

SECTION 2

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AIR COMBINATION SET

X Type Air Combination Set

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Air Combination Set

X, QA Series

How to Order

Code	Combination	Size	Port size	Drain
QA: Module	C: FR + L (Module)	4(Small)	Small: (G1/4)	Nil: Manual
QA: Plastic Module	F + R + L (Module)	F + R + L: FR + L:	M5: (M5)	D: Auto
X: Small	F: Filter	1000 1010	01: (G1/8)	
	R: Regulator	2000 2010	02: (G1/4)	
	L: Lubricator	2500 3010	03: (G3/8)	
	W: Filter regulator	3000 4010	04: (G1/2)	
	FRU: Filter regulator (Small)	4000	06: (G3/4)	
	FRUL: FR + L (Small)	5000	10: (G1)	
	FRL: F + R + L (Small)			

Precautions:

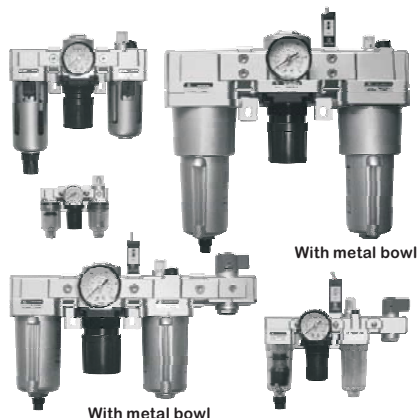
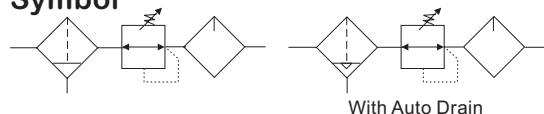
- Before installation, check whether there are any damages or loosen connections caused by the transportation.
- During installing, pay attention to the flow direction and keep the FRL vertical.
- When a bushing is connected to a port, the element's flow will be reduced. When filtration degree is increased the flow will decrease.
- Make sure that the bowl guard is fixed before use.
- When use a regulator, firstly adjust the knob to the zero position, assemble the gauge and make sure that there is no leakage. (The positions of the plug and the gauge can be exchanged.) Then supply the compressed air and regulate the knob to get the pressure needed.
- When use a lubricator, firstly turn the adjusting screw (or needle) to the zero position, fill in the oil up to the oil level mark, then supply compressed air and adjust the screw (or needle) to an appropriate position. Caution: please use the recommended oil. Spindle oil and oils that contain aromatic hydrocarbon or low-grade ketone should not be used.
- When metal pipes are used, make sure that there are no metal scraps, dusts and oil contamination in them.

Ordering

- Please give clearly the descriptions, the models and the number required.
- When order air filters, regulators or filter-regulators, please give the filtration degree and the regulating pressure range. Otherwise, we will supply the general models.
- Non-standard special requirements are made to order, please contact us in advance.

Air Combination Set (Air Filter + Regulator + Lubricator) QAC1000~5000 Series

Symbol



Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
*Filtration	25 μm
Recommended oil	Turbine oil #1 (ISO VG32)
**Bowl material	Polycarbonate / Die casting aluminum (metal bowl)
Bowl guard	QAC1000~2000(W/O) QAC2500~5000(W)
Regulating range	QAC1000: 0.05~0.7MPa QAC2000~5000: 0.05~0.85MPa
Construction/Regulator	Relieving type

*Option: 5、50 μm

Model		Specifications								Accessories
Manu.	Auto.	Air Filter	Regulator	Lubricator	***Max. Flow rate l/min (ANR)	Port size	Gauge port size	Weight kg	Bracket (Two)	Pressure gauge
QAC1000-M5	-	QAF1000	QAR1000	QAL1000	90	M5×0.8	G1/16	0.26	Y10L	QG27-10-R1
QAC2000-01	QAC2000-01D	QAF2000	QAR2000	QAL2000	500	G1/8	G1/8	0.74	Y20L	QG36-10-01
QAC2000-02	QAC2000-02D	QAF2000	QAR2000	QAL2000	500	G1/4	G1/8	0.74	Y20L	
QAC2500-02	QAC2500-02D	QAF3000	QAR2500	QAL3000	1500	G1/4	G1/8	1.04	Y30L	
QAC2500-03	QAC2500-03D	QAF3000	QAR2500	QAL3000	1500	G3/8	G1/8	1.04	Y30L	
QAC3000-02	QAC3000-02D	QAF3000	QAR3000	QAL3000	2000	G1/4	G1/8	1.18	Y30L	
QAC3000-03	QAC3000-03D	QAF3000	QAR3000	QAL3000	2000	G3/8	G1/8	1.18	Y30L	QG46-10-02
QAC4000-03	QAC4000-03D	QAF4000	QAR4000	QAL4000	4000	G3/8	G1/4	2.14	Y40L	
QAC4000-04	QAC4000-04D	QAF4000	QAR4000	QAL4000	4000	G1/2	G1/4	2.14	Y40L	
QAC4000-06	QAC4000-06D	QAF4000	QAR4000	QAL4000	4500	G3/4	G1/4	2.47	Y50L	
QAC5000-06	QAC5000-06D	QAF5000	QAR5000	QAL5000	5000	G3/4	G1/4	3.82	Y60L	
QAC5000-10	QAC5000-10D	QAF5000	QAR5000	QAL5000	5000	G1	G1/4	3.82	Y60L	

***Conditions: Supply pressure 0.7MPa, Setting pressure 0.5MPa.

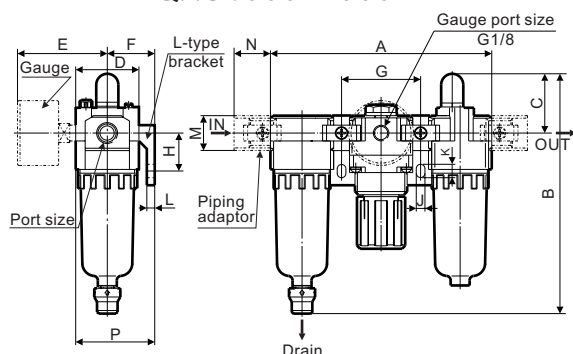
**Option: QAC2000~5000 air combinationset with metal bowl.
Order examples:

1. Need: QAC4000-04, with Metal bowl.
Model: QAC4000-04M

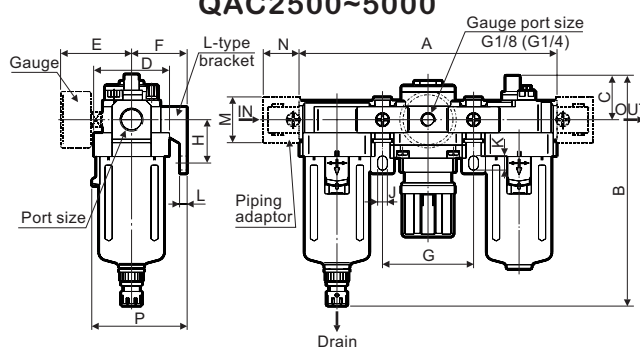
2. Need: QAC5000-10, with Metal bowl & auto drain.
Model: QAC5000-10DM

Dimensions (mm)

QAC1000~2000



QAC2500~5000

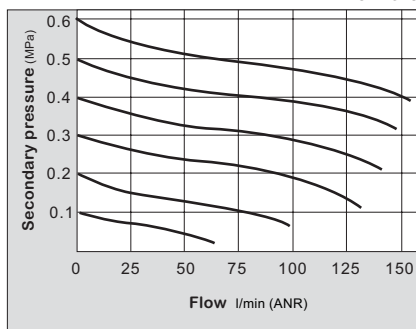


Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	With auto drain B
QAC1000	M5×0.8	91	84.5	25.5	25	26	25	33	20	4.5	7.5	5	17.5	16	38.5	105
QAC2000	G1/8-G1/4	140	125	38	40	56.8	30	50	24	5.5	8.5	5	22	23	50	159
QAC2500	G1/4-G3/8	181	156.5	38	53	60.8	41	64	35	7	11	7	34.2	26	70.5	194.5
QAC3000	G1/4-G3/8	181	156.5	38	53	60.8	41	64	35	7	11	7	34.2	26	70.5	194.5
QAC4000	G3/8-G1/2	238	191.5	41	70	65.5	50	84	40	9	13	7	42.2	33	88	230.5
QAC4000-06	G3/4	253	193	40.5	70	69.5	50	89	40	9	13	7	46.2	36	88	232
QAC5000	G3/4-G1	300	271.5	48	90	75.5	70	105	50	12	16	10	55.2	40	115	310.5

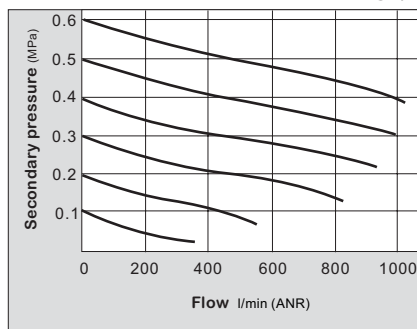
Flow Characteristics

Supply Pressure $P_1=0.7\text{MPa}$

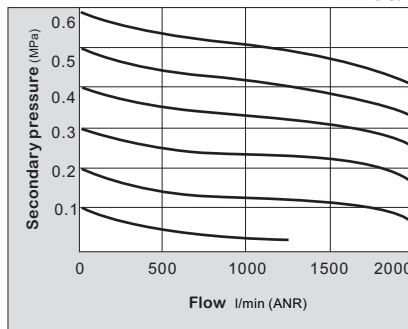
QAC1000 M5×0.8



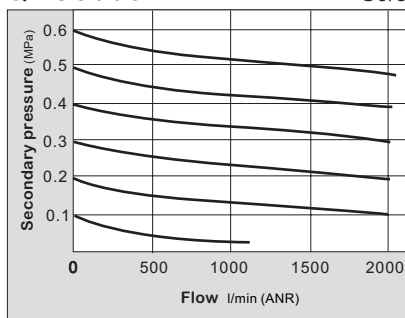
QAC2000 G1/4



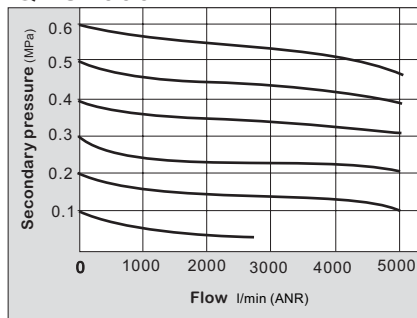
QAC2500 G3/8



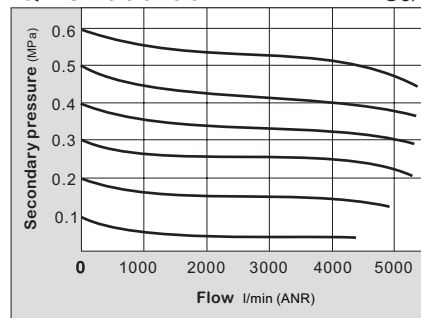
QAC3000 G3/8



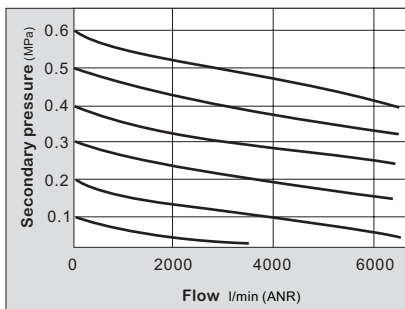
QAC4000 G1/2



QAC4000-06 G3/4



QAC5000 G3/4



Pressure Characteristics

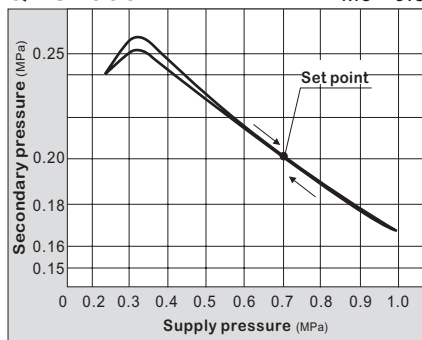
Supply Pressure
 $P_1=0.7\text{MPa}$

Secondary Pressure
 $P_2=0.2\text{MPa}$

Flow Rate
 $Q=20\text{NL/min}$

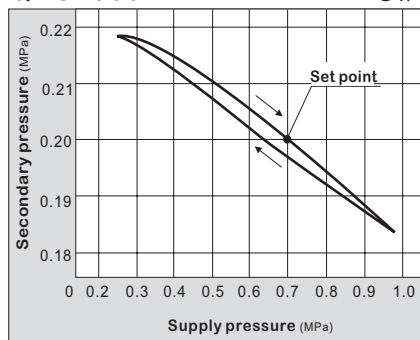
QAC1000

M5×0.8



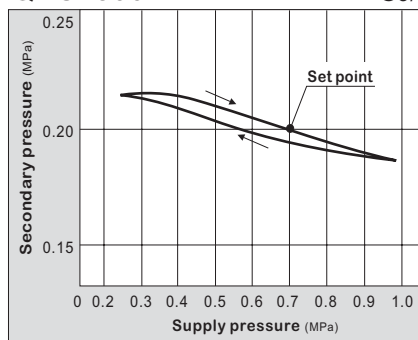
QAC2000

G1/4



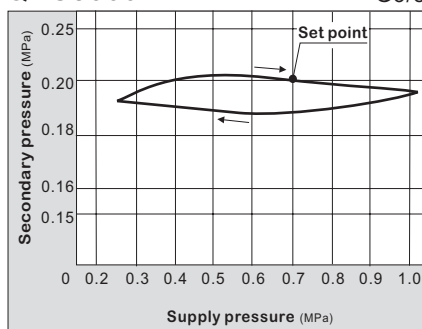
QAC2500

G3/8



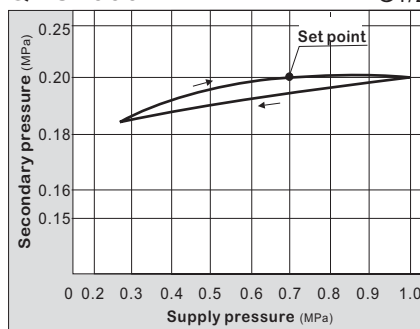
QAC3000

G3/8



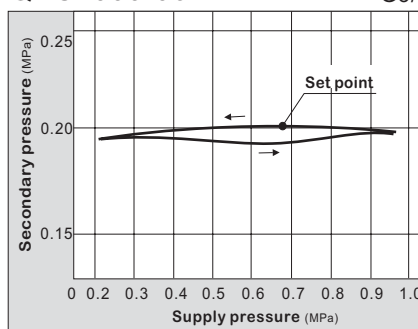
QAC4000

G1/2



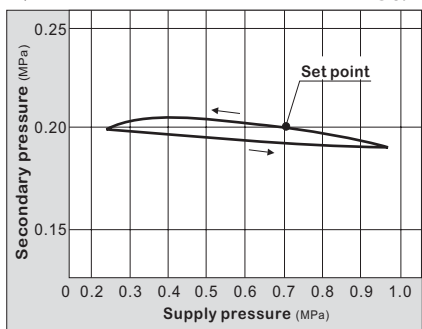
QAC4000-06

G3/4



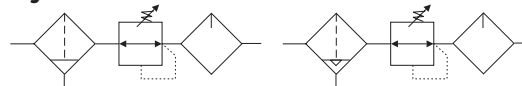
QAC5000

G3/4



Air Combination Set (Filter Regulator + Lubricator) QAC1010~4010 Series

Symbol



Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
*Filtration	25 μm
Recommended oil	Turbine oil #1 (ISO VG32)
**Bowl material	Polycarbonate / Die casting aluminum (metal bowl)
Bowl guard	QAC1010~2010(W/O) QAC3010~4010(W)
Regulating range	QAC1010: 0.05~0.7MPa QAC2010~4010: 0.05~0.85MPa
Construction/Regulator	Relieving type

*Option: 5、50 μm

2

Model		Specifications							Accessories
		Combination		***Max. Flow rate l/min (ANR)	Port size	Gauge port size	Weight kg	Bracket (One)	Pressure gauge
Manu.	Auto.	Filter Regulator	Lubricator						
QAC1010-M5	-	QAW1000	QAL1000	90	M5×0.8	G1/16	0.22	Y10T	QG27-10-R1
QAC2010-01	QAC2010-01D	QAW2000	QAL2000	500	G1/8	G1/8	0.66	Y20T	QG36-10-01
QAC2010-02	QAC2010-02D	QAW2000	QAL2000	500	G1/4	G1/8	0.66	Y20T	
QAC3010-02	QAC3010-02D	QAW3000	QAL3000	1700	G1/4	G1/8	0.98	Y30T	
QAC3010-03	QAC3010-03D	QAW3000	QAL3000	1700	G3/8	G1/8	0.98	Y30T	
QAC4010-03	QAC4010-03D	QAW4000	QAL4000	3000	G3/8	G1/4	1.93	Y40T	QG46-10-02
QAC4010-04	QAC4010-04D	QAW4000	QAL4000	3000	G1/2	G1/4	1.93	Y40T	
QAC4010-06	QAC4010-06D	QAW4000	QAL4000	3000	G3/4	G1/4	1.99	Y50T	

***Conditions: Supply pressure 0.7MPa, Setting pressure 0.5MPa.

**Option: QAC2010~4010 air combinationset with metal bowl.

Order examples:

1. Need: QAC3010-03, with Metal bowl.

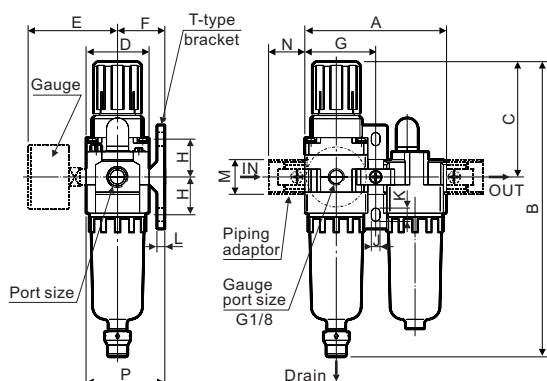
Model: QAC3010-03M

2. Need: QAC4010-04, with Metal bowl & auto drain.

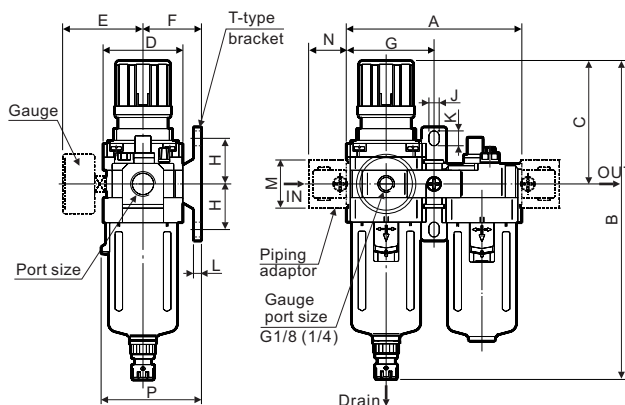
Model: QAC4010-04DM

Dimensions (mm)

QAC1010~2010



QAC3010~4010

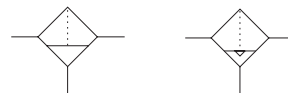


Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	With auto drain
																B
QAC1010	M5×0.8	58	109.5	50.5	25	26	25	29	20	4.5	7.5	5	17.5	16	38.5	130
QAC2010	G1/8-G1/4	90	164.5	78	40	56.8	30	45	24	5.5	8.5	5	22	23	50	198.5
QAC3010	G1/4-G3/8	117	211	92.5	53	60.8	41	58.5	35	7	11	7	34.2	26	70.5	249
QAC4010	G3/8-G1/2	154	262	112	70	70.5	50	77	40	9	13	7	42.2	33	88	310.5
QAC4010-06	G3/4	164	267	114	70	70.5	50	82	40	9	13	7	46.2	36	88	306

Air Filter QAF1000~5000 Series

Symbol

With Auto Drain



With metal bowl.

Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
*Filtration	25 μm
**Bowl material	Polycarbonate / Die casting aluminum (metal bowl)
Bowl guard	QAF1000~2000(W/O) QAF3000~5000(W)

*Option: 5、50 μm

2

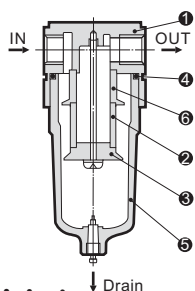
Model		Specifications				Accessories			
		***Max. Flow rate l/min (ANR)	Port size	Bowl Capacity cm ³	Weight kg	Bracket (One)	Filter element	Bowl assembly	
Manu.	Auto.							Manu.	Auto.
QAF1000-M5	-	110	M5×0.8	4	0.07	-	11134-25B	C100F	-
QAF2000-01	QAF2000-01D	750	G1/8	15	0.19	B240	11294-25B	C200F	AD62.0
QAF2000-02	QAF2000-02D	750	G1/4	15	0.19	B240	11294-25B	C200F	AD62.0
QAF3000-02	QAF3000-02D	1500	G1/4	20	0.29	B340	111511-25B	C300F	AD43.0
QAF3000-03	QAF3000-03D	1500	G3/8	20	0.29	B340	111511-25B	C300F	AD43.0
QAF4000-03	QAF4000-03D	4000	G3/8	45	0.55	B440	11104-25B	C400F	AD43.1
QAF4000-04	QAF4000-04D	4000	G1/2	45	0.55	B440	11104-25B	C400F	AD43.1
QAF4000-06	QAF4000-06D	6000	G3/4	45	0.58	B540	11104-25B	C400F	AD43.1
QAF5000-06	QAF5000-06D	7000	G3/4	130	1.08	B640	11173-25B	C400F	AD43.1
QAF5000-10	QAF5000-10D	7000	G1	130	1.08	B640	11173-25B	C400F	AD43.1

***Condition: Supply pressure 0.7MPa.

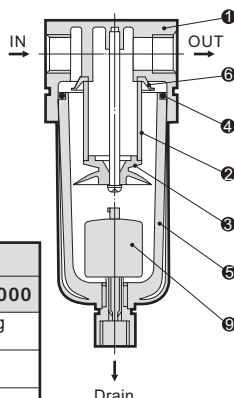
**Option: QAF2000~5000 air Filter with metal bowl.

Construction

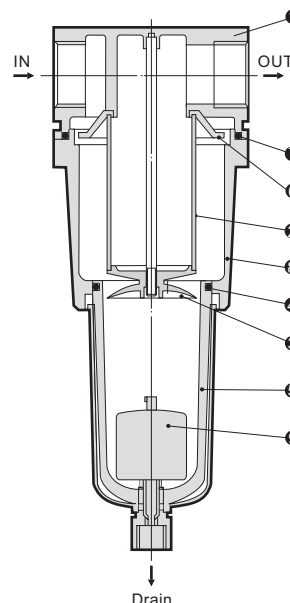
QAF1000~2000



QAF3000~4000



QAF5000



Parts List

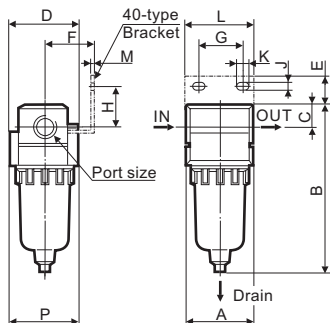
No.	Description	Material	
		QAF1000~2000	QAF3000~5000
1	Body	Die casting zinc	Die casting aluminum
2	Filter element	Bronze / PE	
3	Baffle	ABS	
4	O-ring	NBR	
5	Bowl assembly	Polycarbonate / Die casting aluminum	
6	Deflector	ABS	
7	O-ring	NBR	
8	Housing	Die casting aluminium	
9	Float	POM	

Order examples:

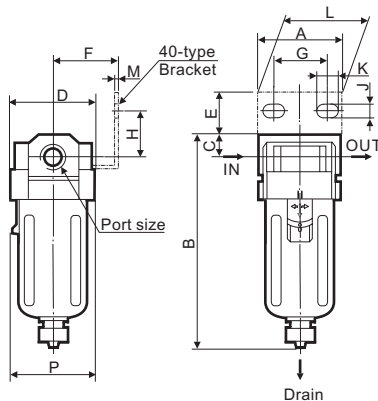
1. Need: QAF4000-04, with Metal bowl.
Model: QAF4000-04M
2. Need: QAF5000-10, with Metal bowl & auto drain.
Model: QAF5000-10DM

Dimensions (mm)

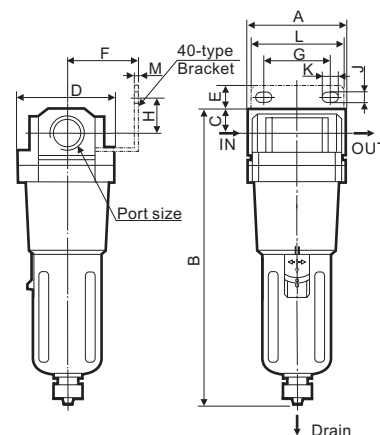
QAF1000~2000



QAF3000~4000



QAF5000



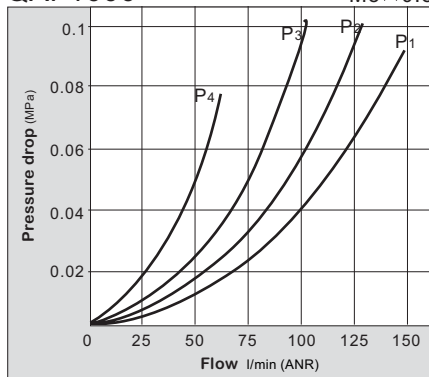
Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	P	With auto drain N.O(B)
QAF1000	M5×0.8	25	66	7	25	-	-	-	-	-	-	-	-	26.5	86.5
QAF2000	G1/8-G1/4	40	97.5	11	40	17	30	27	22	5.4	8.4	40	2.3	40	131.5
QAF3000	G1/4-G3/8	53	132.5	14	53	16	41	40	23	6.5	8	53	2.3	56	170.5
QAF4000	G3/8-G1/2	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.3	73	207.5
QAF4000-06	G3/4	75	172.5	20	70	14	50	54	25	8.5	10.5	70	2.3	73	210
QAF5000	G3/4-G1	90	247.5	24	90	23	70	66	35	11	13	90	3.2	-	286.5

Flow Characteristics

Supply Pressure P₁=0.7 Mpa

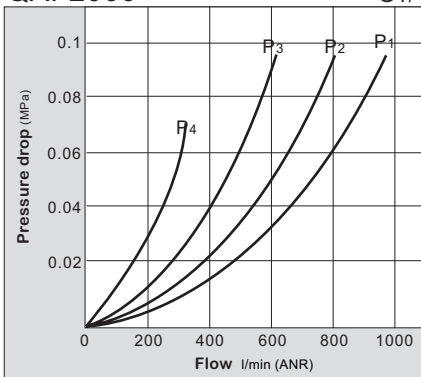
QAF1000

M5×0.8



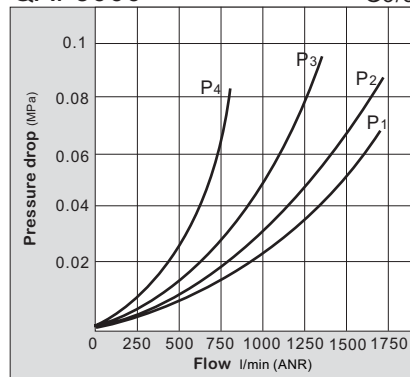
QAF2000

G1/4



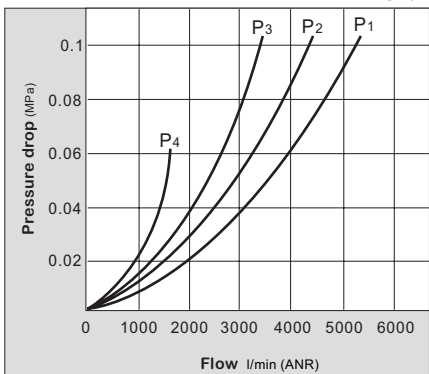
QAF3000

G3/8



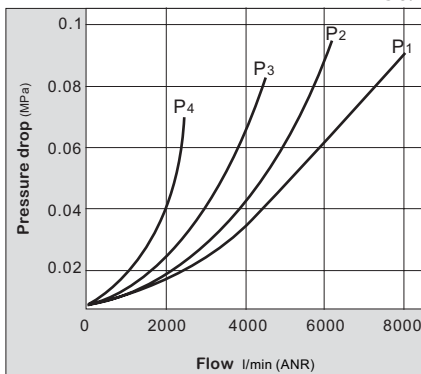
QAF4000

G1/2



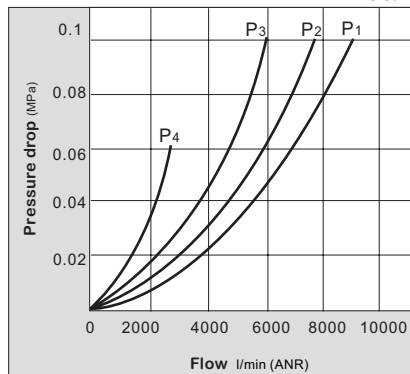
QAF4000-06

G3/4



QAF5000

G3/4


Option: P₁=0.7MPa P₂=0.5MPa P₃=0.3MPa P₄=0.1MPa

Regulator QAR1000~5000 Series

Symbol



Max. Operating pressure	1.0MPa
*Regulating range	QAR1000: 0.05~0.7MPa QAR2000~5000: 0.05~0.85MPa
Ambient and fluid temperature	5~60°C
Construction / Regulator	Relieving type

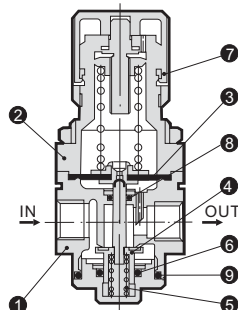
*Option: Regulating range 0.05~0.25MPa.

Model	Specifications				Accessories		
	**Max. Flow rate l/min (ANR)	Port size	Gauge port size	Weight kg	Pressure gauge	Bracket (One)	Diaphragm assembly
QAR1000-M5	100	M5×0.8	G1/16	0.08	QG27-10-R1	B120	1349161A
QAR2000-01	550	G1/8	G1/8	0.27	QG36-10-01	B220	
QAR2000-02	550	G1/4		0.27		B220	
QAR2500-02	2000	G1/4		0.27		B220	
QAR2500-03	2000	G3/8		0.27		B220	
QAR3000-02	2500	G1/4		0.41		B320	131515A
QAR3000-03	2500	G3/8		0.41		B320	
QAR4000-03	6000	G3/8	G1/4	0.84	QG46-10-02	B420	131614A
QAR4000-04	6000	G1/2		0.84		B420	
QAR4000-06	6000	G3/4		0.94		B420	
QAR5000-06	8000	G3/4		1.19		B640	
QAR5000-10	8000	G1		1.19		B640	

**Conditions: Supply pressure 0.7MPa, Setting pressure 0.5MPa.

Construction / Parts List

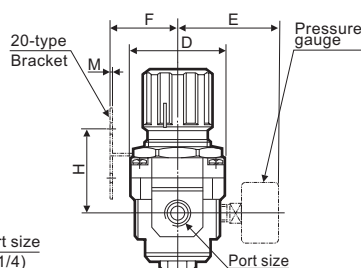
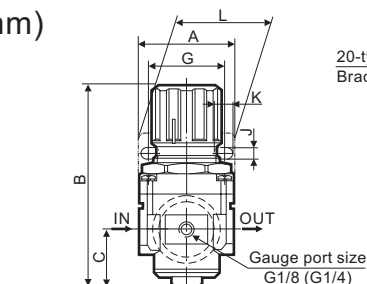
QAR1000~5000



No.	Description	Material		
		QAR1000~2000	QAR2500~3000	QAR4000~5000
1	Body	Die casting zinc	Die casting aluminium	
2	Bonnet	Reinforced nylon		Die casting aluminium
3	Diaphragm ass'y	NBR		
4	Valve ass'y	Brass / NBR		
5	Valve spring	Stainless steel		
6	Valve O-ring	NBR		
7	Knob	POM		
8	O-ring	NBR		
9	O-ring	NBR		

Dimensions (mm)

QAR1000~5000



Panel cut hole



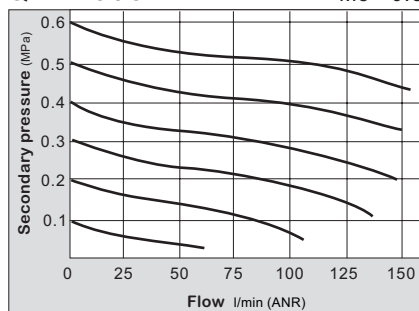
QAR1000-3000:Max. 3.5t
QAR4000-5000:Max. 5t

Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N
QAR1000	M5×0.8	25	61.5	11	25	26	25	28	30	4.5	6.5	40	2	20.5
QAR2000	G1/8-G1/4	40	95	17	40	56.8	30	34	45	5.4	15.4	55	2.3	33.5
QAR2500	G1/4-G3/8	53	102.5	25	48	60.8	30	34	44	5.4	15.4	55	2.3	33.5
QAR3000	G1/4-G3/8	53	127.5	35	53	60.8	41	40	46	6.5	8	53	2.3	42.5
QAR4000	G3/8-G1/2	70	149.5	37.5	70	65.5	50	54	54	8.5	10.5	70	2.3	52.5
QAR4000-06	G3/4	75	154.5	40.5	70	69.5	50	54	56	8.5	10.5	70	2.3	52.5
QAR5000	G3/4-G1	90	168	48	90	75.5	70	66	65.8	11	13	90	3.2	52.5

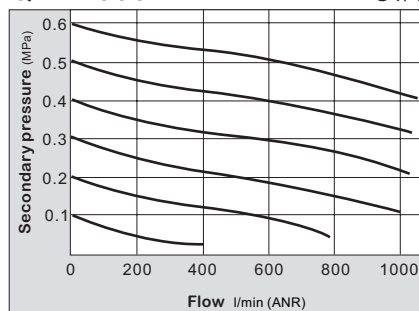
Flow Characteristics

Supply Pressure $P_1=0.7$ Mpa

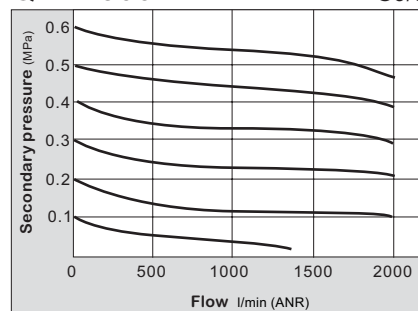
QAR1000 M5×0.8



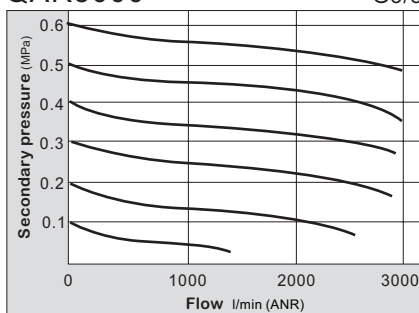
QAR2000 G1/4



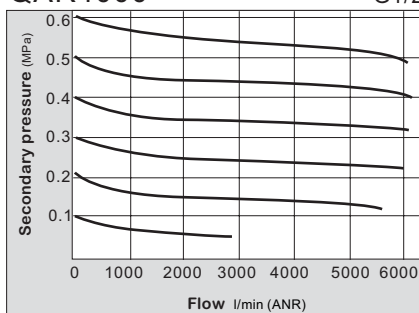
QAR2500 G3/8



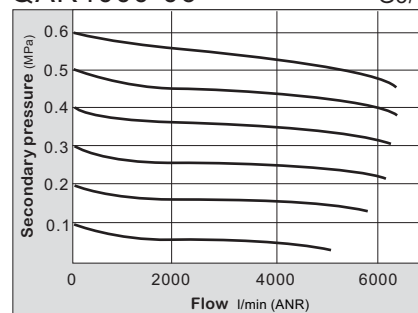
QAR3000 G3/8



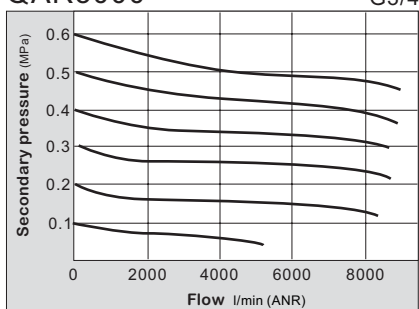
QAR4000 G1/2



QAR4000-06 G3/4



QAR5000 G3/4



Pressure Characteristics

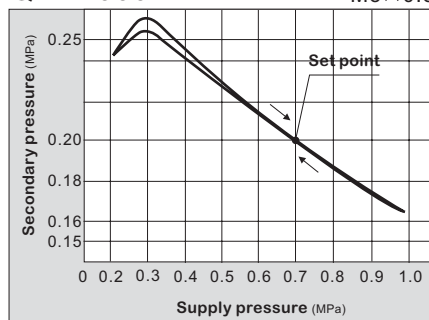
Supply Pressure
 $P_1 = 0.7 \text{ MPa}$

Secondary Pressure
 $P_2 = 0.2 \text{ MPa}$

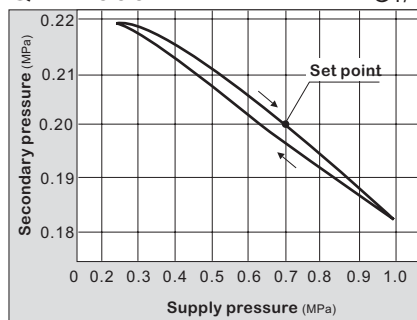
Flow Rate
 $Q = 20 \text{ NI/min}$

2

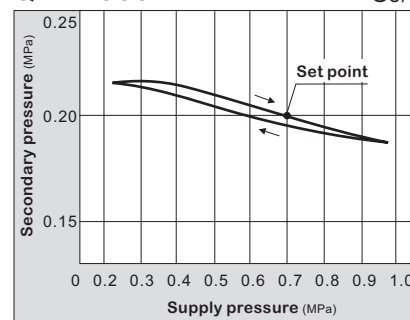
QAR1000 M5×0.8



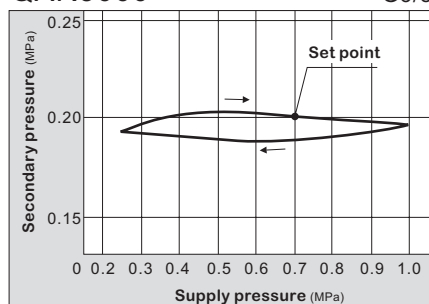
QAR2000 G1/4



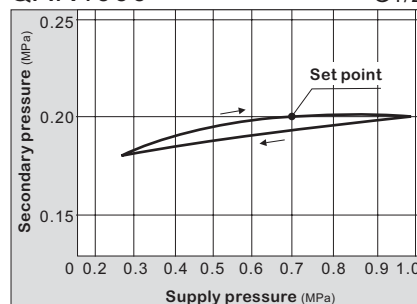
QAR2500 G3/8



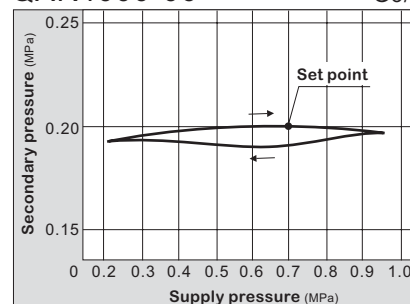
QAR3000 G3/8



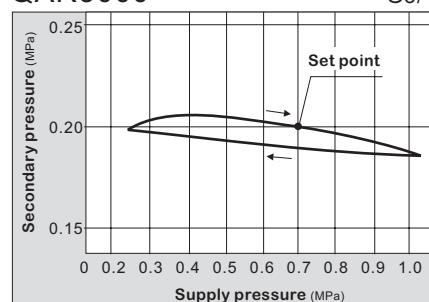
QAR4000 G1/2



QAR4000-06 G3/4



QAR5000 G3/4



Lubricator QAL1000~5000 Series

Symbol



With metal bowl.

Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
Recommended oil	Turbine oil #1 (ISO VG32)
*Bowl material	Polycarbonate / Die casting aluminum (metal bowl)
Bowl guard	QAL1000~2000(W/O) QAL3000~5000(W)

Model	Specifications					Accessories	Spare part	
	Min operating flow l/min (ANR)	*Max. Flow rate l/min (ANR)	Port size	Bowl capacity cm ³	Weight kg	Bracket (One)	Bowl assembly	Sight dome assembly
QAL1000-M5	4	95	M5×0.8	7	0.07	-	C100L	12132
QAL2000-01	15	800	G1/8	25	0.22	B240	C200L	12316
QAL2000-02	15	800	G1/4	25	0.22	B240	C200L	
QAL3000-02	30	1700	G1/4	50	0.30	B340	C300L	12155A
QAL3000-03	40	1700	G3/8	50	0.30	B340	C300L	
QAL4000-03	40	5000	G3/8	130	0.56	B440	C400L	
QAL4000-04	50	5000	G1/2	130	0.56	B440	C400L	
QAL4000-06	50	6300	G3/4	130	0.58	B540	C400L	
QAL5000-06	190	7000	G3/4	130	1.08	B640	C400L	
QAL5000-10	190	7000	G1	130	1.08	B640	C400L	

**Conditions: Supply pressure 0.5MPa,
Number of drop 5 drops/min, ISO VG32, 20°C.

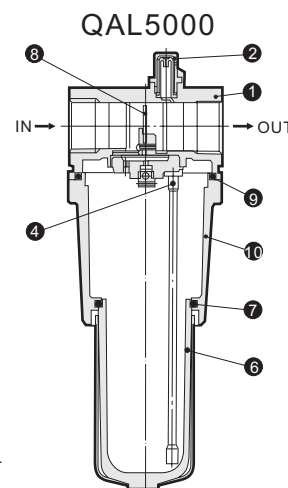
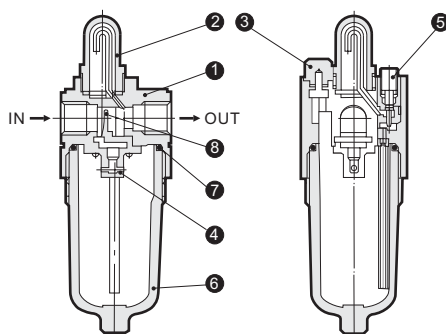
***Conditions: Supply pressure 0.5MPa, Pressure drop 0.03MPa.

*Option: QAL2000~5000 Lubricator with metal bowl.

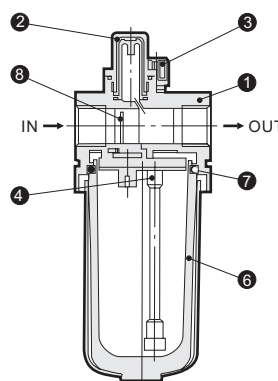
Order examples:
Need: QAL4000-04, with Metal bowl.
Model: QAL4000-04M

Construction

QAL1000~2000



QAL3000~4000

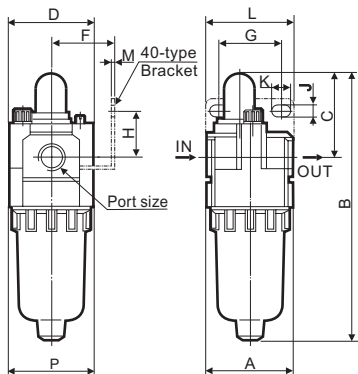


Parts List

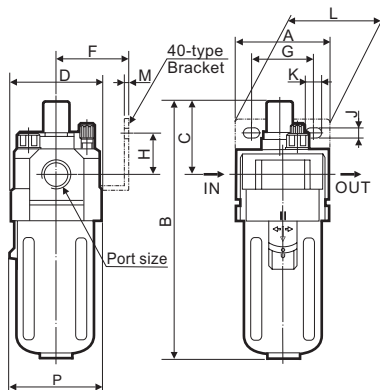
No.	Description	Material		
		QAL1000~2000	QAL3000~4000	QAL5000
1	Body	Die casting zinc	Die casting aluminium	
2	Sight dome ass'y	Polycarbonate		
3	Filler cup ass'y	POM (Black)		
4	Oil pipe Ass'y	ABS		
5	Adj. Screw Assy	Brass / ABS		
6	Bowl ass'y	Polycarbonate / Die casting aluminium		
7	Bowl O-ring	NBR		
8	Damper	PU		
9	Housing O-ring	NBR		
10	Housing	-		Die casting aluminium

Dimensions (mm)

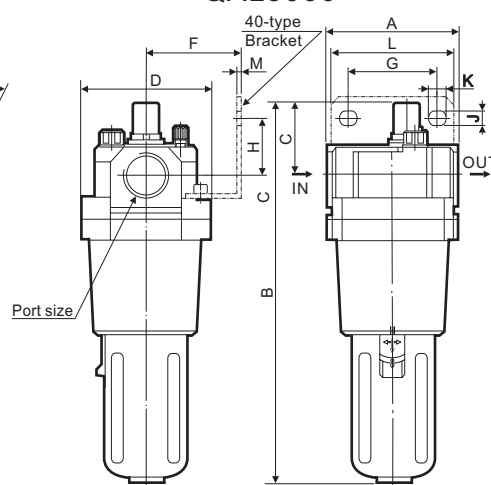
QAL1000~2000



QAL3000~4000



QAL5000

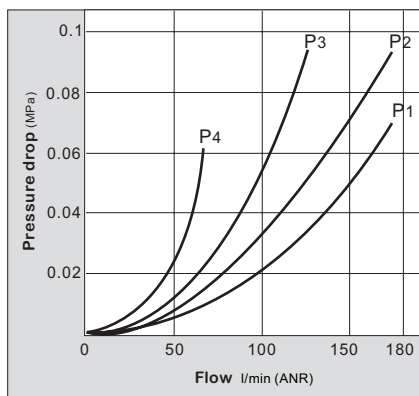


Model	Port size	A	B	C	D	F	G	H	J	K	L	M	P
QAL1000	M5×0.8	25	81.5	25.5	25	-	-	-	-	-	-	-	27
QAL2000	G1/8-G1/4	40	122	38	40	30	27	22	5.4	8.4	40	2.3	40
QAL3000	G1/4-G3/8	53	142	38	53	41	40	23	6.5	8	53	2.3	56
QAL4000	G3/8-G1/2	70	177	41	70	50	54	26	8.5	10.5	70	2.3	73
QAL4000-06	G3/4	75	177	39	70	50	54	25	8.5	10.5	70	2.3	73
QAL5000	G3/4-G1	90	254	45	90	70	66	35	11	13	90	3.2	-

Flow Characteristics

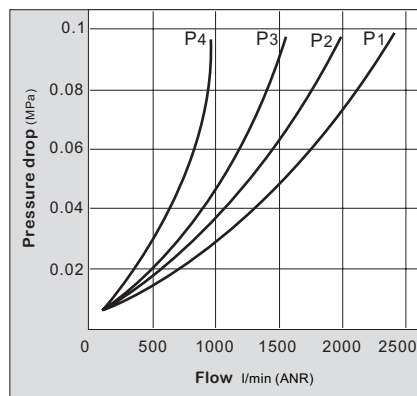
QAL1000

M5×0.8



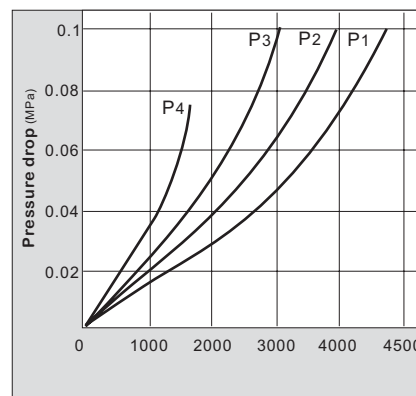
QAL2000

G1/4



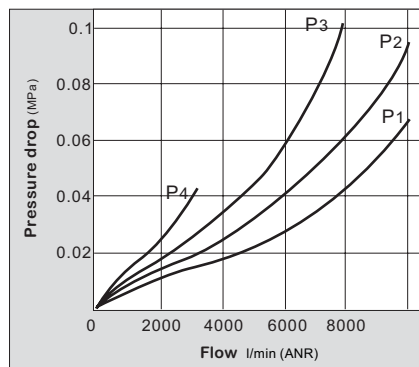
QAL3000

G3/8



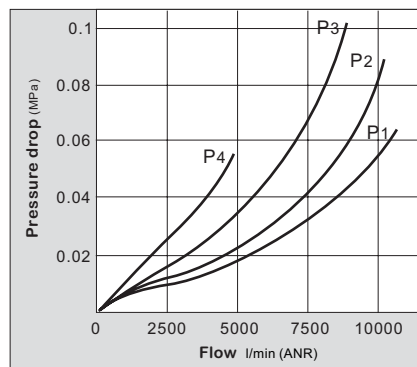
QAL4000

G1/2



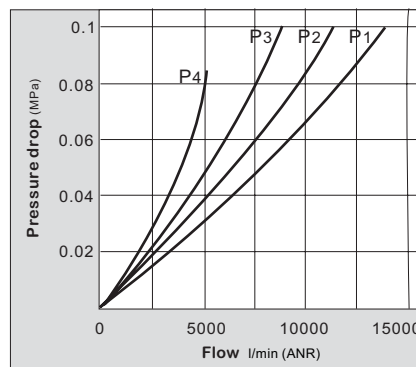
QAL4000-06

G3/4



QAL5000

G3/4



Conditions: P1=0.7MPa P2=0.5MPa

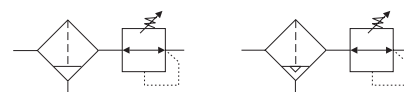
P3=0.3MPa P4=0.1MPa

Filter Regulator QAW1000~4000 Series



With metal bowl.

Symbol



Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
*Filtration	25 μm
**Bowl material	Polycarbonate / Die casting aluminum (metal bowl)
Bowl guard	QAW1000~2000(W/O) QAL2500~5000(W)
Regulating range	QAW1000: 0.05~0.7MPa QAW2000~4000: 0.05~0.85MPa
Construction/Regulator	Relieving type

*Option: 5、50 μm

Model		Specifications				Accessories		Spare part		
Manu.	Auto.	***Max. Flow rate l/min (ANR)	Port size	Gauge port size	Weight kg	Bracket (One)	Pressure gauge	Filter element	Bowl assembly	
									Manu.	Auto.
QAW1000-M5	-	100	M5×0.8	G1/16	0.09	B120	QG27-10-R1	11134-5B	C100F	-
QAW2000-01	QAW2000-01D	550	G1/8	G1/8	0.36	B220	QG36-10-01	11294-25B	C200F	AD62.0
QAW2000-02	QAW2000-02D	550	G1/4	G1/8	0.36	B220		11294-25B	C200F	AD62.0
QAW3000-02	QAW3000-02D	2000	G1/4	G1/8	0.56	B320		111511-25B	C300F	AD43.0
QAW3000-03	QAW3000-03D	2000	G3/8	G1/8	0.56	B320		111511-25B	C300F	AD43.0
QAW4000-03	QAW4000-03D	4000	G3/8	G1/4	1.15	B420	QG46-10-02	11104-25B	C400F	AD43.1
QAW4000-04	QAW4000-04D	4000	G1/2	G1/4	1.15	B420		11104-25B	C400F	AD43.1
QAW4000-06	QAW4000-06D	4500	G3/4	G1/4	1.21	B420		11104-25B	C400F	AD43.1

***Conditions: Supply pressure 0.7MPa, Setting pressure 0.5MPa.

**Option: QAW2000~4000 Filter Regulator with metal bowl.

Order examples:

1. Need: QAW2000-02, with Metal bowl.

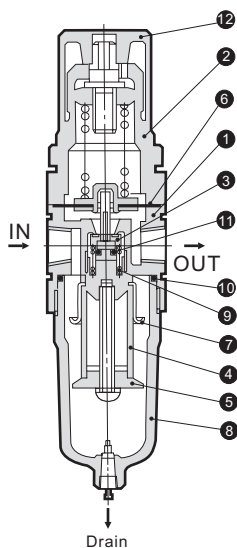
Model: QAW2000-02M

2. Need: QAW4000-04, with Metal bowl & auto drain.

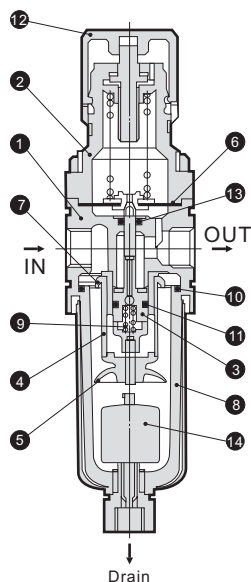
Model: QAW4000-04DM

Construction

QAW1000~2000



QAW3000~4000

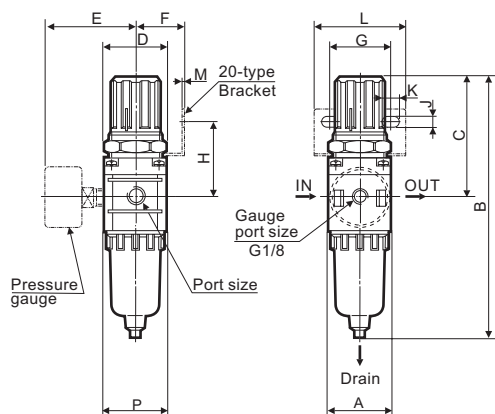


Parts List

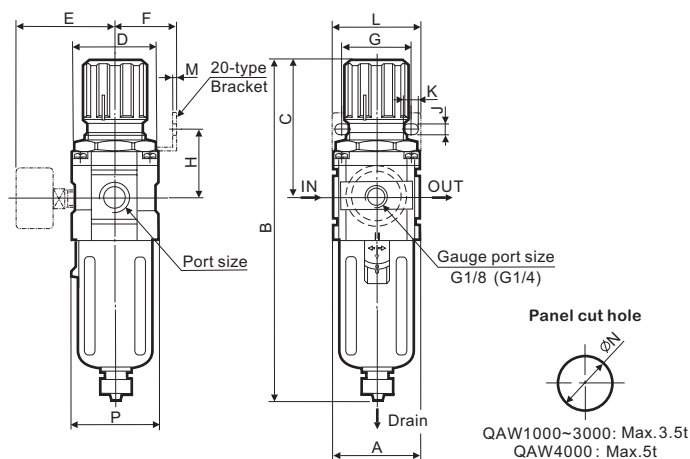
No.	Description	Material		
		QAW1000~2000	QAW3000	QAW4000
1	Body	Die casting zinc	Die casting aluminium	
2	Bonnet	Reinforced nylon		Die casting aluminium
3	Valve ass'y	Brass/NBR		
4	Filter element	Bronze / PE		
5	Baffle	ABS		
6	Diaphragm ass'y	NBR		
7	Deflector	ABS		
8	Bowl ass'y	Polycarbonate / Die casting aluminium		
9	Valve spring	Stainless steel		
10	Case O-ring	NBR		
11	Valve O-ring	NBR		
12	Knob	POM		
13	O-ring	NBR		
14	Float	POM		

Dimensions (mm)

QAW1000~2000



QAW3000~4000

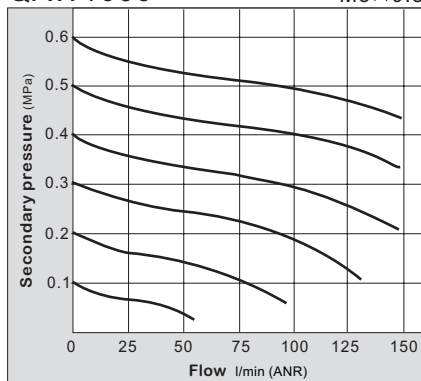


Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	with Auto. Drain B
QAW1000	M5 × 0.8	25	109.5	50.5	25	26	25	28	30	4.5	6.5	40	2.0	20.5	28	130
QAW2000	G1/8-G1/4	40	164.5	78	40	56.8	30	34	45	5.4	15.4	55	2.3	33.5	40	198.5
QAW3000	G1/4-G3/8	53	211	92.5	53	60.8	41	40	46	6.5	8.0	53	2.3	42.5	56	249
QAW4000	G1/2	70	262.5	112	70	70.5	50	54	54	8.5	10.5	70	2.3	52.5	73	301.5
QAW4000-06	G3/4	75	267	114	70	70.5	50	54	56	8.5	10.5	70	2.3	52.5	73	306

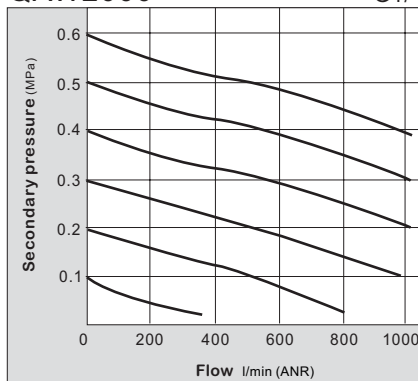
Flow Characteristics

Supply Pressure $P_1=0.7\text{MPa}$

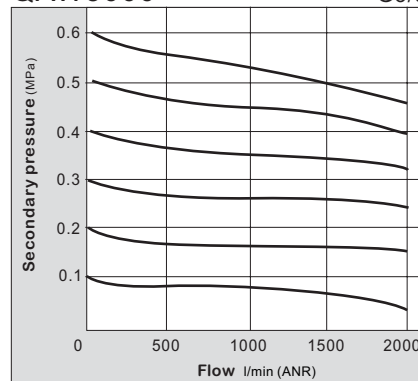
QAW1000 M5×0.8



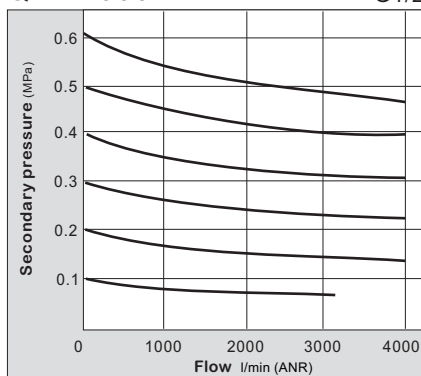
QAW2000 G1/4



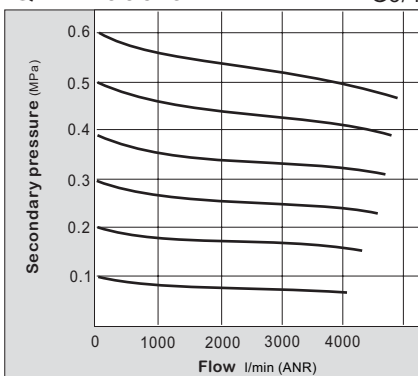
QAW3000 G3/8



QAW4000 G1/2



QAW4000-6 G3/4



Pressure Characteristics

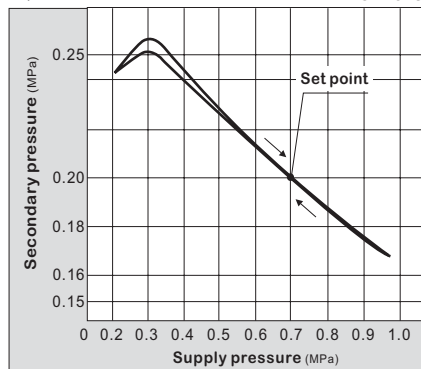
Supply Pressure
 $P_1 = 0.7 \text{ MPa}$

Secondary Pressure
 $P_2 = 0.2 \text{ MPa}$

Flow Rate
 $Q = 20 \text{ NI/min}$

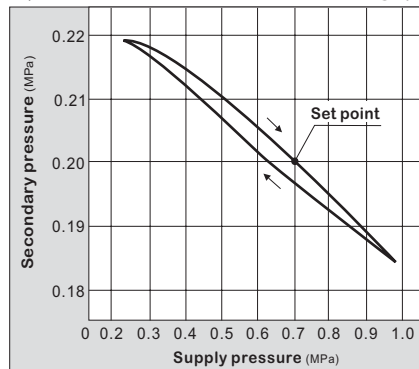
QAW1000

M5×0.8



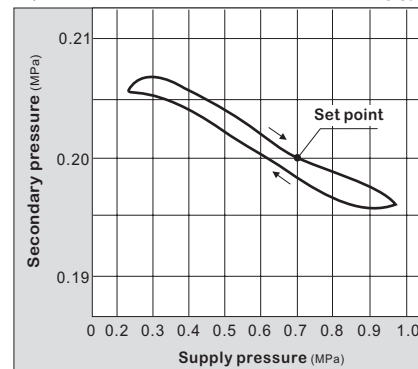
QAW2000

G1/4



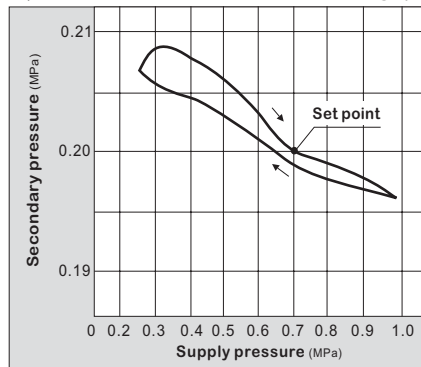
QAW3000

G3/8



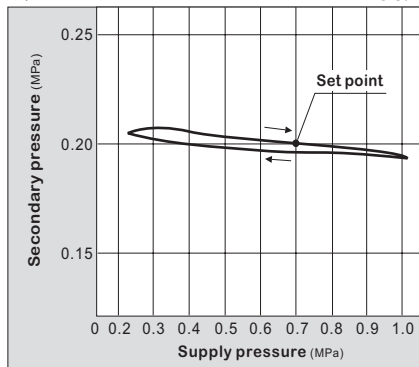
QAW4000

G1/2



QAW4000-06

G3/4



Precision Regulator QPJM2000 Series

Symbol



Model	QPJM2010-02	QPJM2020-02
Max. Operating pressure	1.0MPa	
*Min. Operating pressure	Set pressure + 0.05MPa	
Setting pressure range	0.005~0.4MPa	0.005~0.8MPa
Sensitivity	$\leq 0.2\%$ (full-scale)	
Repeatability	$\leq \pm 0.5\%$ (full-scale)	
**Air consumption	Operating pressure 1.0MPa: 4l/min.(max.) Operating pressure 0.7MPa: 3l/min.(max.)	
Ambient and fluid temperature	-5~60°C	

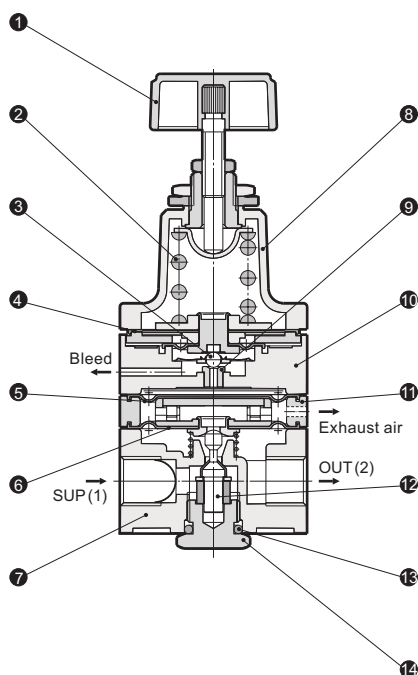
*Always keep Min. operating pressure higher than set pressure by 0.05 Mpa.

**Air is always bleeding to atmosphere

Model	Specifications			Accessories	
	Port size	Gauge port size	Weight kg	Pressure gauge	Bracket (One)
QPJM2010-02	G1/4	G1/8	0.30	QG36-04-01	P220
QPJM2020-02				QG36-10-01	

Construction

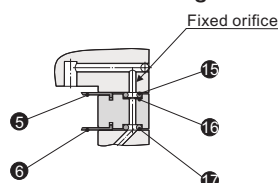
QPJM2000-02



Parts List

No.	Description	Material
1	Knob	POM
2	spring	65Mn
3	steel ball	GCr15
4	Diaphragm A	NBR
5	Diaphragm B	NBR
6	Diaphragm C	NBR
7	Body	Die casting aluminium
8	Bonnet	Die casting aluminium
9	Nozzle	LY12
10	Diaphragm seat A	Die casting aluminium
11	Diaphragm seat B	POM
12	Main valve	Stainless steel
13	O-ring	NBR
14	Valve guide	HPb59-1
15	O-ring	NBR
16	Throttle	Stainless steel
17	O-ring	NBR

SUP Side Passage



Flow Characteristics

Supply Pressure = P_1

Relieving Characteristics

Back Pressure = P_2

Pressure Characteristics

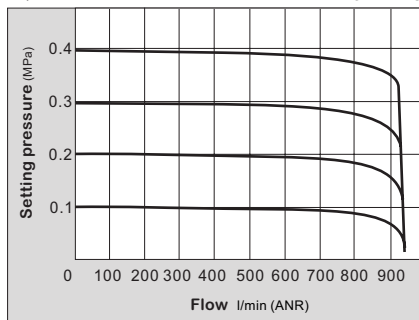
Supply Pressure $P_1=0.7\text{MPa}$

Setting Pressure $P_2=0.2\text{MPa}$

Flow $Q=0\text{Nl/min}$

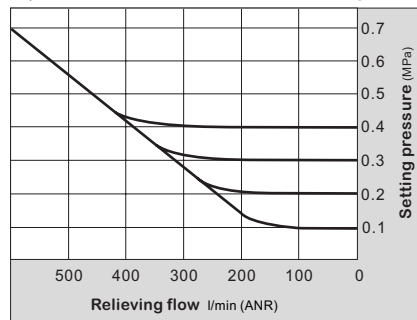
QPJM2010-02

$P_1=0.7\text{MPa}$

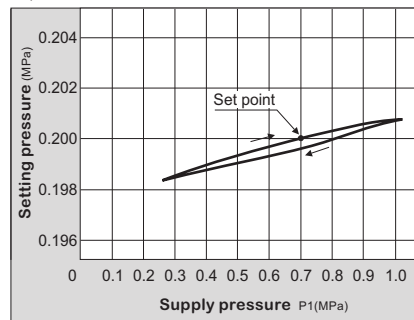


QPJM2010-02

$P_2=0.7\text{MPa}$

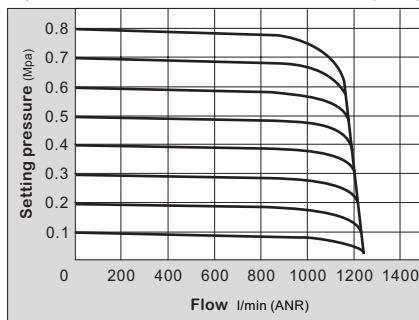


QPJM2010-02



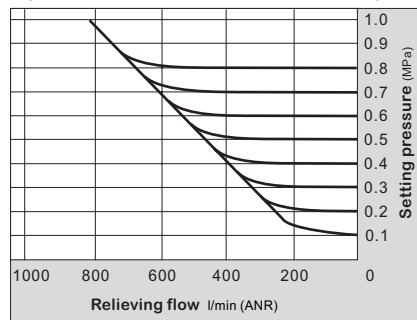
QPJM2020-02

$P_1=1.0\text{MPa}$

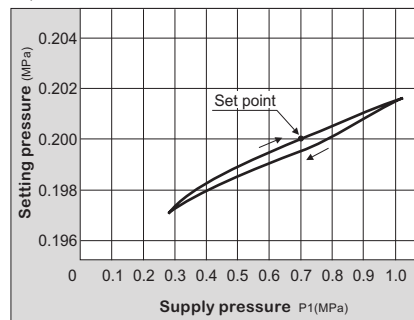


QPJM2020-02

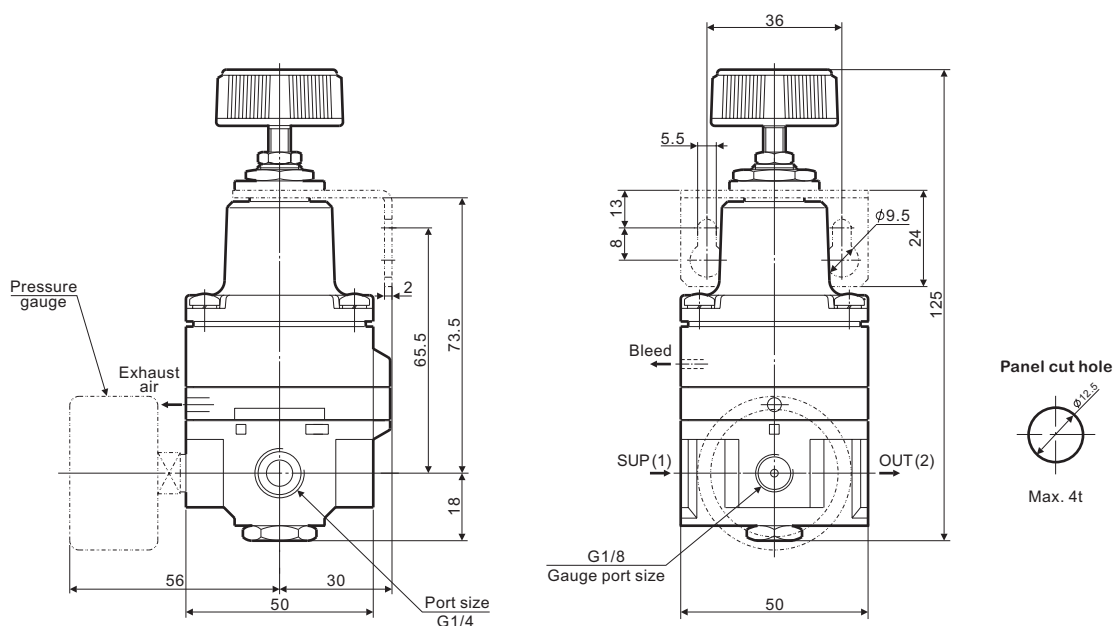
$P_2=1.0\text{MPa}$



QPJM2020-02

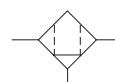


Dimensions (mm)



Maicro Mist Separator QAFD3000~4000 Series

Symbol



With Auto Drain



Max. Operating pressure	1.0MPa
*Min. Operating pressure	0.05MPa
Ambient and fluid temperature	5~60°C
Particle size Collection	95%
Filtration	0.01 μm
Drain type	Manu. / Auto.
**Bowl material	Polycarbonate (With bowl guard) / Die casting aluminum (metal bowl)
Element life	2 years or pressure drop reaches 0.1MPa

*It should be 0.15 MPa when auto drain is used.

Model		Specifications				Accessories				
		***Max. Flow rate l/min (ANR)	Port size	Bowl capacity cm ³	Weight kg	Bracket (One)	Filter element (Blue)		Bowl assembly	
Manu.	Auto.						Manu.	Auto.	Manu.	Auto.
QAFD3000-02	QAFD3000-02D	240	G1/4	20	0.30	B340	FD3	FD3D	C300F	AD43
QAFD3000-03	QAFD3000-03D		G3/8							
QAFD4000-03	QAFD4000-03D	600	G3/8	45	0.55	B440	FD4	FD4D	C400F	
QAFD4000-04	QAFD4000-04D		G1/2							

***Condition: Supply pressure 0.7MPa.

**Option: QAFD3000~4000 Maicro Mist Separator with metal bowl.

Order examples:

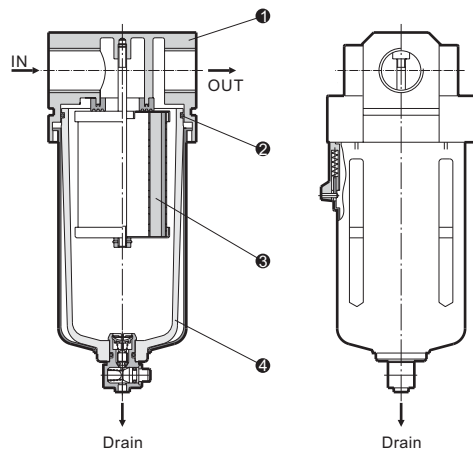
1. Need: QAFD4000-04, with metal bowl.

Model: QAFD4000-04M

2. Need: QAFD3000-03, with metal bowl & auto drain.

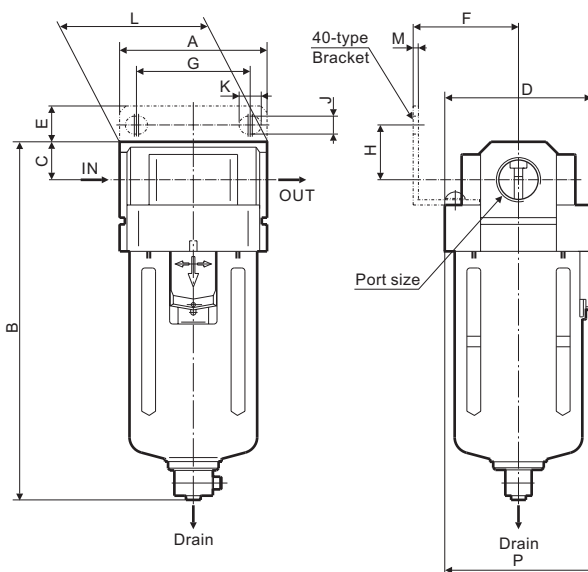
Model: QAFD3000-03DM

Construction



Dimensions (mm)

QAFD3000~4000



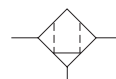
Parts List

No.	Description	Material
1	Body	Die casting aluminum
2	O-ring	NBR
3	Filter element	-
4	Bowl assembly	Polycarbonate / Die casting aluminum

Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	P
QAFD3000-02	G1/4	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAFD3000-03	G3/8	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAFD4000-03	G3/8	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73
QAFD4000-04	G1/2	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73

Mist Separator QAFM3000~4000 Series

Symbol



With Auto Drain



Max. Operating pressure	1.0MPa
*Min. Operating pressure	0.05MPa
Ambient and fluid temperature	5~60°C
Particle size collection	95%
Filtration	0.3 μm
Drain type	Manu. / Auto.
**Bowl material	Polycarbonate (With bowl guard) / Die casting aluminum (metal bowl)
Element life	2 years or pressure drop reaches 0.1MPa

*It should be 0.15 MPa when auto drain is used.

2

Model		Specifications				Accessories				
		***Max. Flow rate l/min (ANR)	Port size	Bowl capacity cm³	Weight kg	Bracket (One)	Filter element (Red)		Bowl assembly	
Manu.	Auto.						Manu.	Auto.	Manu.	Auto.
QAFM3000-02	QAFM3000-02D	450	G1/4	20	0.30	B340	FM3	FM3D	C300F	AD43
QAFM3000-03	QAFM3000-03D		G3/8							
QAFM4000-03	QAFM4000-03D	1100	G3/8	45	0.55	B440	FM4	FM4D	C400F	
QAFM4000-04	QAFM4000-04D		G1/2							

***Condition: Supply pressure 0.7MPa.

**Option: QAFM3000~4000 Mist Separator with metal bowl.

Order examples:

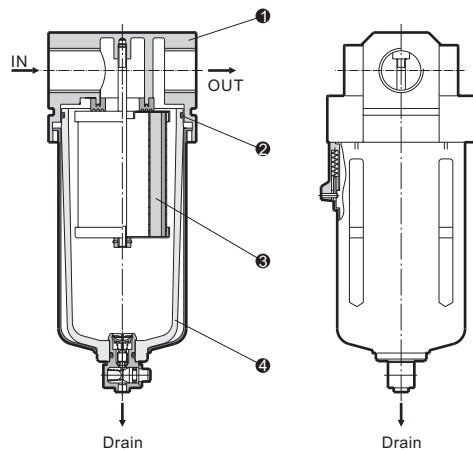
1. Need: QAFM3000-03, with metal bowl.

Model: QAFM3000-03M

2. Need: QAFM4000-04, with metal bowl & auto drain.

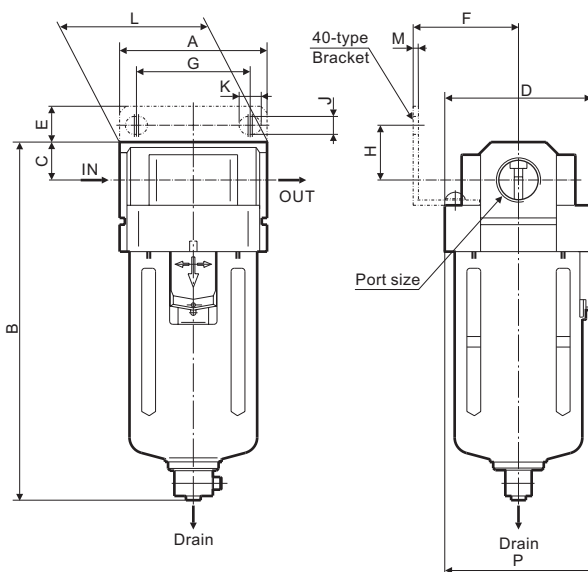
Model: QAFM4000-04DM

Construction



Dimensions (mm)

QAFM3000~4000



Parts List

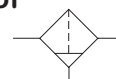
No.	Description	Material
1	Body	Die casting aluminum
2	O-ring	NBR
3	Filter element	-
4	Bowl assembly	Polycarbonate / Die casting aluminum

Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	P
QAFM3000-02	G1/4	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAFM3000-03	G3/8	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAFM4000-03	G3/8	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73
QAFM4000-04	G1/2	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73

Water Separator

QAMG3000~4000 Series

Symbol



With Auto Drain



Max. Operating pressure	1.0MPa
*Min. Operating pressure	0.05MPa
Ambient and fluid temperature	5~60°C
Removal rate of water	99%
Drain type	Manu. / Auto.
**Bowl material	Polycarbonate (With bowl guard) / Die casting aluminum (metal bowl)
Element life	2 years or pressure drop reaches 0.1MPa

*It should be 0.15 MPa when auto drain is used.

Model		Specifications				Accessories				
		***Max. Flow rate l/min (ANR)	Port size	Bowl capacity cm³	Weight kg	Bracket (One)	Filter element		Bowl assembly	
Manu.	Auto.						Manu.	Auto.	Manu.	Auto.
QAMG3000-02	QAMG3000-02D	300	G1/4	20	0.40	B340	MG3	MG3D	C300F	AD43
QAMG3000-03	QAMG3000-03D		G3/8							
QAMG4000-03	QAMG4000-03D	750	G3/8	45	0.58	B440	MG4	MG4D	C400F	
QAMG4000-04	QAMG4000-04D		G1/2							

***Condition: Supply pressure 0.7MPa.

**Option: QAMG3000~4000 Water Separator with metal bowl.

Order examples:

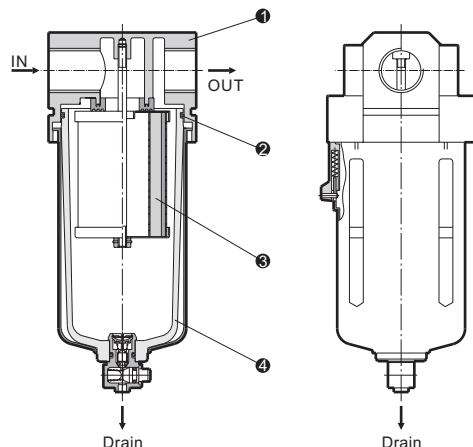
1. Need: QAMG3000-02, with metal bowl.

Model: QAMG3000-02M

2. Need: QAMG4000-03, with metal bowl & auto drain.

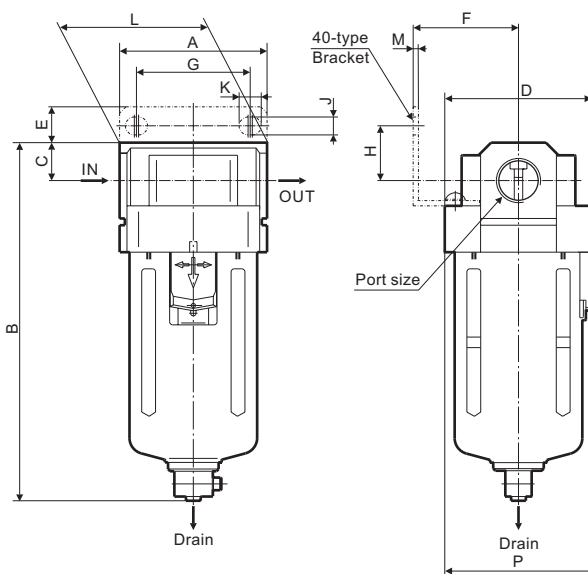
Model: QAMG4000-03DM

Construction



Dimensions (mm)

QAMG3000~4000



Parts List

No.	Description	Material
1	Body	Die casting aluminum
2	O-ring	NBR
3	Filter element	-
4	Bowl assembly	Polycarbonate / Die casting aluminum

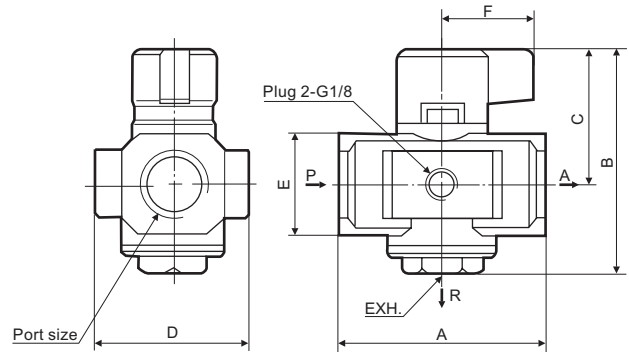
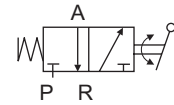
Model	Port size	A	B	C	D	E	F	G	H	J	K	L	M	P
QAMG3000-02	G1/4	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAMG3000-03	G3/8	53	132.5	14	53	16	41	40	23	6.5	8	53	2.5	56
QAMG4000-03	G3/8	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73
QAMG4000-04	G1/2	70	168.5	18	70	17	50	54	26	8.5	10.5	70	2.5	73

3-Port Relieving Shut-off Valve

QVHS2000~4000 Series



Symbol



Model / Size / Dimensions (mm)

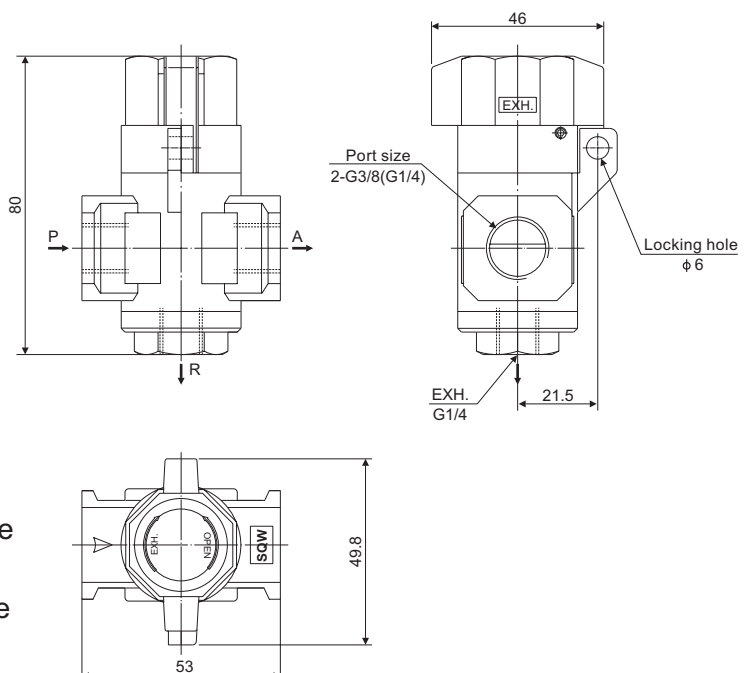
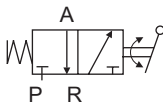
Model	P, A Port size	R Port size	A	B	C	D	E	F
QVHS2000-01	G1/8	G1/8	40	56	36	28	22	25
QVHS2000-02	G1/4	G1/8	40	56	36	28	22	25
QVHS3000-02	G1/4	G1/4	53	74	45	48	28	30
QVHS3000-03	G3/8	G1/4	53	74	45	48	28	30
QVHS4000-03	G3/8	G3/8	70	80	48	54	36	30
QVHS4000-04	G1/2	G3/8	70	80	48	54	36	30

The shut-off valve relieves the downstream pressure for servicing and calibrating.

3-Port Relieving Shut-off Valve (With Locking hole)

QVHL3000-03(02) Type

Symbol



When in the exhaust position, the valve may be padlock secured. Prevents accidental start-ups while personnel are cleaning or servicing equipment. Combination with a modular style FRL is possible.

Pressure Switch QIS1000M Series Specifications

Fluid	Filtered compressed air
Max. operating pressure	0.7MPa
Setting range (off)	0.1~0.4MPa
Differential pressure	<0.08MPa
Ambient and fluid temperature	5~60°C

Characteristics

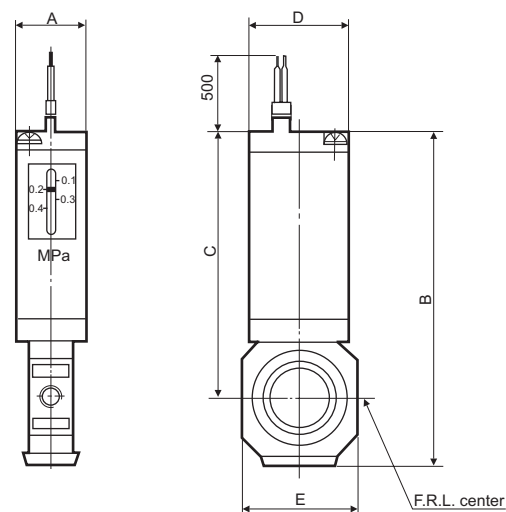
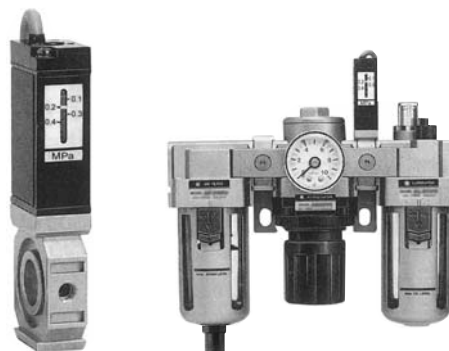
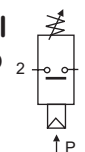
Type of actuation	N.O
Operating voltage	24~220V
Max. operating current	1000mA
Max. switch capacity	10W(VA)
Response time	<1.0ms

Model / Dimensions (mm)

Model	A	B	C	D	E	Applicable model
QIS1000M-2Y	15	73.5	62.5	23	28	QAC2000
QIS1000M-3Y	15	82	64.9	23	29	QAC2500、QAC3000
QIS1000M-4Y	15	88.7	67.9	23	35	QAC4000
QIS1000M-5Y	15	91	71	23	44	QAC4000-06
QIS1000M-6Y	15	100	72.5	23	54	QAC5000

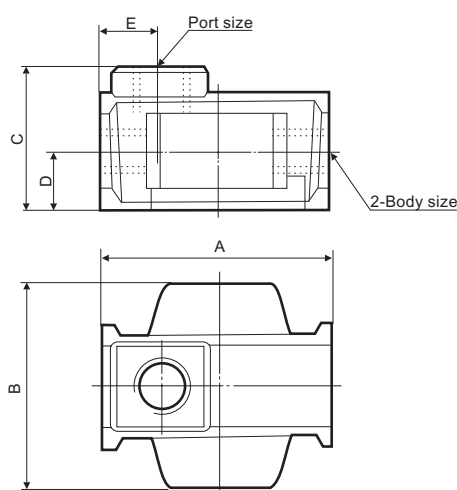
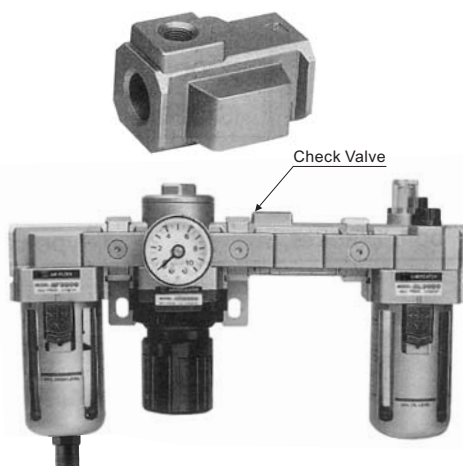
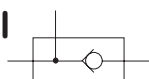
Symbol

Type: N.O



Check Valve QAKM2000~4000 Series

Symbol

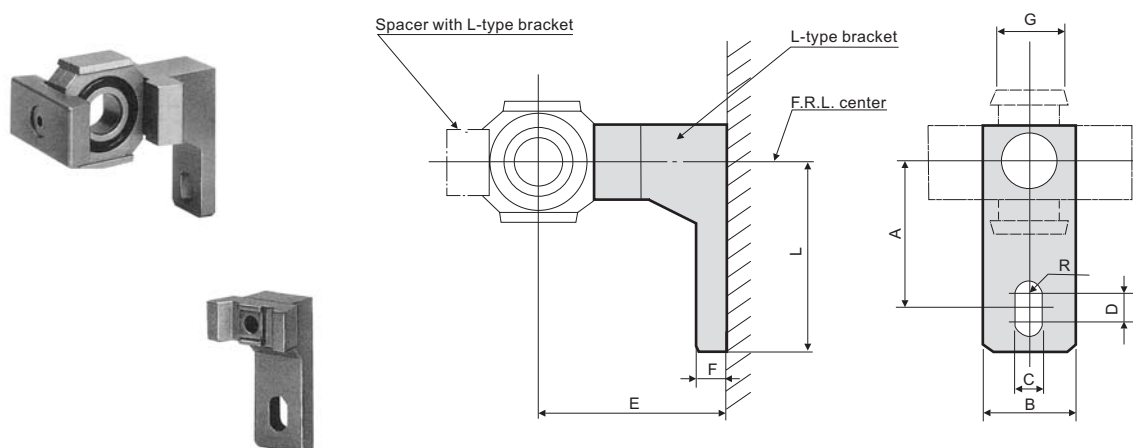


Model / Size / Dimensions (mm)

Model	Body size	Port size	A	B	C	D	E	Applicable model
QAKM2000-01	G1/8	G1/8	40	40	28	11	11	QAC2000 QAC2010
QAKM2000-02	G1/4	G1/4	40	40	28	11	11	
QAKM3000-02	G1/4	G1/8	53	48	34	14	13	QAC2500 QAC2510 QAC3000 QAC3010
QAKM3000-03	G3/8	G1/4	53	48	34	14	13	
QAKM4000-03	G3/8	G1/4	70	54	42	18	15	QAC4000 QAC4010
QAKM4000-04	G1/2	G3/8	70	54	42	18	15	

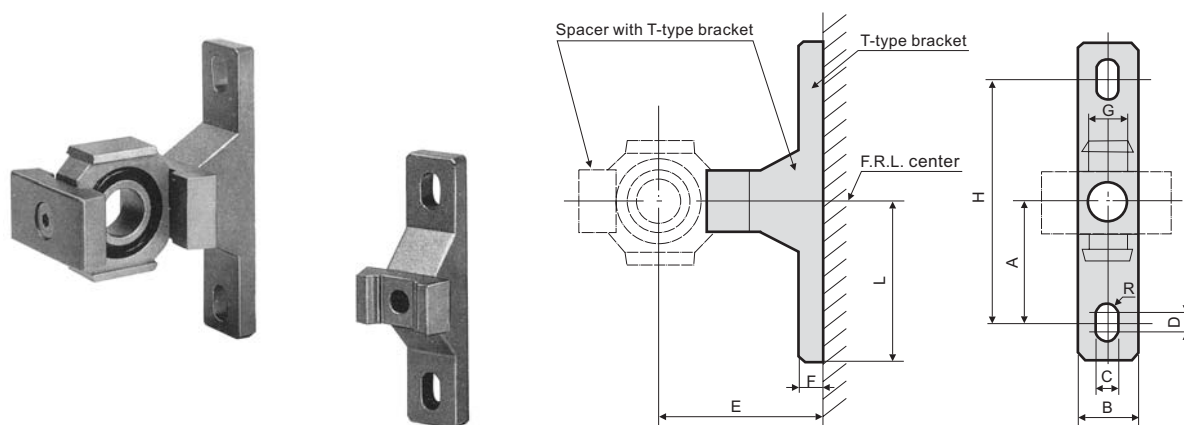
Accessory

L-type Bracket / Spacer with L-type Bracket



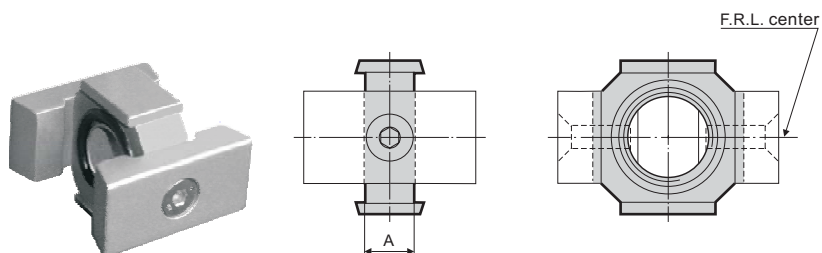
L-type Bracket	Spacer with L-type bracket	A	B	C	D	E	F	G	R	L	Applicable model
B110L	Y10L	20	12	4.5	3	25	5	6	2.25	27	AC1000-M5
B210L	Y20L	24	15	5.5	3	30	5	10	2.75	33	QAC2000-01/02
B310L	Y30L	35	16	7	4	41	7	11	3.5	45	QAC2500-02/03 QAC3000-02/03
B410L	Y40L	40	22	9	4	50	7	14	4.5	50	QAC4000
B510L	Y50L	40	22	9	4	50	7	14	4.5	50	QAC4000-06
B610L	Y60L	50	24	12	4	70	10	15	6	62.5	QAC5000-06/10

T-type Bracket / Spacer with T-type Bracket



T-type Bracket	Spacer with T-type bracket	A	B	C	D	E	F	G	H	R	L	Applicable model
B110T	Y10T	20	12	4.5	3	25	5	8	40	2.25	27	QAC1000 QAC1010
B210T	Y20T	24	15	5.5	3	30	5	10	40	2.75	33	QAC2000 QAC2010
B310T	Y30T	35	16	7	4	41	7	11	70	3.5	45	QAC3000 QAC3010
B410T	Y40T	40	22	9	4	50	7	14	80	4.5	50	QAC4000 QAC4010
B510T	Y50T	40	22	9	4	50	7	14	80	4.5	50	QAC4000-06 QAC4010-06

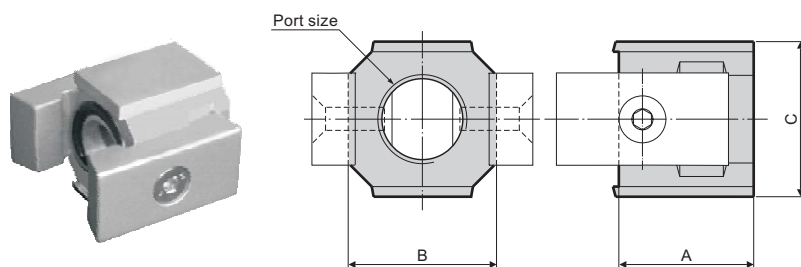
Y-type Spacer



Model	A	Applicable model
Y10	8	QAC1000
Y20	10	QAC2000
Y30	11	QAC2500 QAC3000
Y40	14	QAC4000
Y50	14	QAC4000-06
Y60	15	QAC5000

2

E-type Piping Adaptor



Model	Port size (G)	A	B	C	Applicable model
E10-M5	M5	16	17	17.5	QAC1000
E20-01	1/8	23	28	22	QAC2000
E20-02	1/4	26	29	34.2	QAC2500 QAC3000
E30-02	1/4	33	35	42.2	QAC4000
E30-03	3/8	40	44	46	QAC4000-06
E40-03	3/8	40	54	55.2	QAC5000
E40-04	1/2				
E40-06	3/4				
E50-06	3/4				
E50-10	1				

20-type Bracket

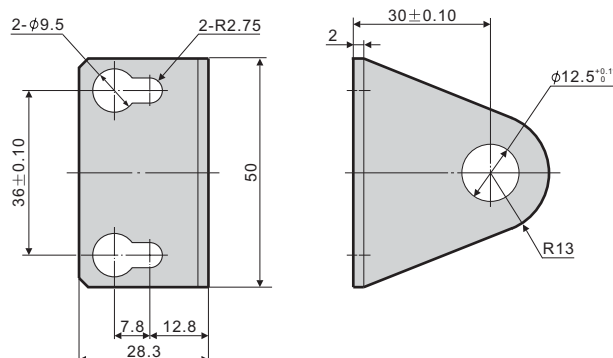
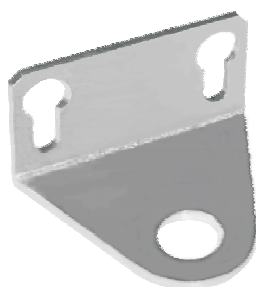
B20



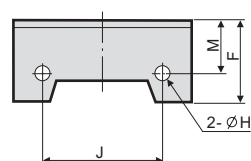
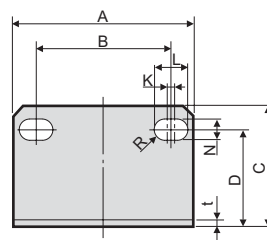
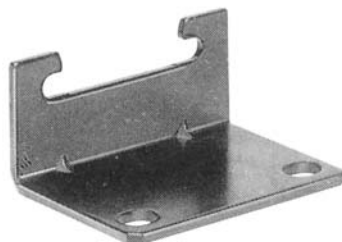
Model	A	B	C	D	F	G	H	J	K	L	N	R	t	Applicable model
B120	40	28	17	11	37.8	25.5	20.5	12.3	2	6.5	4.5	2.25	2	QAR1000、QAW1000
B220	55	34	25	19	50	30	33.5	20	10	15.4	5.4	2.7	2.3	QAR2000-2500、QAW2000
B320	53	40	21	13.5	66	41	42.5	25	1.5	8	6.5	3.25	2.3	QAR3000、QAW3000
B420	70	54	27	18	80	50	52.5	30	2	10.5	8.5	4.25	2.3	QAR4000-5000、QAW4000

P220-type Bracket

(Applicable Model: QPJM2000-02)



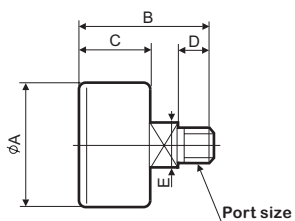
40-type Bracket



2

Model	A	B	C	D	F	H	J	K	L	M	N	R	t	Mounting screw	Applicable model
B240	40	27	33	27	18	4.5	26	3	8.4	14	5.4	2.7	2.3	M4×6	QAF/QAL2000
B340	53	40	39	32	22.5	4.5	35	1.5	8	19	6.5	3.25	2.3	M4×8	QAF/QAL/QAFD/QAFM/QAMG3000-02/03
B440	70	54	47	38	31.5	5.5	47	2	10.5	20	8.5	4.25	2.3	M5×10	QAF/QAL/QAFD/QAFM/QAMG4000-03/04
B540	70	54	47	38	27.5	5.5	47	2	10.5	20	8.5	4.25	2.3	M5×10	QAF/QAL4000-06
B640	90	66	64	52	43	6.5	60	2	13	30	11	5.5	3.2	M6×10	QAF/R/L5000

Pressure Gauge

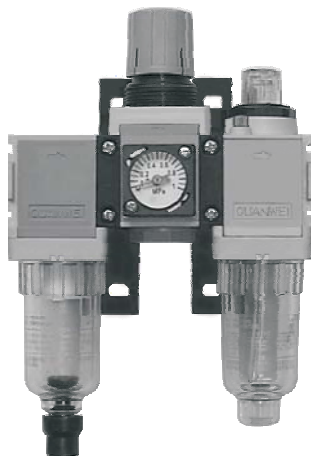
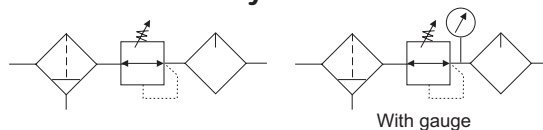


Model	*Pressure range	Port size	A	B	C	D	E	Applicable model
QG27-10-R1	0~1.0MPa(Red) 0~150psi(Black)	M5	26	17.5	11	6.5	-	QAR1000、QAW1000
QG36-10-01		G1/8	41	41	26	8	12	QAR2000-3000、QAW2000-3000 QPJM2000-02
QG46-10-02		G1/4	52	49	28	12	14	QAR4000-5000、QAW4000

* Option: Range 0~0.25MPa (0~35psi), 0~0.4MPa (0~60psi) .

Air Combination Set (Air Filter + Regulator + Lubricator) QPC2000 Type

Symbol



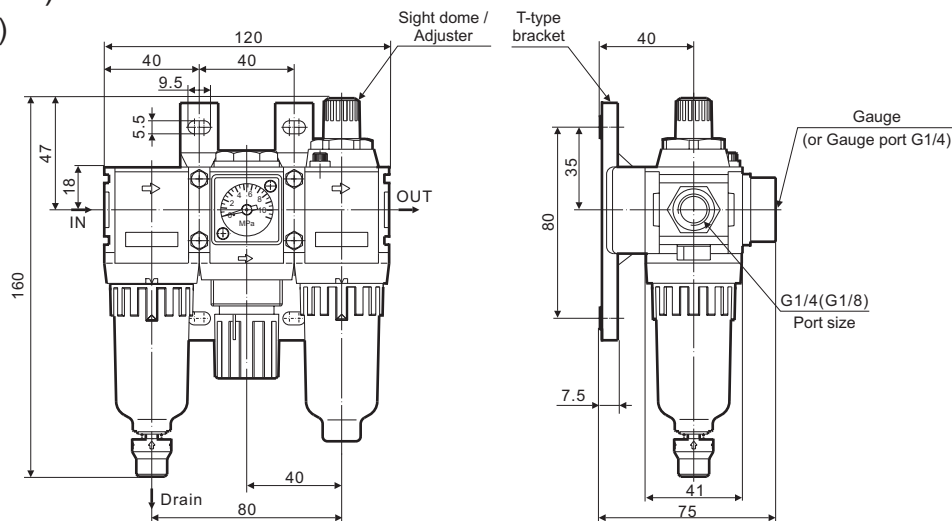
Model	QPC2000-02(01)	QPC2000-02(01)-G (With gauge)
Max. Operating pressure	1.0MPa	
Ambient and fluid temperature	5~60°C	
*Filtration	25 μm	
Regulating range	0.05~0.85MPa	
Regulator type	Relieving type	
Min. Fogging flow	15Nl/min	
Gauge port size	G1/8	—
Drain type	Manual (Lost-air draining)	
Bowl material	Polycarbonate	
Recommended oil	Turbine oil #1 (ISO VG32)	

*Option: 5, 50 μm

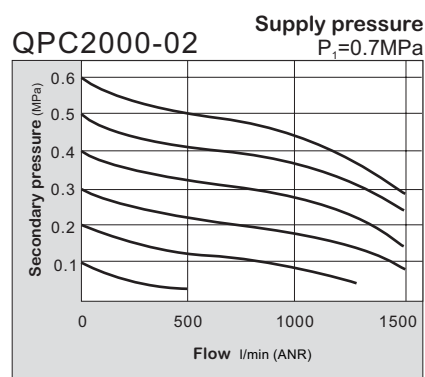
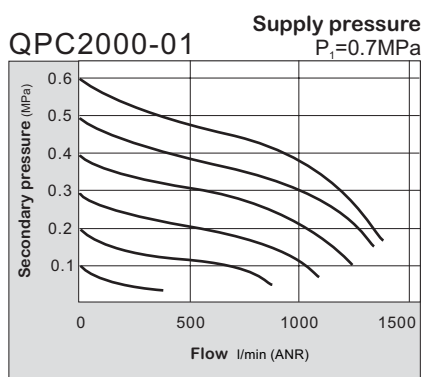
Model	Specifications				Accessories		
	Combination			Port size	Weight Kg	Bracket (Two)	Gauge
	Air filter	Regulator	Lubricator				
QPC2000-01	QPF2000-01	QPR2000-01	QPL2000-01	G1/8	0.43	P20T	QG22S-10
QPC2000-02	QPF2000-02	QPR2000-02	QPL2000-02	G1/4			

Dimensions (mm)

QPC2000-02(01)

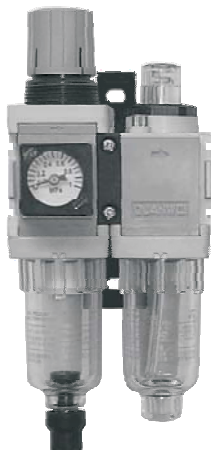
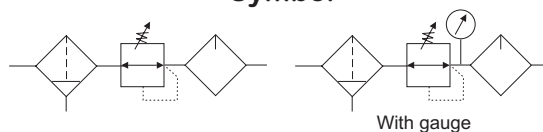


Flow Characteristics



Air Combination Set (Filter Regulator + Lubricator) QPC2010 Type

Symbol



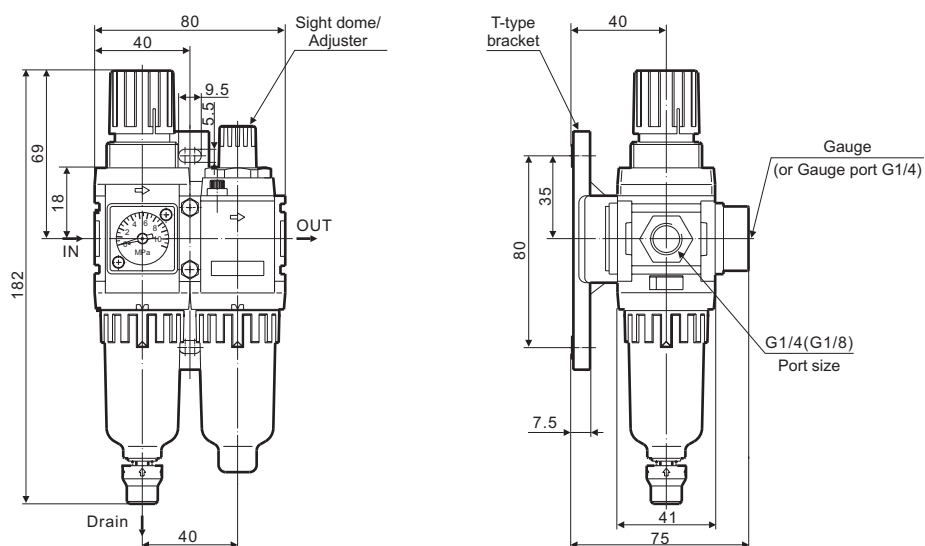
Model	QPC2010-02(01)	QPC2010-02(01)-G (With gauge)
Max. Operating pressure	1.0MPa	
Ambient and fluid temperature	5~60°C	
*Filtration	25 μm	
Regulating range	0.05~0.85MPa	
Regulator type	Relieving type	
Min. Fogging flow	15NI/min	
Gauge port size	G1/8	—
Drain type	Manual (Lost-air draining)	
Bowl material	Polycarbonate	
Recommended oil	Turbine oil #1 (ISO VG32)	

*Option: 5, 50 μm

Model	Specifications				Accessories	
	Combination		Port size	Weight kg	Bracket (One)	Gauge
	Filter regulator	Lubricator				
QPC2010-01	QPW2000-01	QPL2000-01	G1/8	0.34	P20T	QG22S-10
QPC2010-02	QPW2000-02	QPL2000-02	G1/4			

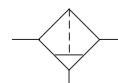
Dimensions (mm)

QPC2010-02(01)



Air Filter QPF2000 Type

Symbol



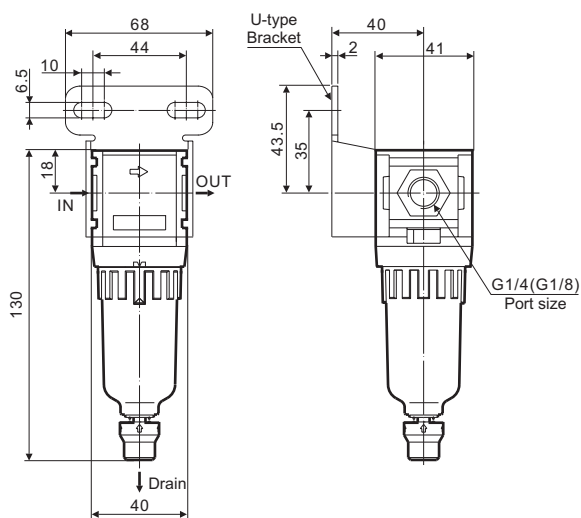
Model	QPF2000-02(01)
Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
*Filtration	25 μm
Drain type	Manual (Lost-air draining)
Bowl material	Polycarbonate

*Option: 5, 50 μm

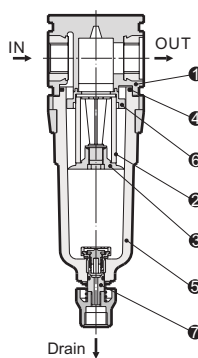
Model	Specifications			Accessories		
	Port size	Bowl capacity cm ³	Weight kg	Element		Bracket (One)
				Filtration	Ports No.	
QPF2000-01	G1/8	15	0.11	5 μm	2000-05P	P20U
QPF2000-02	G1/4			25 μm	2000-25P	
				50 μm	2000-50P	

Dimensions (mm)

QPF2000-02(01)



Construction

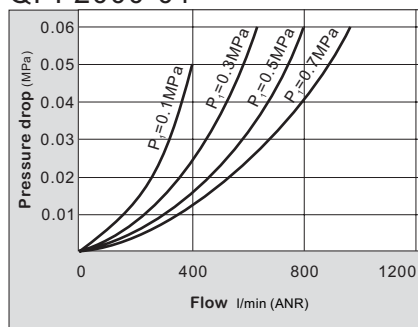


Parts List

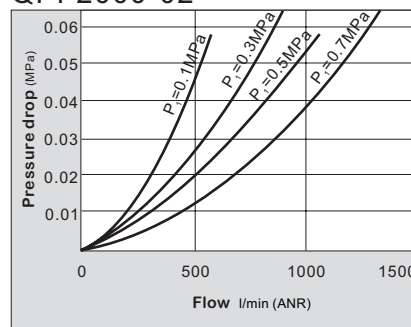
No.	Description	Material
1	Body	Reinforced N6
2	Element	PE
3	Baffle	POM
4	Seal	NBR
5	Bowl	PC
6	Deflector	N6
7	Drainer	POM

Flow Characteristics

QPF2000-01

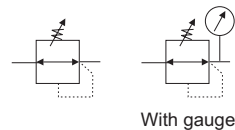


QPF2000-02



Regulator QPR2000 Type

Symbol



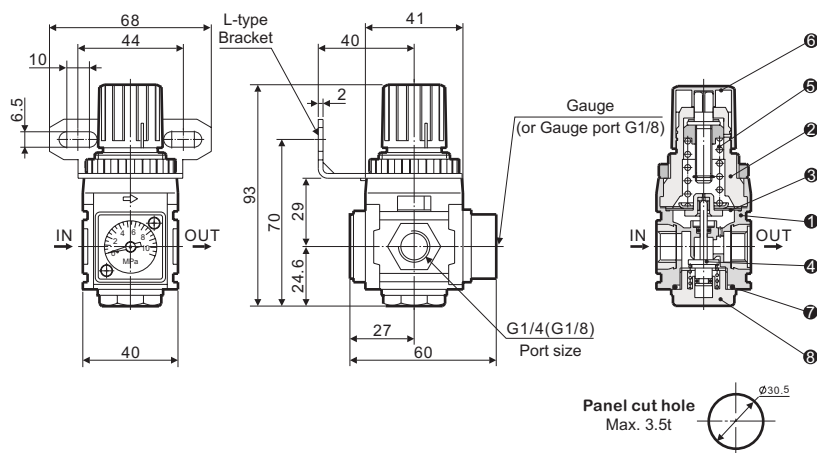
Model	QPR2000-02(01)	QPR2000-02(01)-G (With gauge)
Max. Operating pressure	1.0MPa	
Ambient and fluid temperature	5~60°C	
Regulating range	0.05~0.85MPa	
Gauge port size	G1/8	—
Type	Relieving type	

2

Model	Specifications		Accessories	
	Port size	Weight kg	Bracket (One)	Gauge
QPR2000-01	G1/8	0.16	P20L	QG22S-10
QPR2000-02	G1/4			

Dimensions (mm) QPR2000-02(01)

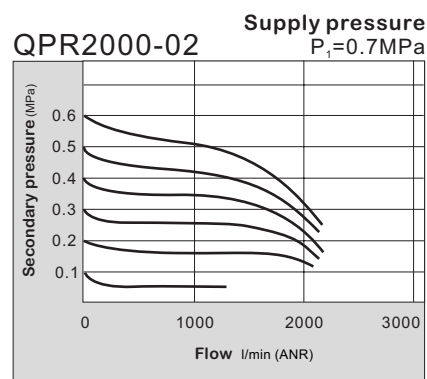
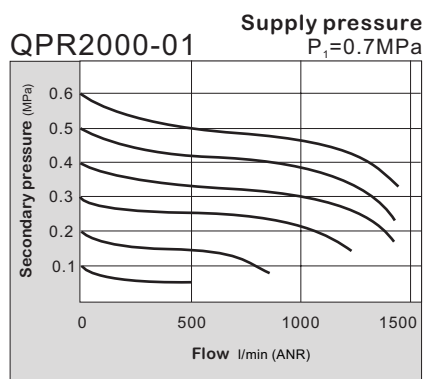
Construction



Parts List

No.	Description	Material
1	Body	Reinforced N6
2	Bonnet	Reinforced N6
3	Diaphragm	NBR
4	Valve ass'y	Brass/NBR
5	Spring	65Mn
6	Knob	POM
7	O-ring	NBR
8	Seat	POM

Flow Characteristics



Lubricator QPL2000 Type

Symbol

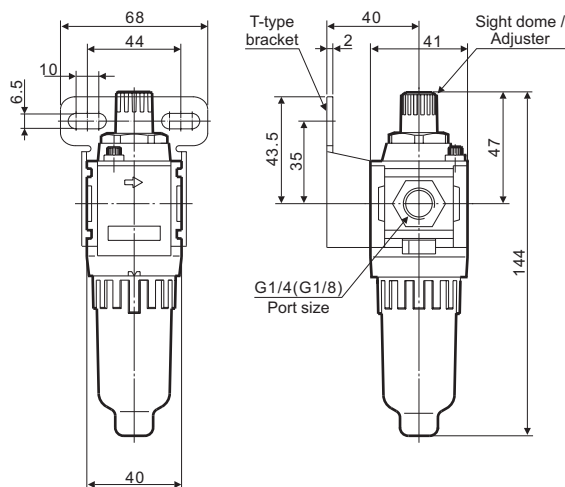


Model	QPL2000-02(01)
Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
Min. Fogging flow	15NI/min
Recommended oil	Turbine oil #1 (ISO VG32)
Bowl material	Polycarbonate

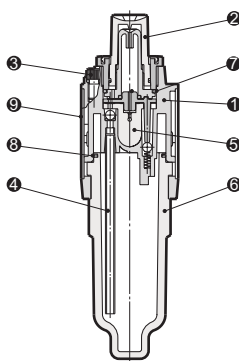
Model	Specifications			Accessories
	Port size	Bowl capacity cm ³	Weight kg	Bracket (One)
QPL2000-01	G1/8	20	0.12	P20U
QPL2000-02	G1/4			

Dimensions (mm)

QPL2000-02(01)



Construction

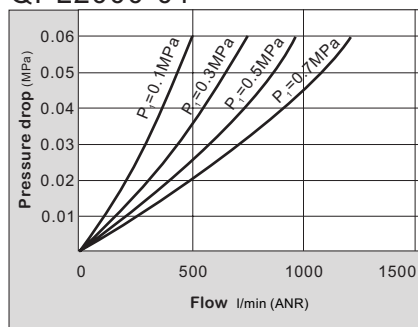


Parts List

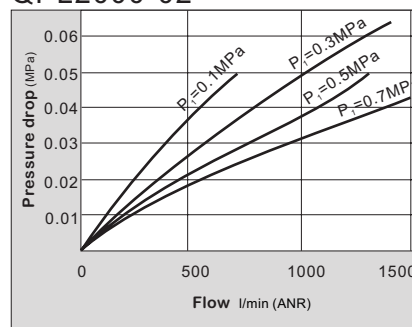
No.	Description	Material
1	Body	Reinforced N6
2	Sight dome	PC
3	Filler screw	Brass
4	Lead tube	PU
5	Damper	PU
6	Bowl	PC
7	O-ring	NBR
8	Seal	NBR
9	Panel	POM

Flow Characteristics

QPL2000-01



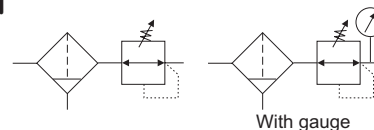
QPL2000-02



Filter Regulator QPW2000 Type



Symbol



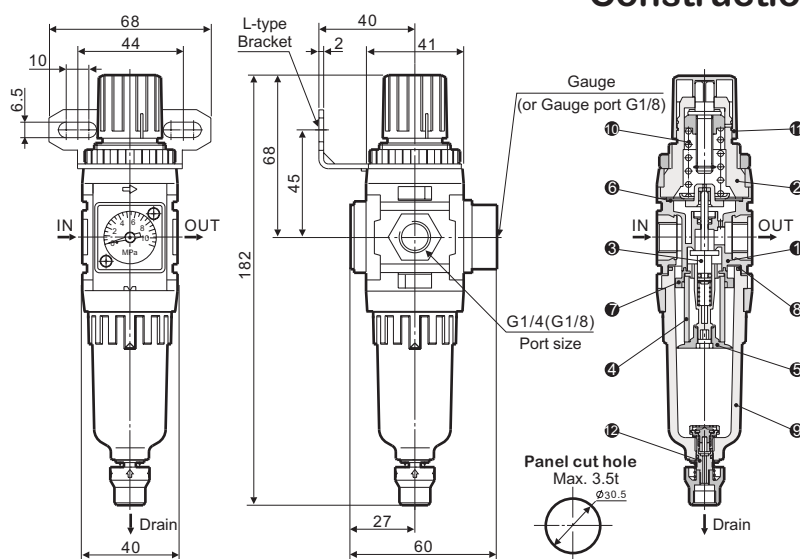
Model	QPW2000-02(01)	QPW2000-02(01)-G (With gauge)
Max. Operating pressure	1.0MPa	
Ambient and fluid temperature	5~60°C	
*Filtration	25 μm	
Regulating range	0.05~0.85MPa	
Gauge port size	G1/8	—
Type	Relieving type	
Bowl material	Polycarbonate	

*Option: 5, 50 μm

Model	Specifications			Accessories	
	Port size	Bowl capacity cm ³	Weight kg	Bracket (One)	Gauge
QPW2000-01	G1/8	15	0.20	P20L	QG22S-10
QPW2000-02	G1/4				

Dimensions (mm)

QPW2000-02(01)

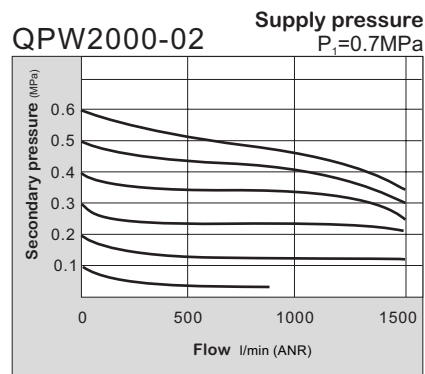
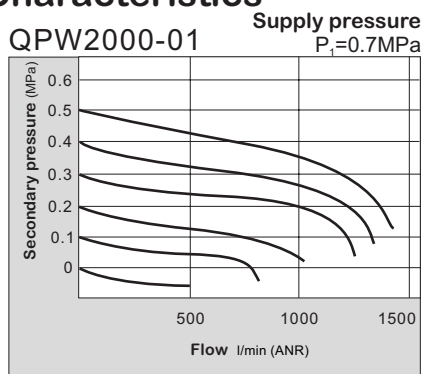


Construction

Parts List

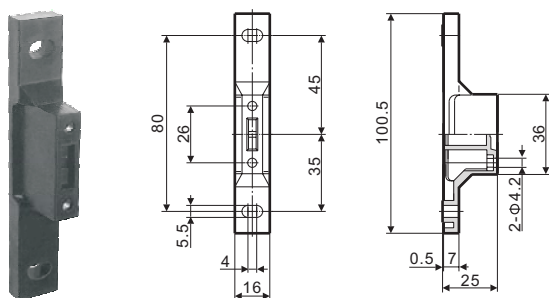
No.	Description	Material
1	Body	Reinforced N6
2	Bonnet	Reinforced N6
3	Valve ass'y	Brass/NBR
4	Element	PE
5	Baffle	POM
6	Diaphragm	NBR
7	Deflector	N6
8	Seal	NBR
9	Bowl	PC
10	Spring	Stainless steel
11	Knob	POM
12	Drainer	POM

Flow Characteristics

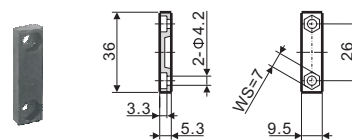


Accessories

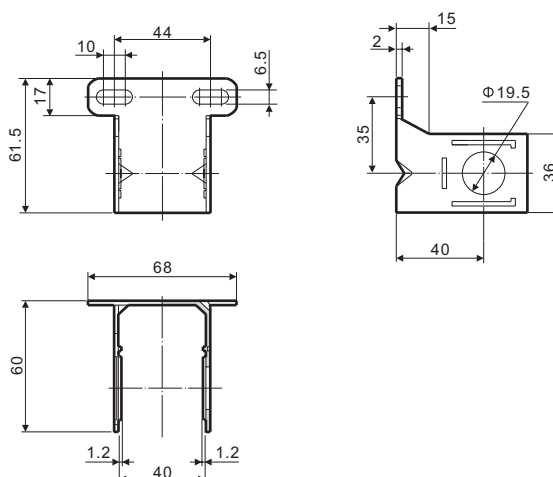
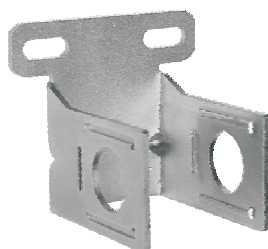
T-type bracket P20T



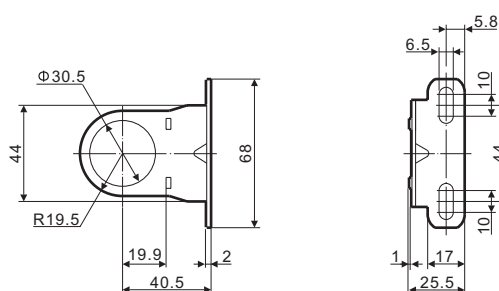
I-type clamp P20I



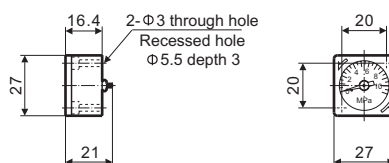
U-type bracket P20U



L-type bracket P20L



Gauge QG22S-10



Air Combination Set

X Series

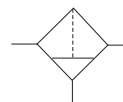
The series consists of air filter, regulator, lubricator and the combination of them , with port size G1/4 and compact structure. The series is specially suitable for small pneumatic equipments.

Air Filter

XF4 Type

Symbol

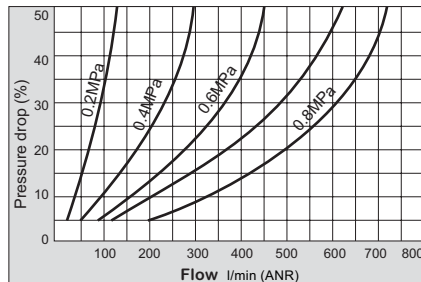
XF4



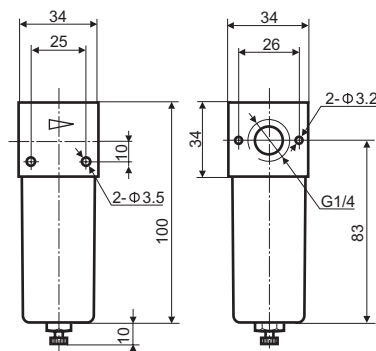
Specifications

Model	XF4
Filtration	50μm
Weight	0.15kg
Ambient temperature	5~60°C
Max. Operating pressure	1.0MPa

Flow Characteristics



Dimensions (mm)



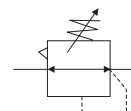
2

Regulator

XR4 Type

Symbol

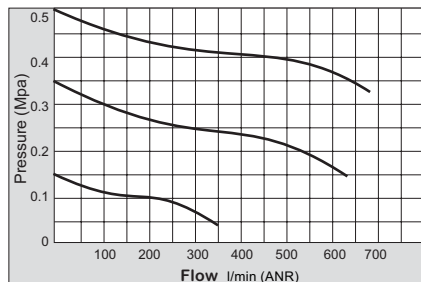
XR4



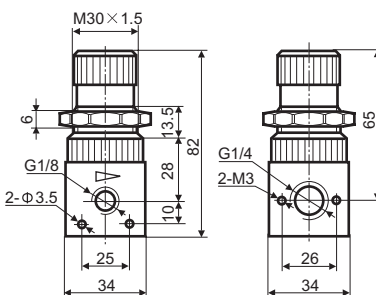
Specifications

Model	XR4
Pressure regulating range	0.05~0.25MPa, 0.05~0.4MPa, 0.05~0.8MPa, 0.05~1.0MPa
Weight	0.135kg
Ambient temperature	5~60°C
Max. Operating pressure	1.0MPa

Flow characteristics

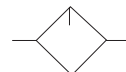


Dimensions (mm)



Lubricator XL4 Type

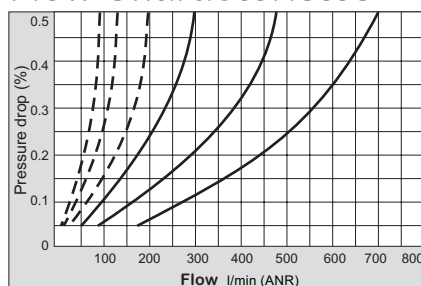
Symbol
XL4



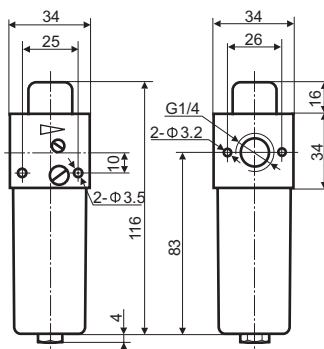
Specifications

Model	XL4
Average diameter of oil particle	<50μm
Weight	0.15kg
Ambient temperature	5~60°C
Max. Operating pressure	1.0MPa

Flow Characteristics

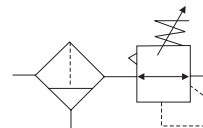


Dimensions (mm)



Filter Regulator XFRU4 Type

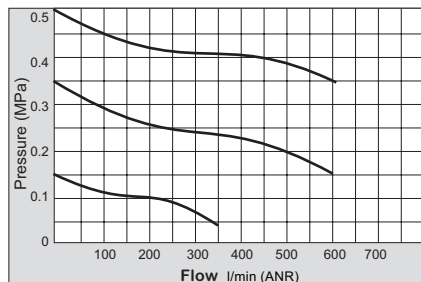
Symbol
XFRU4



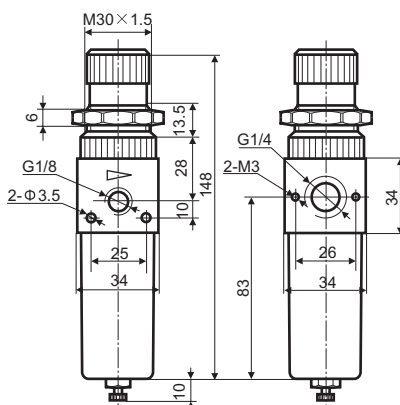
Specifications

Model	XFRU4
Filtration	50μm
Pressure regulating range	0.05~0.25MPa, 0.05~0.4MPa, 0.05~0.8MPa, 0.05~1.0MPa
Max. Operating pressure	1.0MPa
Ambient temperature	5~60°C
Weight	0.17kg

Flow Characteristics

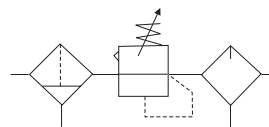


Dimensions (mm)

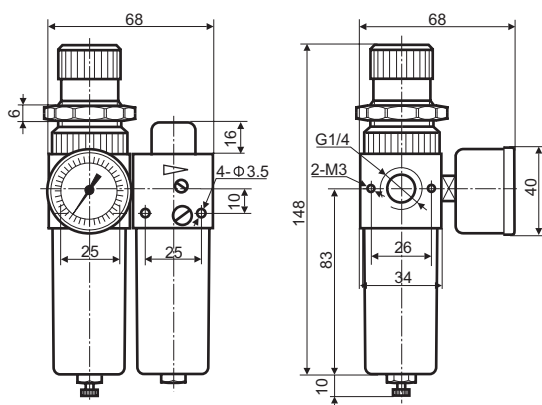


Air Combination Set (Filter Regulator + Lubricator) XFRUL4 Type

Symbol
XFRUL4



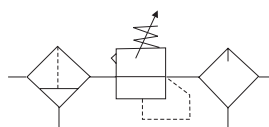
Dimensions (mm)



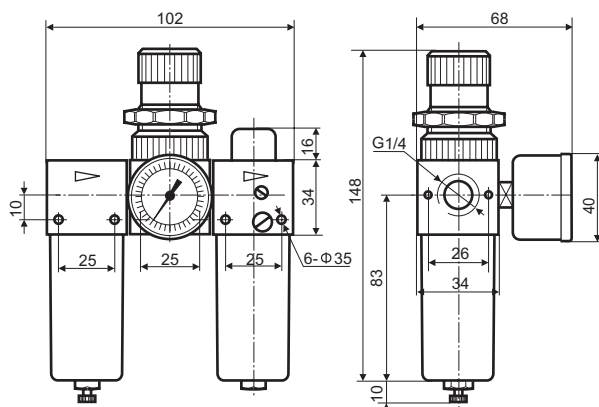
2

Air Combination Set (Air Filter + Regulator + Lubricator) XFRL4 Type

Symbol
XFRL4



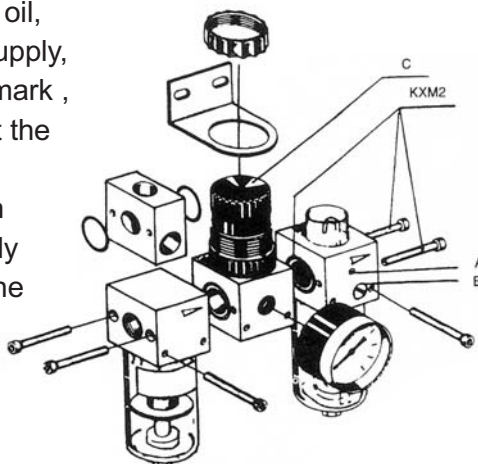
Dimensions (mm)



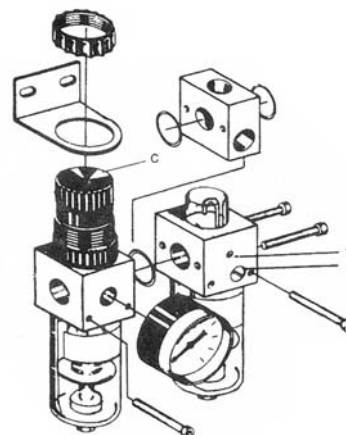
Assembling

- A: Adjusting needle. Adjusting the oil supplied.
- B: Oil filler cup screw. When filling oil, firstly shut off compressed air supply, turn off B, fill oil up to the level mark, finally turn on B, make sure that the hole is sealed.
- C: Pressure regulating knob. When regulating, firstly pull up vertically to the regulating position, turn the knob to get the pressure need, then press down C vertically, finally lock the knob to keep the pressure stable.

F+R+L Assembling XF4+XR4+XL4

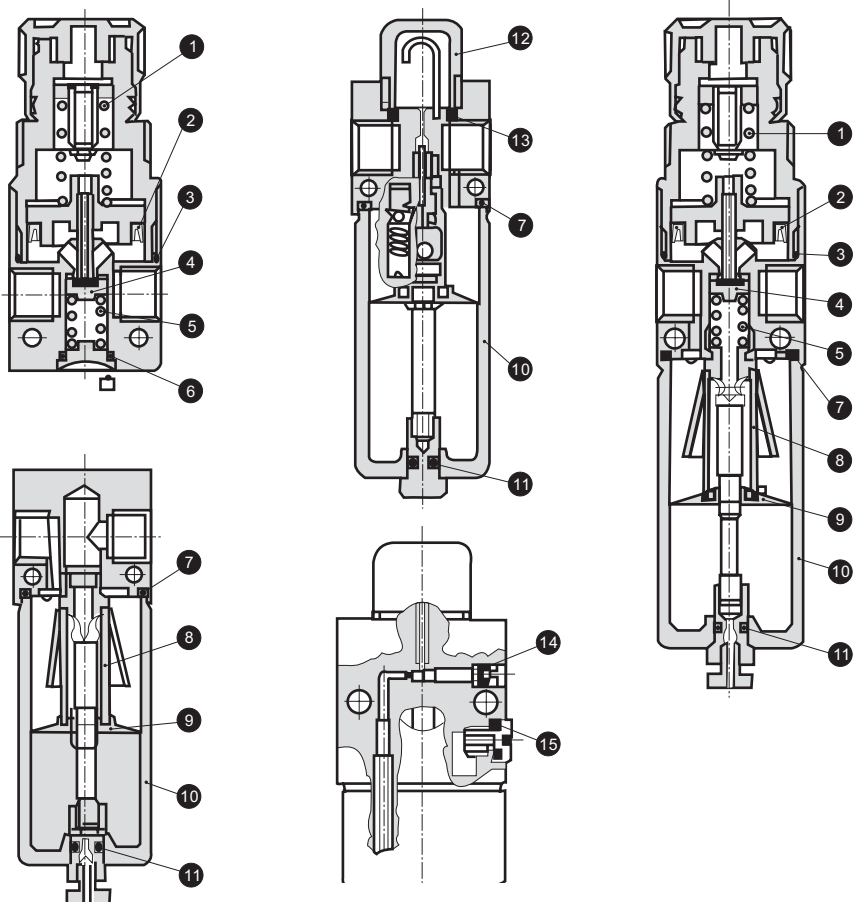


FR+L Assembling XFRU4+XL4



2

Construction

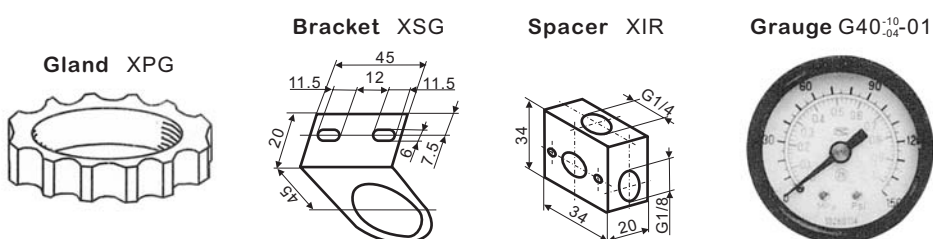


Parts List

No.	Number	Description
1	1	Regulating spring
2	1	Y-ring
3	1	O-ring
4	1	Valve element assembly
5	1	Balance spring
6	1	O-ring
7	1	O-ring
8	1	Filter element
9	1	Baffle
10	1	Bowl
11	1	O-ring
12	1	Sight dome
13	1	O-ring
14	1	O-ring
15	1	O-ring

Note: The number of each part in the list is the same as that in an element.

Accessories



Automatic Drainer

QAD Series (QAD202-02 QAD402-03 QAD402-04)

Symbol



With metal bowl.



Model	QAD202-02	QAD402-03	QAD402-04
Max. Operating pressure	1.0MPa		
Ambient and fluid temperature	5~60°C		
Operating pressure range	0.1~1.0 Mpa		
Enter size	G1/4	G3/8	G1/2
Drain port size	G1/8		
Drain type	Auto. (AD43 N.O)		
Bowl material	Polycarbonate / Die casting aluminum		
Manual drain	With		

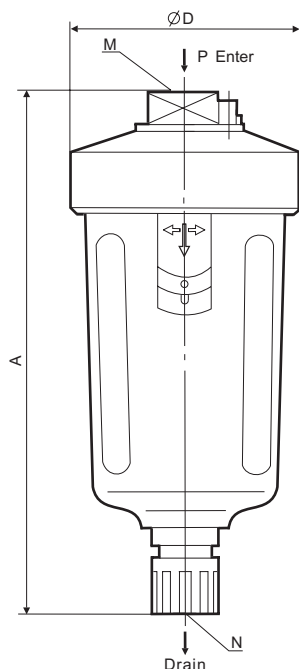
Option: QAD202 Automatic Drainer with metal bowl.

Order examples:

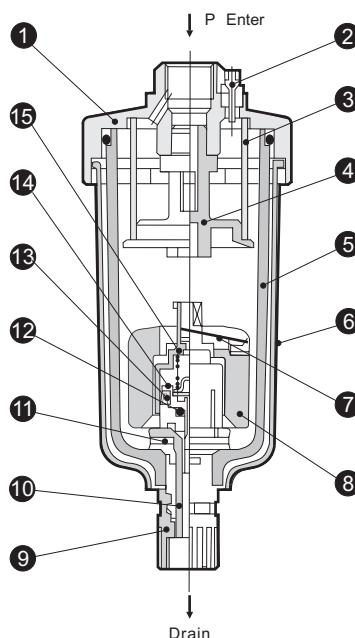
Need: QAD202-02, with Metal bowl.

Model: QAD202-02M

Dimensions (mm)



Construction



Parts List

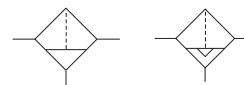
No.	Description	Material
1	Body	Die casting aluminium
2	Relief needle	Brass
3	Strainer	POM
4	Strainer seat	POM
5	Bowl ass'y	Polycarbonate / Die casting aluminum
6	Bowl guard	Cold rolled plate
7	Lever	Stainless steel
8	Float	POM
9	Drain knob	POM
10	Drain pipe	POM
11	Seal	Rubber-plastic composite
12	O-ring	NBR
13	"V"-ring	NBR
14	Piston	POM
15	Float seat	POM

Model	A	D	M	N
QAD 202-02	158	55	G1/4	G1/8
QAD 402-03	170	72	G3/8	Φ6 (Inside diameter of polyurethane tube)
QAD 402-04	170	72	G1/2	

Main Line Filter QAFF Series

Symbol

with Auto Drain



Fluid	Compressed air
Max. Operating pressure	1.0MPa
*Min. Operating pressure	0.05MPa
Ambient and fluid temperature	5~60°C
Filtration	25、50 μm (Removal rate 95%)
Element life	2 years or pressure drop reaches 0.1MPa
Bowl material	Polycarbonate / Die casting aluminum

*It should be 0.15 Mpa when auto drain is used.

Note:

QAFF should be installed at the outlet of air compressor or main air line to remove the water and dirt in the compressed air and to protect the downstream units.

Model		Specifications			Accessories	Spare part
Manu.	Auto.	**Max. Flow rate l/min (ANR)	Port size	Weight kg	Bracket (One)	Filter element ass'y
QAFF37B-14	QAFF37B-14D	12000	G1½	4.2	BM56	QAFF-EL37B
QAFF75B-20	QAFF75B-20D	18000	G2	10.5	BM57	QAFF-EL75B

**Condition: Supply pressure 0.7MPa.

Option: QAFFseries Main Line Filter with metal bowl.

Order examples:

1. Need: QAFF37B-14, with Metal bowl.

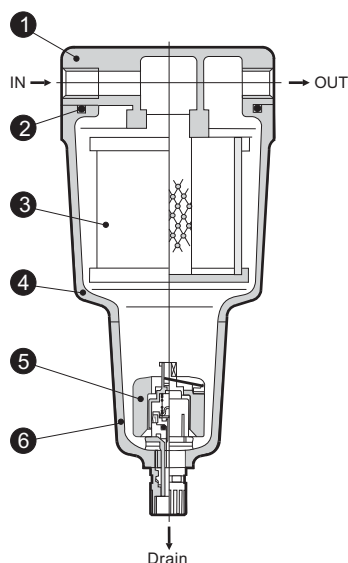
Model: QAFF37B-14M

2. Need: QAFF75B-20, with Metal bowl & auto drain.

Model: QAFF75B-20DM

Construction

QAFF37B-14(D) QAFF75B-20(D)



Parts List

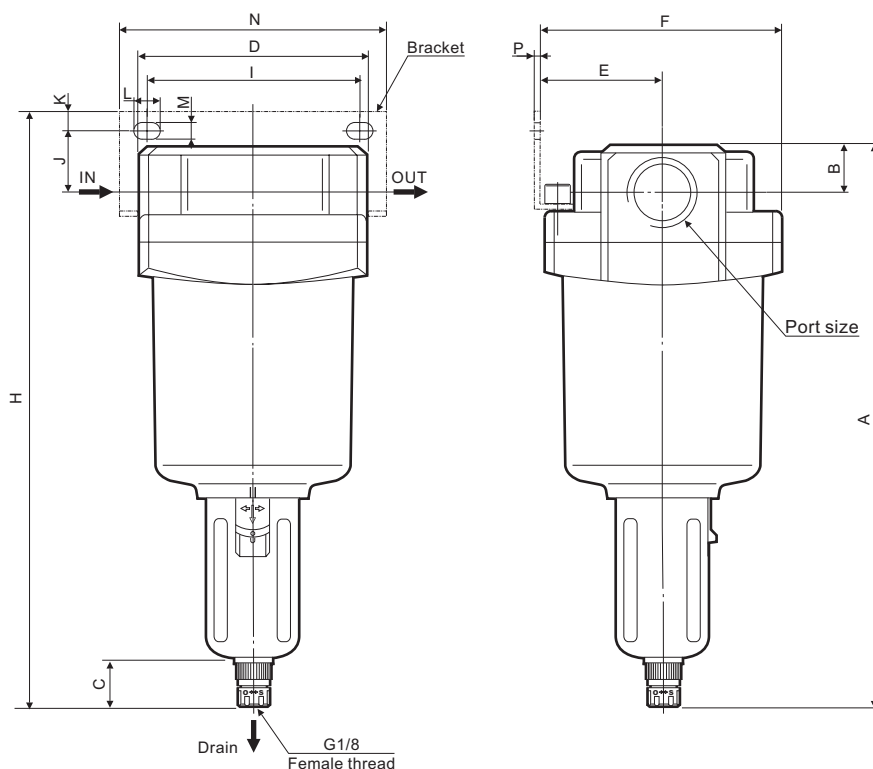
No .	Description	Material	Remark
1	Body	Die casting aluminium	Surface oxidizing, Baking finish
2	O-ring	NBR	GB1235-76(135×5.7)
3	Filter element ass'y	PE	
4	Housing	Die casting aluminium	Surface oxidizing, Baking finish
5	Auto drain float	POM	
6	Bowl assembly	Polycarbonate / Die casting aluminum	

Auto Drain Float

Model	Applicable model
AD43	QAFF37B-14D QAFF75B-20D

Dimensions (mm)

QAFF37B-14(D) QAFF75B-20(D)



Model	Port size	A	B	C	D	E	F	H	I	J	K	L	M	N	P
QAFF37B-14	G1½	373	32	34	160	85	160	395	150	40	15	20	11	180	4
QAFF75B-20	G2	393	42	34	160	85	160	395	150	50	15	20	11	180	4

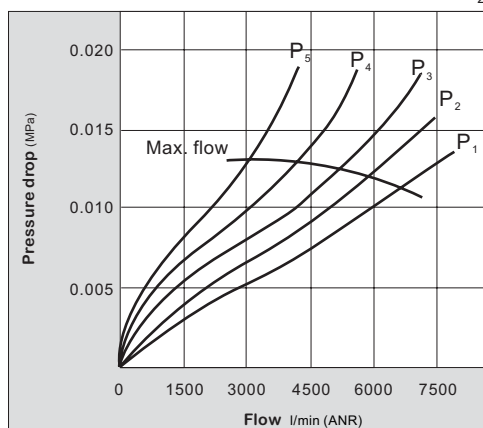
Note: Model QAFF37B-14D, with auto drain.

Flow Characteristics

Supply Pressure $P_1=0.7\text{MPa}$

QAFF37B

G1½



Notes:

$P_1 = 0.9\text{MPa}$

$P_2 = 0.7\text{MPa}$

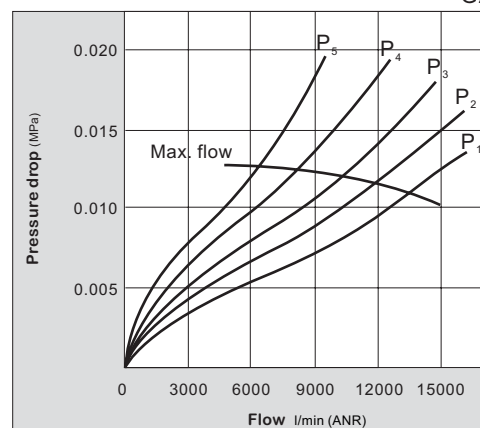
$P_3 = 0.5\text{MPa}$

$P_4 = 0.3\text{MPa}$

$P_5 = 0.1\text{MPa}$

QAFF75B

G2



Large Capacity Lubricator QAL401-04-1S-2-X45C Type

Symbol



Max. Operating pressure	1.0MPa
Ambient and fluid temperature	5~60°C
Recommended oil	Turbine oil #1 (ISO VG32)
Body material	Die casting aluminium

Oil Level Switch

Operating voltage	DC24V AC220V
Max. operating current	1000mA
Max. switch capacity	DC20W AC20VA
Type of actuation	N.O

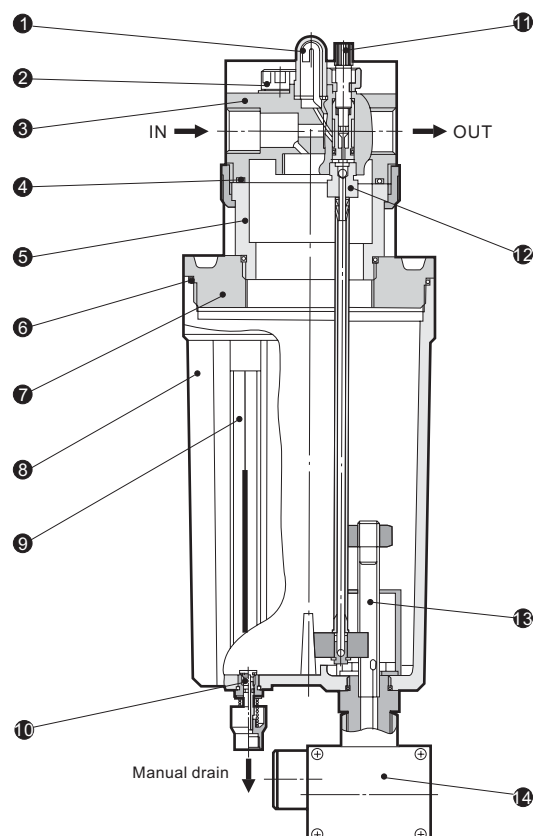
Model	Specifications				
	*Min operating flow l/min (ANR)	**Max. Flow rate l/min (ANR)	Port size	Bowl capacity cm ³	Weight kg
QAL401-04-1S-2-X45C	50	5000	G1/2	1000	1.40

*Conditions: Supply pressure 0.5MPa, Number of drop 5 drop s/min, Turbine oil #1 (ISO VG32)

**Conditions: Supply pressure 0.5MPa, Pressure drop 0.03MPa.

Construction

QAL401-04-1S-2-X45C

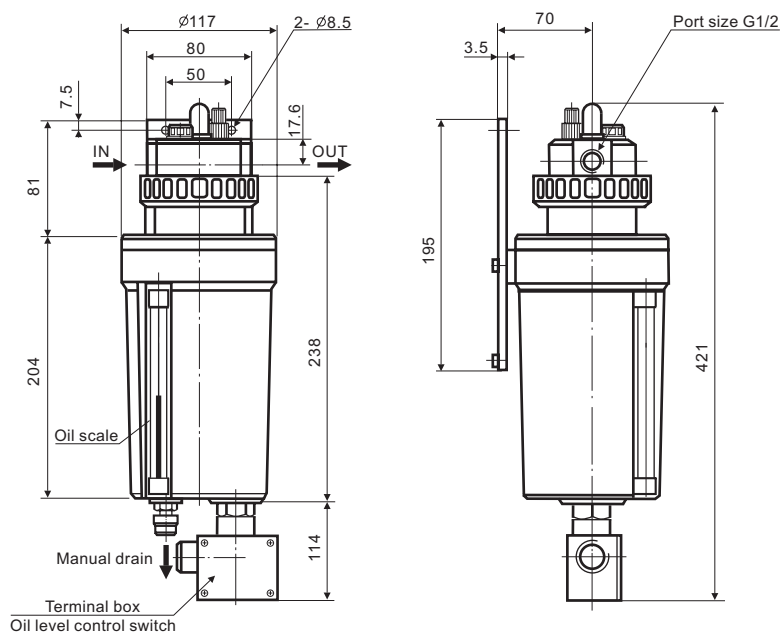


Parts List

No .	Description	Material
1	Sight dome ass'y	Polycarbonate
2	Filler cup ass'y	POM (Black)
3	Body	Die casting aluminium
4	O-ring	NBR
5	Housing	Die casting aluminium
6	O-ring	NBR
7	Cover	Die casting aluminium
8	Reservoir	Die casting aluminium
9	Oil scale ass'y	Die casting aluminium / Transparent pipe
10	Oil relief valve	Brass/POM
11	Adjusting needle	Stainless steel
12	Lead tube ass'y	Brass / PU Pipe/Stainless steel
13	Oil level float switch	N1010
14	Terminal box	Die casting aluminium

Dimensions (mm)

QAL401-04-1S-2-X45C

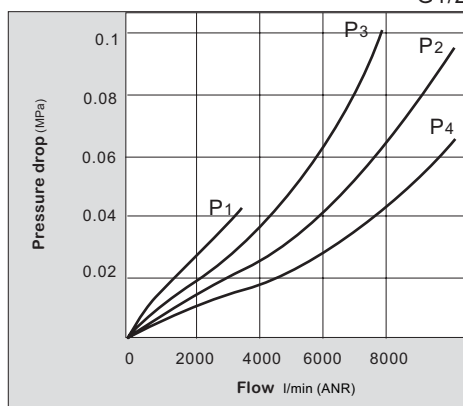


2

Flow Characteristics

QAL401-04-1S-2-X45C

G1/2



Notes:

P₁=0.7MPa

P₂=0.5MPa

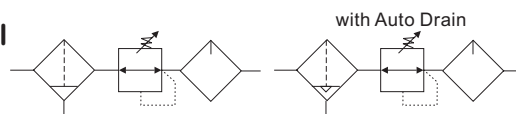
P₃=0.3MPa

P₄=0.1MPa

FRL With Large Capacity Lubricator

QAC-2-Z Type

Symbol



QAC-2D-Z

QAC-2-Z

Model	QAC-2-Z	QAC-2D-Z
Max. Operating pressure	1.0MPa	
Ambient and fluid temperature	5~60°C	
*Filtration	25 μm	
Drain Type	Manu. , Auto.	
Pressure regulating range	0.05~0.85MPa	
Lubricator type	Micro-fog	
Mist particle dia.	5 μm	
Bowl capacity	500cm ³	800cm ³
Recommended oil	Turbine oil #1 (ISO VG32)	
Bowl material	PC	
Port size	G3/8、G1/2(or Fitting∅12)	
Bowl guard	QAF4000、QAW4000 (W) QAL-2-Z (W/O)	
Oil level float switch	Without	With
Addition. Pressure switch	With	

*Option: 5、50 μm

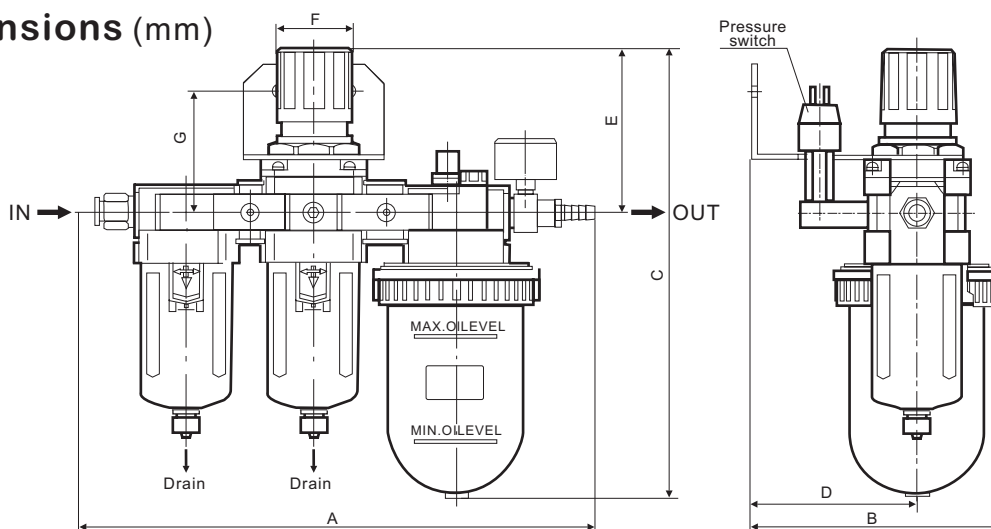
Adj. Pressure Switch

Model	QPM11NC	QPM11NO
Setting range (off)	0.1~1.0MPa	
Ambient and fluid temperature	5~60°C	
Port size	G1/8	
Voltage	220V	
Max. Operating current	500mA	
Max. Switch capacity	100VA	
Type of actuation	N.C	N.O

Oil Level Switch

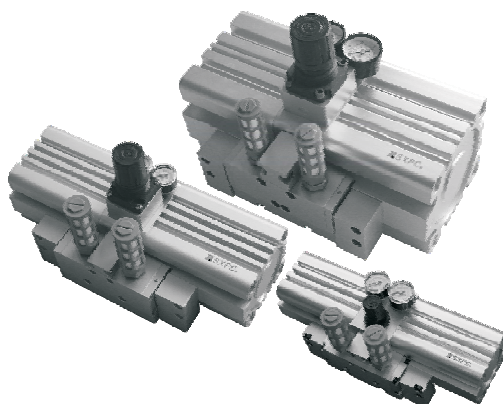
Operating voltage	DC24V AC220V
Max. operating current	1000mA
Max. switch capacity	DC20W AC20VA
Type of actuation	N.O

Dimensions (mm)



Model		A	B	C	D	E	F	G	Bowl assembly	
Manu.	Auto.								Manu.	Auto.
QAC-2-Z	QAC-2-Z-D	335	165	300	110	109.5	44.5	81	C400F	AD43
QAC-2D-Z	QAC-2D-Z-D	355	180	350	110	109.5	44.5	81	C400F	AD43

Duble Pressure Booster XQ-VB Series



Model	XQ-VB40-16	XQ-VB63-16	XQ-VB100-16
Fluid	Compressed air		
Max. Operating pressure MPa	1.0		
Supply pressure range MPa	2.5 ~ 10	2 ~ 10	
Boosting pressure range Mpa	4.5 ~ 16	4 ~ 16	
Pressure increase ratio	2 (max.)		
Flow (High-pressure side) l/min(ANR)	300	1000	3000
Ambient temperature range	5~60°C		
Port size	1/4	3/8	G1/2
Exhaust port size	G1/4	G3/8	G1/2
Installation	Horizontal		

How to Order

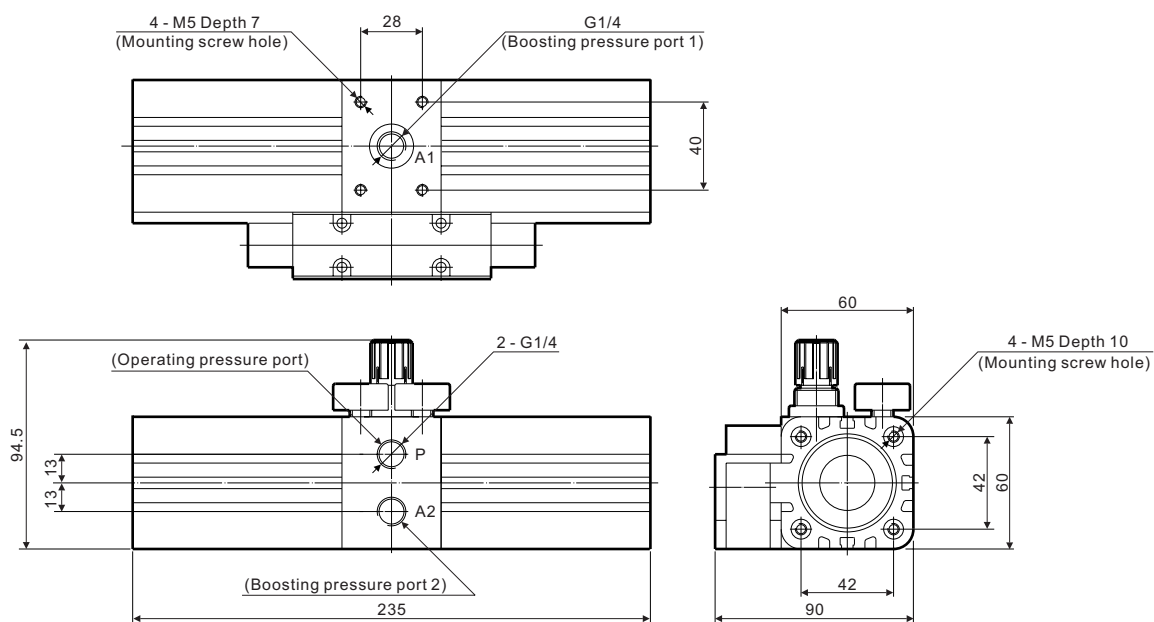
XQ-VB	100	-	16
Code	Size		Boosting pressure
	40, 63, 100		

Features

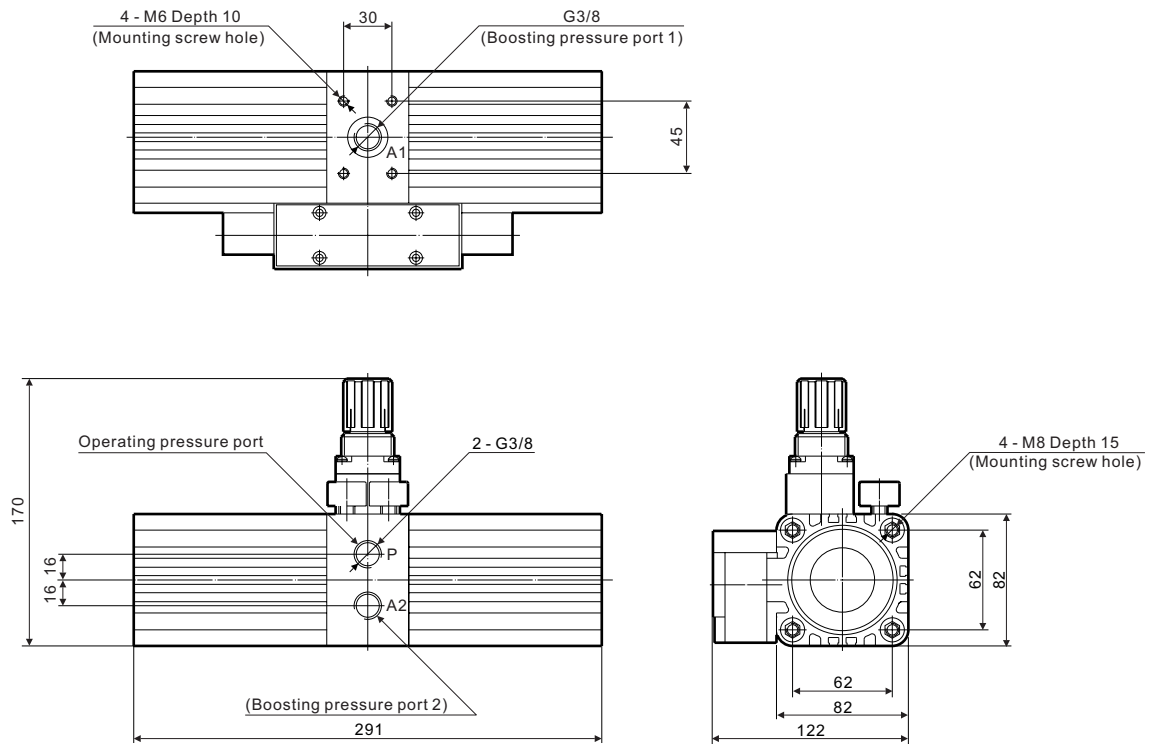
- Low-cost pressure amplification with the pneumatic compressor duble pressure booster.
- It increases input pressure by maximum to a factor of 2 on a purely mechanical basis-without external energy.
- In some cases, use of the duble pressure booster means no need for expensive loe-level hydraulics.
- Automatic supply stop when the pressure level is reached.
- Excellent process reliability thanks to automatic start-up in the event of a pressure drop in order to ensure reliable constant working pressure.
- Targeted increase of the working pressure directly in application.
- The result is greater force in cramped conditions.
- Quick and easy handing during installation and servicing.

Dimensions (mm)

XQ-VB40-16



XQ-VB63-16



XQ-VB100-16

