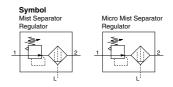
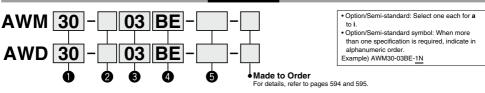
# Mist Separator Regulator **AWM20 to AWM40**Micro Mist Separator Regulator **AWD20 to AWD40**



- 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:  $0.3 \mu m$ )
- 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 μm)

## How to Order



			0	2	Made to Order For details, refer to page	es 594 and 595.		
\	_	_					0	
			_	Symbol	Description		Body size	
					·	20	30	40
				Nil	Rc	•	•	•
2		TI	read type	N Note 1)	NPT		•	
9			iicaa type	Note 2)	G		•	<u> </u>
				+	<u> </u>			
				01	1/8	•		_
_				02	1/4	•	•	•
❸			Port size	03	3/8		•	•
				04	1/2	_	_	•
				+	·			-
				Nil	Without mounting option	•	•	•
		а	Mounting	B Note 4)	With bracket	•	•	•
				Н	With set nut	•	•	•
				+				
			FI	Nil	Without auto drain	•	•	•
		b	Float type auto drain	С	Float type auto drain (N.C.)	•	•	•
	Note 3)		auto urani	D	Float type auto drain (N.O.)	_	•	•
•	등			+				
0	Option				Without pressure gauge	•	•	•
			Pressure	E	Square embedded type pressure gauge	•	•	•
			gauge	G	Round type pressure gauge	•	•	•
				М	Round type pressure gauge (with color zone)	•	•	•
		С		E1 Note 5)	Output: NPN output / Electrical entry: Wiring bottom entry	•	•	•
				<b>E2</b> Note 5)	Output: NPN output / Electrical entry: Wiring top entry	•	•	•
			pressure switch	E3 Note 5)	Output: PNP output / Electrical entry: Wiring bottom entry	•	•	•
			SWILCH	E4 Note 5)	Output: PNP output / Electrical entry: Wiring top entry	•	•	•
				+				
		d	Set pressure	Nil	0.05 to 0.85 MPa setting	•	•	•
		u	Set pressure	1 Note 7)	0.05 to 0.2 MPa setting	•	•	•
				+				
				Nil	Polycarbonate bowl	•	•	•
	ا ۾ ا			2	Metal bowl	•	•	•
	gar	е	Bowl Note 8)	6	Nylon bowl	•	•	•
6	tan		DOWI	8	Metal bowl with level gauge		•	•
9	-ic			С	With bowl guard	•	_	
	Semi-standard			6C	Nylon bowl with bowl guard	•		
	"			+				
				Nil	With drain cock	•	•	•
		f	Drain port Note 9)	Note 10)	Drain guide 1/8	•		
			Diain pon		Drain guide 1/4	_	•	•
				W Note 11)	Drain cock with barb fitting: For ø6 x ø4 nylon tube			•

## Mist Separator Regulator AWM20 to AWM40 Series Micro Mist Separator Regulator AWD20 to AWD40 Series





AC-A AF-A

AF□-A AR-A AL-A AW-A AC-B AF-A AF□-A AR:

AL-A

AW:₿

 $\mathsf{AW}\square$ 

IA∏G

EΠ

A۷ AF

AWM20, AWD20

AWM40, AWD40

\	\	_					0					
				Symbol	Description	Body size						
						20	30	40				
			Exhaust	Nil	Relieving type	•	•	•				
		g mechanism		N	Non-relieving type	•	•	•				
	힏			+								
	Semi-standard	h	Flow direction	Nil	Flow direction: Left to right	•	•	•				
6	stal	"	Flow direction	R	Flow direction: Right to left	•	•	•				
	<u> </u>			+								
	Se			Nil	Name plate, caution plate for bowl, and pressure gauge in imperial units: MPa	•	•	•				
		i	i Pressure unit Z Note 12		Name plate, caution plate for bowl, and pressure gauge in imperial units: psi, °F	O Note 14)	O Note 14)	O Note 14)				
				ZA Note 13)	Digital pressure switch: With unit conversion function	△ Note 15)	△ Note 15)	△ Note 15)				

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 auto drain port comes with ø3/8" one-touch fitting (applicable to the AWM30 to AWM40, AWD30 to AWD40).

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

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

Note 4) Assembly of a bracket and set nuts

Standard Specifications

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

Note 6) Float type auto drain: when used in combination with C or D, minimum set pressure is: N.O. type-0.1 MPa; N.C. type-0.1 MPa (AD27) and 0.15 MPa (AD37/47)

Note 7) 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 8) Refer to Chemical Data on page 387 when

selecting a case material. Note 9) Float type auto drain: The combination of C and D is not possible.

Note 10) Without a valve function

Note 11) Metal bowl: The combination of 2 and 8 is not possible.

Note 12) 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. The combination of the round type pressure gauge with color zone "M" and a psi display "Z" is not orderable as a standard product. However, this combination is available as a special

Note 13) 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 14) O: For thread type: NPT only Note 15)  $\triangle$ : Select with options: E1, E2, E3, E4.

otaniaana opeeniisaanenis							
Model		AWM20 AWD20	AWM30 AWD30	AWM40 AWD40			
Port size		1/8, 1/4	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 Note 1)		1.	/8	1/4			
Ambient and fluid temperature No	te 2)	−5 to 60°C (with no freezing)					
Nominal filtration rating	AWM20 to AWM40	0.3 μm (99.9% filtered particle size)					
Nonlina mitation rating	AWD20 to AWD40	0.01 μm (99.9% filtered particle size)					
Outlet side oil mist	AWM20 to AWM40	Max. 1.0 mg/m³ (ANR) (≈ 0.8 ppm) Note 3) Note 4)					
concentration	AWD20 to AWD40	Max. 0.1 mg/m³ (ANR) (Before s	aturated with oil 0.01 mg/m³ (ANR	) or less $\approx 0.008$ ppm) Note 3) Note 4)			
Rated flow (L/min (ANR)) Note 5)	AWM20 to AWM40	150	330	820			
nated flow (Littliff (ANN))	AWD20 to AWD40	90	450				
Drain capacity (cm³)		8 25 45					
Bowl material		Polycarbonate					
Bowl guard	·	Semi-standard Standard					
Construction		Relieving type					

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

Weight (kg)

0.59

1 25

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/m3 (ANR).

<sup>0.29</sup> Note 4) Bowl O-ring and other O-rings are slightly lubricated.

Note 5) Conditions: Mist separator inlet pressure: 0.7 MPa; outlet 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

## AWM20 to AWM40 Series AWD20 to AWD40 Series

#### Options/Part No.

				Model			
	Optional specifi	cations	AWM20 AWD20	AWM30 AWD30	AWM40 AWD40		
Bracket as	sembly Note 1)		AW20P-270AS	AR30P-270AS	AR40P-270AS		
Set nut			AR20P-260S	AR30P-260S	AR40P-260S		
	_ N-t- 0)	Standard	G36-1	0-□01	G46-10-□02		
	Round type Note 2)	0.02 to 0.2 MPa setting	G36-2	G46-2-□02			
Pressure	Round type Note 2)	Standard	G36-10	G36-10-□01-L			
gauge	(with color zone)	0.02 to 0.2 MPa setting	G36-2-	G36-2-□01-L			
	Square embedded	Standard	GC3-10AS [G	ge cover only)]			
	type Note 3)	0.02 to 0.2 MPa setting	GC3-2AS [GC	e cover only)]			
		NPN output / Wiring bottom entry	ISE35-N-25-	MLA [ISE35-N-25-M (Switc	h body only)]		
Digital pro-	ssure switch Note 4)	NPN output / Wiring top entry	ISE35-R-25-	MLA [ISE35-R-25-M (Switc	h body only)]		
Digital pres	ssure switch	PNP output / Wiring bottom entry	ISE35-N-65-	MLA [ISE35-N-65-M (Switc	h body only)]		
		PNP output / Wiring top entry	ISE35-R-65-	h body only)]			
Floor time	auto drain Note 5) Note 6)	N.C.	AD27	AD37	AD47		
rioat type	auto urami noco o noco o	N.O.	_	AD38	AD48		

#### Semi-standard/Bowl Assembly Part No.

S	emi-stand	lard speci	fications			Model					
Bowl material	Float	t type drain N.O.	Note 6) With drain guide	With drain With		AWM20 AWD20	AWM30 AWD30	AWM40 AWD40			
	_	_	_	_	•	C2SF-C	_				
	•	_	_	_	•	AD27-C	_	_			
Polycarbonate	_	_	•	_	_	C2SF-J	C3SF-J	C4SF-J			
	_	_		•	_	_	C3SF-W	C4SF-W			
	_	_	•	_	•	C2SF-CJ	_	-			
	_	_	_	_	_	C2SF-6	C3SF-6	C4SF-6			
	_	_		_	•	C2SF-6C	_	-			
	•	_	_	_	_	AD27-6	AD37-6	AD47-6			
Nisten	_	•	_	_	_	_	AD38-6	AD48-6			
Nylon	•	_		_	•	AD27-6C	_	-			
	_	_	•	_	_	C2SF-6J	C3SF-6J	C4SF-6J			
	_	_	_	•	_	_	C3SF-6W	C4SF-6W			
	_	_	•	_	•	C2SF-6CJ	_	_			
	_	_		_	_	C2SF-2	C3SF-2	C4SF-2			
Metal	•	_	_	_	_	AD27-2	AD37-2	AD47-2			
ivietai	_	•	_	_	_	_	AD38-2	AD48-2			
	_	_	•	_	_	C2SF-2J	C3SF-2J	C4SF-2J			
	_	_	_	_	_	_	C3LF-8	C4LF-8			
Metal bowl with	•	_	_	_	_	_	AD37-8	AD47-8			
level gauge	_	•	_	_	_	_	AD38-8	AD48-8			
	_	_	•	_	_	_	C3LF-8J	C4LF-8J			

Note 1) Assembly of a bracket and set nuts

Note 2) in part numbers for a round pressure gauge indicates a type of connection thread. No indication is necessary for R; however, indicate N for NPT. Please contact SMC regarding the connection thread NPT and pressure gauge supply for psi unit specifications.

Note 3) Including one O-ring and 2 mounting screws. [ ]: Pressure gauge cover only
Note 4) Lead wire with connector (2 m), adapter, lock pin, O-ring (1 pc.), mounting screw (2 pcs.) are attached. [ ]: Switch body only.

Also, regarding how to order the digital pressure switch, please refer to page 596.

Note 5) Minimum operating pressure: N.O. type-0.1 MPa; N.C. type-0.1 MPa (AD27) and 0.15 MPa (AD37/47). Please contact SMC for psi and °F unit specifications. Note 6) Please consult SMC for details on drain piping to fit NPT or G port sizes. Note) • Including O-ring

Bowl assembly for the AWM30/40, AWD30/40 comes with a bowl guard (steel band material), (except when the bowl material is metal)



## AWM20 to AWM40 Series AWD20 to AWD40 Series **Specific Product Precautions**

Be sure to read this before handling the products. Refer to back page 50 for Safety Instructions and pages 387 to 391 for F.R.L. Precautions.

#### Selection

## **♠ Warning**

1. Residual pressure release (outlet pressure release) is not complete by releasing inlet pressure. Please contact SMC regarding residual pressure release.

#### Air Supply

### ∕!\ Caution

- 1. Install an air filter (AF series) as a pre-filter on the inlet side of the mist separator regulator to prevent premature clogging
- 2. Install a mist separator (AFM series) as a pre-filter on the inlet side of the micro mist separator regulator to prevent premature clogging.

#### Maintenance

## 🛝 Warning

1. Replace the element every 2 years or when the pressure drop becomes 0.1 MPa, whichever comes first, to prevent damage to the element.

#### Mounting and Adjustment

## ∕!\ Caution

- 1. Set the regulator while verifying the displayed values of the inlet and outlet pressure gauges. Turning the regulator knob excessively can cause damage to the internal parts.
- 2. The pressure gauge included with regulators for 0.02 to 0.2 MPa setting is for up to 0.2 MPa use only. Exceeding 0.2 MPa of pressure can damage the gauge.
- 3. Do not use tools on the pressure regulator knob as this may cause damage. It must be operated manually.

#### Mounting and Adjustment

## Warning

- Be sure to unlock the knob before adjusting the pressure and lock it after setting the pressure. Failure to follow this procedure can cause damage to the knob and the outlet pressure
- · Pull the pressure regulator knob to unlock. (You can visually verify this with the "orange mark" that appears in the gap.)
- · Push the pressure regulator knob to lock. When the knob is not easily locked, turn it left and right a little and then push it (when the knob is locked, the "orange mark", i.e., the gap will disappear).



2. A knob cover is available to prevent careless operation of the knob. Refer to page 597 for details.

AC-A

AF-A

AF□-A AR-A

AL-A

AW-A AC-B

AF-A

AF□-A

AR:

AL-A

AW:

 $A \square G$ 

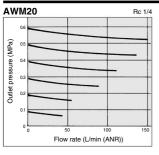
EΠ A۷

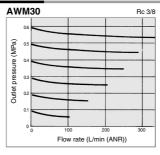
AF

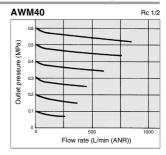
## AWM20 to AWM40 Series AWD20 to AWD40 Series

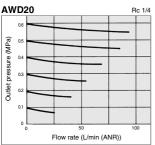


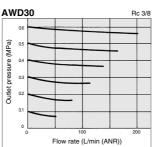
Condition: Inlet pressure 0.7 MPa

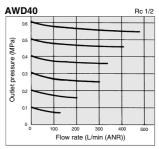






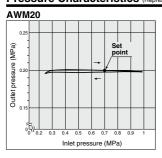


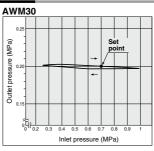


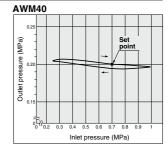


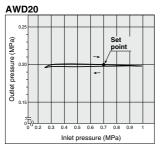
#### Pressure Characteristics (Representative values)

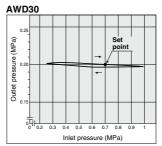
Conditions: Inlet pressure 0.7 MPa, Outlet pressure 0.2 MPa, Flow rate 20 L/min (ANR)

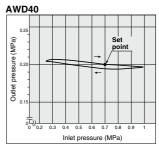








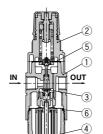




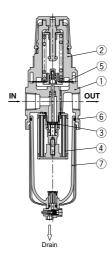
## Mist Separator Regulator AWM20 to AWM40 Series Micro Mist Separator Regulator AWD20 to AWD40 Series

#### Construction

#### AWM20 AWD20



#### AWM30, AWM40 AWD30, AWD40



**Component Parts** 

No.	Description	Material	Model	Color
1	Body	Aluminum die-cast	AWM20 to AWM40 AWD20 to AWD40	Platinum silver
2	Bonnet	Polyacetal	AWM20 to AWM40 AWD20 to AWD40	Black

Rep	lacement Parts									
					Part no.					
No.	Descript	ion	Material	AWM20 AWD20	AWM30 AWD30	AWM40 AWD40				
3	Valve assembly		Brass, HNBR	AWM20P-090AS	AWM30P-090AS	AWM40P-090AS				
_	Flamout cocombb.	AWM20 to AWM40	_	AFM20P-060AS	AFM30P-060AS	AFM40P-060AS				
4	Element assembly	AWD20 to AWD40	_	AFD20P-060AS	AFD30P-060AS	AFD40P-060AS				
5	Diaphragm assembly		Weatherable NBR	AR20P-150AS	AR30P-150AS	AR40P-150AS				
6	Bowl O-ring		NBR	C2SFP-260S		C4SFP-260S				
7	Bowl assembly Note 1)		Polycarbonate	C2SF	C3SF Note 2)	C4SF Note 2)				

Note 1) Bowl O-ring is included. Please contact SMC regarding the bowl assembly supply for psi and °F unit specifications.

Note 2) Bowl assembly for the AWM30/40, AWD30/40 comes with a bowl guard (steel band material).

AC-A AF-A AF□-A

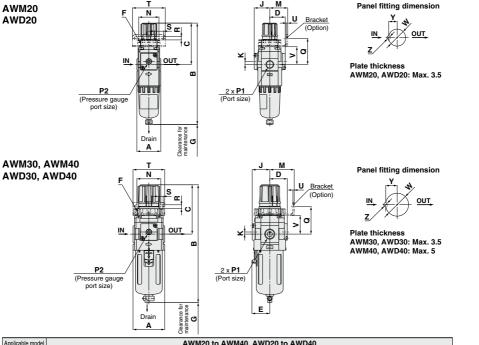
AR-A

AL-A AW-A AC-B AF-A AF□-A AR:A AL-A AW:  $AW\square$ 

A□G IE□ A۷ AF

## AWM20 to AWM40 Series AWD20 to AWD40 Series

#### **Dimensions**



		0 - 1		
Applicable model		AWM20 to AWM	140, AWD20 to AWD40	
Option	Square embedded type pressure gauge	Digital pressure switch	Round type pressure gauge	Round type pressure gauge (with color zone)
Dimensions	Center of piping	Center of piping	±	Center of piping

Applicable model		AWM20, AWD20	)	AWM30/40, AWD30/40							
Optional/Semi-standard specifications	With auto drain (N.C.)	Metal bowl	With drain guide	With auto drain (N.O./N.C.)	Metal bowl	Metal bowl with level gauge	With drain guide	Drain cock with barb fitting			
Dimensions	M5 x 0.8	B	1/8 Width across flats 14	N.O.: Black N.C.: Gray e10 one-touch fitting			Width across flats 17	Barb fitting Applicable tubing: T06004			

		Standard specifications											Optional specifications						
Model													Square type pressure gauge		Digital pressure switch		Round type pressure gauge		Round type pressure gauge (with color zone)
	P1	P2	Α	B Note)	С	D	Е	F	G	J	K	Н	J	Н	J	Н	J	Н	J
AWM20/AWD20	1/8, 1/4	1/8	40	173	73	26	_	M28 x 1	40	26	5	□28	27	□27.8	37.5	ø37.5	62.5	ø37.5	63
AWM30/AWD30	1/4, 3/8	1/8	53	201	86	29.5	30	M38 x 1.5	55	29.5	3.5	□28	30.5	□27.8	41	ø37.5	66	ø37.5	66
AWM40/AWD40	1/4, 3/8, 1/2	1/4	70	239	92	37.5	38	M42 x 1.5	80	37.5	1.5	□28	38.5	□27.8	49	ø42.5	76	ø42.5	76

					C	Semi-standard specifications											
Model			Bra	acket mo	ount				Panel mount W				With auto drain With barb fitting With drain guide Metal b				
	M	N	Q	R	S	Т	U	٧	W	Υ	Z	B Note)	B Note)	B Note)	B Note)	B Note)	
AWM20/AWD20	30	34	44	5.4	15.4	55	2.3	30	28.5	14	6	190	_	177	173	_	
AWM30/AWD30	41	40	46	6.5	8	53	2.3	31	38.5	19	7	242	209	208	214	234	
AWM40/AWD40	50	54	54	8.5	10.5	70	2.3	35.5	42.5	21	7	278	247	246	252	272	

Note) The total length of B dimension is the length when the filter regulator knob is unlocked.

## Mist Separator Regulator AWM20 to AWM40 Micro Mist Separator Regulator AWD20 to AWD40 **Made to Order Specifications:**



Please contact SMC for detailed dimensions, specifications and lead times.

#### 1 0.4 MPa Setting

The maximum set pressure is 0.4 MPa. When a pressure gauge is included, the display will show a range from 0 to 0.4 MPa.

#### Specifications

Proof pressure	1.5 MPa
Maximum operating pressure	1.0 MPa
Set pressure range	0.05 to 0.4 MPa

#### Applicable Model

	Model	AWM20	AWM30	AWM40
	Model	AWD20	AWD30	AWD40
	Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2

#### 2 Long Bowl

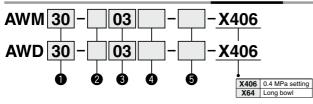
Drain capacity is greater than that of standard models.

#### Applicable Model/Drain Capacity

Model	AWM20	AWM30	AWM40
Model	AWD20	AWD30	AWD40
Port size	1/8, 1/4	1/4, 3/8	1/4, 3/8, 1/2
Drain capacity (cm3)	19	43	88

Note) Please consult SMC for dimensions.

#### 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 alphanumeric order Example) AWM30-03BE-2N-X406

#### 0.4 MPa Setting

#### Long Bowl

Example) AVIIII00 00BE EN A400													
			Symbol Description		Body size					Body size			
							20	30	40		20	30	40
					Rc	Г	•	•	•	$\neg$	•	•	•
2		Thr	ead type	Note 1)	NPT		•	•	•		•	•	•
_				F Note 2)	G		•	•	•		•	•	•
				+		_							
				01	1/8		•	_	_		•	_	_
0		_	ort size	02	1/4		•	•	•		•	•	•
8		P	ort size	03	3/8		-	•	•		_	•	•
				04	1/2		-	T -	•		_	_	•
				+									
		а		Nil	Without mounting option		•	•	•		•	•	•
			Mounting	B Note 4)	With bracket	L	•	•	•		•	•	•
				Н	With set nut (for panel fitting)	L	•	•	•		•	•	•
			+		_								
			. Float type	Nil	Without auto drain	L	•	•	•		_	_	
		b	auto drain	С	Float type auto drain (N.C.)	L	•	•	•		_	_	_
	Note 3)	D			Float type auto drain (N.O.)		-	•	•		_	_	_
4	S   H   Without pressure gauge   H   H   H   H   H   H   H   H   H												
U	립			Nil	Without pressure gauge	L	•	•	•		•	•	•
	•	c -	Pressure	E	Square embedded type pressure gauge (with limit indicator)	L	•	•	•	_	•	•	•
			gauge	G	Round type pressure gauge	L	•	•	•	_	•	•	•
				M	Round type pressure gauge (with color zone)	L	•	•	•		•	•	•
			Digital	E1 Note 5)	Output: NPN output / Electrical entry: Wiring bottom entry	L	•	•	•	_	•	•	•
			pressure	<b>E2</b> Note 5)	Output: NPN output / Electrical entry: Wiring top entry	L	•	•	•	_	•	•	•
			switch	E3 Note 5)	Output: PNP output / Electrical entry: Wiring bottom entry	L	•	•	•	_	•	•	•
			2	E4 Note 5)	Output: PNP output / Electrical entry: Wiring top entry	L	•	•	•		•	•	•

Note 1) Drain guide is NPT 1/8 (applicable to the AWM20, AWD20) and NPT 1/4 (applicable to the AWM30 to AWM40, AWD30 to AWD40). The auto drain port comes with ø3/8" One-touch fitting (applicable to the AWM30 to AWM40, AWD30 to AWD40).

Note 2) Drain guide is G 1/8 (applicable to the AWM20, AWD20) and G 1/4 (applicable to the AWM30 to AWM40, AWD30 to AWD40).

Note 3) Option B, G, H, M are not assembled and 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 bottom entry" for the electrical entry.



## Mist Separator Regulator AWM20 to AWM40 Series Micro Mist Separator Regulator AWD20 to AWD40 Series

AF-A AF□-A

AC-A

AR-A

AL-A AW-A

AC-B

AF-A AF□-A

AR:

AL-A

AW:

Long Bowl

 $AW\square$ A□G

EΠ A۷

AF

Body size Body size 20 30 30

0.4 MPa Setting

	d	Note 6)	Nil	0.05 to 0.85 MPa setting		_	-	•	•	•								
	u	Set pressure	1 Note 7)	0.05 to 0.2 MPa setting	_	_	-	•	•	•								
			+															
		e Bowl Note 8)	Nil	Polycarbonate bowl	•	•	•	•	•	•								
			2	Metal bowl	•	•	•	•	•	•								
	١.		6	Nylon bowl	•	•	•	•	•	•								
	е	DOWI	8	Metal bowl with level gauge	_	•	•	_	-	-								
			C	With bowl guard	•	_	-	•	-	-								
			6C	Nylon bowl with bowl guard	•	_	-	•	-	-								
9			+															
Semi-standard		f Drain port	Nil	With drain cock	•	•	•	•	•	•								
fg			Drain port	Drain port							J Note 10)	Drain guide 1/8	•	_	-	•	-	_
<b>7</b>   ≈	Ш'				- 1	Drain guide 1/4	_	•	•	_	•	•						
%			W Note 11)	Drain cock with barb fitting: For ø6 x ø4 nylon tube	_	•	•	_	•	•								
"	+																	
	g	Exhaust	Nil	Relieving type	•	•	•	•	•	•								
	9	mechanism	N	Non-relieving type	•	•	•	•	•	•								
	+																	
	h	Flow direction	Nil	Flow direction: Left to right	•	•	•	•	•	•								
		1 low direction	R	Flow direction: Right to left	•	•	•	•	•	•								
	+																	
			Nil	Name plate and caution plate for bowl in imperial units: MPa	•	•	•	•	•	•								
	i	Pressure unit	<b>Z</b> Note 12)	Name plate and caution plate for bowl, and pressure gauge in imperial units: psi, °F	O Note 14)	O Note 14)	O Note 14)	O Note 14)	O Note 14)	O Note 14)								
			ZA Note 13)	Digital pressure switch: With unit conversion function	△ Note 15)	△ Note 15)	△ Note 15)	△ Note 15)	△ Note 15)	△ Note 15)								

Description

Note 6) Float type auto drain: when used in combination with C or D, minimum set pressure is: N.O. type–0.1 MPa; N.C. type–0.1 MPa (AD27) and 0.15 MPa (AD37/47).

Note 7) 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 8) Refer to Chemical Data on page 387 when selecting a case material. Note 9) Float type auto drain: The combination of C and D is not possible.

Symbol

Note 10) Without a valve function

6

Note 11) Metal bowl: The combination of 2 and 8 is not possible.

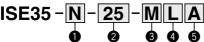
Note 12) For thread type: NPT. This product is for overseas use only according to the new Measurement Law. (The SI unit type is provided for use in Japan.) The digital pressure switch will be equipped with the unit conversion function, setting to psi initially.

Note 13) 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 14) O: For thread type: NPT only
Note 15) A: Select with options: E1, E2, E3, E4,

## Option Digital Pressure Switch C C SW US

For details about the Pressure Switch Precautions, refer to Best Pneumatics No. 8. For details about the Specific Product Precautions, refer to the Operation Manual at SMC website.



_			0 0 0 0	
		Symbol	Description	
a	Electrical entry	N	Wiring bottom entry	
J	Electrical entry	R	Wiring top entry	
		+		
0	Output	25	NPN output	
9	Output	65	PNP output	
		+		
_		Nil Note 2)	With unit conversion function	
8	Display unit Note 1)	M	Fixed SI unit	
		P Note 2)	Pressure unit: psi (initial value) with unit conversion function	
_		+	I	
4	Lead wire	Nil	Without lead wire	
_		<u> </u>	Lead wire (2 m) with connector	
_		Nil	Without accessories (switch body only)	
6	Accessories	A	With accessories (switch body only)  With accessories (adapter, O-ring (1 pc.), mounting screw (2 pcs.), lock pin)	
Note 1) Under the New Measurement Law, sales of switches with the unit switching function are not allowed for use in Japan.  Note 2) Name plate is included.  Note 3) Operation Instruction manual is attached.  Note 4) When ordering the body only, select the symbol from   to respectively.				
Option/Part no.				

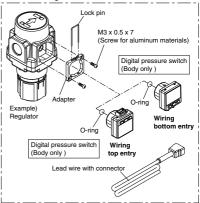
When optional parts are required separately, use the following part numbers to place an order.

Part no.	Option
ZS-32-A	Lead wire (2 m) with connector
ZS-32-C	Accessories (adapter, O-ring (1 pc.), mounting screw (2 pcs.), lock pin)

**Applicable Series** 

F.R.L. unit	AC20, AC25, AC30, AC40, AC50, AC55, AC60
	AC20A, AC30A, AC40A, AC50A, AC60A
	AC20B, AC25B, AC30B, AC40B,
	AC50B, AC55B, AC60B
	AC20C, AC25C, AC30C, AC40C
	AC20D, AC30D, AC40D
Regulator	AR20(K), AR25(K), AR30(K), AR40(K),
negulatoi	AR50(K), AR60(K)
Filter regulator	AW20(K), AW30(K), AW40(K), AW60(K)
Mist separator regulator	AWM20, AWM30, AWM40
Micro mist separator regulator	AWD20, AWD30, AWD40

Diigtal Pressure Switch Details

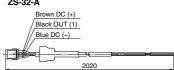


#### Specifications

596

Rated press	ura ranga	0 to 1 MPa				
	pressure range	-0.1 to 1 MPa				
		1.5 MPa				
Withstand p		110 1111 01				
	pressure resolution	0.01 MPa				
Fluid		Air, Inert gas, Non-flammable gas				
Power supp	oly voltage	12 to 24 VDC, Ripple (p-p) 10% or less (with power supply polarity protection)				
Current cor	sumption	55 mA or less (at no load)				
Switch outp	out	NPN or PNP open collector 1 output				
	Max. load current	80 mA				
	Max. applied voltage	30 V (with NPN output)				
	Residual voltage	1 V or less (with load current of 80 mA)				
	Response time	1 s (Response time selections: 0.25, 0.5, 2, 3)				
Short circuit	protection	With short circuit protection				
Repeatabili	ty	±1%F.S.				
·	ty Hysteresis mode	=:,::::::::::::::::::::::::::::::::::::				
Hysteresis		±1%F.S.  Variable (can be set from 0)				
·	Hysteresis mode	=:,::::::::::::::::::::::::::::::::::::				
Hysteresis	Hysteresis mode Window comparator mode	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green)				
Hysteresis Display	Hysteresis mode Window comparator mode uracy	Variable (can be set from 0) 3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.				
Hysteresis Display Display acc	Hysteresis mode Window comparator mode uracy ht	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%F.S. ±1 digit (at 25°C ± 3°C)				
Hysteresis Display Display acc	Hysteresis mode Window comparator mode uracy ht	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%F.S. ±1 digit (at 25°C ± 3°C)  Illuminates when output is turned ON. (Green)				
Display Display acc Indicator lig Environmental resistance	Hysteresis mode Window comparator mode uracy tht Enclosure	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%F.S. ±1 digit (at 25°C ± 3°C)  Illuminates when output is turned ON. (Green)  IP40				
Display Display acc Indicator lig Environmental resistance	Hysteresis mode Window comparator mode uracy ht Enclosure Operating temperature range	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%F.S. ±1 digit (at 25°C ± 3°C)  Illuminates when output is turned ON. (Green)  IP40  -5 to 50°C (with no freezing and condensation)				
Display Display acc Indicator lig Environmental resistance Lead wire w	Hysteresis mode Window comparator mode uracy ht Enclosure Operating temperature range	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%F.S. ±1 digit (at 25°C ± 3°C)  Illuminates when output is turned ON. (Green)  IP40  -5 to 50°C (with no freezing and condensation)  ø3.4 3-wire 25AWG 2 m				
Display Display acc Indicator lig Environmental resistance Lead wire w (Option: L)	Hysteresis mode Window comparator mode uracy ht Enclosure Operating temperature range	Variable (can be set from 0)  3-digit, 7-segment indicator, 2-color display (Red/Green) can be interlocked with the switch output.  ±2%-F.S. ±1 digit (at 25°C ± 3°C)  Illuminates when output is turned ON. (Green)  IP40  −5 to 50°C (with no freezing and condensation)  ø3.4 3-wire 25AWG 2 m  With connector cover				

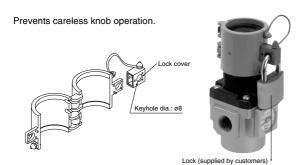
●Dimensions: Lead wire with connector ZS-32-A



Note) For details about the wiring, refer to the Operation Manual at SMC website (http://www.smcworld.com).



## Option Knob Cover



Part no.	Applicable model
AR20P-580AS	AC20□, AR20(K), AW20(K), AWM20, AWD20
AR25P-580AS	AC25□, AR25(K)
AR30P-580AS	AC30□, AR30(K), AW3(K), AWM30, AWD30
AR40P-580AS	AC40□(-06), AR40(K)(-06), AW40(K)(-06), AWM40, AWD40

AC-A
AF-A
AF□-A
AR-A

AL-A AW-A

AC-B

AF□-A

AR:A

AW:

AW■

E

AV AF