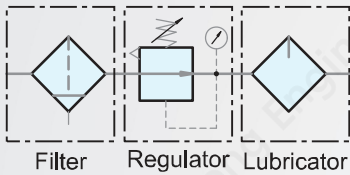


Symbol



Features

- * Remove water and particle effectively.
- * 40 μ m and 5 μ m filter element are easily interchangeable and replaceable.
- * Accurate and easy pressure setting.
- * Lubricator oil can be replenished without stopping air supply.
- * Oil spray in mist ensures good lubrication for machines.
- * Anti-acid & alkali bowl and aluminum bowl provide excellent protection in organic chemistry working environments. (Please contact our sales for more enquires.)



How to order

UFRL	-	02	N	C	D	A	SB		
F.R.L combination		Port size	Thread		Filtration		Drain	Bowl	Spacer block
Filter+Regulator+Lubricator		02 1/4"	Blank	PS	Blank	5 μ m	Blank	Standard bowl	
		03 3/8"	N	NPT	C	40 μ m	H	A	Anti-acid & alkali bowl
		04 1/2"					D	AL	Aluminum bowl (1/4"~1/2")
		06 3/4"							
		08 1"							

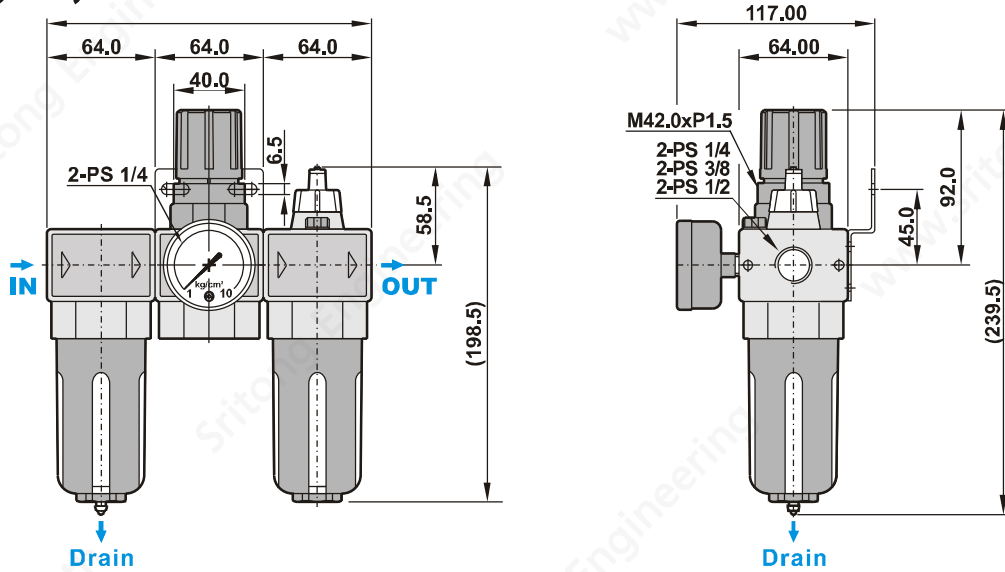
Specifications

※Note: Please see page 1-51 for ordering spacer block separately.

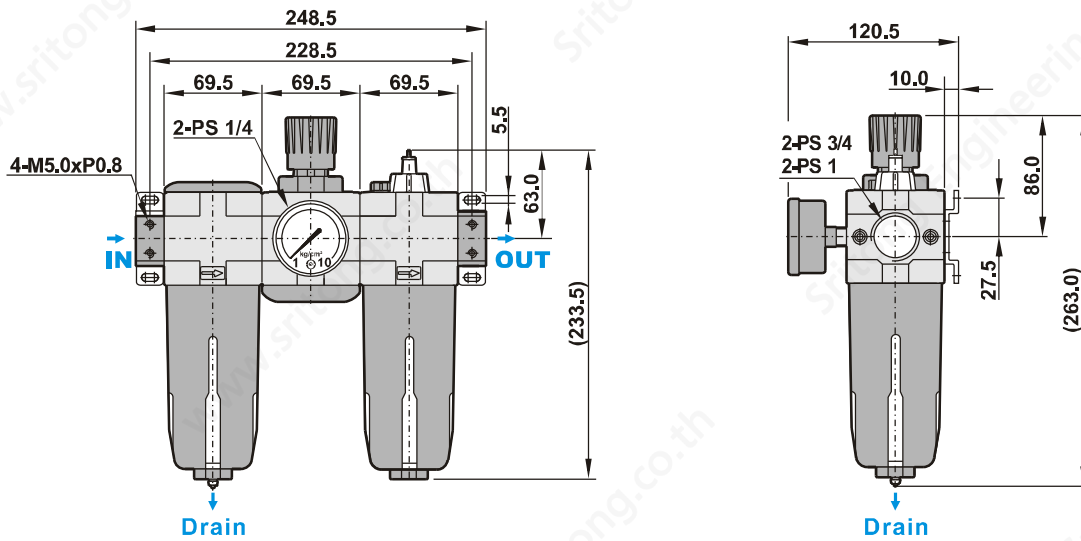
Model	UFRL-02	UFRL-03	UFRL-04	UFRL-06	UFRL-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Regulator construction	Piston				
Body material	Aluminum die-cast				
Bowl material	Polycarbonate (Standard), Anti-acid & alkali bowl (Option), Aluminum bowl (Option)				
Filtration	5 μ m (Standard) · 40 μ m (Option)				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. operating pressure (Standard bowl)	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2080	2100	2600	7940	8200
Ambient temperature	-10°C ~ 60°C				
Lubricator oil (Recommended)	ISO-VG32				
Filter bowl capacity	105cc			210cc	
Lubricator bowl capacity	125cc			235cc	
Standard drain	Semi-auto drain (Drains below 0.5kgf/cm ²)				
Net weight	1800g (AL Aluminum bowl 2100g)			2650g	
Accessories	Pressure gauge, Mounting bracket, Plug, Screw x 4				

Dimensions

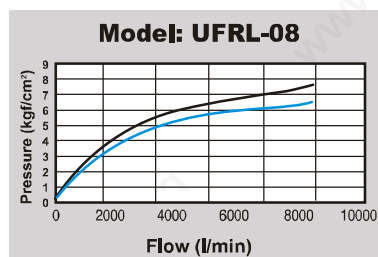
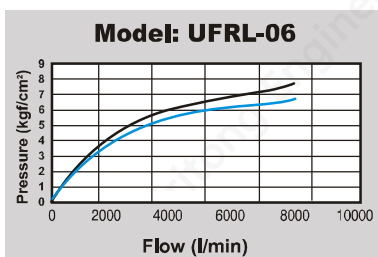
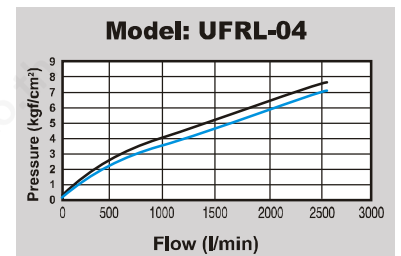
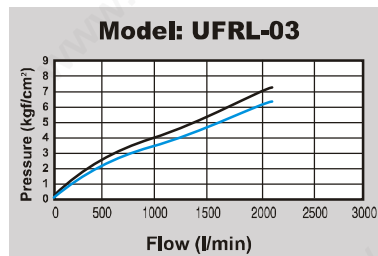
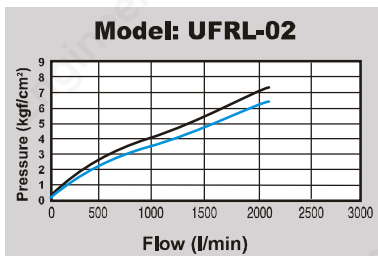
UFRL-02, 03, 04



UFRL-06, 08



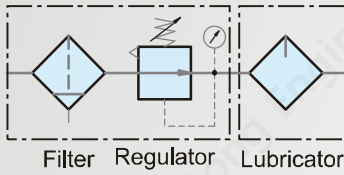
Flow chart



Note:

X axis: Flow
 Y axis: Pressure
 Blue line (P0) = Outlet pressure
 Black line (P1) = Inlet pressure
 P1-P0 = Pressure range

Symbol



Features

- * Remove water and particle effectively.
- * 40 μm and 5 μm filter element are easily interchangeable and replaceable.
- * Accurate and easy pressure setting.
- * Lubricator oil can be replenished without stopping air supply.
- * Oil spray in mist ensures good lubrication for machines.
- * Anti-acid & alkali bowl and aluminum bowl provide excellent protection in organic chemistry working environments. (Please contact our sales for more enquires.)



How to order

UFR/L - 02		N		C		D		A		SB		
F.R.L combination		Port size		Thread		Filtration		Drain		Bowl		Spacer block
Filter Regulator +Lubricator		02	1/4"	Blank	PS	Blank	5 μm	Blank	Semi-auto drain	Blank	Standard bowl	
		03	3/8"	N	NPT	C	40 μm	H	Manual drain	A	Anti-acid & alkali bowl	
		04	1/2"					D	Auto drain	AL	Aluminum bowl (1/4"~1/2")	
		06	3/4"									
		08	1"									

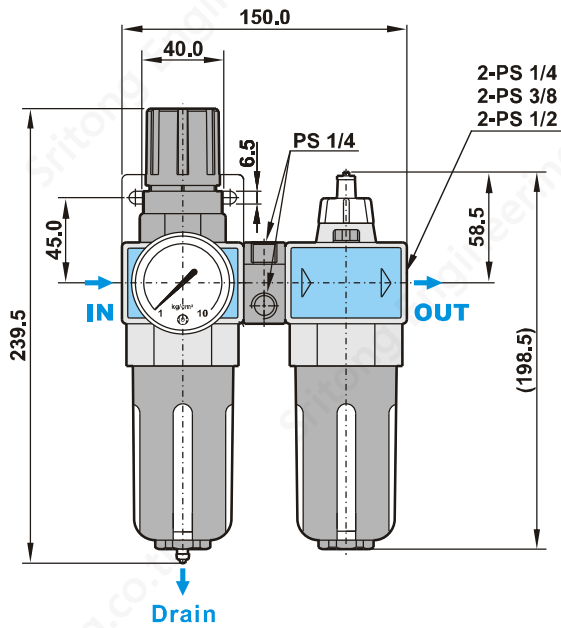
Specifications

* Note: Please see page 1-51 for ordering spacer block separately.

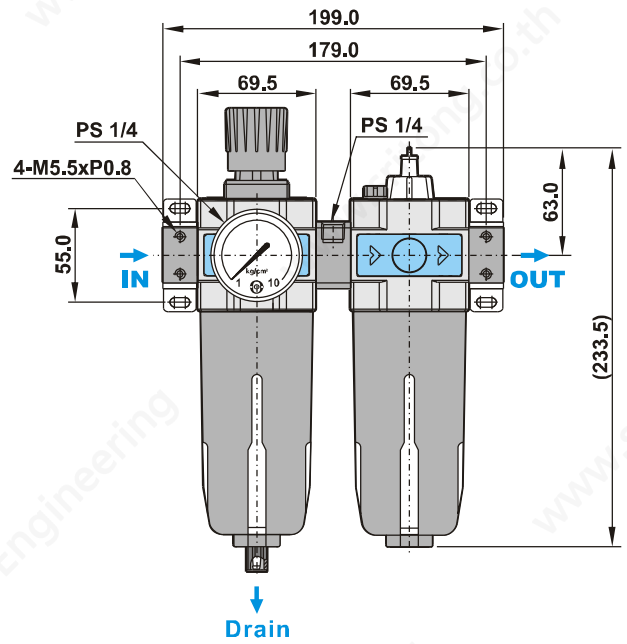
Model	UFR/L-02	UFR/L-03	UFR/L-04	UFR/L-06	UFR/L-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Regulator construction	Piston				
Body material	Aluminum die-cast				
Bowl material	Polycarbonate (Standard), Anti-acid & alkali bowl (Option), Aluminum bowl (Option)				
Filtration	5 μm (Standard) \ 40 μm (Option)				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. operating pressure (Standard bowl)	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2080	2100	2600	7940	8200
Ambient temperature	-10°C ~ 60°C				
Lubricator oil (Recommended)	ISO-VG32				
Filter bowl capacity	105cc			210cc	
Lubricator bowl capacity	125cc			235cc	
Standard drain	Semi-auto drain (Drains below 0.5kgf/cm ²)				
Net weight	1480g (AL Aluminum bowl 1780g)			2145g	
Accessories	Pressure gauge, Mounting bracket, Plug, Screw x 4				

Dimensions

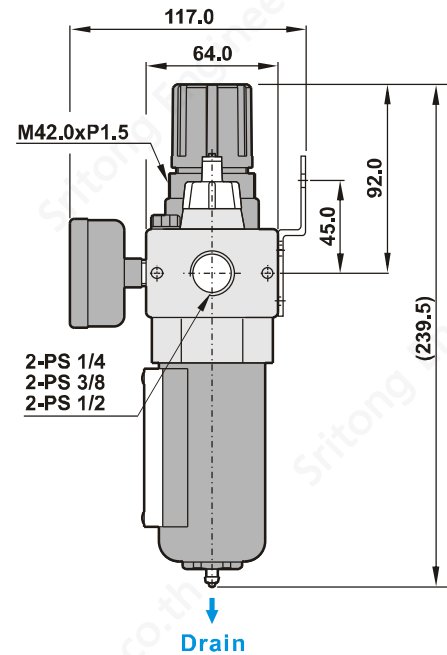
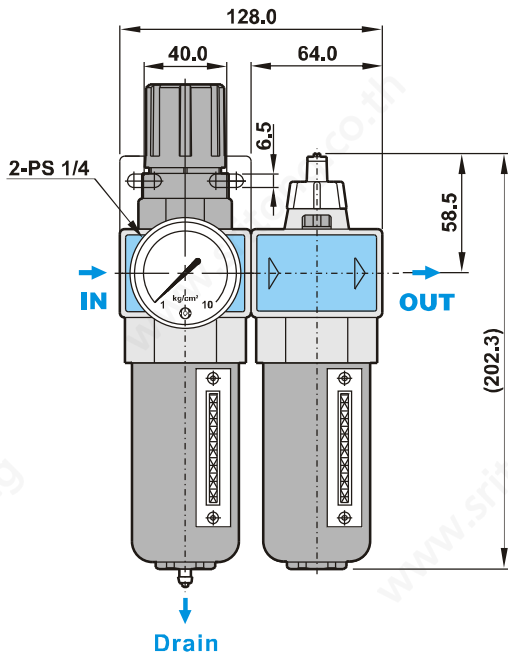
UFR/L-02, 03, 04SB (Spacer block)



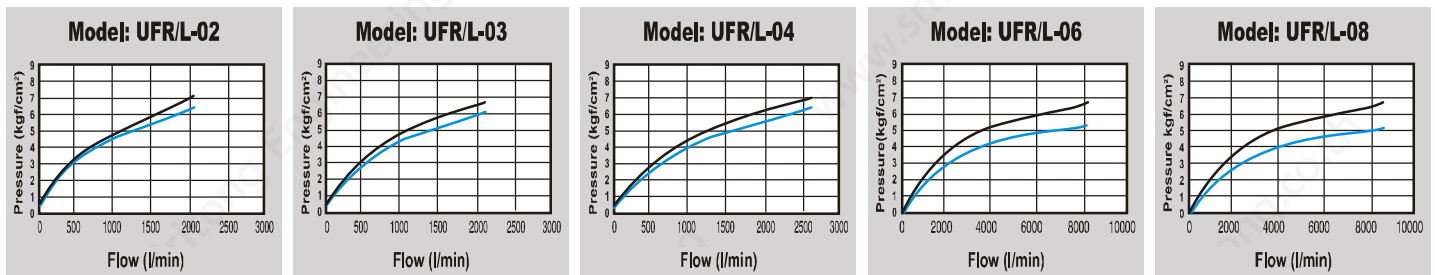
UFR/L-06, 08SB (Spacer block)



UFR/L-02AL, 03AL, 04AL (Aluminum bowl)



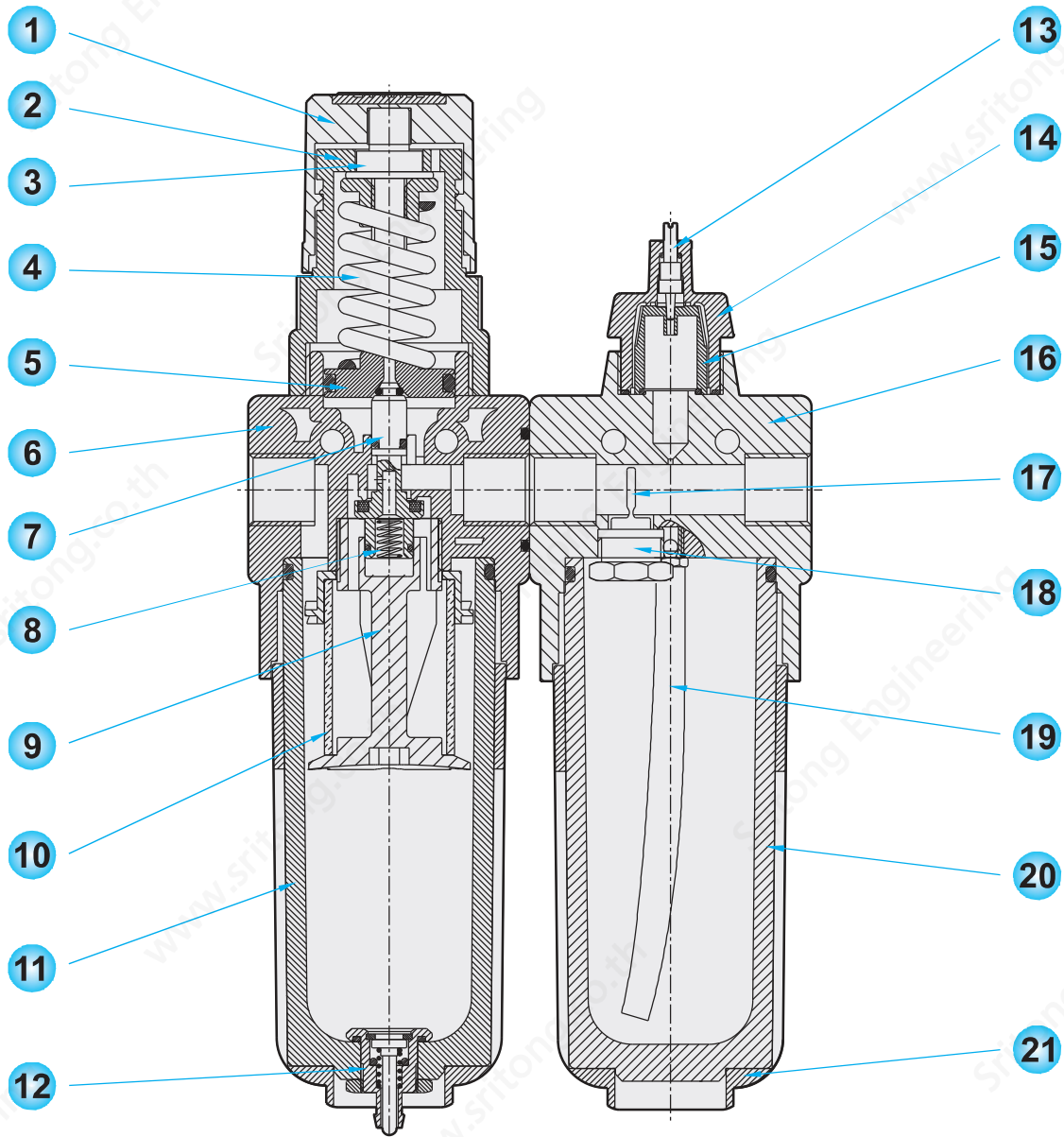
Flow chart



Note: X axis: Flow, Y axis: Pressure, Blue line (P0) = Outlet pressure, Black line (P1) = Inlet pressure, P1-P0 = Pressure range

Construction

UFR/L-02, 03, 04

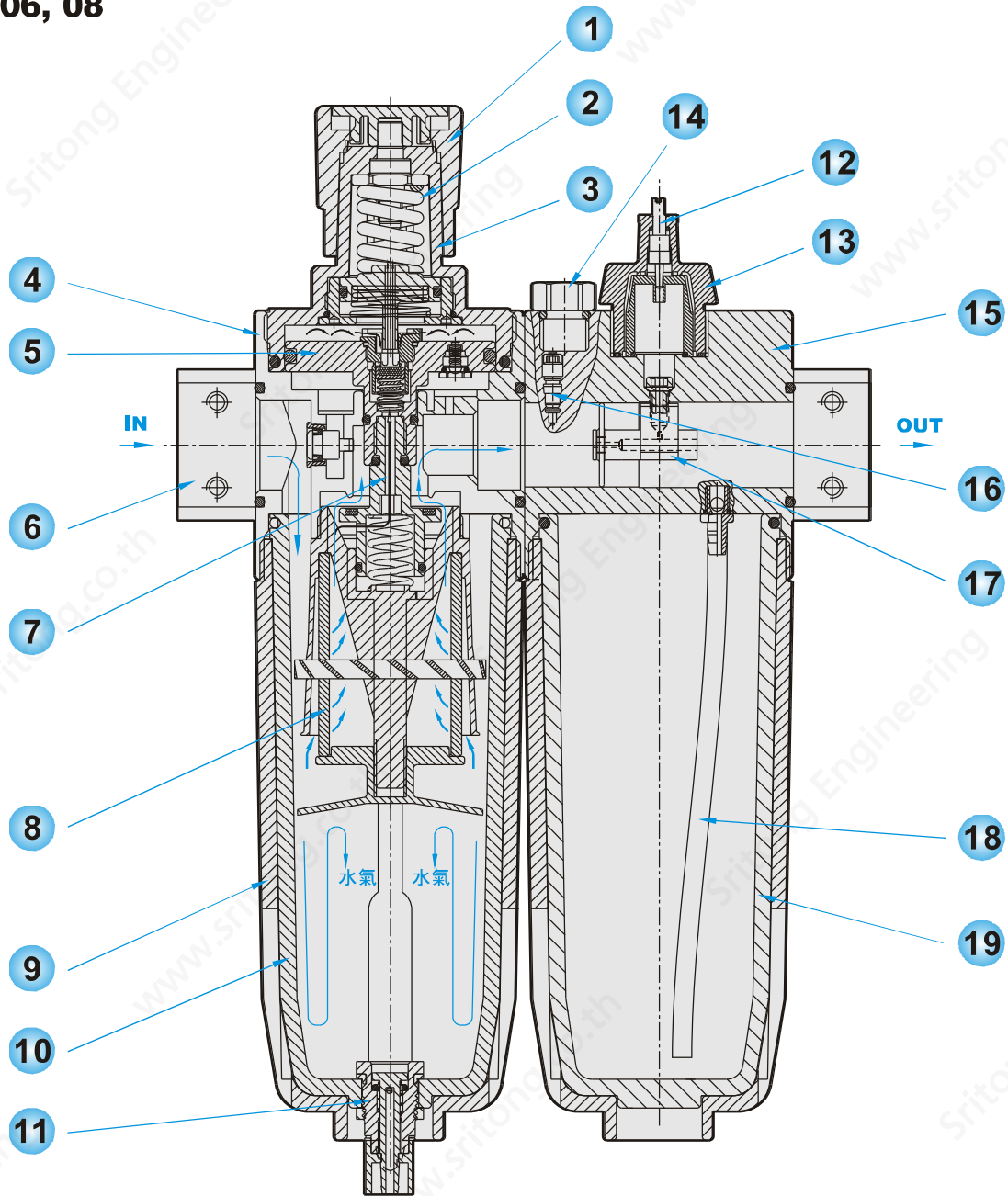


No.	Description	Material
1	Pressure regulating knob	NY
2	Regulator base	NY+GF
3	Pressure regulating screw	Fe+Ni
4	Pressure regulating spring	Spring steel+Ni
5	Piston	Cu+Ni
6	Regulator body	ADC12
7	Regulating needle	Cu+NBR
8	Spring	SUS304
9	Filter element holder	NY
10	Filter element	Cu
11	Filter bowl	PC

No.	Description	Material
12	Semi-auto drain	Cu+Ni
13	Oil adjusting screw	Cu+Ni
14	Oil viewer	GV4H
15	Oil dropping orifice	PC
16	Lubricator body	ADC12
17	Damper	PU
18	Plug	Cu
19	Oil pipe	PU
20	Lubricator bowl	PC
21	Bowl guard	NY

Construction

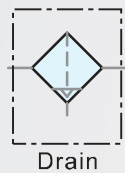
UFR/L-06, 08



No.	Description	Material
1	Pressure regulating knob	NY
2	Spring	Spring steel+Ni
3	Regulator base	NY+GF
4	Regulator body	ADC12
5	Piston	AL
6	Adaptor	ADC12
7	Pressure regulating needle	Cu+NBR
8	Filter element	Cu
9	Bowl guard	NY+GF
10	Filter bowl	PC

No.	Description	Material
11	Semi-auto drain	POM
12	Oil adjusting screw	Cu+Ni
13	Oil viewer	GV4H
14	Oil filling plug	Cu+Ni
15	Lubricator body	ADC12
16	Check valve	Cu
17	Oil dropping orifice	Cu
18	Oil pipe	PU
19	Lubricator bowl	PC

Symbol



Drain

Features

- * AD940 series effectively and quickly drains water.
- * Special internal construction prevents vacuum occurred.



How to order

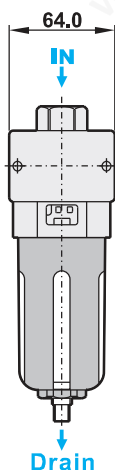
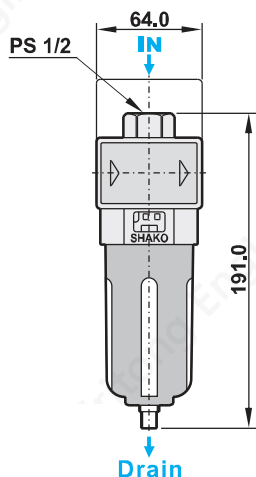
AD940	—	04	N	AL
Automatic drain		Port size	Thread	Bowl
		04 1/2"	Blank PS	Blank Standard bowl
		06 3/4"	N NPT	AL Aluminum bowl (only for 1/2")
		08 1"		

Specifications

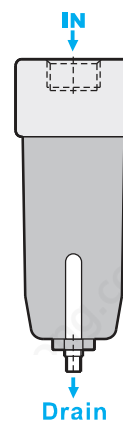
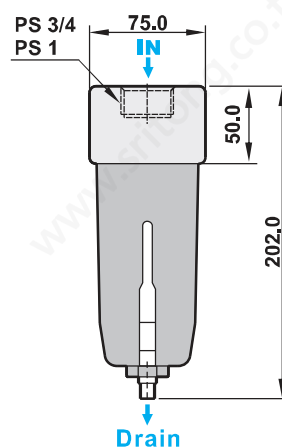
Model	AD940-04	AD940-06	AD940-08
Port size	1/2"	3/4"	1"
Fluid	Compressed air		
Body material	Aluminum die-cast		
Bowl material	Polycarbonate (Standard), Aluminum bowl (Option)		
Operating pressure range	0.5 ~ 10 kgf/cm ²		
Max. inlet pressure	12 kgf/cm ²		
Ambient temperature	-10°C ~ 60°C		
Filter bowl capacity	105cc		210cc
Net weight	500g		400g

Dimensions

AD940-04



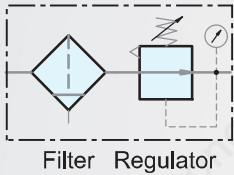
AD940-06, 08



SHAKO FILTER REGULATOR

FRL COMBINATIONS

Symbol



Features

- * Remove water and particle effectively.
- * 40 μm and 5 μm filter element are easily interchangeable and replaceable.
- * Accurate and easy pressure setting.



Patent number in Taiwan : 684011
 Patent number in China : ZL200420019530. 2
 Patent category : Pressure regulating constructions

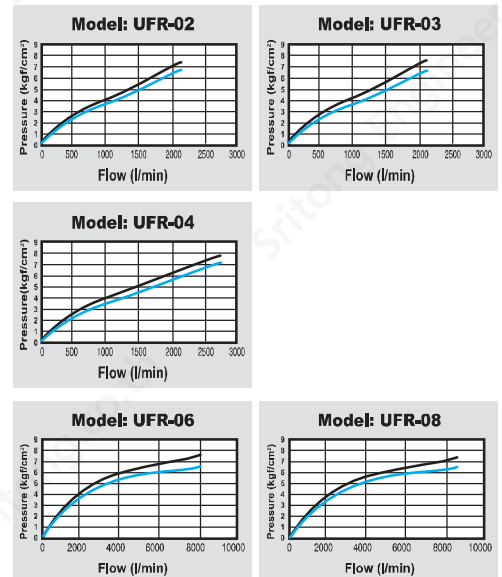
How to order

UFR	—	O2	N	C	D	A
Filter Regulator		Port size	Thread	Filtration	Drain	Bowl
		O2 1/4"	Blank PS	Blank 5 μm	Blank Semi-auto drain	Blank Standard bowl
		O3 3/8"	N NPT	C 40 μm	H Manual drain	A Anti-acid & alkali bowl
		O4 1/2"			D Auto drain	AL Aluminum bowl (1/4"~1/2")
		O6 3/4"				
		O8 1"				

Specifications

Model	UFR-02	UFR-03	UFR-04	UFR-06	UFR-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Regulator construction	Piston				
Body material	Aluminum die-cast				
Bowl material	Polycarbonate (Standard), Anti-acid & alkali bowl (Option), Aluminum bowl (Option)				
Filtration	5 μm (Standard) · 40 μm (Option)				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. operating pressure (Standard bowl)	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2080	2100	2600	7940	8200
Ambient temperature	-10°C ~ 60°C				
Lubricator oil (Recommended)	ISO-VG32				
Filter bowl capacity	105cc			210cc	
Lubricator bowl capacity	125cc			235cc	
Standard drain	Semi-auto drain (Drains below 0.5kgf/cm ²)				
Net weight	930g (W/ Aluminum bowl, 1230g)			1360g	
Accessories	Pressure gauge, Mounting bracket, Plug, Screw x 4				

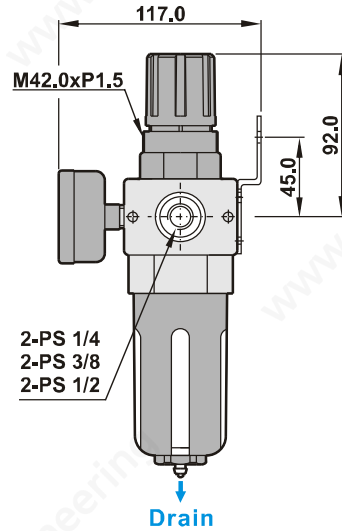
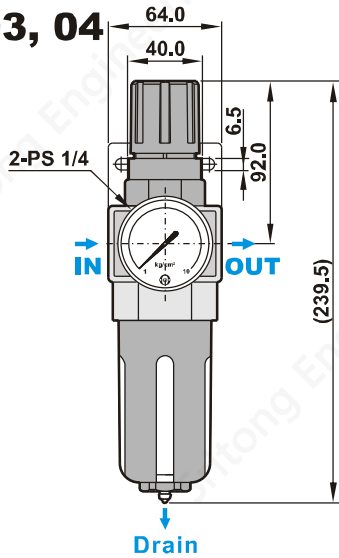
Flow chart



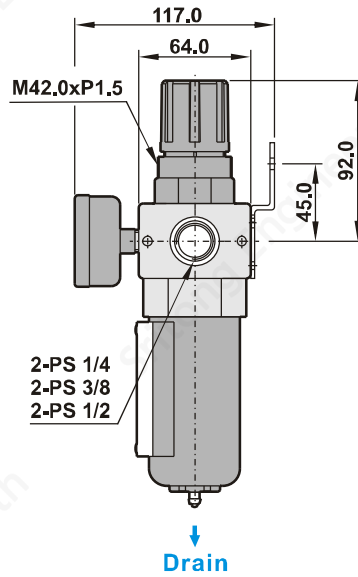
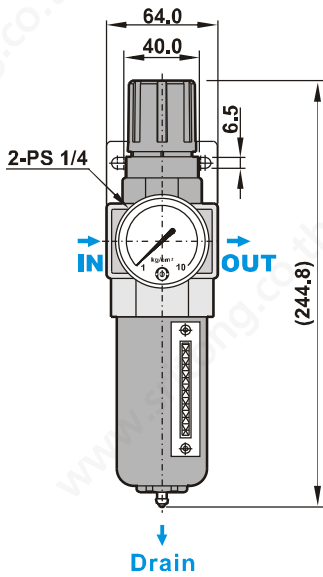
Note:
 X axis: Flow
 Y axis: Pressure
 Blue line (P0) = Outlet pressure
 Black line (P1) = Inlet pressure
 P1-P0 = Pressure range

Dimensions

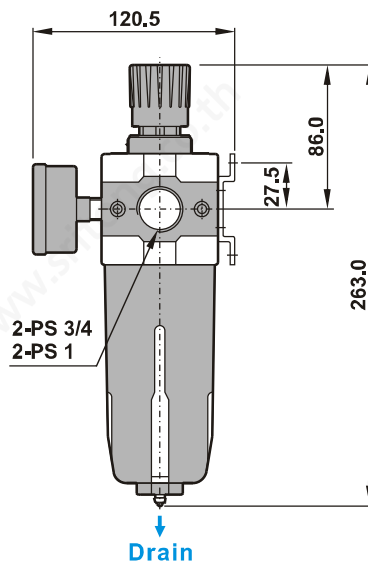
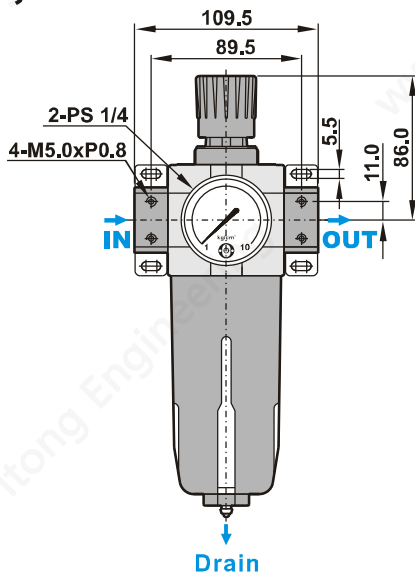
UFR-02, 03, 04



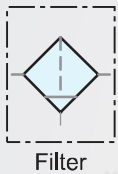
UFR-02AL, 03AL, 04AL (Aluminum bowl)



UFR-06, 08



Symbol



Features

- * Remove water and particle effectively.
- * 40 μm and 5 μm filter element are easily interchangeable and replaceable.



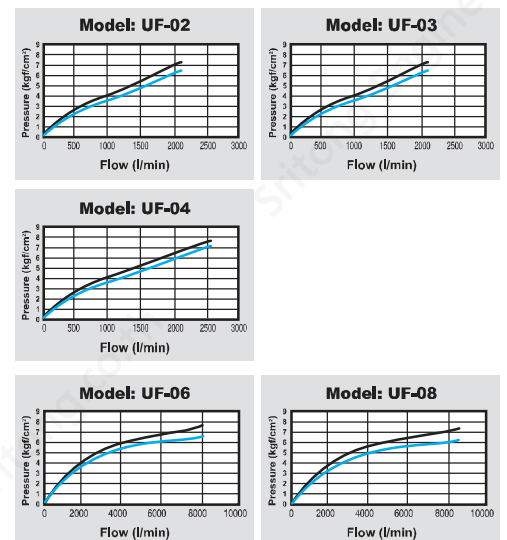
How to order

UF	O2	N	C	D	B	A				
Filter	Port size	Thread		Filtration		Drain	Mounting		Bowl	
02	1/4"	Blank	PS	Blank	5 μm	Blank	Semi-auto drain	Blank	Standard bowl	
03	3/8"	N	NPT	C	40 μm	H	Manual drain	B	Anti-acid & alkali bowl	
04	1/2"					D	Auto drain		Aluminum bowl (1/4"~1/2")	
06	3/4"									
08	1"									

Specifications

Model	UF-02	UF-03	UF-04	UF-06	UF-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Body material	Aluminum die-cast				
Bowl material	Polycarbonate (Standard), Anti-acid & alkali bowl (Option), Aluminum bowl (Option)				
Filtration	5 μm (Standard) · 40 μm (Option)				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. operating pressure (Standard bowl)	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2440	2450	3030	8250	8860
Ambient temperature	-10°C ~ 60°C				
Filter bowl capacity	105cc		210cc		
Standard drain	Semi-auto drain (Drains below 0.5kgf/cm ²)				
Net weight	530g (W/I Aluminum bowl 830g)			1250g	

Flow chart

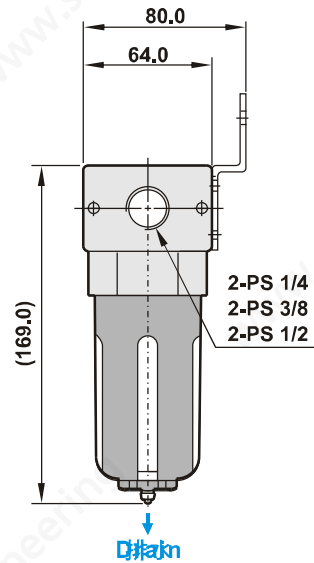
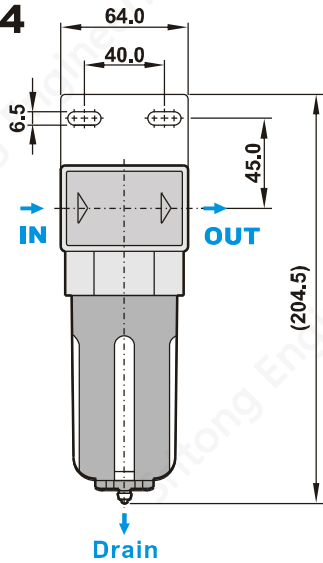


Note:

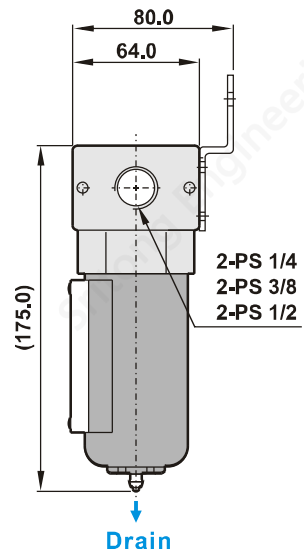
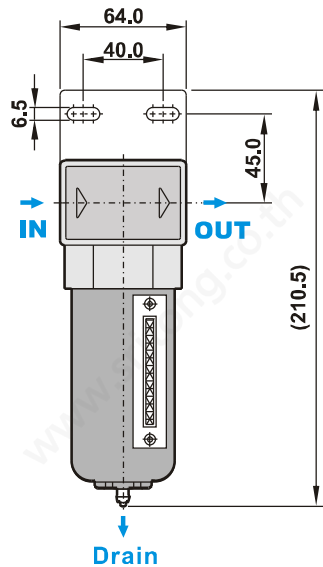
X axis: Flow
 Y axis: Pressure
 Blue line (P0) = Outlet pressure
 Black line (P1) = Inlet pressure
 P1-P0 = Pressure range

Dimensions

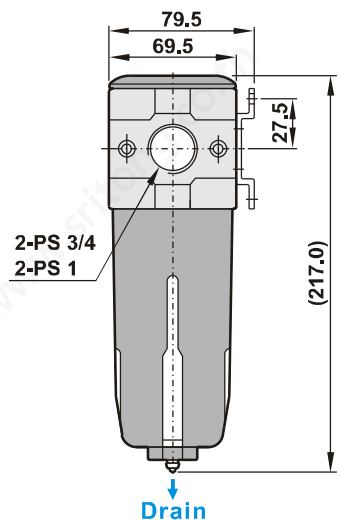
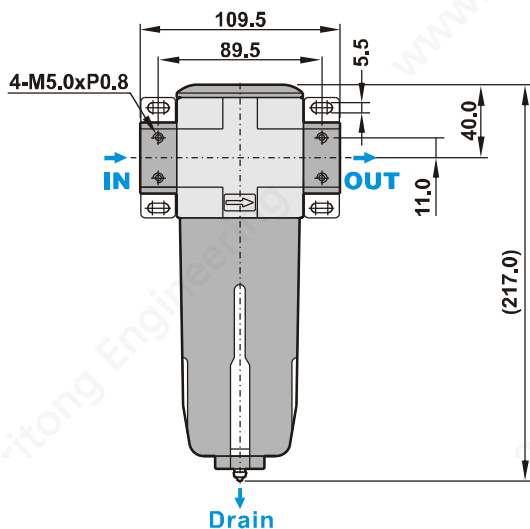
UF-02, 03, 04



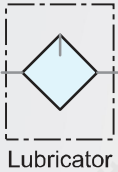
UF-02AL, 03AL, 04AL (Aluminum bowl)



UF-06, 08



Symbol



Features

- * Lubricator oil can be replenished without stopping air supply.
- * Oil spray in mist ensures good lubrication for machines.



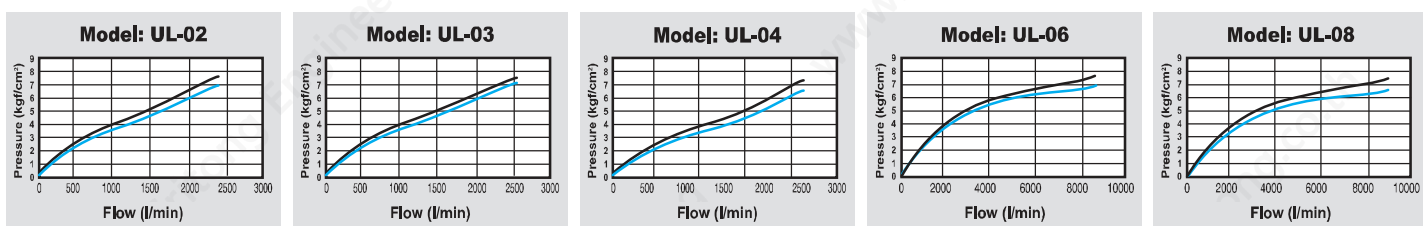
How to order

UL	—	02	N	B	A
Lubricator		Port size	Thread	Mounting	Bowl
		02 1/4"	Blank PS	Blank W/O bracket	Blank Standard bowl
		03 3/8"	N NPT	B W/I bracket	A Anti-acid & alkali bowl
		04 1/2"			AL Aluminum bowl (1/4"~1/2")
		06 3/4"			
		08 1"			

Specifications

Model	UL-02	UL-03	UL-04	UL-06	UL-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Body material	Aluminum die-cast				
Bowl material	Polycarbonate (Standard), Anti-acid & alkali bowl (Option), Aluminum bowl (Option)				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. operating pressure (Standard bowl)	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2490	2525	4310	8400	9000
Ambient temperature	-10°C ~ 60°C				
Lubricator oil (Recommended)	ISO-VG32				
Lubricator bowl capacity	125cc			235cc	
Net weight	500g (W/I Aluminum bowl 800g)			1095g	

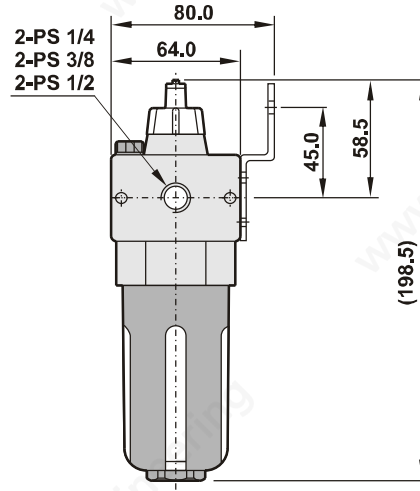
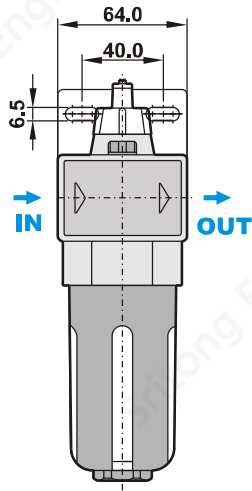
Flow chart



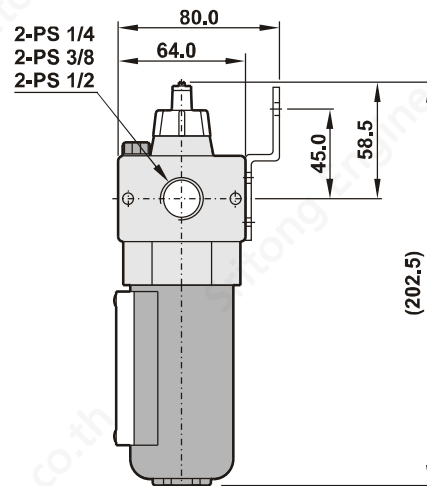
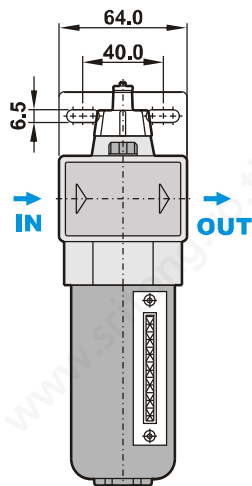
Note: X axis: Flow, Y axis: Pressure, Blue line (P0) = Outlet pressure, Black line (P1) = Inlet pressure, P1-P0 = Pressure range

— Dimensions

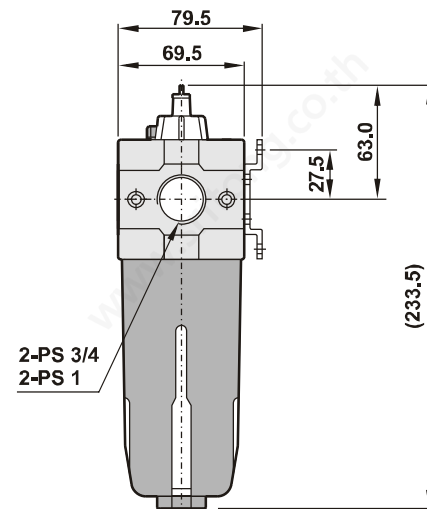
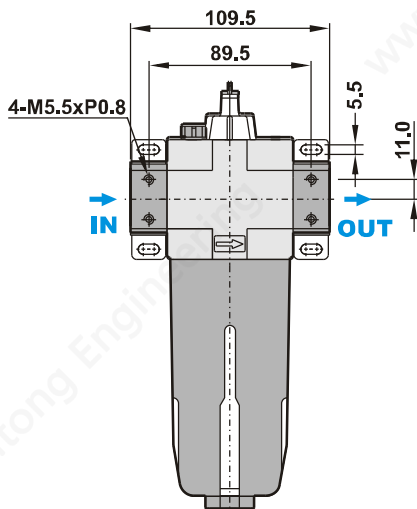
● UL-02, 03, 04



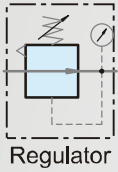
● UL-02AL, 03AL, 04AL (Aluminum bowl)



● UL-06, 08



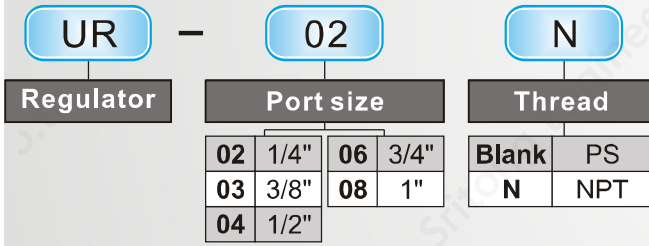
Symbol



Features

- * Accurate and easy pressure setting.
- * Panel mounting is available.

How to order

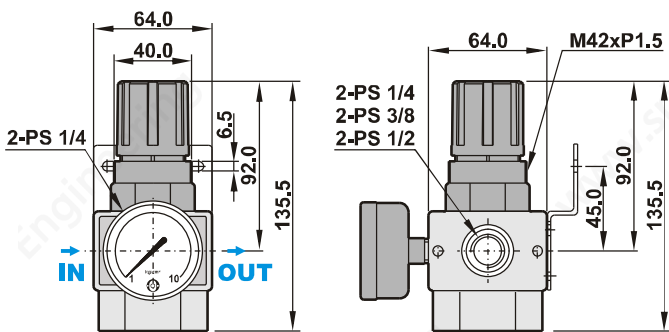


Specifications

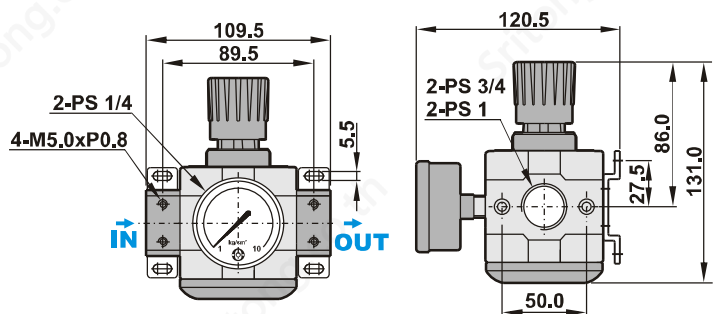
Model	UR-02	UR-03	UR-04	UR-06	UR-08
Port size	1/4"	3/8"	1/2"	3/4"	1"
Fluid	Compressed air				
Regulator construction	Piston				
Body material	Aluminum die-cast				
Operating pressure range	0.5 ~ 10 kgf/cm ²				
Max. inlet pressure	15 kgf/cm ²				
Max. flow rate l/min (6kgf/cm ²)	2100	2130	2750	8000	8500
Ambient temperature	-10°C ~ 60°C				
Net weight	740g	730g	720g	1250g	1240g
Accessories	Pressure gauge, Mounting bracket, Plug, Screw x 4				

Dimensions

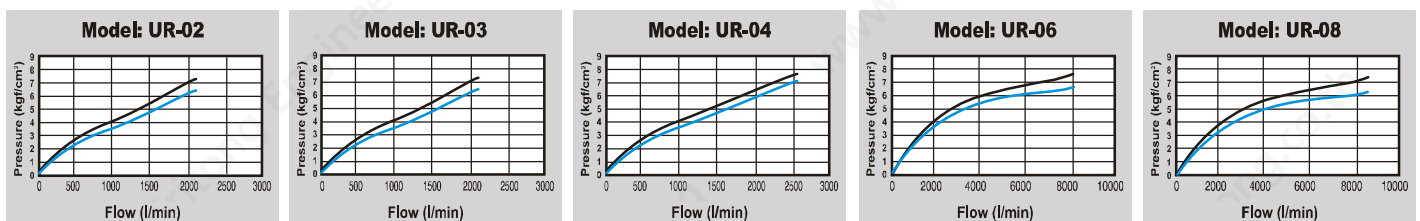
UR-02, 03, 04



UR-06, 08



Flow chart

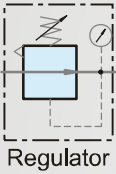


Note: X axis: Flow, Y axis: Pressure, Blue line (P0) = Outlet pressure, Black line (P1) = Inlet pressure, P1-P0 = Pressure range

SHAKO 1-1/2", 2" REGULATOR

FRL COMBINATIONS

Symbol



Features

- * Large flow rate (Max. 30000 l/min)
- * Aluminum alloy body, light weight.
- * Pilot regulator is available for remote control.

How to order

UR

20

N

UR	Regulator
UAR	Pilot regulator

Port size	
14	1 1/2"
20	2"

Thread	
Blank	PS
N	NPT



UAR



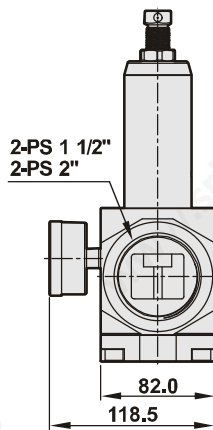
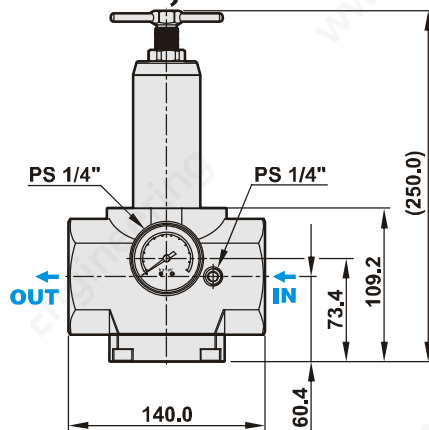
UR

Specifications

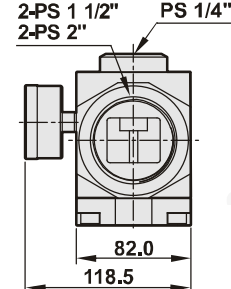
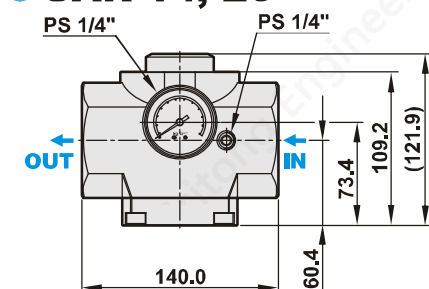
Model	UR-14	UR-20	UAR-14	UAR-20
Port size	1 1/2"	2"	1 1/2"	2"
Fluid	Compressed air			
Regulator construction	Piston			
Operating pressure range	0 ~ 8 kgf/cm ²			
Max. operating pressure	15 kgf/cm ²			
Max. flow rate l/min (6kgf/cm ²)	30000 l/min (input 7 kgf/cm ² output 6 kgf/cm ²)			
Ambient temperature	-10°C ~ 60°C			
Net weight	2.8 kg	2.5 kg	2.2 kg	2.0 kg
Accessories	Pressure gauge, plug			

Dimensions

UR-14, 20



UAR-14, 20



Installation

These lines can be virtually any distance from remote regulator.

