

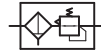
Air unit - Filter regulator

Specification / Flow and Pressure characteristic

CHELIC PNEUMATIC



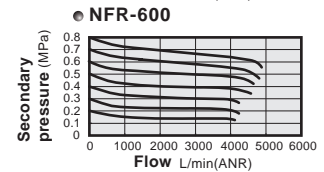
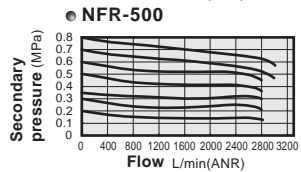
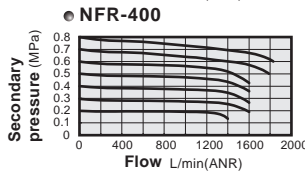
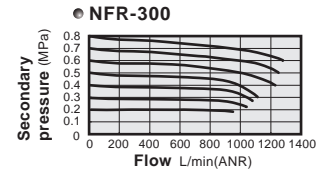
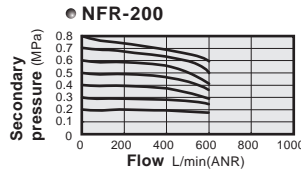
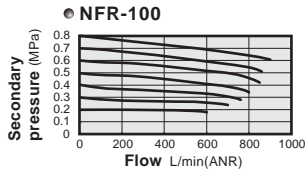
Symbol :



Specification

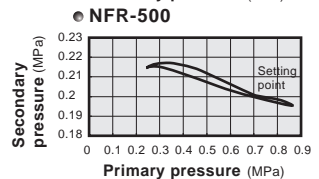
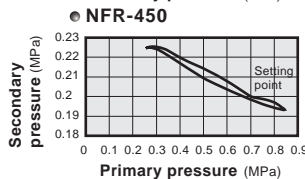
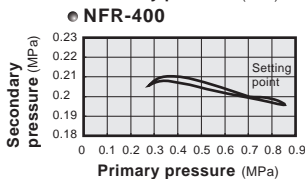
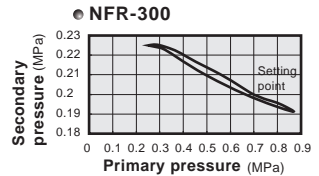
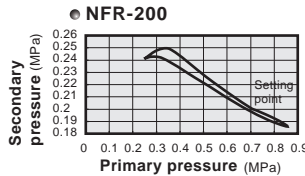
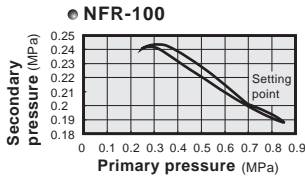
Item	Model	NFR-100	NFR-200	NFR-300	NFR-400	NFR-450	NFR-500
Fluid		Air					
Port size	Rc	M5, 1/8"	1/8", 1/4"	1/4, 3/8"	1/4", 3/8", 1/2"	1/2, 3/4"	3/4", 1"
Filter grade		5 μ m					
Pressure range	kgf/cm ² (kpa)	0.5~8.5(50~850)					
Max. service pressure	kgf/cm ² (kpa)	9.5(950)					
Temperature	°C	5~60					
Lubricator capacity	cc	15	60	60	60	100	100
Weight	kg	0.18	0.21	0.34	0.45	0.95	1.15
Material	Main body	Aluminum die cast					
	Bowl	Polycarbonate/Aluminum bowl					

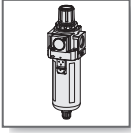
Flow characteristic



Note : The flow of filter will be reduced because of the use time and cross block of the filter element; it has to be checked and changed regularly to maintain the flow volume.

Pressure characteristic





Air unit - Filter regulator

Order expression / Bowl and Drain cock type

CHELIC PNEUMATIC

How to 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							
	Code	M5	01	02	03	04	06	10
	Port size	M5	1/8	1/4	3/8	1/2	3/4	1"
NFR - 100		●	●					
NFR - 200			●	●				
NFR - 300				●	●			
NFR - 400					●	●		
NFR - 450							●	●
NFR - 500								●

Thread type			
None	G	N	
M5	RC	G Type	NPT
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●

※ The dimension of thread 1/2 more is same with NPT/RC

Bowl type	
None	Other bowl type
PC(Short bowl)	—
PC(Short bowl)	option
Bowl guard (Short bowl)	option
Bowl guard (Short bowl)	option
Bowl guard (Short bowl)	option
Bowl guard (Short bowl)	option

※ Please see the below table in detail.

Fitting	
None	-F1
Manual drain cock	option
Manual drain cock	option
Manual drain cock	option
Manual drain cock	option

※ Please see the below table in detail.

Pressure gauge (6)

PG-05
 ■ None : (Standard)
 Circle pressure gauge
 ※ For N100 series

PG-22N
 ■ None : (standard)
 (Square pressure gauge)
 (Thin mounting type)

PG-10A
 PG-10A Pressure gauge (option)
 ※ N200,N300,N400,N450,N500 series (option)
 (※ Please refer to P.1-1.103 for pressure gauge)

Bracket

■ none : With bracket (standard)

With 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)
	Manual drain cock	Differential pressure	Manual drain cock	Differential pressure	Manual drain cock	Auto drain	Manual drain cock	Auto drain	Auto drain
Model	-H	-A	-BG-H	-BG-A	-LG-H	-LG-A	-LBG-H	-LBG-A	-LMG-A
NFR-100	● (standard)	—	—	—	—	—	—	—	—
NFR-200	● (standard)	● (option)	● (option)	● (option)	● (option)	● (option)	● (option)	● (option)	● (option)

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

NFR-100/200	—	● (standard)	● (option)	● (standard)	● (option)	● (option)	● (option)	● (option)	● (option)
Description		Note.1 (Fitting outside)	Note.1 (Fitting outside)	Note.1 (Fitting outside)	Quick fitting	Quick fitting	Quick fitting	Quick fitting	Quick fitting

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

Bowl type	Bowl guard (Standard)			Bowl guard (Long bowl)		Metal (Long bowl)	
	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)	● (option)	● (option)	● (option)	● (option)	● (option)
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- 🔍 Note : 1. NFR200 series are outside fitting , others are inside fitting ; please refer to P.04 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)

NC
F.R.L.
Combinations

NFC
F.R.L.
Combinations

PSN-10 30,41
Pressure switch

NFR
Filter regulator

MFR
Mist filter regulator

MFRD
Micro mist filter regulator

NF
Air filter

MF
Mist separator

MFD
Micro mist separator

NR
Regulator

ARX
Regulator

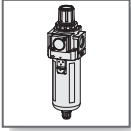
NL
Lubricator

N series
Mounting bracket

DM
Large-sized filter

ER
Precision regulator

PG/AFB
NDV/AD



Air unit - Filter regulator

Internal structure / Auto drain structure theory

CHELIC PNEUMATIC

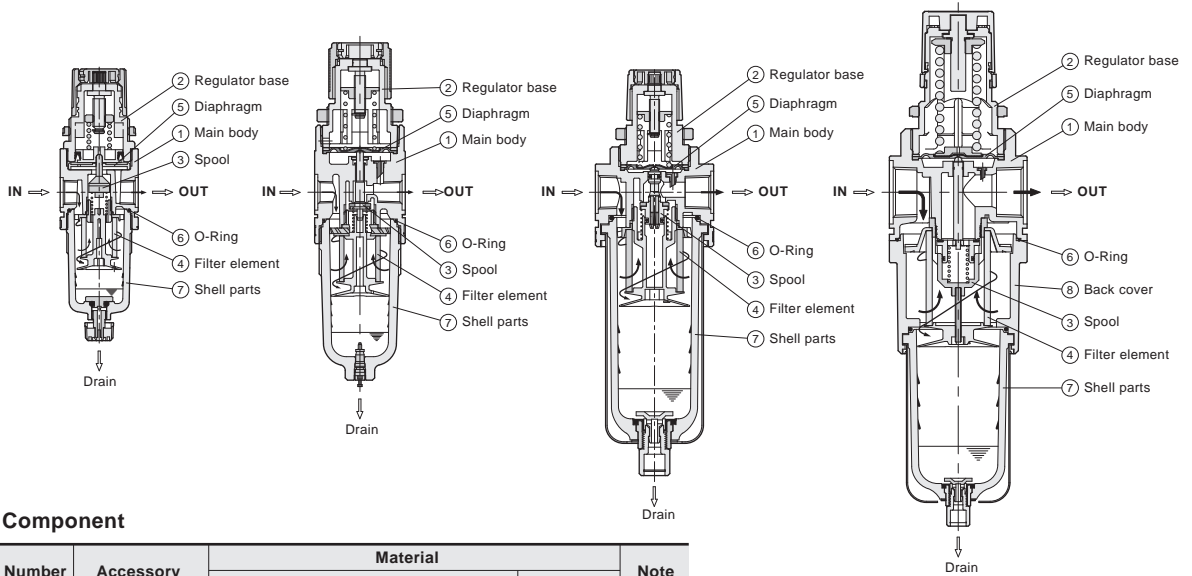
Internal structure

● NFR-100

● NFR-200

● NFR-300, NFR-400, NFR-450

● NFR-500



Component

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

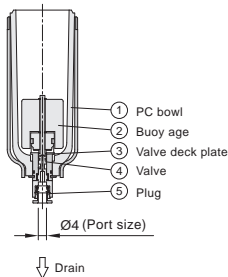
Replacement parts

Number	Accessory	Material					Note
		NFR100	NFR200	NFR300	NFR400	NFR450	
2	Base	Aldehyde resin					Aluminum
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			

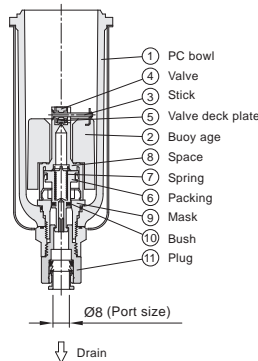
🔍 Note : NFR200 are included bowl guard. (Material : Aluminum alloy)
The shell parts in NFR300-NFR500 is included bowl guard (Material : SS41)

Auto drain structure theory

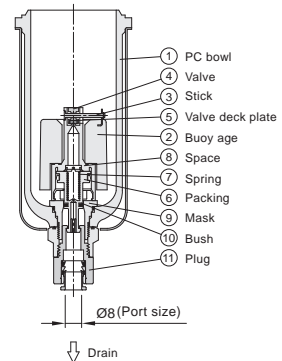
● Suitable for : N200
Model : AD-25

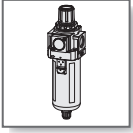


● Suitable for : N300
Model : AD-50



● Suitable for : N400, N450, N500
Model : AD-50



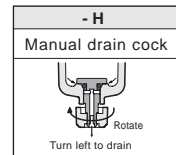
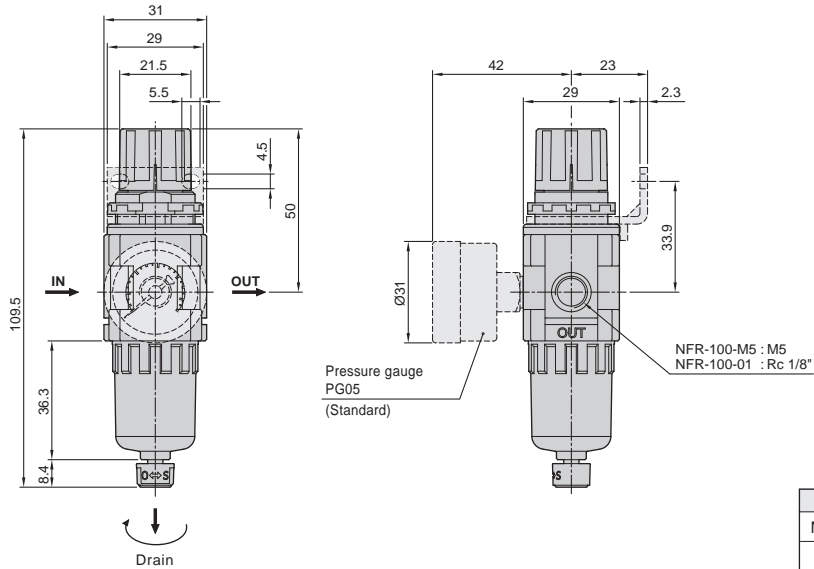


Air unit - Filter regulator

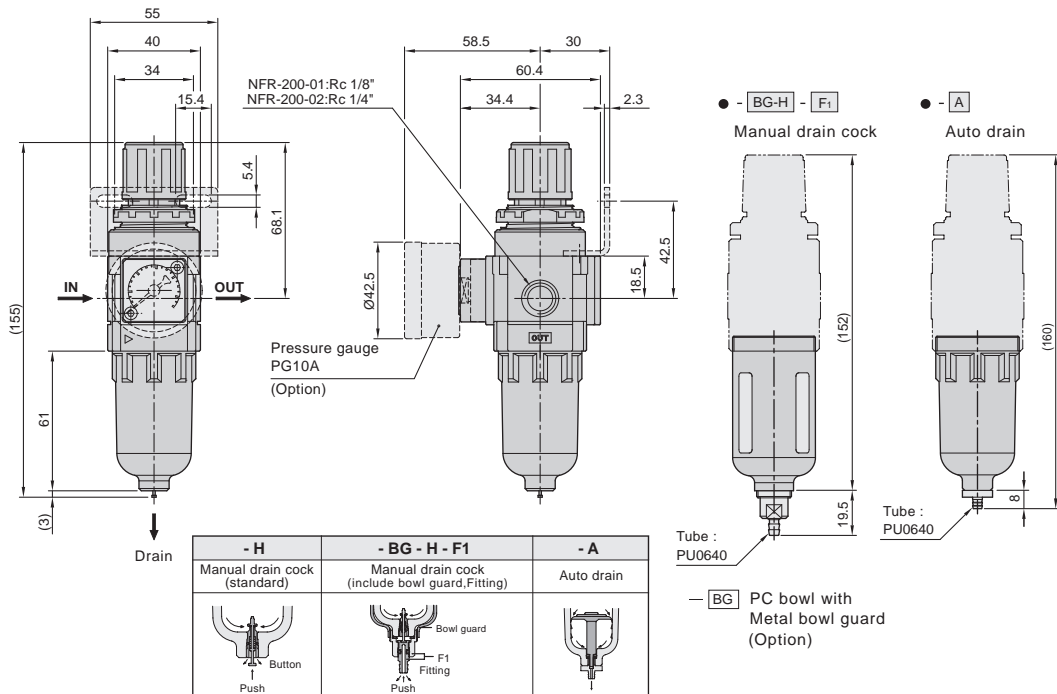
External dimensions

CHELIC PNEUMATIC

● NFR - 100 - Standard



● NFR - 200 - Standard - H



NC
F.R.L.
Combinations

NFC
F.R.L.
Combinations

**PSN-10
30,41**
Pressure switch

NFR
Filter
regulator

MFR
Mist filter
regulator

MFRD
Micro mist
filter regulator

NF
Air filter

MF
Mist
separator

MFD
Micro mist
separator

NR
Regulator

ARX
Regulator

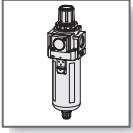
NL
Lubricator

N series
Mounting
bracket

DM
Large-
sized filter

ER
Precision
regulator

**PG/AFB
NDV/AD**

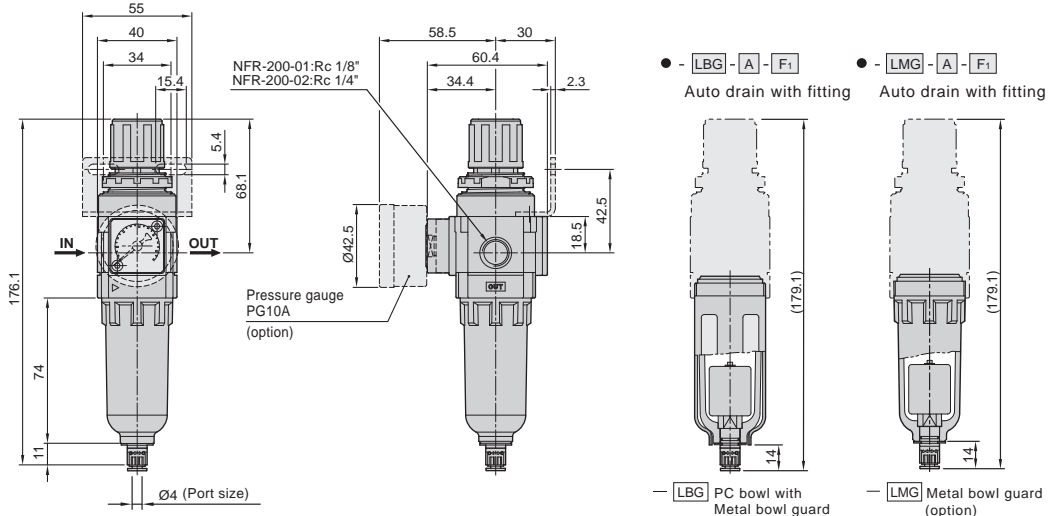


Air unit - Filter regulator

External dimensions

CHELIC PNEUMATIC

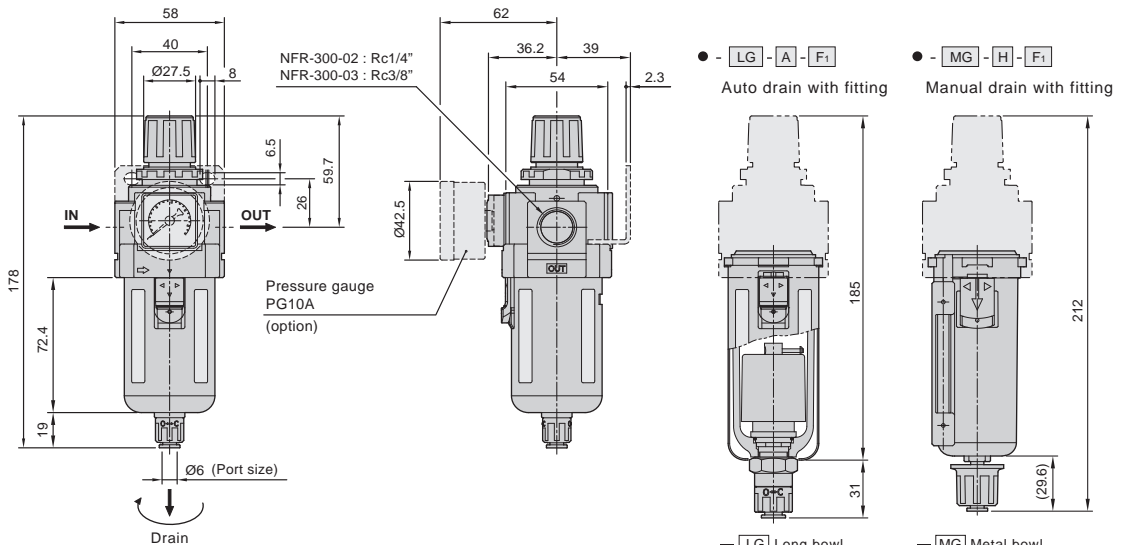
● NFR - 200 - [] - LG - A Long bowl



-LG-A	-LG-A-F1	-LBG-A	-LBG-A-F1	-LMG-A	-LMG-A-F1
Auto drain (option)	Auto drain with fitting (option)	Auto drain (option)	Auto drain with fitting (option)	Auto drain (option)	Auto drain with fitting (option)
Float type	Float type	Float type	Float type	Float type	Float type

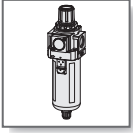
Note : Above auto drainer is AD-25.

● 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-50)
Turn left to drain	Turn left to drain	Turn left to drain	Turn left to drain	Float type

Note : Above auto drainer is AD-50.

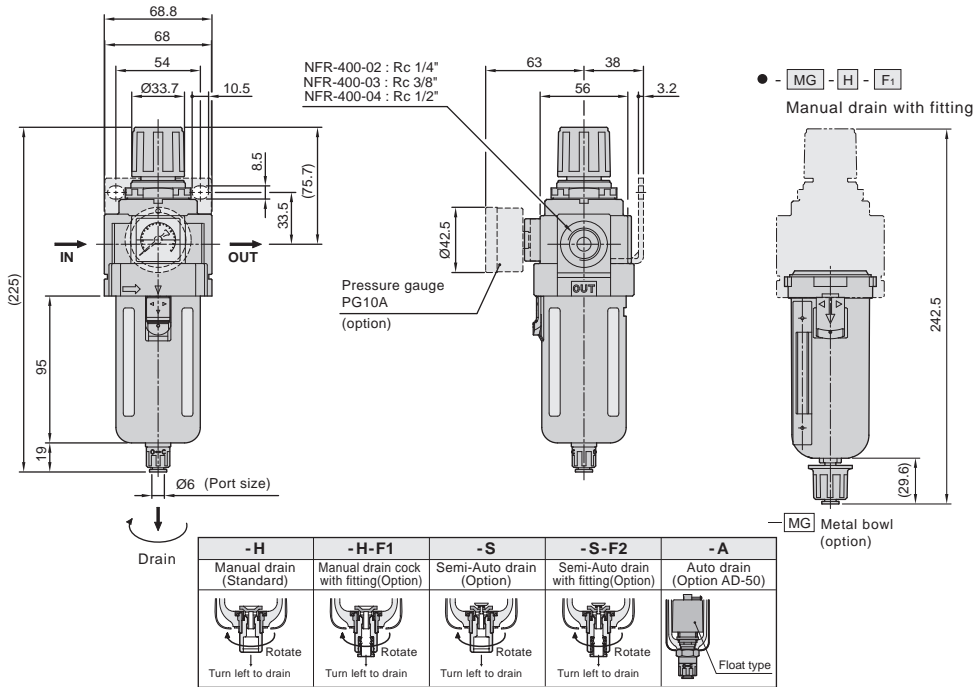


Air unit - Filter regulator

External dimensions

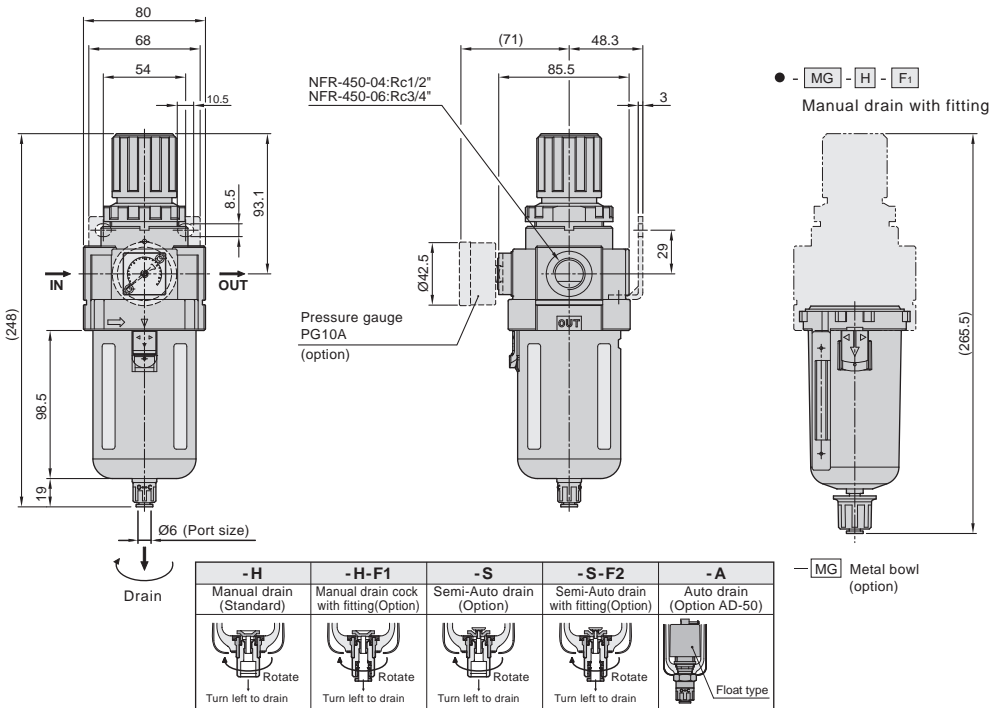
CHELIC PNEUMATIC

● NFR - 400 - H Standard



Note : Above auto drainer is AD-50.

● NFR - 450 - H Standard



Note : Above auto drainer is AD-50.

NC
F.R.L.
Combinations

NFC
F.R.L.
Combinations

PSN-10 30,41
Pressure switch

NFR
Filter
regulator

MFR
Mist filter
regulator

MFRD
Micro mist
filter regulator

NF

Air filter

MF

Mist
separator

MFD

Micro mist
separator

NR

Regulator

ARX

Regulator

NL

Lubricator

N series

Mounting
bracket

DM

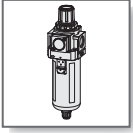
Large-
sized filter

ER

Precision
regulator

PG/AFB

NDV/AD

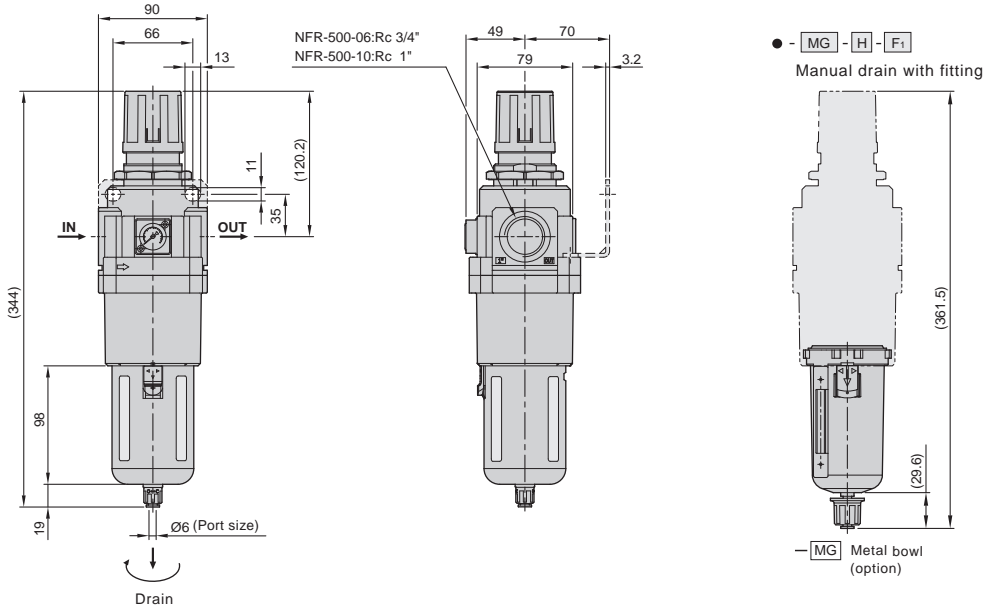


Air unit - Filter regulator

External dimensions

CHELIC PNEUMATIC

☉ NFR - 500 - [] - 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-50)
Rotate Turn left to drain	Rotate Turn left to drain	Rotate Turn left to drain	Rotate Turn left to drain	Float type

🔍 Note : Above auto drainer is AD-50.

