range

For NIR1000/2000 series

0	0.005~0.2MPa
1	0.01~0.4MPa
2	0.01~0.8MPa

For NIR3000 series

0	0.01~0.2MPa
1	0.01~0.4MPa
2	0.01~0.8MPa

Note) The air control type is only NIR3120.

Thread type

Nil	Rc
N	NPT※
F	G※

※Semi-standard

Port size

Symbol	Size	Application		
		NIR1000	NIR2000	NIR3000
01	1/8	●		
02	1/4		●	●
03	3/8			●
04	1/2			●

Accessory

Nil	None
B	With bracket
G[Note]	With pressure gauge

※ For the model with pressure gauge (G), the pressure gauge is shipped together, but not assembled.

Suffix 1

Nil	-
T	For high temp. environments (−5 to 100°C)
L[Note]	For low temp. environments (−30 to 60°C)

Note)except NIR1000 series, NIR3000 series cannot choose "L" and "X1"

Suffix 2

Nil	-
R[Note]	Bracket, Name plate, Mounting on the opposite side

Note)The standard mounting position of the name plate is on the front when viewing the precision regulator with the SUP side to the left and OUT side to the right. The bracket is attached to the back.

Made to Order

| Nil	Specifications
X1	Non-grease specifications
X170	Compatible with modular connection brackets (With modular adapter)
X465□	With digital pressure switch (NISE30A)

※1 Prefix (10-): Clean series
※2 Prefix (20-): Secondary battery compatible
※3 Prefix (80-): Ozone resistant (Fluororubber specification)
※4 Manifold specifications (For NIR1000 and NIR2000 series only. Except air operated type and NIR3000 series)

※ The operating conditions or external disturbance may affect each of the characteristics. So, the characteristic values shown below are not guaranteed.
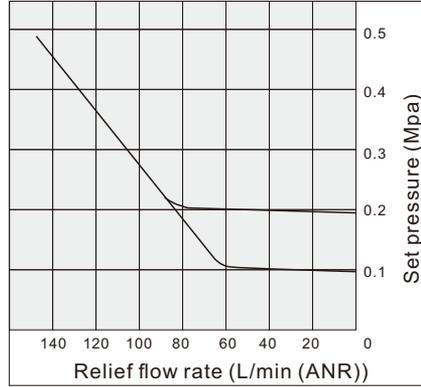
Flow Rate Characteristics

※ Testing methods conform to JIS B 8372.

NIR1000-01 — Supply pressure: 0.5 MPa

NIR1010-01 — Supply pressure: 0.7 MPa

NIR1020-01 — Supply pressure: 0.7 MPa
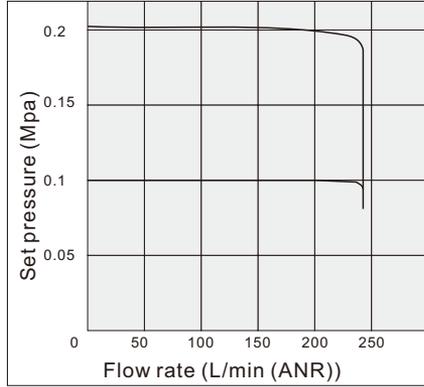
Relief Characteristics
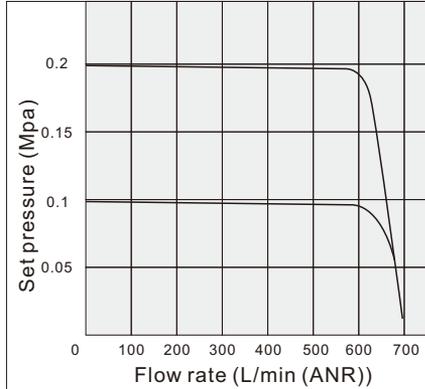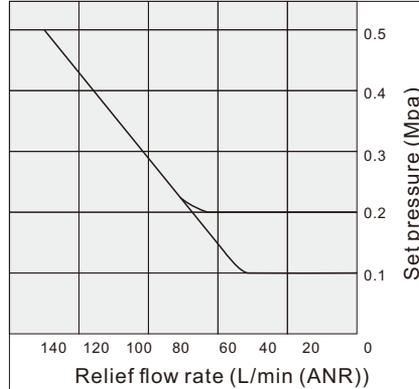
NIR1000-01 — Back pressure: 0.5 MPa
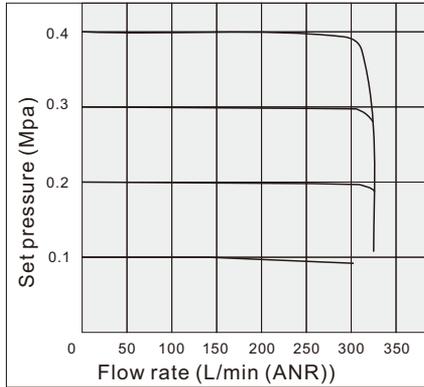
NIR1010-01 — Back pressure: 0.7 MPa
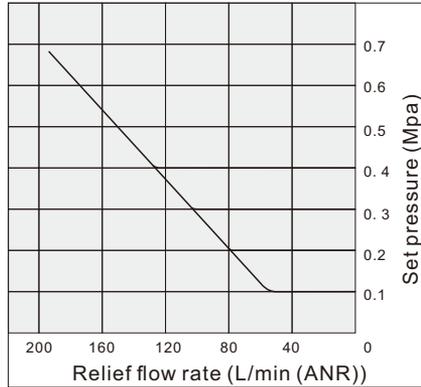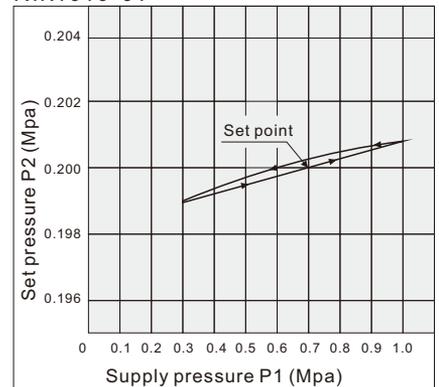
NIR1020-01 — Back pressure: 0.7 MPa
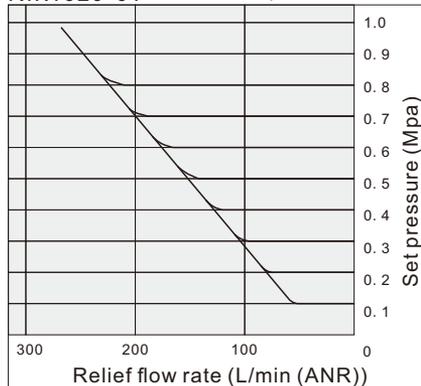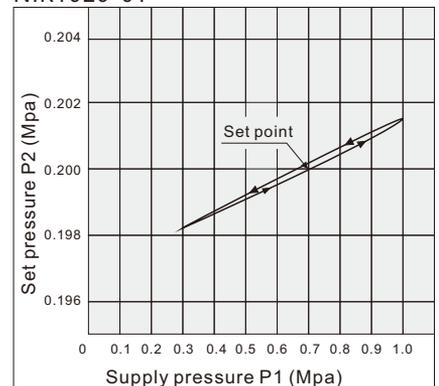
Pressure Characteristics

Supply pressure: 0.7MPa
Set pressure: 0.2MPa
Flow rate: 0 L/min (ANR)

NIR1000-01

NIR1010-01

NIR1020-01

NNT®

※ The operating conditions or external disturbance may affect each of the characteristics. So, the characteristic values shown below are not guaranteed.

Flow Rate Characteristics
※ Testing methods conform to JIS B 8372.

Relief Characteristics

Pressure Characteristics
Supply pressure: 0.7MPa
Set pressure: 0.2MPa
Flow rate: 0 L/min (ANR)

NIR2000-02 — Supply pressure: 0.5 MPa

NIR1000-02 — Back pressure: 0.5 MPa

NIR2000-02
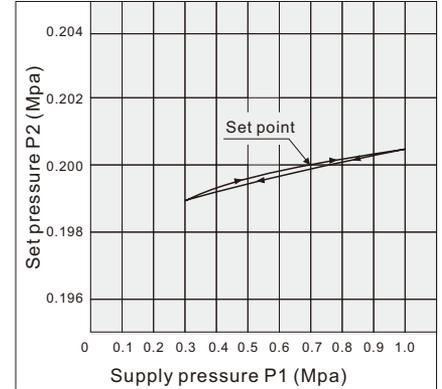
NIR2010-02 — Supply pressure: 0.7 MPa
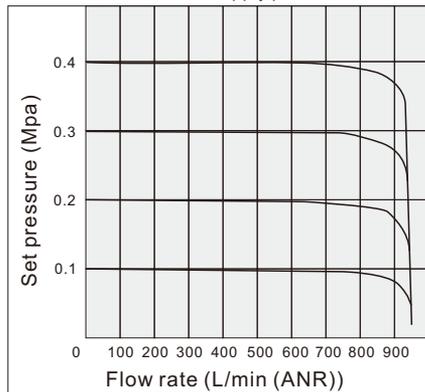
NIR2010-02 — Back pressure: 0.7 MPa
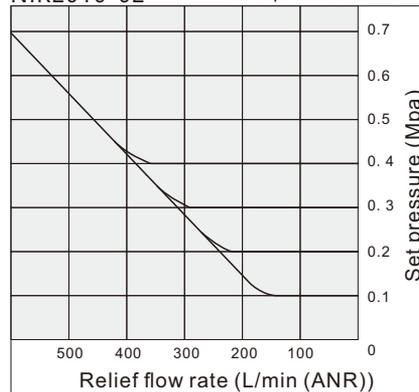
NIR2010-02
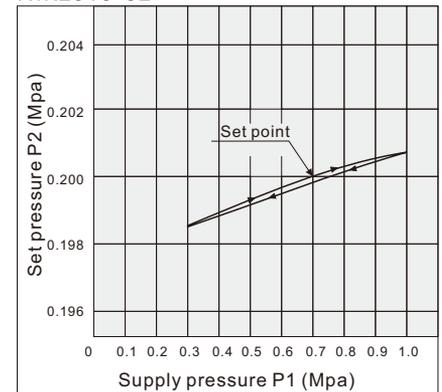
NIR2020-01 — Supply pressure: 1.0 MPa
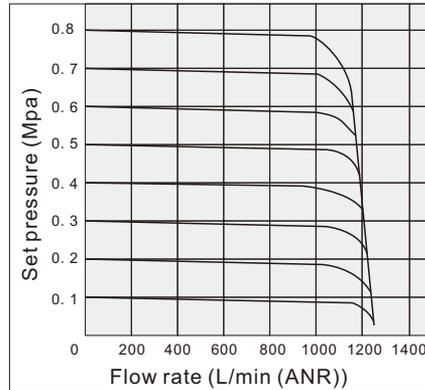
NIR2020-02 — Back pressure: 1.0 MPa
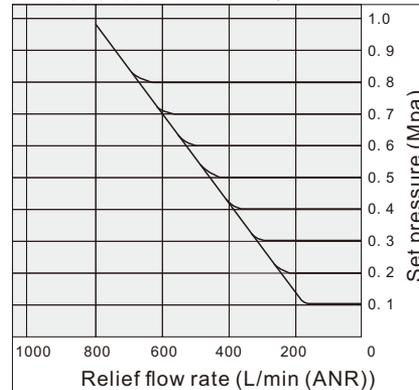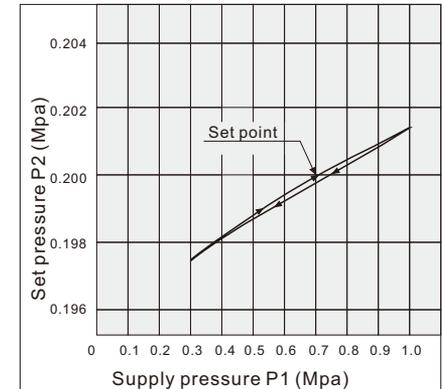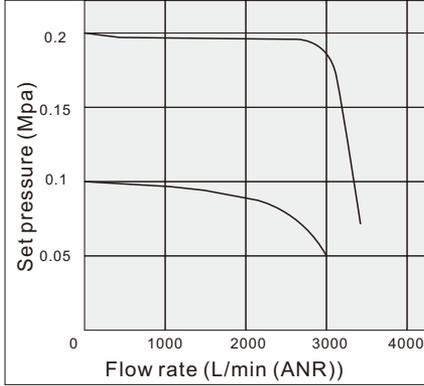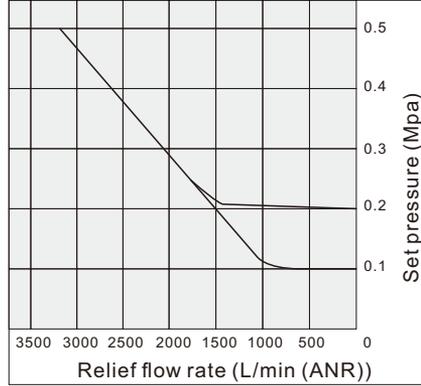

NIR2020-02
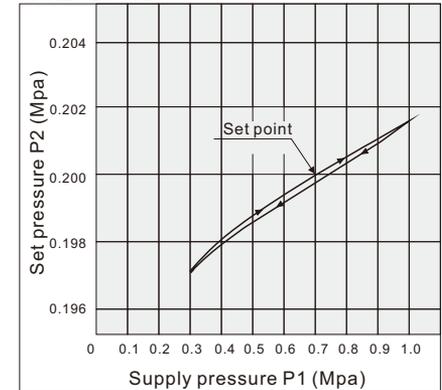
NIR2120-02 — Supply pressure: 1.0 MPa
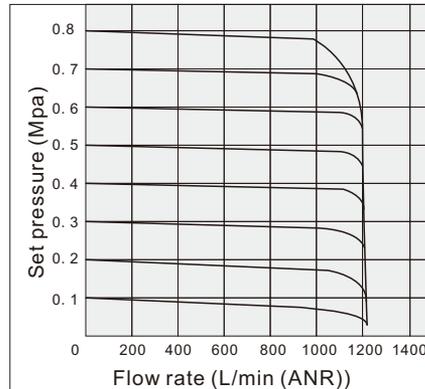
NIR2120-02 — Back pressure: 1.0 MPa
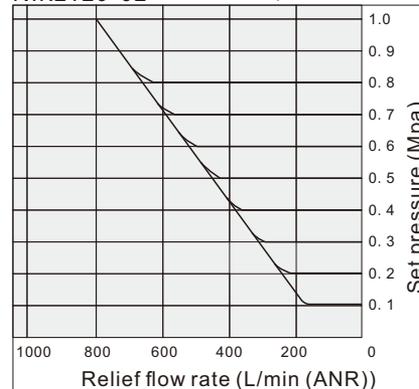
NIR2120-02

※ The operating conditions or external disturbance may affect each of the characteristics. So, the characteristic values shown below are not guaranteed.

Flow Rate Characteristics

※ Testing methods conform to JIS B 8372.

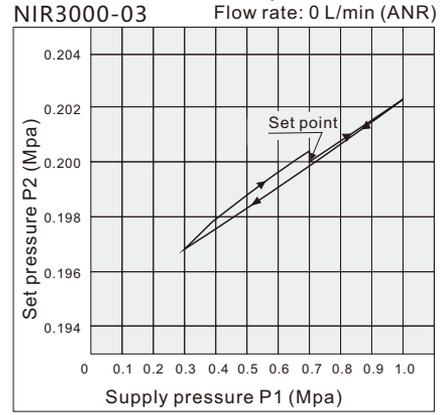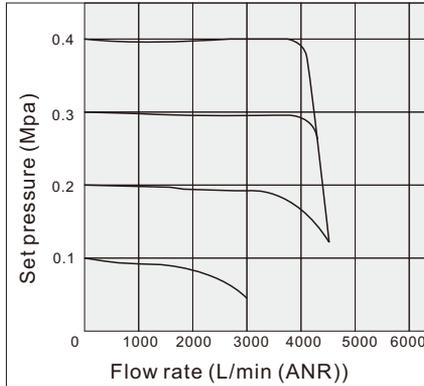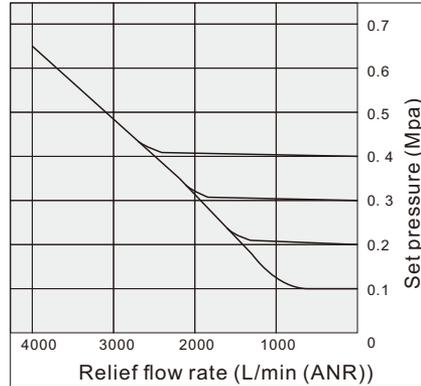**NIR3000-03** Supply pressure: 0.5 MPa

NIR3010-03 Supply pressure: 0.7 MPa

NIR3020-03 Supply pressure: 1.0 MPa

NIR3120-03 Supply pressure: 1.0 MPa

Relief Characteristics

NIR3000-03 Back pressure: 0.5 MPa

NIR3010-03 Back pressure: 0.7 MPa

NIR3020-03 Back pressure: 1.0 MPa

NIR3120-03 Back pressure: 1.0 MPa

Pressure Characteristics

Supply pressure: 0.7MPa
Set pressure: 0.2MPa
Flow rate: 0 L/min (ANR)

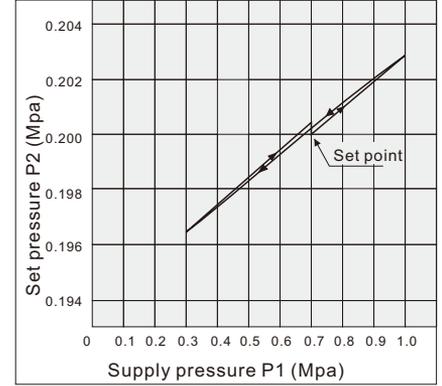**NIR3000-03**

NIR3010-03
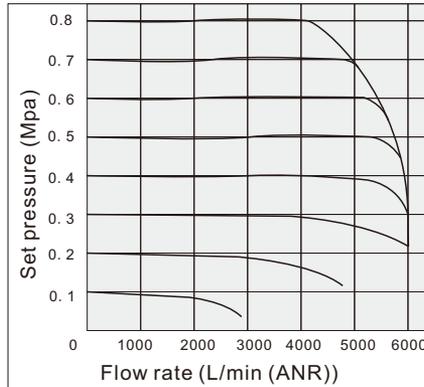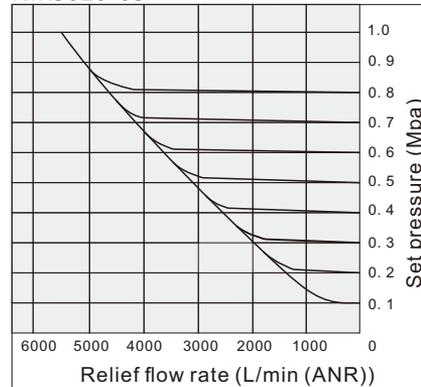
NIR3020-03
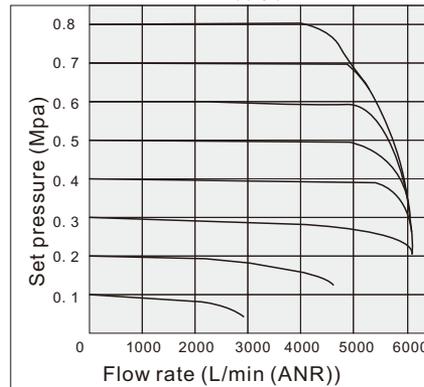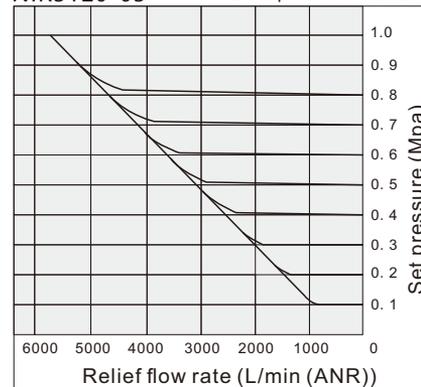
NIR3120-03
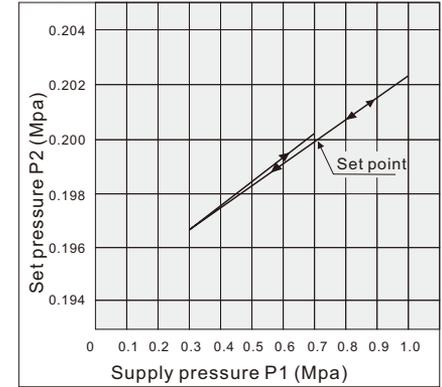
Equip on the mdular filter combination

③Interface
④Interface with bracket

①AF
②AFM

NIR□0□0-□-X170

Application Example

Tension control

Contact pressure control

Drive roller

Low friction cylinder
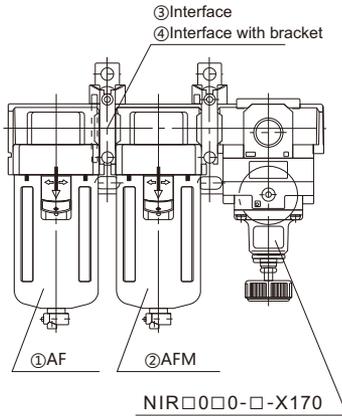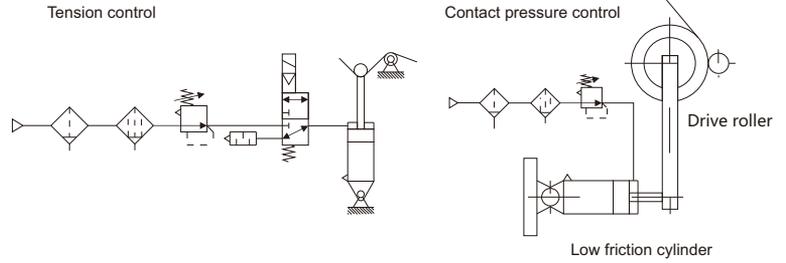
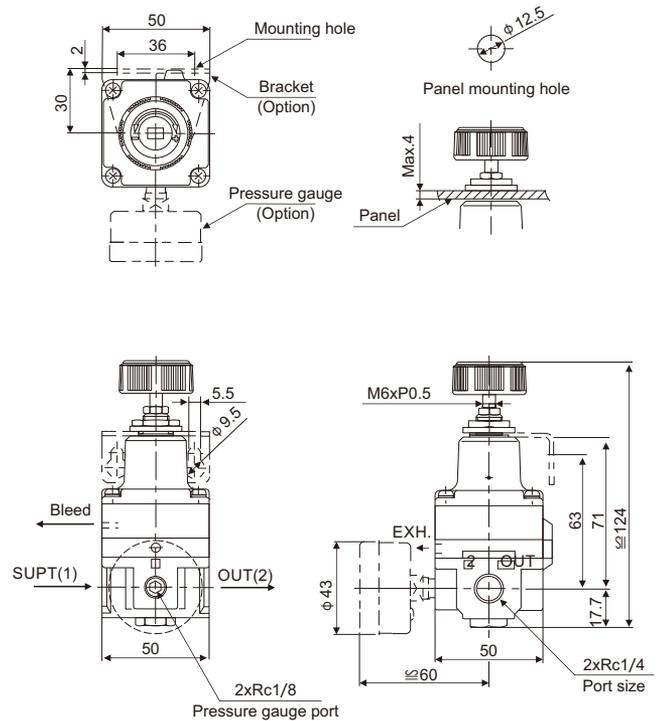| Description	Applicable model		
	NIR10□0-01-X170	NIR20□0-02-X170	NIR30□0-□□-X170
Air filter	NAF20-A	NAF30-A	NAF40-A
Mist separator	NAFM20-A	NAFM30-A	NAFM40-A
Interface	NY200-A	NY300-A	NY400-A
Interface with bracket	NY200T-A	NY300T-A	NY400T-A

Note) The modular adapter attached to the Made-to-Order product (NIR□□□□-□□-X170) is shipped together, but not assembled.
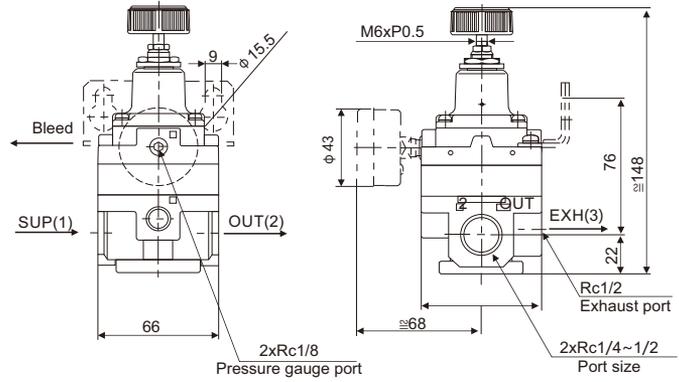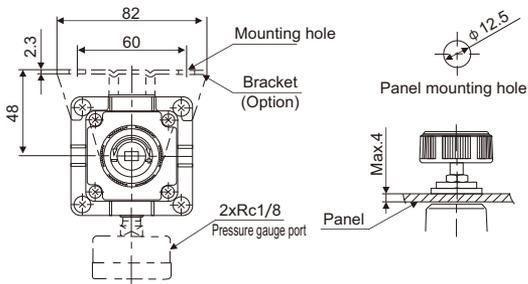
Dimensions

NIR10□0-01

42
28
2
25
Mounting hole
Bracket (Option)
Pressure gauge (Option)

φ10.5
Panel mounting hole
Max.4
面板

4.5
φ8.5
M5xP0.5
Bleed
SUP(1)
OUT(2)
φ30
35
2xRc1/8
Pressure gauge port
≦43
≦92
52.5
46
9.5
OUT
2xRc1/8
Port size

NIR20□0-02

50
36
2
30
Mounting hole
Bracket (Option)
Pressure gauge (Option)

φ12.5
Panel mounting hole
Max.4
Panel

5.5
φ9.5
M6xP0.5
Bleed
SUPT(1)
OUT(2)
φ43
50
2xRc1/8
Pressure gauge port
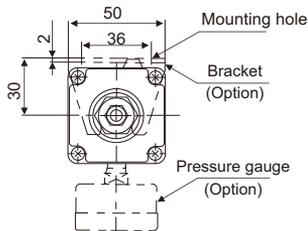EXH.
≦60
≦124
71
63
17.7
OUT
50
2xRc1/4
Port size

Dimensions

NIR30□0-0□

NIR2120-02□
(Air operated type)

NIR3120-0□□
(Air operated type)