

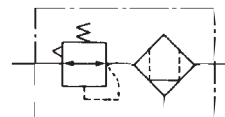
# Mist Separator Regulator

## AWM20 to AWM40

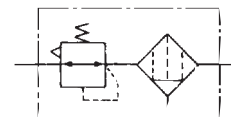
# Micro Mist Separator Regulator

## AWD20 to AWD40

Symbol  
Mist Separator  
Regulator

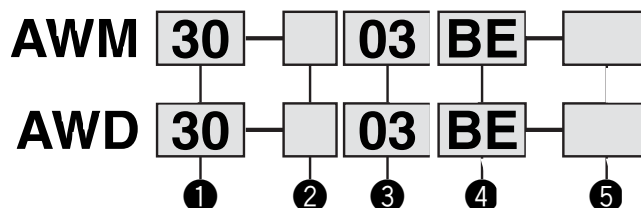


Symbol  
Micro Mist Separator  
Regulator



- The AWM series is made up of a regulator and a mist separator to provide optimum results in applications such as clean air blow operations. (Nominal filtration rating: 0.3 m)
- The AWD series is made up of a regulator and a micro mist separator to provide optimum results in applications such as ultraclean air blow operations. (Nominal filtration rating 0.01 m)

### How to Order



- Option / Semi-standard: Select one each for a to i.
- Option / Semi-standard symbol: When more than one specification is required, indicate in ascending alphanumeric order.  
Example) AWM30-03BE-1N

		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	—	—	●	
+							
④	a	Mounting	Nil	Without mounting option	●	●	●
			B <sup>Note 4)</sup>	With bracket	●	●	●
			H	With set nut	●	●	●
	+						
	b	Float type auto drain	Nil	Without auto drain	●	●	●
			C	Float type auto drain (N.C.)	●	●	●
			D	Float type auto drain (N.O.)	—	●	●
	+						
	c	Pressure gauge	Nil	Without pressure gauge	●	●	●
			E	Square embedded type pressure gauge	●	●	●
			G	Round type pressure switch	●	●	●
		Digital pressure switch	E1 <sup>Note 5)</sup>	NPN output / Wiring bottom entry	●	●	●
			E2 <sup>Note 5)</sup>	NPN output / Wiring top entry	●	●	●
			E3 <sup>Note 5)</sup>	PNP output / Wiring bottom entry	●	●	●
			E4 <sup>Note 5)</sup>	PNP output / Wiring top entry	●	●	●
+							
⑤	d	Set pressure	Nil	0.05 to 0.85 MPa set	●	●	●
			1 <sup>Note 6)</sup>	0.02 to 0.2 MPa set	●	●	●
	+						
	e	Bowl	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	●	—	—
	+						
	f	Drain port <sup>Note 7)</sup>	Nil	With drain cock	●	●	●
			J <sup>Note 8)</sup>	Drain guide 1/8	●	—	—
				Drain guide 1/4	—	●	●
			W <sup>Note 9)</sup>	Drain cock with barb fitting: For ø6 x ø4 nylon tube	—	●	●

# Mist Separator Regulator *Series AWM20 to AWM40*

## Micro Mist Separator Regulator *Series AWD20 to AWD40*



**AWM20, AWD20    AWM40, AWD40**

		Symbol	Description	1			
				Body size			
				20	30	40	
5	g	Exhaust mechanism	Nil	Relieving type	●	●	●
			N	Non-relieving type	●	●	●
			+				
	h	Flow direction	Nil	Flow direction: Left to right	●	●	●
			R	Flow direction: Right to left	●	●	●
			+				
	i	Pressure unit	Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	●	●	●
			Z <small>Note 10)</small>	Name plate, caution plate for bowl, and pressure gauge in imperial units (PSI, F)	○ <small>Note 12)</small>	○ <small>Note 12)</small>	○ <small>Note 12)</small>
			ZA <small>Note 11)</small>	Digital pressure switch: With unit switching function	△ <small>Note 13)</small>	△ <small>Note 13)</small>	△ <small>Note 13)</small>

Note 1) Drain guide is NPT1/8 (applicable to the AWM20, AWD20) and NPT1/4 (applicable to the AWM30 to AWM40, AWD30 to AWD40). The exhaust port for auto drain comes with  $\phi 3/8"$  One-touch fitting (applicable to the AWM30 to AWM40, AWD30 to AWD40).

Note 2) Drain guide is G1/8 (applicable to the AWM20 and AWD20) and G1/4 (applicable to the AWM30 to AWM40, AWD30 to AWD40).

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

Note 4) Assembly of a bracket and set nuts

Note 5) When choosing with H (panel mount) the installation space for lead wires will not be secured. In this case, select "wiring down entry" for the lead wire entry.

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) Float type auto drain: The combination between C and D is not available.

Note 8) Without a valve function

Note 9) Metal bowl: The combination of 2 and E cannot be selected.

Note 10) 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 switching function, setting to PSI initially.

Note 11) 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 12) ○: For thread type NPT only

Note 13) △: Combination available for options: E1, E2, E3, E4

### Standard Specifications

Model		AWM20 AWD20	AWM30 AWD30	AWM40 AWD40
Port size		1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2
Fluid		Air		
Proof pressure		1.5 MPa		
Maximum operating pressure		1.0 MPa		
Set pressure range		0.05 to 0.85 MPa		
Pressure gauge port size <sup>Note 1)</sup>		1/8		1/4
Ambient and fluid temperature <sup>Note 2)</sup>		−5 to 60°C (with no freezing)		
Nominal filtration rating	AWM20 to AWM40	0.3 m (95% filtered particle size)		
	AWD20 to AWD40	0.01 m (95% filtered particle size)		
Outlet side oil mist concentratio	AWM20 to AWM40	Maximum 1.0 mg/m <sup>3</sup> (ANR) ( 0.8 ppm) <sup>Note 3)</sup> <sup>Note 4)</sup>		
	AWD20 to AWD40	Max. 0.1 mg/m <sup>3</sup> (ANR) (Before saturated with 0.001 mg/m <sup>3</sup> (ANR) or less 0.008 ppm) <sup>Note 3)</sup> <sup>Note 4)</sup>		
Rated flow (ℓ/min (ANR)) <sup>Note 5)</sup>	AWM20 to AWM40	150	330	820
	AWD20 to AWD40	90	180	450
Drain capacity (cm <sup>3</sup> )		8	25	45
Bowl material		Polycarbonate		
Bowl guard		Semi-standard	Standard	
Regulator construction		Relieving type		
Weight (kg)		0.44	0.59	1.25

Note 1) Pressure gauge connection threads are not available for F.R.L. unit with a square embedded type pressure gauge.

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

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

Note 4) Bowl O-ring and other C-rings are slightly lubricated.

Note 5) Conditions: Mist separator inlet pressure 0.7 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.