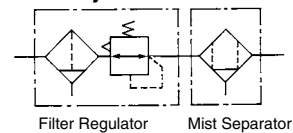


## Filter Regulator + Mist Separator

**AC20D to AC40D**

JIS Symbol



## How to Order

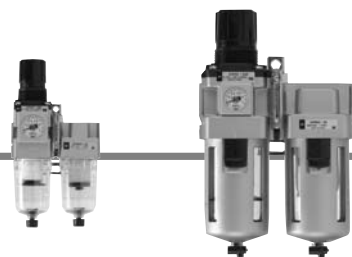
AC **30** D - **03** **DE** - -

①      ②      ③      ④      ⑤      ⑥

- Option/Semi-standard: Select one each for a to j.
- Option/Attachment/Semi-standard symbol: When more than one specification is required, indicate in alphanumeric order.  
Example) AC30D-F03DE1-SV-16NR

		Symbol	Description	①			
				Body size			
				20	30	40	
②	Thread type	Nil	Rc	●	●	●	
		N <sup>Note 1)</sup>	NPT	●	●	●	
		F <sup>Note 2)</sup>	G	●	●	●	
+							
③	Port size	01	1/8	●	—	—	
		02	1/4	●	●	●	
		03	3/8	—	●	●	
		04	1/2	—	—	●	
		06	3/4	—	—	●	
+							
④ Option	a	Float type auto drain	Nil	Without auto drain	●	●	●
			C	Float type auto drain (N.C.)	●	●	●
			D	Float type auto drain (N.O.)	—	●	●
	+						
	b	Pressure gauge	Nil	Without pressure gauge	●	●	●
			E	Square embedded type pressure gauge (with limit indicator)	●	●	●
			G	Round type pressure gauge (with limit indicator)	●	●	●
			M	Round type pressure gauge (with color zone)	●	●	●
		Digital pressure switch	E1	Output: NPN output / Electrical entry: Wiring bottom entry	●	●	●
			E2	Output: NPN output / Electrical entry: Wiring top entry	●	●	●
			E3	Output: PNP output / Electrical entry: Wiring bottom entry	●	●	●
			E4	Output: PNP output / Electrical entry: Wiring top entry	●	●	●
+							
⑤ Attachment	c	Pressure switch	Nil	Without attachment	●	●	●
			S <sup>Note 4)</sup>	Mounting position: AW+S+AFM	●	●	●
	+						
	d	3-port valve for residual pressure release	Nil	Without attachment	●	●	●
V			Mounting position: AW+AFM+V	●	●	●	
V1 <sup>Note 5)</sup>			Mounting position: V+AW□K+AFM	●	●	●	
+							
⑥ Semi-standard	e	Set pressure	Nil	0.05 to 0.85 MPa setting	●	●	●
			1 <sup>Note 6)</sup>	0.02 to 0.2 MPa setting	●	●	●
	+						
	f	Bowl <sup>Note 7)</sup>	Nil	Polycarbonate bowl	●	●	●
			2	Metal bowl	●	●	●
			6	Nylon bowl	●	●	●
			8	Metal bowl with level gauge	—	●	●
			C	With bowl guard	●	—	—
			6C	Nylon bowl with bowl guard	●	—	—
	+						
	g	Filter regulator Mist separator drain port <sup>Note 8)</sup>	Nil	With drain cock	●	●	●
			J <sup>Note 9)</sup>	Drain guide 1/8	●	—	—
				Drain guide 1/4	—	●	●
			W <sup>Note 10)</sup>	Drain cock with barb fitting: For ø6 x ø4 nylon tube	—	●	●
	+						
h	Exhaust mechanism	Nil	Relieving type	●	●	●	
		N	Non-relieving type	●	●	●	
+							
i	Flow direction	Nil	Flow direction: Left to right	●	●	●	
		R	Flow direction: Right to left	●	●	●	

# Air Combination *Series AC20D to AC40D*



AC20D

AC40D

	Symbol	Description	①		
			Body size		
			20	30	40
⑥ Semi-standard	j	Pressure unit	●	●	●
		NII Name plate and pressure gauge in imperial units: MPa	○ Note 13)	○ Note 13)	○ Note 13)
		Z Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F	△ Note 14)	△ Note 14)	△ Note 14)
		ZA Digital pressure switch: With unit conversion function			

Note 1) Drain guide is NPT1/8 (applicable to the AC20D) and NPT1/4 (applicable to the AC30D to AC40D). The auto drain port comes with  $\phi 3/8"$  one-touch fitting (applicable to the AC30D to AC40D).

Note 2) Drain guide is G1/8 (applicable to the AC20D) and G1/4 (applicable to the AC30D to AC40D).

Note 3) Option G, M are not assembled and supplied loose at the time of shipment.

Note 4) The bracket position varies depending on the pressure switch mounting.

Note 5) The regulator is equipped with a backflow function in this configuration. Additionally, for safety purposes, please check that the pressure in the outlet side is turned to the atmospheric pressure once the pressure in the outlet side is exhausted, by using a pressure gauge, etc.

Note 6) The only difference from the standard specifications is the adjusting spring for the regulator. It does not restrict the setting of 0.2 MPa or more. When the pressure gauge is attached, a 0.2 MPa pressure gauge will be fitted.

Note 7) Refer to Chemical Data on page 287 when selecting a case material.

Note 8) Float type auto drain: The combination of C and D is not possible.

Note 9) Without a valve function

Note 10) Metal bowl: The combination of 2 and 8 is not possible.

Note 11) For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) The digital pressure switch will be equipped with the unit conversion function, setting to psi initially. MPa and psi are shown together on the pressure unit.

Note 12) For options: E1, E2, E3, E4. This product is for overseas use only according to the new Measurement Law. (The SI unit is provided for use in Japan.)

Note 13) ○: For thread type: NPT only

Note 14) △: Select with options: E1, E2, E3, E4.

## Standard Specifications

Model		AC20D	AC30D	AC40D	AC40D-06
Component	Filter regulator	AW20	AW30	AW40	AW40-06
	Mist separator	AFM20	AFM30	AFM40	AFM40-06
Port size		1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2	3/4
Pressure gauge port size <sup>Note 1)</sup>		1/8		1/4	
Fluid		Air			
Ambient and fluid temperature <sup>Note 2)</sup>		−5 to 60°C (with no freezing)			
Proof pressure		1.5 MPa			
Maximum operating pressure		1.0 MPa			
Minimum operating pressure		0.05 MPa			
Set pressure range		0.05 to 0.85 MPa			
Relief pressure		Set pressure + 0.05 MPa [at relief flow rate of 0.1 ℓ/min (ANR)]			
Nominal filtration rating		AF: 5 μm, AFM: 0.3 μm (99.9% filtered particle size)			
Rated flow (ℓ/min (ANR)) <sup>Note 3)</sup>		150	330	800	800
Outlet side oil mist concentration		Max. 1.0 mg/m³ (ANR) (≈ 0.8 ppm) <sup>Note 4)</sup> <sup>Note 5)</sup>			
Bowl material		Polycarbonate			
Bowl guard		Semi-standard	Standard		
Regulator construction		Relieving type			
Mass (kg)		0.57	0.74	1.38	1.43

Note 1) Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge or with a digital pressure switch (AC20D to AC40D).

Note 2) -5 to 50°C for the products with the digital pressure switch

Note 3) Conditions: Mist separator inlet pressure: 0.5 MPa; The rated flow varies depending on the inlet pressure. Keep the air flow within the rated flow to prevent an outflow of lubricant to the outlet side.

Note 4) When the compressor oil mist discharge concentration is 30 mg/m<sup>3</sup> (ANR).

Note 5) Bowl O-ring and other O-rings are slightly lubricated.

AC

AF□

AR

AL

AW□

A□G

AV

AF800  
AF900