



Pressure Switches

Flow Switches



**3-Screen
Display**

3-screen display applicable series

Setting is possible while checking the measured value.

Main screen Measured value (Current pressure value)

Sub screen Label (Display item), Set value (Threshold value)

**Visualization
of Settings**

Set value (Threshold value)	P-1
Hysteresis value	H-1
Delay time	dt1
Peak value	H-H1
Bottom value	H-L0



Applicable series

High-Precision
Digital Pressure Switch
ZSE20□(F)/ISE20□ Series
ISE70/71 Series

Sensor Monitor
PSE300AC Series

Digital Flow Monitor
PFG300 Series

Applicable fluid	Series	Rated pressure range	Output type
Self-contained type	ZSE20(F) ISE20 1 output IP40	-100.0 to 100.0 kPa, 0.0 to -101.0 kPa, -0.100 to 1.000 MPa	NPN/PNP open collector 1 output
	ZSE20A(F) ISE20A 2 outputs IP40		NPN/PNP open collector 2 outputs Analog output (Voltage/Current)
	ZSE20B(F) ISE20B 2 outputs IP65		
	ZSE30AF -X576 to X580 For low pressure IP40	-500 to 500 Pa, -1.000 to 1.000 kPa, -2.00 to 2.00 kPa, -5.00 to 5.00 kPa, -10.00 to 10.00 kPa	NPN/PNP open collector Analog output (Voltage/Current)
	ZSE10(F) ISE10 IP40	-100.0 to 100.0 kPa, 0.0 to -101.0 kPa, -0.100 to 1.000 MPa	NPN/PNP open collector Analog output (Voltage)
	ISE70/71 IP67	0 to 1.000 MPa, 0 to 1.600 MPa	2 outputs (IO-Link: Switch output 1 + Switch output 2) Switch output: NPN or PNP switching type Open collector
	ZSE20C(F) ISE20C(H) IP65	-100.0 to 100.0 kPa, 0.0 to -101.0 kPa, -0.100 to 1.000 MPa, -0.100 to 2.000 MPa	NPN/PNP open collector 2 outputs Analog output (Voltage/Current)
Remote type	PSE53 IP40	0 to 1 MPa, 0 to -101 kPa, 0 to 101 kPa, -101 to 101 kPa	Analog output (Voltage)
	PSE54 IP40	0 to 1 MPa, 0 to -101 kPa, -100 to 100 kPa	
	PSE550 IP40	Rated differential pressure range 0 to 2 kPa	Analog output (Voltage/Current)
	PSE56 IP65	0 to 1 MPa, 0 to -101 kPa, -100 to 100 kPa, 0 to 500 kPa	
	PSE57 IP65	0 to 1 MPa, -100 to 100 kPa, 0 to 500 kPa, 0 to 2 MPa, 0 to 5 MPa, 0 to 10 MPa	
Controller	PSE200 Sensor input amount: 4 inputs IP65	Set pressure range -0.1 to 1 MPa, 10 to -101 kPa, -101 to 101 kPa, -10 to 101 kPa	NPN/PNP open collector 1ch 2 outputs 2 to 4ch 1 output
	PSE300 Sensor input amount: 1 input IP40		NPN/PNP open collector 2 outputs Analog output (Voltage/Current)
Sensor monitor	PSE300AC Sensor input amount: 1 input IP65	Set pressure range -0.2 to 2.1 kPa, 10 to -105 kPa, -105 to 105 kPa, -10 to 105 kPa, -50 to 525 kPa, -0.105 to 1.05 MPa, -0.105 to 2.1 MPa, -0.1 to 5.25 MPa, -0.1 to 10.5 MPa	NPN or PNP switching type open collector 2 outputs
Applicable fluid	Series	Rated distance range	Output type
Gap checker	ISA3 IP67	0.0004 to 0.0012 in (0.01 to 0.03 mm)(F type) 0.0008 to 0.0059 in (0.02 to 0.15 mm)(G type) 0.0020 to 0.0118 in (0.05 to 0.30 mm)(H type)	NPN/PNP open collector 1 output

*1 Front face: IP65 (Others: IP40) *2 M5 female threaded *3 Face seal fitting *4 Compression fitting *5 Conforming to ISO 1179-1

Smallest settable increment	Piping	Page	Functions								
			3-screen display	3 step	Copy function	Auto shift	Power-saving mode	Anti-chattering	Display value fine adjustment	Setting of security code	Panel mount
0.1 kPa (Vacuum/Compound pressure) 0.001 MPa (Positive pressure)	M5 Female thread 1/8 (R, NPT)	p. 5	●	●			●	●	●	●	●
		p. 5	●	●	●	●	●	●	●	●	●
		p. 5	●	●	●	●	●	●	●	●	●
1 Pa (-X576) 0.001 kPa (-X577) 0.01 kPa (-X578 to X580)	1/8 (R, NPT)*2	p. 6		●	●		●	●	●	●	●
0.1 kPa (Vacuum/Compound pressure) 0.001 MPa (Positive pressure)	M5 Female thread 1/8 (R, NPT)	p. 6		●	●		●	●	●	●	●
0.001 MPa	1/4 (Rc, NPT, G)*5	p. 6	●	●			●	●	●	●	
0.1 kPa (Vacuum/Compound pressure) 0.001 MPa (Positive pressure)	1/8 (Rc) 1/4 (R, NPT, G)*2 1/4 (URJ*3, TSJ*4)	p. 5	●	●	●	●	●	●	●	●	●
—	M5 ø6 (Reducer) 1/4" (Reducer)	p. 7									
—	M3, M5 (Male thread, Female thread) 1/8 (R, NPT)*2 ø4 (Reducer) ø6 (Reducer)	p. 7									
—	ø4.8 resin piping	p. 7									
—	1/8 (R*2, Rc, NPT*2) 1/4 (R, NPT)*2 1/4 (URJ*3, TSJ*4)	p. 7									
—	1/8 (R)*2 1/4 (R)*2	p. 7									
—	—	p. 8			●	●		●	●		●
—	—	p. 8				●		●	●		●
—	—	p. 8	●	●			●	●	●	●	
Piping		Page									
	For type C	For type F	p. 6	●	●						
Supply side	1/8 (Rc)	1/8 (G)*5									
Detection side	ø4 (F type) ø6 (G, H type)	1/8 (G)*5									

	Applicable fluid	Series	Rated flow range [L/min] 1 L/min = 0.035 scfm	Output type
Integrated type	Dry air, N ₂ , Ar, CO ₂	PFM7/ PFM7-X300 (Low particle generation) IP40	0.2 to 10, 0.5 to 25, 1 to 50, 2 to 100	NPN/PNP open collector Accumulated pulse output Analog output (Voltage/Current)
	Air, N ₂	PF2A7 IP65	1 to 10, 5 to 50, 10 to 100, 20 to 200, 50 to 500	NPN/PNP open collector Accumulated pulse output
	Air, N ₂	PF3A7 □H Applicable to the Digital Flow Monitor PFG300 IP65	30 to 3000, 60 to 6000, 120 to 12000	NPN/PNP open collector Accumulated pulse output Analog output (Voltage/Current)
	Dry air, N ₂	PFMB7/ PFMB-X300 (Low particle generation) Applicable to the Digital Flow Monitor PFG300 IP40	2 to 200	
		PFMB7 Applicable to the Digital Flow Monitor PFG300 IP40	5 to 500, 10 to 1000, 20 to 2000	
		PFMC7 Applicable to the Digital Flow Monitor PFG300 IP65	5 to 500, 10 to 1000, 20 to 2000	
	Water, Ethylene glycol aqueous solution	PF3W IP65	0.5 to 4, 2 to 16, 5 to 40, 10 to 100, 50 to 250	
	Water, Deionized water, Chemical liquids	PF3W (PVC piping type) IP65	10 to 100, 30 to 250	
Remote type	Dry air, N ₂ , Ar, CO ₂	Sensor unit PFM5 IP40	0.2 to 10, 0.5 to 25, 1 to 50, 2 to 100	Analog output (Voltage/Current)
		Monitor unit PFM3 IP40		NPN/PNP open collector Accumulated pulse output Analog output (Voltage/Current)
	Dry air, N ₂	Sensor unit PFMV5 IP40	0 to 0.5, 0 to 1, 0 to 3, -0.5 to 0.5, -1 to 1, -3 to 3	Analog output (Voltage/Current)
		Monitor unit PFMV3 IP40		NPN/PNP open collector Analog output (Voltage/Current)
	Air, N ₂	Sensor unit PF2A5 IP65	1 to 10, 5 to 50, 10 to 100, 20 to 200, 50 to 500	Analog output (Voltage/Current)
		Monitor unit PF2A3 1ch IP40		NPN/PNP open collector Accumulated pulse output
		Monitor unit PF2A2 4ch IP65 ^{*1}		
	Water, Ethylene glycol aqueous solution	Sensor unit PF3W5 IP65	0.5 to 4, 2 to 16, 5 to 40, 10 to 100, 50 to 250	Analog output (Voltage/Current)
	Water, Deionized water, Chemical liquids	Sensor unit PF3W5 (PVC piping type) IP65	10 to 100, 30 to 250	
	Water, Water-soluble coolant	Monitor unit PF3W3 IP65 ^{*1}	0.5 to 4, 2 to 16, 5 to 40, 10 to 100, 50 (30) to 250	NPN/PNP open collector Analog output (Voltage/Current)
		Sensor unit LFE IP65	0.5 to 20, 2.5 to 100, 5 to 200	Analog output (Voltage/Current)
	Deionized water, Fluids that do not corrode or osmose Super PFA.	Monitor unit LFE0 IP65 ^{*1}		NPN/PNP open collector Analog output (Voltage/Current)
		Sensor unit PF2D5 IP65	0.4 to 4, 1.8 to 20, 4 to 40	Analog output (Voltage/Current)
		Monitor unit PF2D3 1ch IP40		NPN/PNP open collector Accumulated pulse output
		Monitor unit PF2D2 4ch IP65 ^{*1}		
Controller	Water	FC2W-X110 (Grease-free)	Flow rate control range 0.5 to 4.0 ^{*2} 2.0 to 16.0	Flow rate pulse output

*1 Front face: IP65 (Others: IP40) *2 Flow rate control range *3 Conforming to ISO 228-1 *4 Conforming to ISO 1179-1 *5 Conforming to ISO 228

Smallest settable increment [L/min] 1 L/min = 0.035 scfm	Piping	Page
0.01 (PFM710), 0.1 (PFM725/750/711)	1/8, 1/4 (Rc, NPT, G ^{*3}) ø4 (5/32"), ø6, ø8 (5/16"), ø1/4"	p. 8, 9
0.1 (PF2A710), 0.5 (PF2A750), 1 (PF2A711), 2 (PF2A721), 5 (PF2A751)	1/8, 1/4, 3/8, 1/2 (Rc, NPT, G ^{*3})	p. 9
2 (PF3A703H), 5 (PF3A706H), 10 (PF3A712H)	1, 1 1/2, 2 (Rc, NPT, G ^{*4})	p. 9
1	1/4 (Rc, NPT, G ^{*4}) ø8 (5/16")	p. 9
	1/2, 3/4 (Rc, NPT, G ^{*5})	p. 8
	1/2, 3/4 (Rc, NPT, G ^{*5})	p. 9
0.01 (PF3W704), 0.1 (PF3W720/740), 1 (PF3W711), 2 (PF3W721)	3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2 (Rc, NPT, G ^{*5})	p. 10
	25A, 30A	p. 10
0.1 (LFE1), 0.5 (LFE2), 1 (LFE3)	3/8, 1/2, 3/4, 1 (Rc, NPT, G)	p. 10
—	1/8, 1/4 (Rc, NPT, G ^{*3}) ø4 (5/32"), ø6, ø8 (5/16"), ø1/4"	p. 8
0.01 (PFM510), 0.1 (PFM525/550/511)	—	p. 8
—	M5	p. 9
0.001 (PFMV505/505F), 0.01 (PFMV510/530/510F/530F)	—	p. 9
—	1/8, 1/4, 3/8, 1/2 (Rc, NPT, G ^{*3})	p. 9
0.1 (PF2A510), 0.5 (PF2A550), 1 (PF2A511), 2 (PF2A521), 5 (PF2A551)	—	p. 9
	—	p. 9
—	3/8, 1/2, 3/4, 1, 1 1/4, 1 1/2 (Rc, NPT, G ^{*5})	p. 10
	25A, 30A	p. 10
0.01 (PF3W504), 0.1 (PF3W520/540), 1 (PF3W511), 2 (PF3W521)	—	p. 10
—	3/8, 1/2, 3/4, 1 (Rc, NPT, G)	p. 10
0.1 (LFE1), 0.5 (LFE2), 1 (LFE3)	—	p. 10
—	3/8", 1/2", 3/4" (Applicable tubing size)	p. 10
0.05 (PF2D504), 0.1 (PF2D520), 0.5 (PF2D540)	—	p. 10
	—	p. 10
—	3/8, 1/2 (Rc)	p. 10

Functions						
Flow adjustment valve	Rotary/ reversible display	Bypass structure	Grease-free	Power-saving mode	Setting of security code	Switching of flow direction
●			●	●	●	
	Rotary Display					
	Rotary Reversible Display	●	●		●	
●	Reversible Display	●	●		●	
	Reversible Display	●	●		●	
	Rotary Display	●	●		●	
●	Rotary Display		●	●	●	
	Rotary Display		●	●	●	
				●	●	●
●			●		●	
				●	●	
			●			
				●	●	
●			●			
			●			
				●	●	
				●	●	



Digital Flow Monitor
PFG300

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IP40

3-Screen
Display

Power-saving mode
Setting of security code



3-Screen Display High-Precision Digital Pressure Switch

ZSE20(F)/ISE20

1 output



- Setting is possible while checking the measured value.
- Visualization of setting items
- Delay time: Fastest 1.5 ms or less
- Current consumption: 25 mA or less

Series	Type	Rated pressure range
ZSE20F	Compound pressure	-14.5038 to 14.5038 psi (-100.0 to 100.0 kPa)
ZSE20	Vacuum pressure	0.0 to 14.6488 psi (0.0 to -101.0 kPa)
ISE20	Positive pressure	-14.5038 to 145.038 psi (-0.100 to 1.000 MPa)

Functions: 3-Screen Display, 3 Step, Air, IP40

3-Screen Display High-Precision Digital Pressure Switch

ZSE20A(F)/ISE20A

2 outputs



- Setting is possible while checking the measured value.
- Visualization of setting items
- Delay time: Fastest 1.5 ms or less
- Current consumption: 35 mA or less
- Copy function/Auto-shift function

Series	Type	Rated pressure range
ZSE20AF	Compound pressure	-14.5038 to 14.5038 psi (-100.0 to 100.0 kPa)
ZSE20A	Vacuum pressure	0.0 to 14.6488 psi (0.0 to -101.0 kPa)
ISE20A	Positive pressure	-14.5038 to 145.038 psi (-0.100 to 1.000 MPa)

Functions: 3-Screen Display, Copy Function, 3 Step, Air, IP40

3-Screen Display High-Precision Digital Pressure Switch

ZSE20B(F)/ISE20B

2 outputs



- Setting is possible while checking the measured value.
- Visualization of setting items
- Delay time: Fastest 1.5 ms or less
- Current consumption: 35 mA or less
- IO-Link compatible (For details, please contact SMC.)
- Copy function/Auto-shift function

Series	Type	Rated pressure range
ZSE20BF	Compound pressure	-14.5038 to 14.5038 psi (-100.0 to 100.0 kPa)
ZSE20B	Vacuum pressure	0.0 to 14.6488 psi (0.0 to -101.0 kPa)
ISE20B	Positive pressure	-14.5038 to 145.038 psi (-0.100 to 1.000 MPa)

Functions: 3-Screen Display, Copy Function, 3 Step, Air, IP65

For General Fluids

3-Screen Display High-Precision Digital Pressure Switch

ZSE20C(F)/ISE20C(H)

2 outputs



- Setting is possible while checking the measured value.
- Visualization of setting items
- Delay time: Fastest 1.5 ms or less
- Current consumption: 35 mA or less
- Copy function/Auto-shift function
- Stainless steel diaphragm
- Leakage
 - 1 x 10⁻¹⁰ Pa·m³/s
 - <Face seal and compression fitting>
 - 1 x 10⁻⁵ Pa·m³/s
 - <Threaded type (R, Rc, NPT, G)>

Series	Type	Rated pressure range
ZSE20CF	Compound pressure	-14.5038 to 14.5038 psi (-100.0 to 100.0 kPa)
ZSE20C	Vacuum pressure	0.0 to 14.6488 psi (0.0 to -101.0 kPa)
ISE20C	Positive pressure	-14.5038 to 145.038 psi (-0.100 to 1.000 MPa)
ISE20CH	Positive pressure	-14.5038 to 290.075 psi (-0.100 to 2.000 MPa)

Functions: 3-Screen Display, Copy Function, 3 Step, Air, General Fluids, IP65



Compact Digital Pressure Switch

ZSE10(F)/ISE10



- Low profile: 0.385827 in (9.8 mm)
- Vertical mounting space reduced to approx. 1/2 (Compared to the ZSE/ISE30A series)
- Simultaneous copying is possible for a maximum of 10 units.

Series	Type	Rated pressure range
ZSE10F	Compound pressure	-14.5038 to 14.5038 psi (-100.0 to 100 kPa)
ZSE10	Vacuum pressure	0.0 to -14.6488 psi (0.0 to -101.0 kPa)
ISE10	Positive pressure	-145.038 to 145.038 psi (-0.100 to 1.000 MPa)



3-Screen Display High-Precision Digital Pressure Switch

ISE70/71



- Setting is possible while checking the measured value.
- Angled display
- Rotating display (336°)
- IO-Link compatible

Series	Type	Rated pressure range
ISE70	Positive pressure	0 to 145.038 psi (0 to 1.000 MPa)
ISE71	Positive pressure	0 to 232.06 psi (0 to 1.600 MPa)



2-Color Display High-Precision Digital Pressure Switch (for Low Pressure)

ZSE30AF-X576 to X580



- Able to detect and display pressures of 1.45038 psi (10 kPa) or less
- Can copy to up to 10 switches simultaneously
- With display low-cut function (zero-cut function)

Series	Type	Rated pressure range
ZSE30AF-X576	Compound pressure	-0.0725 to 0.0725 psi (-500 to 500 Pa)
ZSE30AF-X577	Compound pressure	-0.145038 to 0.145038 psi (-1.000 to 1.000 kPa)
ZSE30AF-X578	Compound pressure	-0.290075 to 0.290075 psi (-2.00 to 2.00 kPa)
ZSE30AF-X579	Compound pressure	-0.725189 to 0.725189 psi (-5.00 to 5.00 kPa)
ZSE30AF-X580	Compound pressure	-1.45038 to 1.45038 psi (-10.00 to 10.00 kPa)



3-Color Display Digital Gap Checker

ISA3



Centralized lead wire (With control unit)

- Check at a glance to see if a workpiece is placed or not.
- The clearance distance between the detection surface and the workpiece can be found intuitively.
- Simple setting: Change the settings while checking the displayed value.
- Energy saving: Air consumption reduced by 60%
- Improved drainage resistance: 10 times or more

Series	Rated distance range	Piping specifications: Supply side	Piping specifications: Detection side
ISA3-F	0.0004 to 0.0012 in	Rc, G 1/8	ø4 One-touch fitting, G 1/8
ISA3-G	0.0008 to 0.0059 in	Rc, G 1/8	ø6 One-touch fitting, G 1/8
ISA3-H	0.0020 to 0.0118 in	Rc, G 1/8	ø6 One-touch fitting, G 1/8





Compact Pneumatic Pressure Sensor

PSE53



- Connector type
- Analog output (Voltage)

Series	Type	Rated pressure range
PSE531	Vacuum pressure	0 to -14.6488 psi (0 to -101 kPa)
PSE533	Compound pressure	-14.6488 to 14.6488 psi (-101 to 101 kPa)
PSE532	Low pressure	0 to 14.6488 psi (0 to 101 kPa)
PSE530	Positive pressure	0 to 145.038 psi (0 to 1 MPa)

Applicable fluid: Air
Enclosure: IP40

Compact Pneumatic Pressure Sensor

PSE54



- Analog output (Voltage)

Series	Type	Rated pressure range
PSE541	Vacuum pressure	0 to -14.6488 psi (0 to -101 kPa)
PSE543	Compound pressure	-14.5038 to 14.5038 psi (-100 to 100 kPa)
PSE540	Positive pressure	0 to 145.038 psi (0 to 1 MPa)

Applicable fluid: Air
Enclosure: IP40

Low Differential Pressure Sensor

PSE550



- Suitable for applications such as air current volume maintenance, filter blockage, and liquid surface detection.
- Analog output (Voltage/Current)

Series	Type	Rated differential pressure range
PSE550	Low differential pressure	0 to 0.2901 psi (0 to 2 kPa)

Applicable fluid: Air
Enclosure: IP40

Pressure Sensor for General Fluids

PSE56



- Material of parts in contact with fluid: Stainless steel 316L
- Suitable for a wide variety of fluids
- Analog output (Voltage/Current)
- Select from a face seal or compression fitting.

Series	Type	Rated pressure range
PSE561	Vacuum pressure	0 to -14.6488 psi (0 to -101 kPa)
PSE563	Compound pressure	-14.5038 to 14.5038 psi (-100 to 100 kPa)
PSE564	Positive pressure	0 to 72.5189 psi (0 to 500 kPa)
PSE560	Positive pressure	0 to 145.038 psi (0 to 1 MPa)

Applicable fluids: Air, General Fluids
Enclosure: IP65

Pressure Sensor for General Fluids

PSE57



- Withstand voltage: 500 VAC
- Materials of parts in contact with fluid
Piping port: C3604 + Nickel plating
Pressure sensor: Al₂O₃ (Alumina 96%)
O-ring: FKM + Grease (PSE570/573/574)
Square ring: FKM (PSE570/576/577)

1 kPa = 0.145038 psi, 1 MPa = 145.038

Series	Type	Rated pressure range	Proof pressure
PSE570	Positive pressure	0 to 1 MPa	3.0 MPa
PSE573	Compound pressure	-100 to 100 kPa	600 kPa
PSE574	Positive pressure	0 to 500 kPa	1.5 MPa
PSE575	Positive pressure	0 to 2 MPa	5.0 MPa
PSE576	Positive pressure	0 to 5 MPa	12.5 MPa
PSE577	Positive pressure	0 to 10 MPa	30 MPa

Applicable fluids: Air, General Fluids
Enclosure: IP65



3-Screen Display Sensor Monitor

PSE300AC



- Setting is possible while checking the measured value.
- Visualization of setting items
- NPN/PNP switch function
- Input range selection (for pressure/flow rate)
- Simple 3-step setting



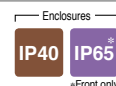
Series	Set pressure range	Applicable pressure sensor
PSE300AC	-0.0290 to 0.3046 psi	PSE550
	1.4504 to -15.229 psi	PSE531/PSE541/PSE561
	-15.229 to 15.229 psi	PSE533/PSE543/PSE563/PSE573
	-1.4504 to 15.229 psi	PSE532
	-7.2519 to 76.1448 psi	PSE564/PSE574
	-15.2290 to 152.2896 psi	PSE530/PSE540/PSE560/PSE570
	-15.2290 to 304.579 psi	PSE575
	-14.5038 to 761.4481 psi	PSE576
	-14.5038 to 1522.896 psi	PSE577

Multi-Channel Digital Pressure Sensor Controller

PSE200



- 4 sensors can be connected.
- Applicable sensors: PSE53□, 54□, 56□, 570, 573
- A single controller can be used to monitor various applications.
- 4 inputs, 5 outputs



Series	Set pressure range
PSE200	-14.6488 to -14.6488 psi (-101 to 101 kPa), 1.4504 to -14.6488 psi (10 to -101 kPa) -1.4504 to 14.6488 psi (-10 to 101 kPa), -1.45038 to 145.038 psi (-0.1 to 1 MPa)

2-Color Display Digital Pressure Sensor Controller

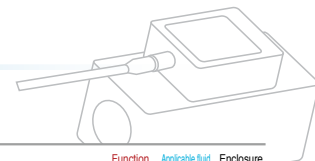
PSE300



- Applicable sensors: PSE53□, 54□, 550, 56□, 570, 573, 574
- Compatible with voltage input and current input
- Response time: 1 ms
- Space saving, Capable of vertical and horizontal contact mounting
- Panel mounting, Bracket mounting, DIN rail mounting



Series	Set pressure range
PSE300	-14.6488 to -14.6488 psi (-101 to 101 kPa), 1.4504 to -14.6488 psi (10 to -101 kPa) -1.4504 to 14.5038 psi (-10 to 100 kPa), -1.45038 to 145.038 psi (-0.1 to 1 MPa) -7.25189 to 14.5038 psi (-50 to 500 kPa), -0.0290 to 0.2901 psi (-0.2 to 2 kPa)



2-Color Display Digital Flow Switch

PFM



- Compact, Lightweight, Space saving
- Dry air, N₂, Ar, CO₂
- Grease-free



Series	Rated flow range [scfm (L/min)]
PFM	0.01 to 0.35 (0.2 to 10)(0.01 to 0.18 (0.2 to 5)), 0.02 to 0.88 (0.5 to 25)(0.02 to 0.44 (0.5 to 12.5)) 0.04 to 1.77 (1 to 50)(0.04 to 0.88 (1 to 25)), 0.07 to 3.53 (2 to 100)(0.07 to 1.77 (2 to 50))

* (): For CO₂

2-Color Display Digital Flow Switch

PFMB

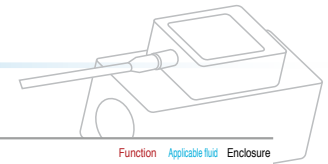


- Flow ratio 100 : 1
- Dry air, N₂
- Rotary display
- Grease-free



Series	Rated flow range [scfm (L/min)]
PFMB	0.07 to 7.06 (2 to 200), 0.18 to 17.66 (5 to 500) 0.35 to 35.31 (10 to 1000), 0.71 to 70.63 (20 to 2000)

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2-Color Display Digital Flow Switch/Low Particle Generation PFM7/PFMB7-X300

Function: Reversible Display, Dry Air, IP40
+PFMB



- Flow control of a clean air blow in clean room environments
- Metal material of parts in contact with fluid: Stainless steel 304

Series	Applicable fluid	Rated flow range [scfm (L/min)]
PFM7-X300	Dry air	0.01 to 0.35 (0.2 to 10)(0.01 to 0.18 (0.2 to 5))
	N ₂	0.02 to 0.88 (0.5 to 25)(0.02 to 0.44 (0.5 to 12.5))
	Ar	0.04 to 1.77 (1 to 50)(0.04 to 0.88 (1 to 25))
	CO ₂	0.07 to 3.53 (2 to 100)(0.07 to 1.77 (2 to 50))
PFMB7-X300	Dry air N ₂	0.2901 to 29.0075 (2 to 200)

* (): For CO₂

3-Color Display Digital Flow Switch PFMC

Function: Rotary Display, Dry Air, IP65



Applicable to digital flow monitors

- 3-color/2-screen display
- Flow ratio 100 : 1
- With a bypass structure
- Dry air, N₂

Series	Rated flow range [scfm (L/min)]
PFMC	0.18 to 17.66 (5 to 500)
	0.35 to 35.31 (10 to 1000)
	0.71 to 70.63 (20 to 2000)

Flow Sensor PFMV

Applicable fluid: Dry Air, IP40



- Suction verification of very small workpieces
- Repeatability: $\pm 2\%$ F.S.
- Response speed: 5 ms or less, Withstand pressure: 72.5189 psi
- Grease-free, RoHS compliant
- Only 1 voltage monitor is required to cover the complete range.

Series	Rated flow range [scfm (L/min)]
PFMV	0 to 0.02 (0 to 0.5)
	0 to 0.04 (0 to 1)
	0 to 0.11 (0 to 3)
	-0.02 to 0.02 (-0.5 to 0.5)
	-0.04 to 0.04 (-1 to 1)
	-0.11 to 0.11 (-3 to 3)

Digital Flow Switch for Air PF2A

Function: Rotary Display, Air, IP40, IP65
+Front only



- An integrated type and a separate monitor type are available.
- Switch output, Accumulated pulse output, Analog output
- Capable of switching back and forth between cumulative and instantaneous flow

Series	Rated flow range [scfm (L/min)]
PF2A	0.04 to 0.35 (1 to 10)
	0.18 to 1.77 (5 to 50)
	0.35 to 3.53 (10 to 100)
	0.71 to 7.06 (20 to 200)
	1.77 to 17.66 (50 to 500)

3-Color Display Digital Flow Switch for Large Flow PF3A7□H

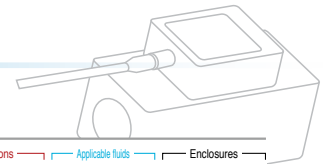
Function: Rotary Reversible Display, Air, IP65



Applicable to digital flow monitors

- Flow range: Max. 12000 L/min
- Flow ratio 100 : 1
- Through bore construction
- Pressure loss: 75% reduction (2.9 to 0.725189 psi (20 to 5 kPa))
- Improved drainage and resistance to foreign matter
- Applicable fluids: Air, N₂

Series	Rated flow range [scfm (L/min)]
PF3A7□H	1.06 to 105.94 (30 to 3000)
	2.12 to 211.89 (60 to 6000)
	4.24 to 423.78 (120 to 12000)



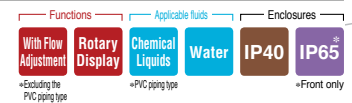
3-Color Display Digital Flow Switch for Water

PF3W



- 3-color/2-screen display
- Integrated temperature sensor
- Grease-free
- Fluid temperature: 32 to 194°F (0 to 90°C) (PVC piping type: 32 to 158°F (0 to 70°C))
- PVC piping type: Applicable to deionized water, chemical liquids, etc.

C (PVC piping type: 0 to 70



Series	Rated flow range [scfm (L/min)]
PF3W	0.02 to 0.14 (0.5 to 4)
	0.07 to 0.57 (2 to 16)
	0.18 to 1.41 (5 to 40)
	0.35 to 3.53 (10 to 100)
	1.77 to 8.83 (50 to 250) (PVC piping type: 1.06 to 8.83 (30 to 250))

3-Color Display Electromagnetic Type Digital Flow Switch

LFE



- Applicable fluids: Water, Water-soluble coolant
- Compact, Lightweight
2.20 in x 1.57 in x 3.54 in (H x W x D)
Weight: 11.99 oz (340 g) (LFE1□3)
- Reverse flow can be detected.
- Operating fluid temperature: 32°F to 185°F (0 to 85°C)
- Pressure loss: 2.90 psi or less (0.02 MPa or less)



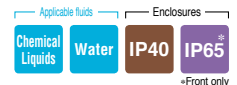
Series	Rated flow range [scfm (L/min)]
LFE	0.02 to 0.71 (0.5 to 20)
	0.09 to 3.53 (2.5 to 100)
	0.18 to 7.06 (5 to 200)

Digital Flow Switch for Deionized Water and Chemical Liquids

PF2D



- Body sensor: New PFA, Tube: Super PFA
- Low particle generation, Excellent flow-through characteristics



Series	Rated flow range [scfm (L/min)]
PF2D	0.01 to 0.14 (0.4 to 4)
	0.06 to 0.71 (1.8 to 20)
	0.14 to 1.41 (4 to 40)

3-Screen Display Digital Flow Monitor

PFG300



- Can measure up to 42.38 scfm (12000 L/min)!
- 3-screen display: Setting is possible while checking the measured value.
- NPN/PNP switch function
- Input range selection (for pressure/flow rate)
- Simple 3-step setting



Series	Rated flow range [scfm (L/min)]
PF3A7□H	1.06 to 105.94 (30 to 3000)
	2.12 to 211.89 (60 to 6000)
	4.24 to 423.781 (120 to 12000)
PFMB	0.07 to 7.06 (1.8 to 20), 0.18 to 17.66 (5 to 500)
	0.35 to 35.31 (10 to 1000), 0.71 to 70.63 (20 to 2000)
PFMC	0.18 to 17.66 (5 to 500)
	0.35 to 35.31 (10 to 1000)
	0.71 to 70.63 (20 to 2000)

Flow Controller for Water

FC2W-X110



- Automatically adjusts the flow rate
- Flow rate control accuracy: ±5% F.S.
- Grease-free



Series	Flow rate control range [scfm (L/min)]	Flow rate measurement range [scfm (L/min)]
FC2W-X110	0.02 to 0.14 (0.5 to 4)	0.01 to 0.15 (0.4 to 4.2)
	0.07 to 0.57 (2 to 16)	0.06 to 0.59 (1.6 to 16.8)

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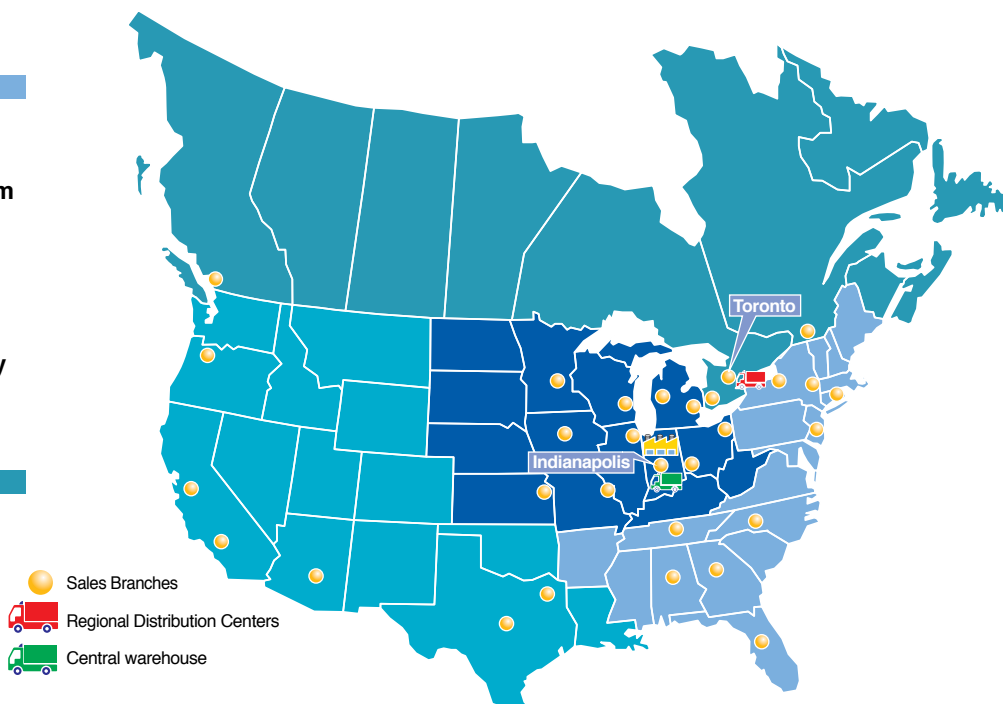
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