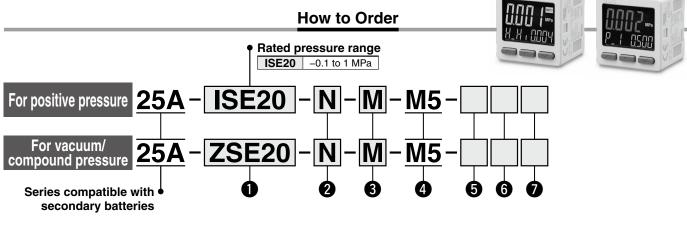
# 1 Output 3-Screen Display High-Precision Digital Pressure Switch 25A-ZSE20(F)/ISE20 Series



Rated pressure range						
ZSE20	0 to -101 kPa					
ZSE20F	-100 to 100 kPa					

### **2** Output specification

Symbol	Description
Ν	NPN open collector 1 output
Р	PNP open collector 1 output
	· · · ·

### **3** Unit specification

<u> </u>	
Symbol	Description
Nil	Units selection function*1
М	SI unit only <sup>*2</sup>
Р	Units selection function (Initial value psi)*1

**6** Option 2

Nil None

Panel mount

Panel mount

adapter + Front

protection cover

adapter

Symbol

в

D

\*1 Under the New Measurement Act, switches with the units selection function are not permitted for use in Japan.

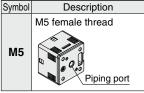
Description

ZS-46-B

ZS-46-D

\*2 Fixed unit: kPa, MPa

### **4** Piping specification



<b>6</b> Ор	tion 1		
Symbol		Description	
Nil	Without lead	l wire	
L	Lead wire with connector (3-core, 2 m lead wire)	Without waterproof cover	ZS-46-3L

### **O**ption 3

Symbol	Operation manual*1	Calibration certificate*1				
Nil	0	—				
Y	_	—				
Κ	0	0				
T — O						

\*1 All texts are in both English and Japanese.

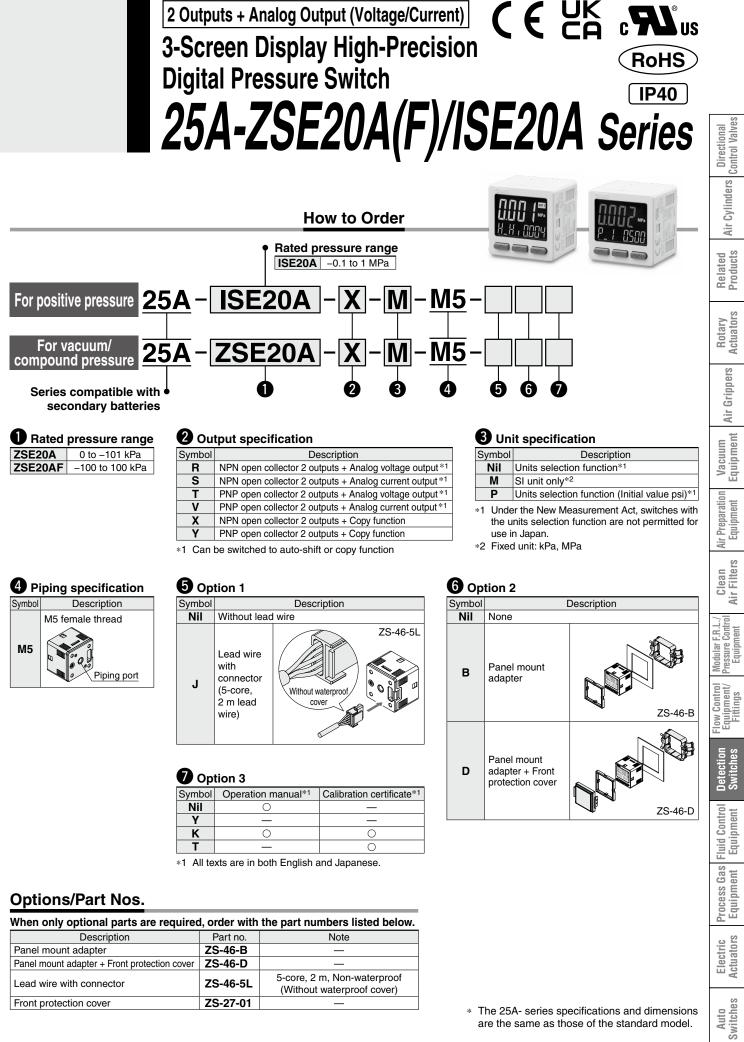
### **Options/Part Nos.**

When only optional parts are required	l, order with	the part numbers listed below.
	-	

Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-3L	3-core, 2 m, Non-waterproof (Without waterproof cover)
Front protection cover	ZS-27-01	—

\* The 25A- series specifications and dimensions are the same as those of the standard model.

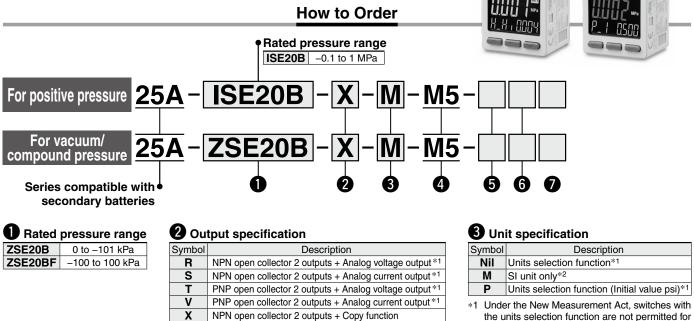




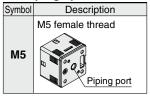
<sup>\*</sup> The 25A- series specifications and dimensions are the same as those of the standard model.



### 2 Outputs + Analog Output (Voltage/Current) **3-Screen Display High-Precision** RoHS **Digital Pressure Switch** IP65 25A-ZSE20B(F)/ISE20B Series



### Piping specification



Symbol		Description	
Nil	Without lead	l wire	
w	Lead wire with connector (5-core, 2 m lead wire, With waterproof cover)	With waterproof cover	ZS-46-5F

PNP open collector 2 outputs + Copy function

Can be switched to auto-shift or copy function

### Ontion 3

\*1

Symbol	Operation manual*1	Calibration certificate*1
Nil	0	—
Y	—	—
K	0	0
Т	—	0

\*1 All texts are in both English and Japanese.

### **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

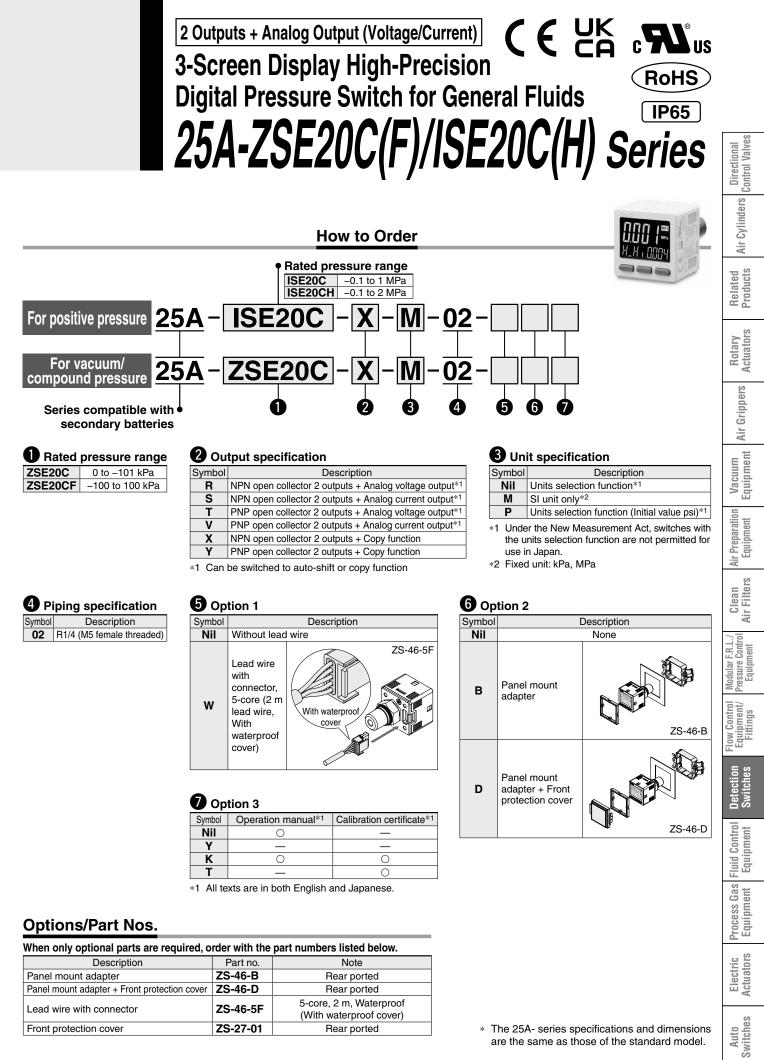
Description	Part no.	Note
Panel mount adapter	ZS-46-B	—
Panel mount adapter + Front protection cover	ZS-46-D	—
Lead wire with connector	ZS-46-5F	5-core, 2 m, Waterproof (With waterproof cover)
Front protection cover	ZS-27-01	—

- the units selection function are not permitted for use in Japan.
- \*2 Fixed unit: kPa, MPa

### 6 Option 2 Symbol Description Nil None Panel mount B adapter 7S-46-B Panel mount D adapter + Front protection cover ZS-46-D

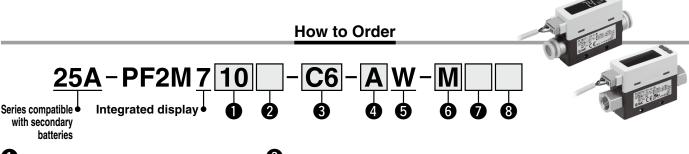
\* The 25A- series specifications and dimensions are the same as those of the standard model.





For details, refer to the **Web Catalog**. 216

# 2-Color Display (E CA CAUS Digital Flow Switch 25A-PF2M7 Series



### Rated flow range

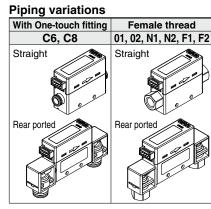
01	0.01 to 1 L/min	25	0.3 to 25 L/min
02	0.02 to 2 L/min	50	0.5 to 50 L/min
05	0.05 to 5 L/min	11	1 to 100 L/min
10	0.1 to 10 L/min	21	2 to 200 L/min

### **2** Piping entry direction

				-					
Symbol	Piping entry			Rate	ed flo	ow ra	ange	•	
IIIDUI	direction	1	2	5	10	25	50	100	200
Nil	Straight	$\bullet$						٠	
L	Rear ported	$\bullet$					٠		
	Nil	Mil         direction           Nil         Straight	direction 1	Imboldirection12NilStraight••	mboldirection125NilStraight•••	mboldirection12510NilStraight••••	Imboldirection1251025NilStraight••••••	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Milor         direction         1         2         5         10         25         50         100           Nil         Straight         •<

### Ort size

Sumbol	Dort oize	Rated flow range							
Symbol	Port size	1	2	5	10	25	50	100	200
01	Rc1/8			۲			$\bullet$	—	—
N1	NPT1/8	$\bullet$	$\bullet$	$\bullet$	۲	٠	٠	—	—
F1	G1/8	$\bullet$	$\bullet$	$\bullet$		$\bullet$	$\bullet$	—	-
02	Rc1/4	—	—	—	—	—	—	۲	$\bullet$
N2	NPT1/4	—	—	—	—	—	—	$\bullet$	
F2	G1/4	—	—	—	—	—	—	۲	$\bullet$
C6	ø6	$\bullet$		$\bullet$			$\bullet$	—	-
C8	ø8	—	—	—	—	—	—	۲	

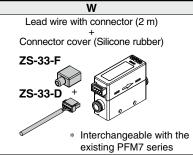


### **4** Output specification

	Calparopeonioación						
Symbol	OUT1	OUT2					
Α	NPN	NPN					
В	PNP	PNP					
С	NPN	Analog 1 to 5 V $\Leftrightarrow$ Analog 0 to 10 V <sup>*1</sup>					
D	NPN	Analog 4 to 20 mA					
E	PNP Analog 1 to 5 V $\Leftrightarrow$ Analog 0 to 10 V <sup>*1</sup>						
F	PNP	Analog 4 to 20 mA					

\*1 1 to 5 V or 0 to 10 V can be selected by pressing the button. The default setting is 1 to 5 V.

### **5** Option 1



### **6** Unit specification

	<u> </u>						
M		SI unit only <sup>*2</sup>					
Nil		Unit selection function*3					
	*2 Fixed unit: Instantaneous flow: L/min						

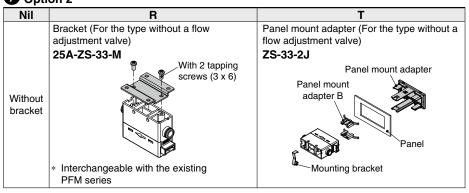
Accumulated flow: L \*3 This product is for overseas use only. (The SI unit type is provided for use in Japan in accordance with the New Measurement Act.) The unit can be changed. Instantaneous flow: L/min  $\Leftrightarrow$  cfm Accumulated flow: L  $\Leftrightarrow$  ft<sup>3</sup>

### 8 Calibration certificate\*4

Nil	None
Δ	Yes

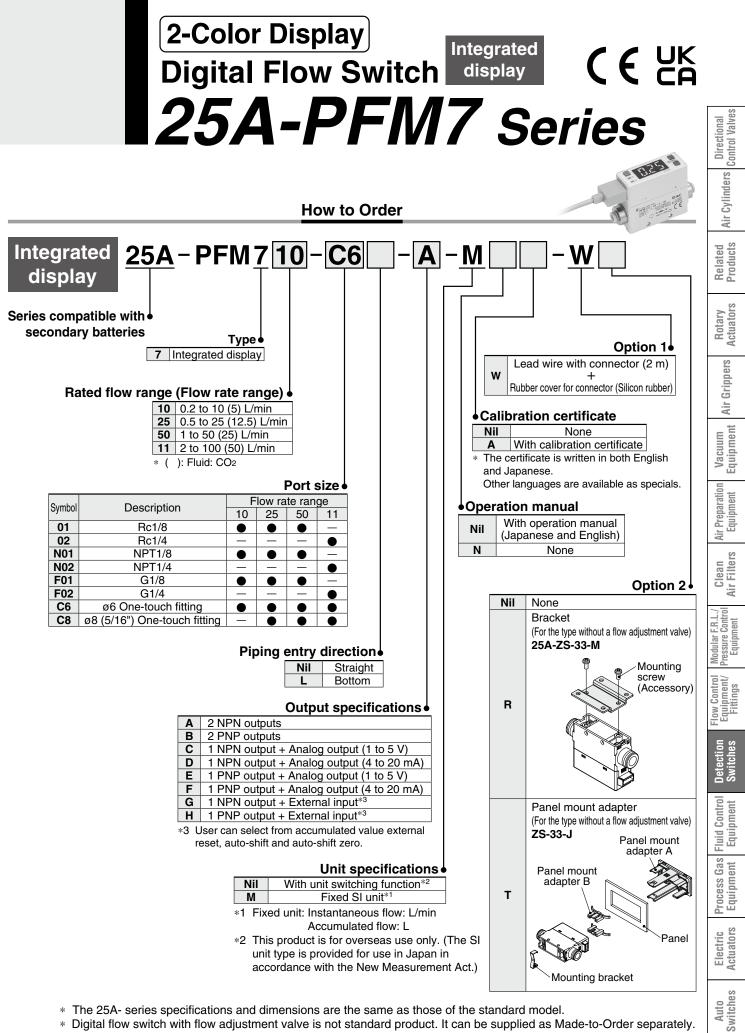
- \*4 Made to order
- The certificate is in both English and Japanese.

### Option 2



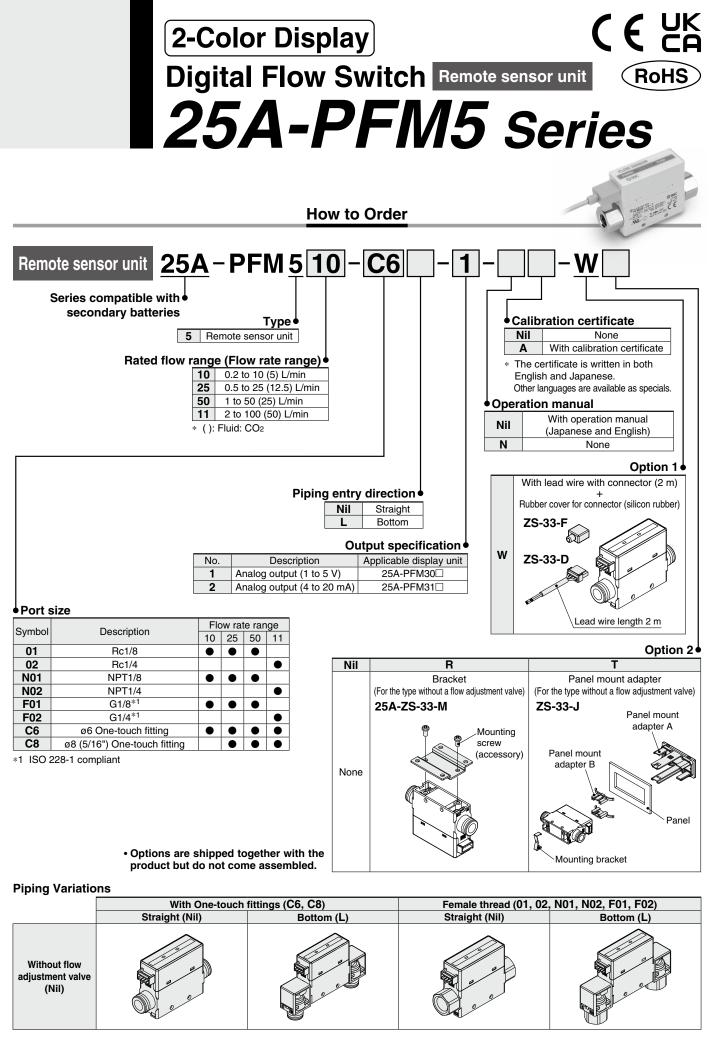
- \* Options are shipped together with the product but do not come assembled.
  - \* The 25A- series specifications and dimensions are the same as those of the standard model.





\* Digital flow switch with flow adjustment valve is not standard product. It can be supplied as Made-to-Order separately. For details, refer to the Web Catalog.





\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

SMC

For 25A-PFM5

Panel mount adapter

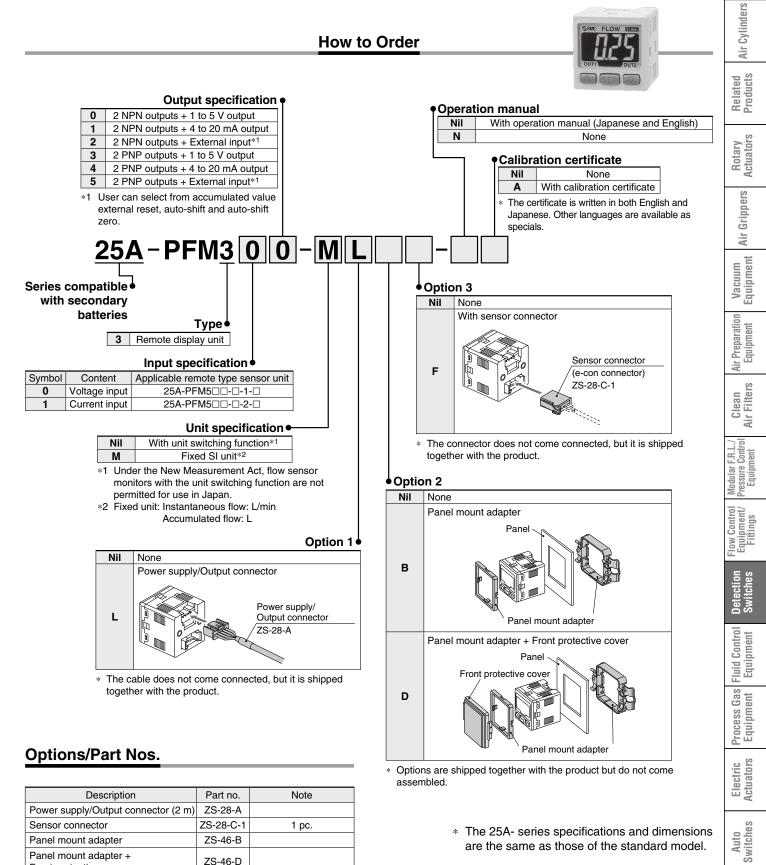
Panel mount adapter +

Front protective cover

ZS-46-B

ZS-46-D

### **Flow Sensor Monitor** RoHS 25A-PFM3 Series

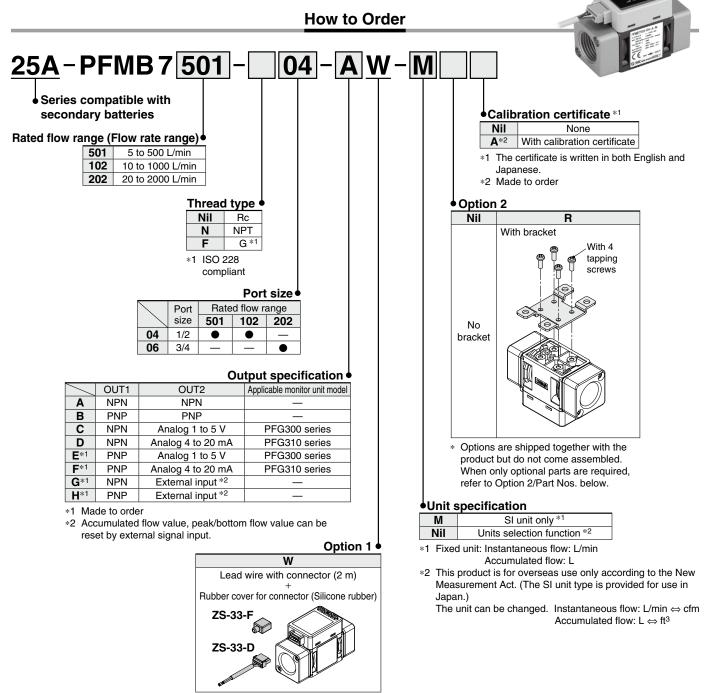


**SMC** 

\* The 25A- series specifications and dimensions are the same as those of the standard model.

**Control Valves** Directional

# 2-Color Display( € UK<br/>CADigital Flow SwitchRoHS25A-PFNB7 Series



 When only optional parts are required, refer to Option 1/Part Nos. below.

### Option 1/Part Nos.

Option	Part no.	Qty.	Note
Lead wire with connector	ZS-33-D	1	Lead wire: 2 m
Rubber cover (Silicone rubber)	ZS-33-F	1	For connector

#### Option 2/Part Nos.

Note	Option	Part no.	Qty.	Note
d wire: 2 m	Bracket (for PFMB7201)	25A-ZS-33-M	1	With 2 tapping screws (3 x 6)
connector	Panel mount adapter (for PFMB7201)	ZS-33-J	1	
	Bracket (for PFMB7501/7102)	25A-ZS-42-C	1	With 4 tapping screws (3 x 6)
	Bracket (for PFMB7202)	25A-ZS-42-D	1	With 4 tapping screws (3 x 6)

The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

SMC

Directional Control Valves						
Air Cylinders						
Related Products						
Rotary Actuators						
Air Grippers						
Vacuum Equipment						
Air Preparation Equipment						
Clean Air Filters						
Modular F.R.L./ Pressure Control Equipment						
Flow Control Equipment/ Fittings						
Detection Switches						
Fluid Control Equipment						
Process Gas Equipment						
Electric Actuators						
Auto Switches						

222



# Integrated Display (E CA CAUs 3-Color Display Digital Flow Switch for Water RoHS 25A-PF3W7-Z Series

How to Order

03

25A - PF3W 7 04 Series compatible with secondary batteries 0 2

### **О** Туре

**5** Port size

Symbol

03

04

06

10

М

G

connector (3 m)

Port

size

3/8

1/2

3/4

1/1

Lead wire (Option)

Nil With lead wire with M8

04

Integrated display

Pated flow range (Flow range)					
Symbol	Rated flow range				
04	0.5 to 4 L/min				
20	2 to 16 L/min				
40	5 to 40 I /min				

10 to 100 L/min

11

Rated flow range

40

•

connector

11

•

Ν

Without lead wire with M8

20

•

### **3** Flow adjustment valve

-					
Symbol	With/without flow adjustment valve	F	Rated flo	w range	ə
Symbol	adjustment valve	04	20	40	11
Nil	None	•			
S	Yes	•		•	_

4 Thread type

Ζ

ി

9

Nil	Rc
Ν	NPT
F	G*1

\*1 ISO 228 compliant

 \* 100 L/min type with flow adjustment valve is not available.

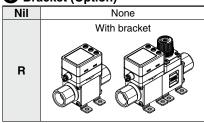
\* The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### **6** Output specification/Temperature sensor

Symbol	OUT1	OUT2			Temperature
Symbol	Flow rate	Flow rate		Temperature	sensor
Α	NPN	NPN		—	
В	PNP PNP			—	
С	NPN	Analog 1 to 5 V		—	
D	NPN	Analog 4 to 20 mA		—	None
E	PNP	Analog 1 to 5 V		—	none
F	PNP	Analog 4 to 20 mA		—	
G	NPN	External input*1		—	]
Н	PNP	External input*1		—	
AT	NPN		↔2	NPN	
BT	PNP	(PNP)	↔2	PNP	14/341-
СТ	NPN	(Analog 1 to 5 V)	<del>≪2</del>	Analog 1 to 5 V	With
DT	NPN		↔2	Analog 4 to 20 mA	temperature sensor
ET	PNP	(Analog 1 to 5 V)	<del>≪2</del>	Analog 1 to 5 V	301301
FT	PNP		↔2	Analog 4 to 20 mA	]

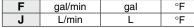
\*1 External input: The accumulated value, peak value, and bottom value can be reset.
\*2 For units with temperature sensor, only OUT2 can be set as either temperature output or flow rate output. Setting when shipped is for temperature output.

### **9** Bracket (Option)



### Calibration certificate (Only for flow rate)

- NilNoneAWith calibration certificate
- The certificate is written in both Japanese and English.
   Units with temperature sensor
- can only display the flow rate.



Integrated display/Unit specification
 Symbol Instantaneous flow Accumulated flow Temperature

L

gal

- \* Under the New Measurement Act, units other than SI (symbol "M") cannot be used in Japan.
- \* G, F, J: Made to order

Reference: 1 [L/min]↔0.2642 [gal/min] 1 [gal/min]↔3.785 [L/min] °F = 9/5°C + 32

### **Options/Part Nos.**

L/min

gal/min

When only optional parts are required, order with the part numbers listed below.

°C

°C

Description	Part no.	Qty.	Note		
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)	
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)	
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)	
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire length: 3 m		

\*1 For units with flow adjustment valve, 2 brackets are required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



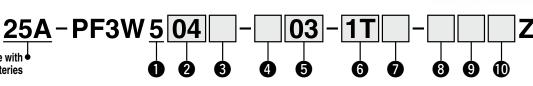


### Remote Sensor Unit

3-Color Display Digital Flow Switch for Water (RoHS)

25A-PF3W5-Z Series

### How to Order



Series compatible with secondary batteries

🛈 Туре Remote sensor unit 5

### 2 Rated flow range (Flow range)

5 to 40 L/min

10 to 100 L/min

Rated flow range Symbol 0.5 to 4 L/min 04 20 2 to 16 L/min

40

11

### **3** Flow adjustment valve

0	With/without flow	F	Rated flow range		
Symbol	With/without flow adjustment valve	04	20	40	11
Nil	None	•	•	•	•
S	Yes	•	•		_

\* 100 L/min type with flow adjustment valve is not available.

The flow adjustment valve of this product is not suitable for applications which require constant adjustment of flow rate.

### **5** Port size

Symbol Port		Rated flow range				
Symbol	size	04	20	40	11	
03	3/8	•	•	—	—	
04	1/2	—	•	•	—	
06	3/4	_	_	•	•	
10	1/1	_	_	_		

### Lead wire (Option)

Nil	With lead wire with M8 connector (3 m)
Ν	Without lead wire with M8 connector

### **6** Output specification/Temperature sensor

Symbol	OUT1	OUT2	Temperature
Symbol	Flow rate	Temperature	sensor
1	Analog 1 to 5 V	—	None
2	Analog 4 to 20 mA	—	None
1T	Analog 1 to 5 V	Analog 1 to 5 V	With temperature sensor

To use in combination with remote monitor (PF3W3 series), select analog output of 1 to 5 V of flow rate (output symbol "-1" or "-1T").

### 8 Remote sensor unit/Unit printed on label

Sy	/mbol	Instantaneous flow	Temperature
	Nil	L/min	°C
	<b>G</b> *1	L/min (gal/min)	°C/°F

\*1 Under the New Measurement Act, units other than SI (symbol "Nil") cannot be used in Japan. \* G: Made to order

Reference: 1 [L/min] ↔ 0.2642 [gal/min] 1 [gal/min] ↔ 3.785 [L/min]  $^{\circ}F = 9/5^{\circ}C + 32$ 

#### Calibration certificate

(Only for flow rate)					
Nil	None				
Α	With calibration certificate				

The certificate is written in both Japanese and English

Units with temperature sensor can only display the flow rate.

Bracket (Option)		
Nil	None	
R	With bracket	

 $\frown$ 

**Options/Part Nos.** 

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Qty.	No	te
	25A-ZS-40-K	1	For PF3W704/720/504/520	With 4 tapping screws (3 x 8)
Bracket*1	25A-ZS-40-L	1	For PF3W740/540	With 4 tapping screws (3 x 8)
	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead wire le	ength: 3 m

\*1 For units with flow adjustment valve, 2 brackets are required.

\* The 25A- series specifications and dimensions are the same as those of the standard model.



Air Cylinders Control Valves

**Related Products** 

Air Grippers

Equipment

Air Preparation Equipment

Clean Air Filters

Modular F.R.L./ Pressure Control Equipment

Flow Control Equipment/ Fittings

Detection Switches

Equipment

Process Gas | Equipment

Electric Actuators

Auto Switches

Vacuum

Directional

Rotary Actuators **4** Thread type

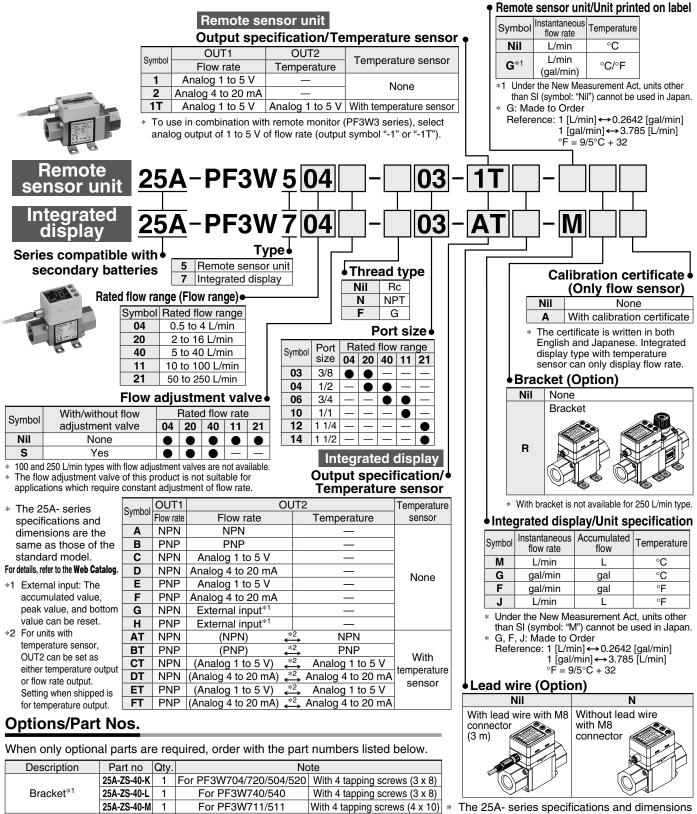
Rc NPT Ν G\*1 F

*1	ISO 228	compliant

Nil

## 3-color display Digital Flow Switch for Water 25A-PF3W Series ( 도 모두 RoHS)

### How to Order



The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

\*1 For units with flow adjustment valve, 2 brackets are required.

1

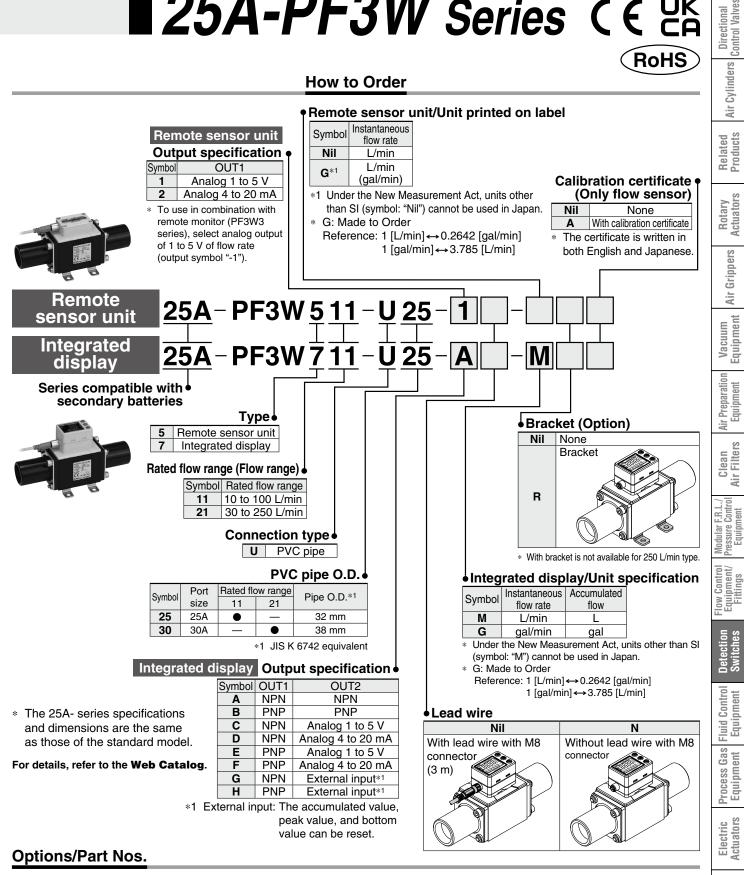
Lead wire with M8 connector 25A-ZS-40-A

SMC SMC

Lead wire length (3 m)

## **3-color display Digital Flow Switch for PVC Piping** 25A-PF3W Series ( € 분 RoHS

### How to Order

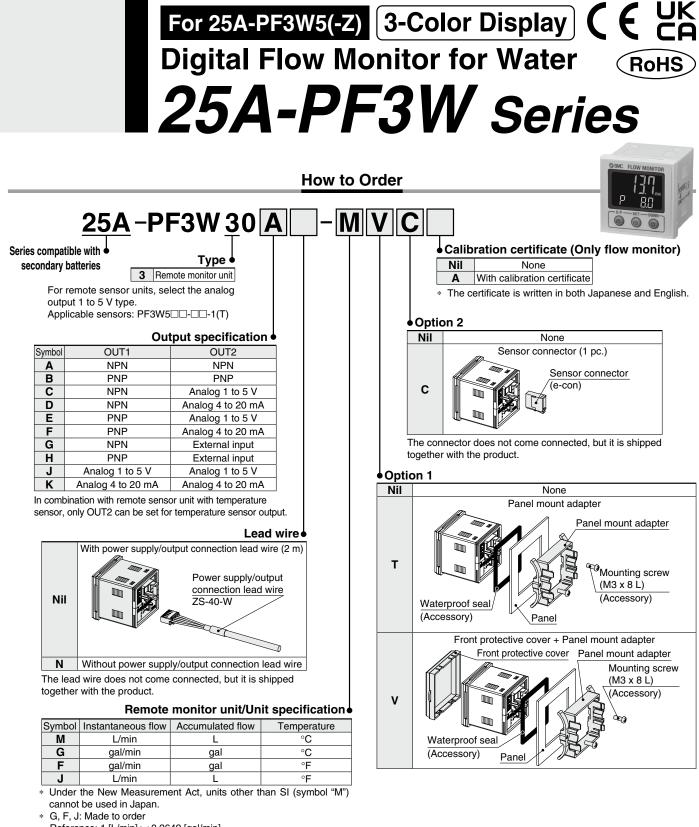


**多SMC** 

When only optional parts are required, order with the part numbers listed below.				
Description	Part no.	Qty.		Note
Bracket	25A-ZS-40-M	1	For PF3W711/511	With 4 tapping screws (4 x 10)
Lead wire with M8 connector	25A-ZS-40-A	1	Lead	wire length (3 m)

- \* The 25A- series specifications and dimensions are the same as those of the standard model.
- For details, refer to the Web Catalog.

Auto Switches



Reference: 1 [L/min]↔0.2642 [gal/min] 1 [gal/min]↔3.785 [L/min]

°F = 9/5°C + 32

### **Options/Part Nos.**

When only optional parts are required, order with the part numbers listed below.

Description	Part no.	Note
Panel mount adapter	25A-ZS-26-B	With waterproof seal and screws
Front protective cover + Panel mount adapter	25A-ZS-26-C	With waterproof seal and screws
Front protective cover only	ZS-26-01	Separately order panel mount adapter, etc.
Power supply/output connection lead wire	ZS-40-W	Lead wire length: 2 m
Sensor connector (e-con)	ZS-28-CA-4	1 pc.
Lead wire with connector for copying	ZS-40-Y	Connect up to 10 copy destination units

\* The 25A- series specifications and dimensions are the same as those of the standard model. For details, refer to the Web Catalog.

SMC