

Auto Feed Lube

ALF400 to 900

Standard Specifications

Model	Auto Feed Lube						Auto Feed Tank			
	ALF400	ALF400-06	ALF500	ALF600	ALF800	ALF900	ALT-5	ALT-5-IS- ¹ / ₂	ALT-9	ALT-9-IS- ¹ / ₂
Port size	1/4 3/8 1/2	3/4	3/4 1	1	1 1/4 1 1/2	2	AIR: 1/4 OIL: 3/8			
Fluid	Air									
Proof pressure	1.5MPa									
Max. operating pressure	0.7MPa						1.0MPa			
Operating pressure ⁽¹⁾ differential range	0.1 to 0.6MPa						—			
Vibration resistance {Differential pressure 0.3MPa }	1G(9.81m/sec ²) or less						—			
Min. operating flow (ℓ /min (ANR)) ⁽²⁾	1/4: 65 3/8: 100 1/2: 120	120	190	220	1 1/4: 460 1 1/2: 650	1800	—			
Bowl capacity (cm ³) (Capacity between levels) ⁽³⁾	—						5000 (4400)	5000 (3400)	9000 (7800)	9000 (6000)
Recommended oil	Turbine oil class 1 (ISOVG32)									
Ambient and fluid temperature	-5 to 60°C (No freezing)									
Bowl material	Polycarbonate						Metal (Steel tubing for machine construction)			
Weight (kg)	0.85	0.88	1	1.15	1.85	1.9	12.6	13.2	26.0	26.6
Accessory (Standard) Bowl guard	●	●	●	●	●	●	—			

- Note 1) Tank pressure is the pressure of Auto Feed Tank and line pressure is the pressure of Auto Feed Lube
- Note 2) Conditions: Primary pressure 0.5MPa, 5 drops/min, Turbine oil class 1 (ISO VG32), Temperature 20°C, Needle fully open.
Use air consumption rate for minimum operating flow.
- Note 3) Capacity between levels; in case of float switch equipped model, the capacity is measured in levels between the level gauge upper limit and the lower limit of the float switch detective range.

The problem of running out of oil is prevented because the oil is fed automatically. This system makes lubrication work unnecessary, thus significantly reducing the amount of maintenance labour.



ALF400



ALT-9

Accessories (Options) Part No.

Description	Model	Part No.					
		ALF400	ALF400-06	ALF500	ALF600	ALF800	ALF900
Bracket		B44P	B44-1P	1 1/4: B45-1P 1 1/2: B45-2P	B46P	—	—

Note) A float switch can not be mounted on "ALT-5" or "ALT-9" afterwards.

JIS Symbol
Auto Feed Lube



Auto Feed Tank



How to Order

〈Auto Feed Lube〉

ALF 40 0 - 02

Auto Feed Lube

Body size

40	1/2
50	3/4
60	1
80	1 1/2
90	2

Port size

02	1/4
03	3/8
04	1/2
06	3/4
10	1
12	1 1/4
14	1 1/2
20	2

Thread

-	Rc (PT)
N	NPT
F	G (PF)

Option

Symbol	Description	Applicable model
-	-	-
B	W/ bracket	ALF400 to 600

〈Auto Feed Tank〉

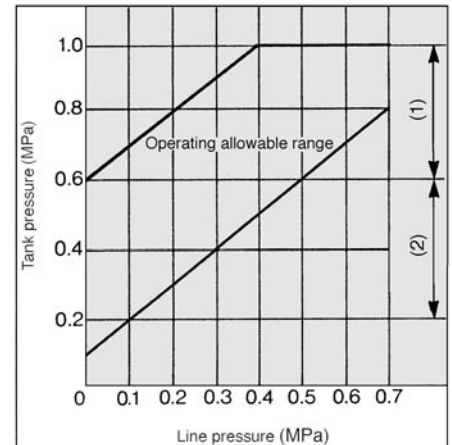
ALT - 5

Auto Feed Tank

Tank capacity

5	5000cm ³
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Operating pressure range Tank and line pressure



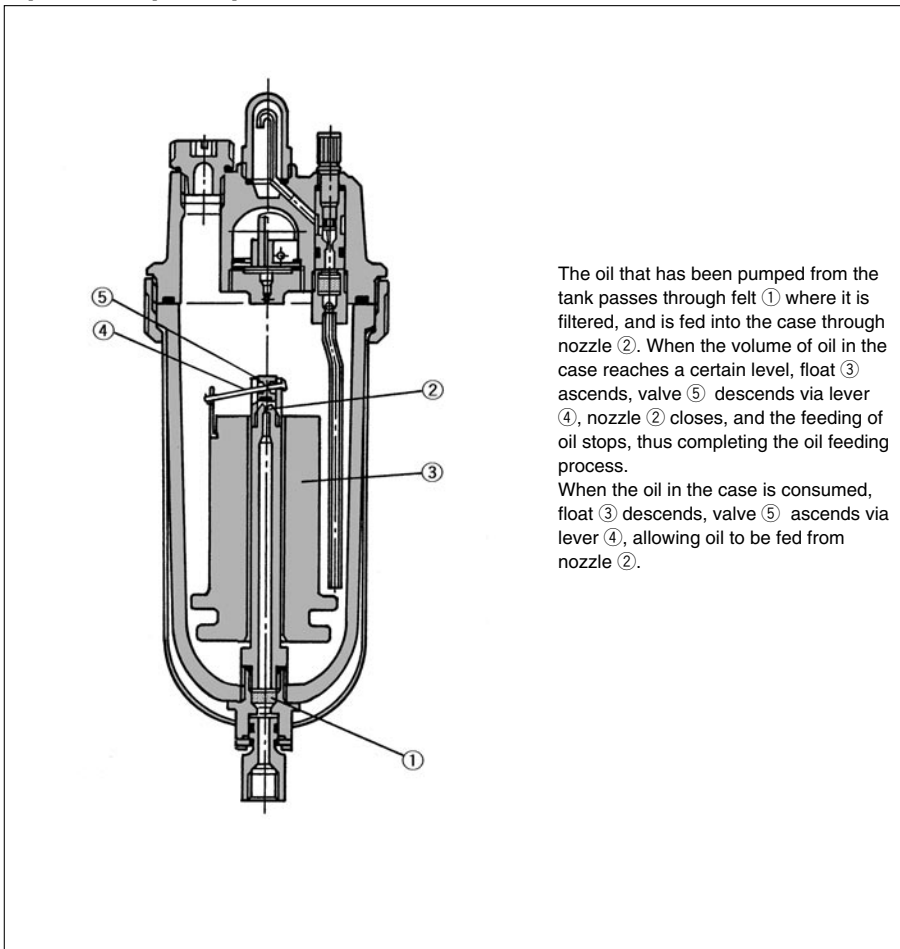
Note 1) Tank pressure is removed when line pressure is stopped

Note 2) Tank pressure is kept same when line pressure is stopped possible to use

⚠ Precautions

Be sure to read before handling.
Refer to p.0-26 and 0-27 for Safety Instructions and common precautions on the products mentioned in this catalogue, and refer to p.1.0-2 and 1.0-3 for precautions on every series.

Operation principles/Auto feed lube



The oil that has been pumped from the tank passes through felt ① where it is filtered, and is fed into the case through nozzle ②. When the volume of oil in the case reaches a certain level, float ③ ascends, valve ⑤ descends via lever ④, nozzle ② closes, and the feeding of oil stops, thus completing the oil feeding process.
When the oil in the case is consumed, float ③ descends, valve ⑤ ascends via lever ④, allowing oil to be fed from nozzle ②.

Design

⚠ Warning

- ① The bowl and the sight dome material is polycarbonate. Therefore, this product cannot be used in an environment or location that is exposed to synthetic oils, organic solvents, chemicals, or a threadlock agent, etc., which affect the strength of polycarbonate and could cause damage to the product. Do not use in a press machine. It causes damage and malfunction.

Selection

⚠ Warning

- ① Air should not flow from the secondary side. It damages the damper.
- ② Make sure that the amount of air that is necessary for the oil to drip is available because the oil might not drip if the operating air volume is insufficient.

Mounting

⚠ Warning

If the line pressure is discharged, the oil could flow back if the operating pressure differential range (the difference between the tank and line pressures) exceeds 0.6MPa. Therefore, make sure to also discharge the tank pressure.

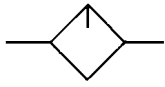
⚠ Caution

Install the float vertically inside the bowl so that it will not come into contact with the siphon tube to prevent the oil from dripping poorly.

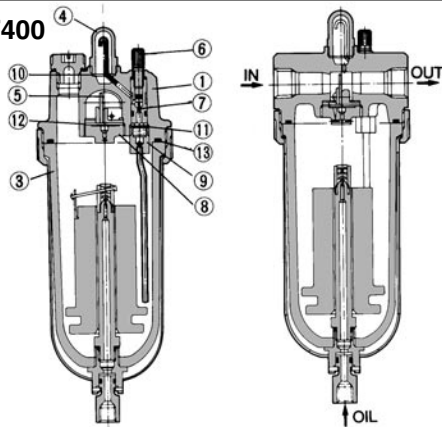
ALF400 to 900

Construction: Auto Feed Lube

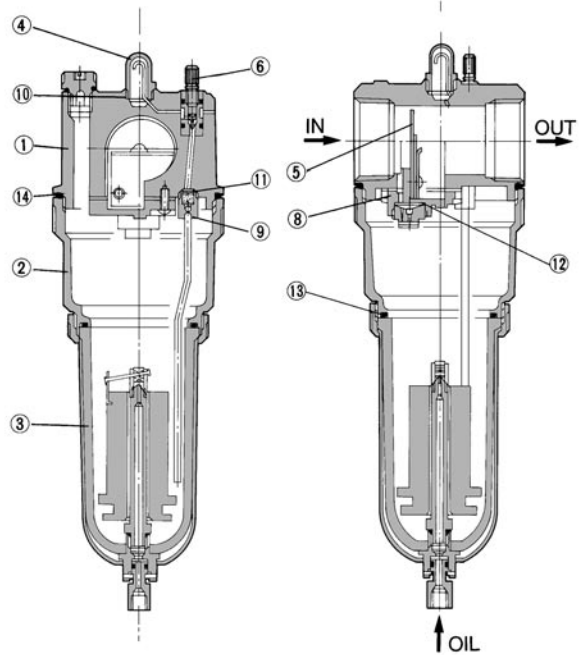
JIS Symbol



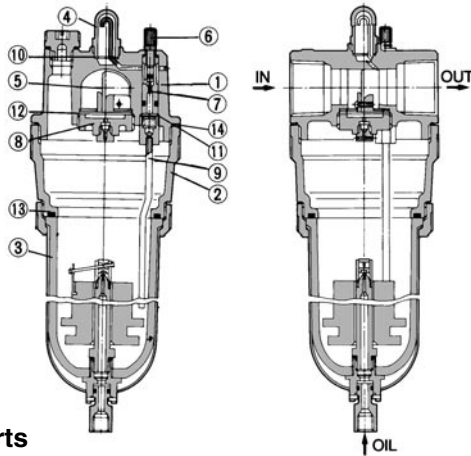
ALF400



ALF800/900



ALF500/600



Component parts

No.	Description	Material			Note
		ALF400, 400-06	ALF500, 600	ALF800, 900	
①	Body	Aluminum die cast	Aluminum cast	Painted silver	
②	Housing	—	Aluminum die cast	Painted silver	

Replacement parts

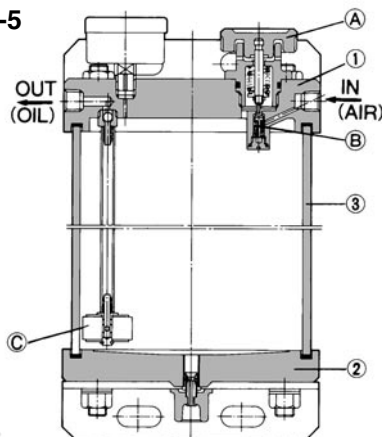
No.	Description	Material	Part No.					
			ALF400	ALF400-06	ALF500	ALF600	ALF800	ALF900
③	Auto feed	—	ALF-3	ALF-3	ALF-3	ALF-3	ALF-3	ALF-3
④	Sight dome	Polycarbonate	12316	12316	12316	12316	12316	12316
⑤	Damper assembly	—	123122-3A (1/2) 123122-2A (3/8) 123122-1A (1/4)	123122-3A	123210A	123310A	123417A(1 1/4) 123416A(1 1/2)	12356A
⑥	Needle stud assembly	—	123128PA	123128PA	123128PA	123128PA	123128PA	123128PA
⑦	Needle guide assembly	—	123129A	123221A	123292A	123314A	—	—
⑧	Retainer assembly	—	123182	123182	12325A	12335A	123032	—
⑨	Siphon tube assembly	—	124230	124230	124231	124232	124232	124232
⑩	Sight dome seal	Urethane resin	12318	12318	12318	12318	12318	12318
⑪	Siphon nut seal	Urethane resin	123111	123111	123111	123111	123111	123111
⑫	Damper retainer seal	NBR	123126	123126	123213	123313	123011	—
⑬	Bowl O ring	NBR	113136	113136	113136	113136	113136	113136
⑭	Housing O ring	NBR	—	—	JISB2401G80	JISB2401G90	JISB2401G90	JISB2401G90

Construction: Auto Feed Tank

JIS Symbol



ALT-5



Operation the principle/Auto feed tank

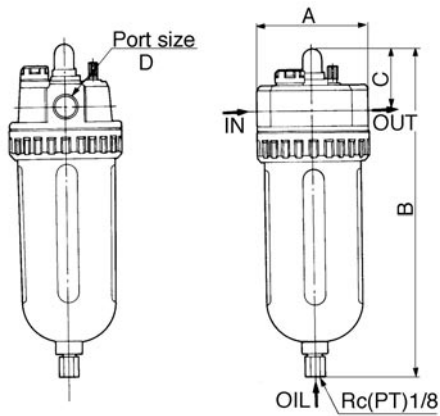
By turning cam handle A 90° clockwise, valve B opens, allowing the air that has entered from the IN side to be introduced into the tank. Due to the air pressure, the oil in the tank passes through felt C and exits from the OUT side. Turning cam handle A 90° counterclockwise stops the air from the IN side, thus stopping the feeding of the oil.

Component parts

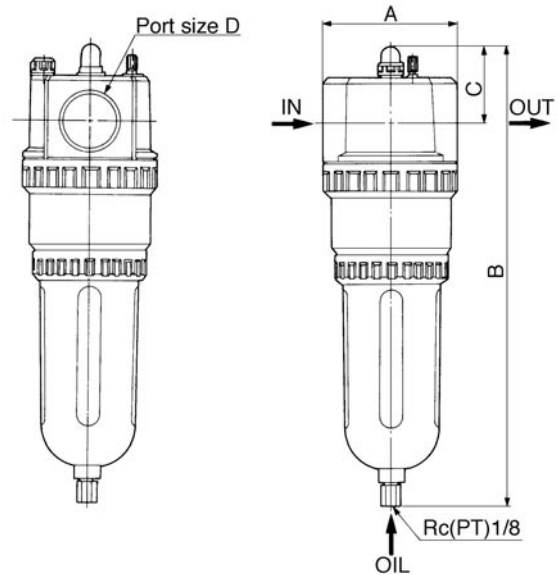
No.	Description	Material	Note
①	Top cover	Aluminum cast	Painted silver
②	Bottom cover	Aluminum cast	Painted silver
③	Bowl	STKM	Painted silver

Dimensions: Auto Feed Lube

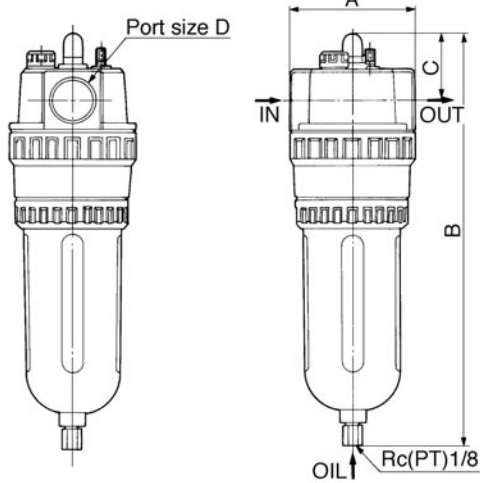
ALF400



ALF800/900

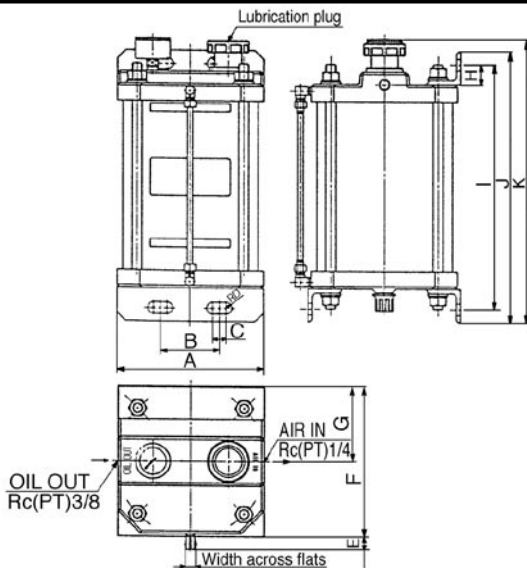


ALF500/600



Model	Port size D	A	B	C
ALF400	1/4 / 3/8 / 1/2	80	238.5	44
ALF400-06	3/4	85	246.5	46
ALF500	3/4 / 1	90	295.5	48
ALF600	1	100	319.5	51
ALF800	1 1/4 / 1 1/2	100	338.5	59
ALF900	2	100	344.5	63

Dimensions: Auto Feed Tank



Model	A	B	C	D	E	F	G	H	I	J	K	L
ALT-5	174	70	16	7	91	106	197	24	382	414	428	—
ALT-5-IS	174	70	16	7	91	106	197	24	382	414	428	449
ALT-9	234	108	30	7	121	137	258	40	422	472	—	—
ALT-9-IS	234	108	30	7	121	137	258	40	422	472	—	482

Oil Distributor VA, VB/Nylon Tubing Related Products

Oil Distributor Series VA, VB

How to Order



VA4-6

V **A** **4** - **6**

Oil Distributor

Distribution

A	Both sides exhaust
B	One side exhaust

Number of distribution ports

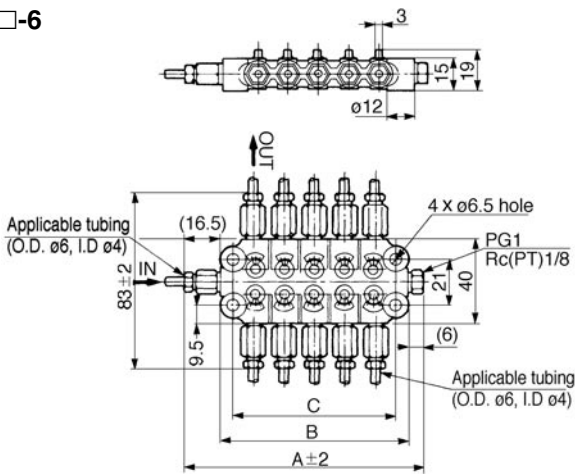
	(VA)	(VB)
4	4 ports	4 ports
6	6 ports	6 ports
10	10 ports	8 ports
16	16 ports	

Applicable tube O.D.

6	ø6
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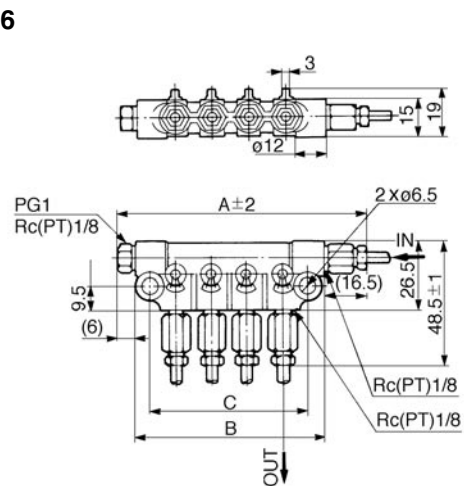
Dimensions

VA□-6



Model	# Ports	A	B	C	Applicable tubing
VA4-6	4	—	36.5	—	ø6
VA6-6	6	82.5	60	48	
VA10-6	10	110.5	88	76	
VA16-6	16	152.5	130	118	

VB□-6



Model	# Ports	A	B	C	Applicable tubing
VB4-6	4	96.5	74	62	ø6
VB6-6	6	124.5	102	90	
VB8-6	8	152.5	130	118	

Note) Insert seal plug (PG1) into the distribution port which is not used.

Nylon Tubing

Specifications

Model	T0604
Max. operating pressure	1.0MPa
Burst pressure	Refer to burst pressure characteristics curve.
Min. bending radius (mm) ⁽¹⁾	25
Operating temperature	-20°C to 60°C
Material	Nylon 12

Note 1) The value at temp. of 20°C and with O.D. variable rate 10% max.

How to Order

T **0604** **B** - **20**

Nylon tubing

Tubing size

O.D. ø6, I.D. ø4

Color

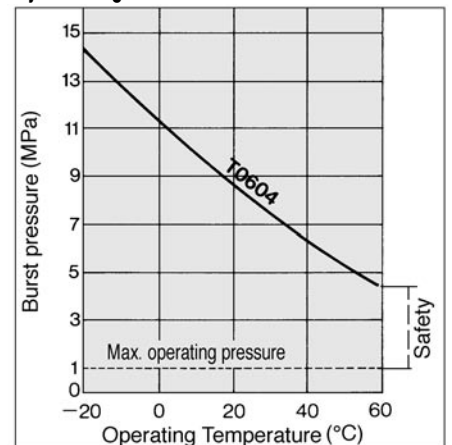
Symbol	Color
B	Black
W	White
R	Red
BU	Blue
Y	Yellow
G	Green

Length per roll

20	20m
100	100m roll



Nylon tubing Burst Pressure Characteristics Curve



Max. operating pressure is 1.3 max of burst pressure at 60°C, considering the safety ratio.