

NFR series Filter Regulator

Product features/ Characteristics graph

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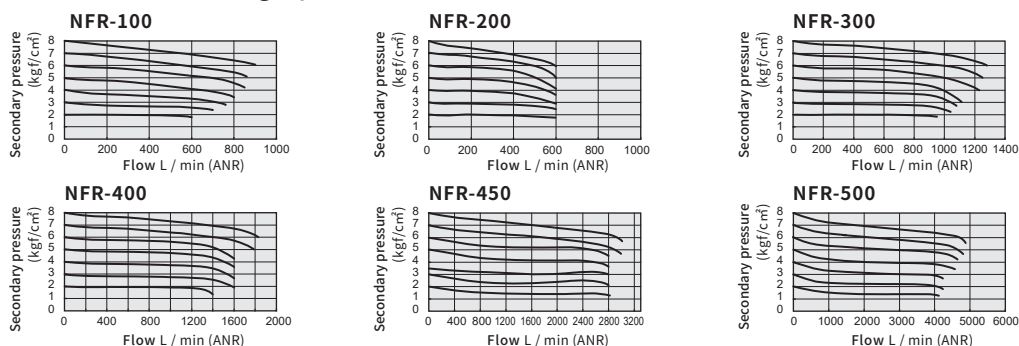
Symbol:



Specification

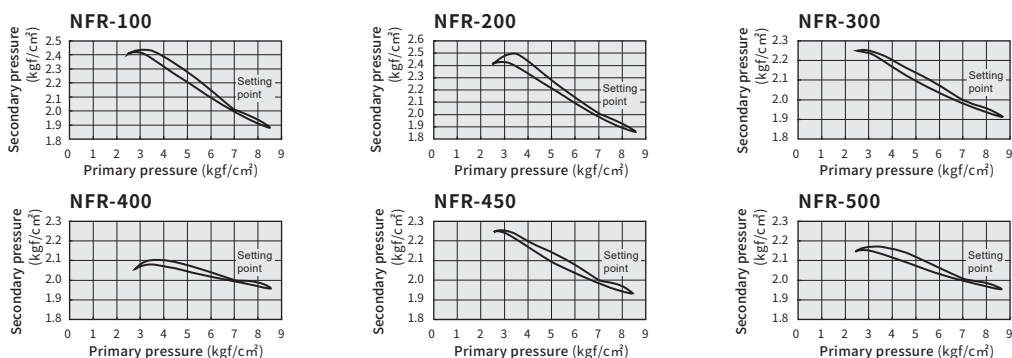
Item	Model	NFR-100	NFR-200	NFR-300	NFR-400	NFR-450	NFR-500
Fluid		Air					
Port size	M5/Rc/G/NPT	M5, 1/8	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	1/2, 3/4	3/4, 1
Filter grade	μm	5					
Pressure range	$\text{kgf/cm}^2(\text{kPa})$	0.5 ~ 8.5 (50 ~ 850)					
Max. service pressure	$\text{kgf/cm}^2(\text{kPa})$	9.5 (950)					
Temperature	$^{\circ}\text{C}$	5 ~ 60					
Bowl capacity	cc	5	15	30	60	100	100
Weight	kg	0.18	0.21	0.34	0.45	0.95	1.15
Material	Main body	Aluminum die cast					
	Bowl	Relieving type					

Flow rate characteristic graph



Note : The flow rate dropping might be caused by working environment with dirt and objects; filter element is suggested to replace from time to time.

Pressure characteristics graph



NFR series Filter Regulator

Code of order

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Code of order

NFR-300 - **03** - **G** - **BG-A** - **F1** - **PG 10** - **Bracket**

Model (1) Port size (2) Thread type (3) Bowl type (4) Fitting (5) Pressure gauge (6) Bracket

Model	Port size							Thread type			Bowl type		Fitting		Pressure gauge PG-05 Circle pressure gauge ※ For N100 series PG-22N None : (standard) (Square pressure gauge) (Thin mounting type) PG-10A None : (standard) (option) N200, N300, N400, N450, N500 series (option)	Bracket none : With bracket (standard)	
	Code	M5	01	02	03	04	06	10	None	G	N	None	Other bowl type	None			-F1
	Port size	M5	1/8	1/4	3/8	1/2	3/4	1	M5	RC	G	NPT	PC (Short bowl)	—			Manual drain cock
NFR-100		●											PC (Short bowl)	—			
NFR-200		●	●										PC (Short bowl)	option	option		
NFR-300				●	●								Bowl guard (Short bowl)	option	option		
NFR-400					●	●							Bowl guard (Standard)	option	option		
NFR-450						●	●						Bowl guard (Standard)	option	option		
NFR-500							●	●					Bowl guard (Standard)	option	option		

※ Please see the below table in detail.

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■ Bowl and Drain cock type ← ④

○ With Fitting - F1 ← ⑤

■ NFR-100~200 type - Bowl and Drain cock type - ④

Bowl type	PC (Short bowl)		Bowl guard (Short bowl)		PC (Long bowl)	Bowl guard (Long bowl)	Metal (Long bowl)
Drain cock type	Manual drain cock	Differential pressure	Manual drain cock	Differential pressure	Auto drain	Auto drain	Auto drain
Model	-H	-A	-BG-H	-BG-A	-LG-A	-LBG-A	-LMG-H
NFR-100	● (standard)	—	—	—	—	—	—
NFR-200	● (standard)	● (option)	● (option)	● (option)	● (option)	● (option)	● (option)

○ NFR-100~200 type - With Fitting - F1 - ⑤

NFR-100/200	—	● (standard)	● (option)	● (standard)	● (standard)	● (standard)	—
Description		Note.1 (Fitting outside)	Note.1 (Fitting outside)	Note.1 (Fitting outside)	(PF1/8 Male thread)	(PF1/8 Male thread)	

■ NFR-300~500 type - Bowl and Drain cock type - ④

Bowl type	Bowl guard (Standard)			Bowl guard (Long bowl)		Metal (Long bowl)	
Drain cock type	Manual drain cock	Differential pressure	Auto drain	Manual drain cock	Auto drain	Manual drain cock	Auto drain
Model	-H	-S	-A	-LG-H	-LG-A	-MG-H	-MG-A
NFR-300	● (standard short)	● (option)	—	● (option)	● (option)	● (option)	● (option)
NFR-400	● (standard)	● (option)	● (option)	—	—	● (option)	● (option)
NFR-450	● (standard)	● (option)	● (option)	—	—	● (option)	● (option)
NFR-500	● (standard)	● (option)	● (option)	—	—	● (option)	● (option)

○ NFR-300~500 type - With Fitting - F1 - ⑤

NFR-300~500 Note	● (option)	● (option)	● (standard)	● (option)	● (standard)	● (option)	● (standard)
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- 🔍 Note : 1. NFR200 series are outside fitting , others are inside fitting ; please refer to P.1-1.06 auto drain construction.
2. NFR300 series are standard manual type. (-H Short bowl type)
3. (standard): Standard accessory; (option): Optional accessory.

○ Pressure gauge - ⑥

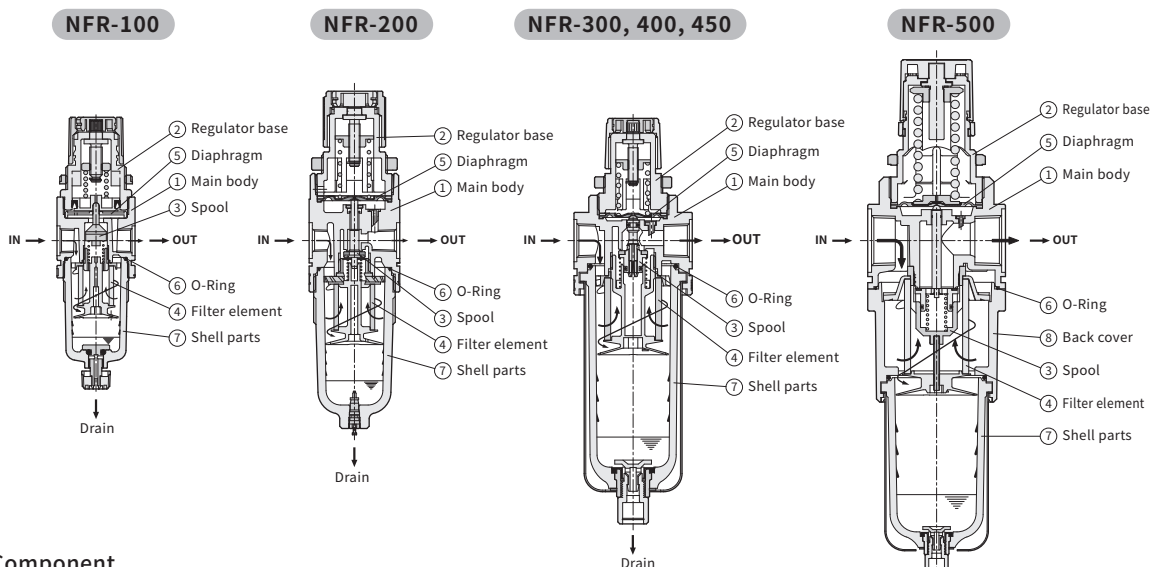
Pressure gauge		NFR-100	NFR-200	NFR-300	NFR-400	NFR-450	NFR-500
Model	Order code						
PG-05	P5	● (standard)	—	—	—	—	—
PG-10	P10	—	● (option)	● (option)	● (option)	● (option)	● (option)
PG-22N	P22	—	● (standard)	● (standard)	● (standard)	● (standard)	● (standard)

NFR series Filter Regulator

Product features

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Internal structure



Component

Number	Accessory	Material		Note
		NFR100, NFR200, NFR300, NFR400, NFR450	NFR500	
1	Main body	Aluminum alloy		
8	Back cover	—	Aluminum alloy	

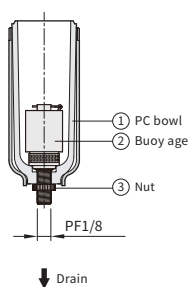
Replacement parts

Number	Accessory	Material						Note
		NFR100	NFR200	NFR300	NFR400	NFR450	NFR500	
2	Base	Aldehyde resin					Aluminum alloy	
3	Spool	Copper+NBR						
4	Filter element	EA30						
5	Diaphragm	POM	Stainless still +NBR					
6	O-ring	NBR						
7	Shell parts	PC	PC	PC+SS41				

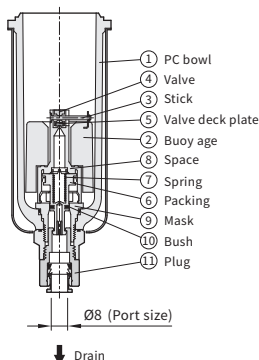
Note: NFR200 are included bowl guard. (Material : Aluminum alloy)
The shell parts in NFR300-NFR500 is included bowl guard (Material : SS41)

Auto drain structure theory

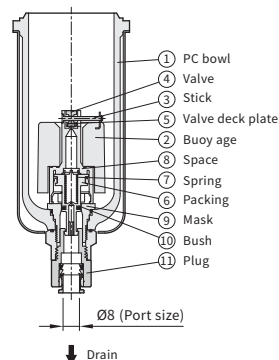
● Suitable for: N200
Model: AD-25



● Suitable for: N300
Model: AD-35



● Suitable for: N400, N450, N500
Model: AD-55

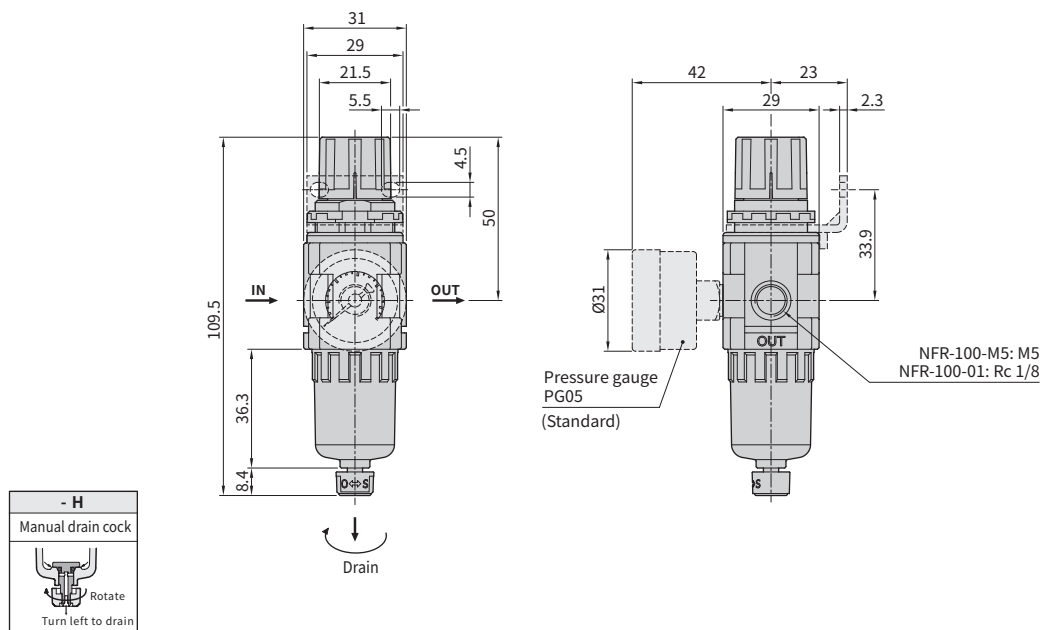


NFR series Filter Regulator

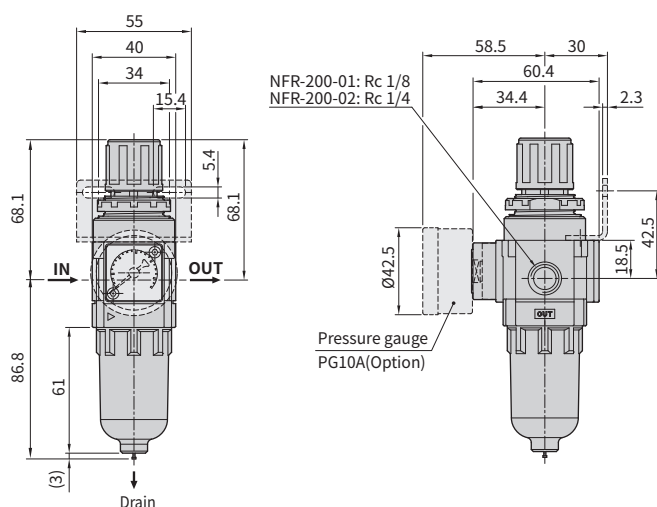
Dimensions

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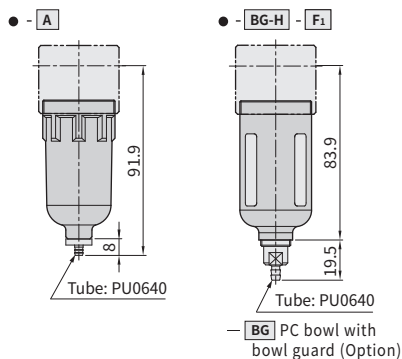
● NFR - 100 - Standard



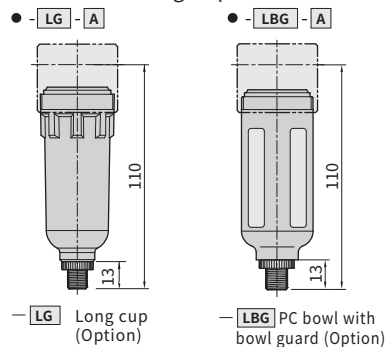
● NFR - 200 - H



Manual drain cock-Standard



Auto drain-Long cup



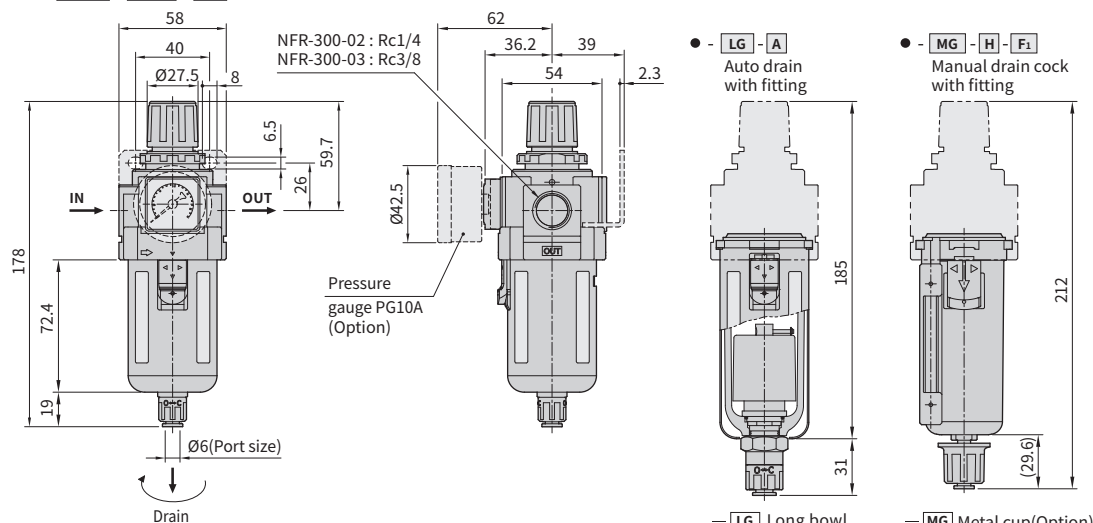
- H	- BG-H - F1	- A	- LG - A	- LBG - A
Manual drain cock (standard)	Manual drain cock (With bowl guard, Fitting)	Auto drain (Differential pressure should be above 1kg)	Auto drain (AD-25)	Auto drain (AD-25)
Button Push	Bowl guard F1 Fitting Push			

NFR series Filter Regulator

Dimensions

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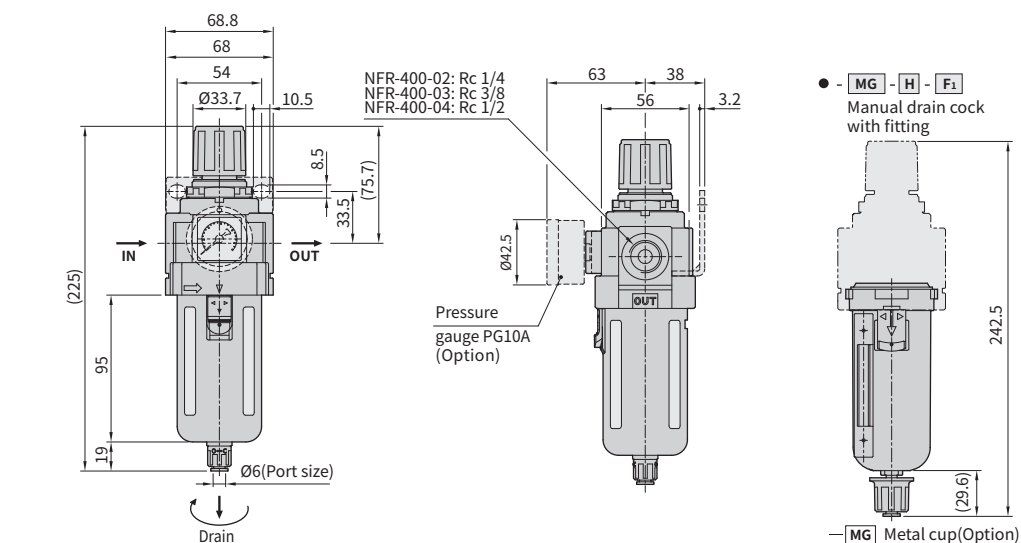
● NFR - 300 - - H Standard



-H	-H-F1	-S	-S-F2	-A
Manual drain (Standard)	Manual drain cock with fitting (Option)	Semi-Auto drain (Option)	Semi-Auto drain with fitting (Option)	Auto drain (Option AD-35)

Note: Above auto drainer is AD-35.

● NFR - 400 - - H Standard



-H	-H-F1	-S	-S-F2	-A
Manual drain (Standard)	Manual drain cock with fitting (Option)	Semi-Auto drain (Option)	Semi-Auto drain with fitting (Option)	Auto drain (Option AD-55)

Note: Above auto drainer is AD-55.

NC

NFC

PSN-10
30,41

NFR

MFR

MFRD

NF

MF

MFD

NR

ARX

NPR

NL

N

DM

ERX

ERP

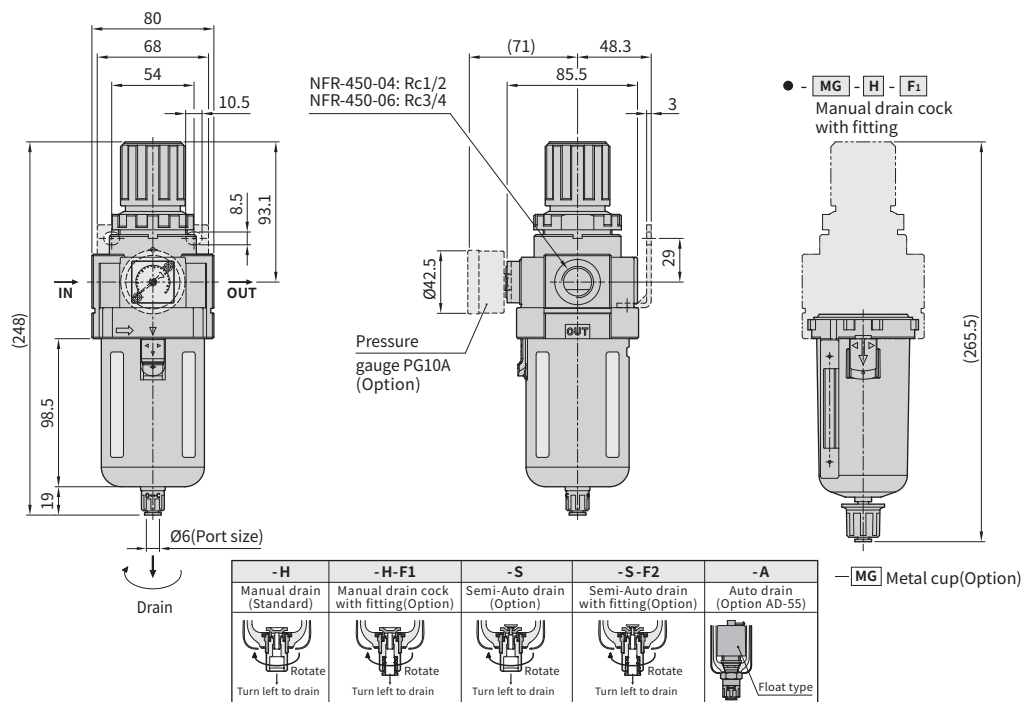
PG/AFB
NDV/AD

NFR series Filter Regulator

Dimensions

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● NFR - 450 - H Standard



● NFR - 500 - H Standard

