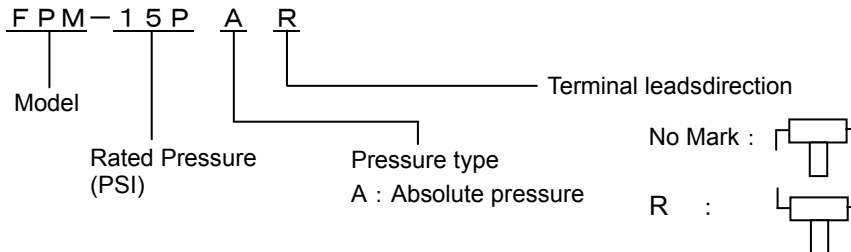


### ■Features

- Barometric pressure measurable
- Dual-in-line package (DIP)

### ■Ordering Information



	Weight (grams)
	1.5

RoHS compliance

Measurable pressure range(kPa.abs)	Part number	
34.66 to 168.0	FPM-15PA	FPM-15PAR

### ■Specifications

Model	FPM-15PA / FPM-15PAR	Unit	
<b>Recommended operating conditions</b>			
Pressure type	Absolute pressure	-	
Rated pressure	168.0	kPa.abs	
Measurable pressure range	34.66 to 168.0	kPa.abs	
Temperature range	0 to 50	deg.C	
Pressure media	Non-corrosive gases only (No liquid)	-	
Excitation current (Constant)	1.5	mADC	
<b>Absolute maximum rating</b>			
Maximum load pressure	Twice of rated pressure	-	
Maximum excitation current	3.0	mADC	
Operating temperature	-20 to 100	deg.C	
Storage temperature	-40 to 120	deg.C	
Operating humidity	30 to 80 (Non dew condition)	%RH	
<b>Electric characteristics (Drive Current 1.5mA constant ,ambient temperature Ta=25deg.C)</b>			
Output span voltage	80 to 160 (at 34.66 to 168.0kPa.abs)	mV	
Offset voltage	50 to 130 (at 101.3kPa.abs)	mV	
Bridge resistance	4000 to 6000	Ω	
Response time	2 (for the reference)	msec.	
Accuracy	TSO*	+/-3	%FS/0-50deg.C
	TCS*	2.5	%FS/0-50deg.C
	Linearity	+/-0.3	%FS
	Pressure hysteresis	+/-0.2	%FS

\*TSO : Temperature sensitivity of offset voltage(Temperature range from 0-50 deg.C)

\*TCS : Temperature coefficient of output span voltage(Temperature range from 0-50 deg.C)

P1= 34.66 kPa.abs      T1= 0 deg.C  
 P2= 67.98 kPa.abs      T2= 25 deg.C  
 P3= 101.3 kPa.abs      T3= 50 deg.C  
 P4= 168.0 kPa.abs

Offset voltage (mV)

V<sub>off</sub> = V(P3,T)      at 101.3kPa.abs

Output voltage at full scale (mV)

V(P1,T)      at 34.66kPa.abs

V(P4,T)      at 168.0kPa.abs

Output span voltage (mV)

SV = V(P4,T) - V(P1,T)

SV(0) = V(P4,T1) - V(P1,T1)

SV(25) = V(P4,T2) - V(P1,T2)

SV(50) = V(P4,T3) - V(P1,T3)

Temperature sensitivity of offset voltage (%FS)

TSO = {LARGER ONE} / SV(25) x 100

LARGER ONE = larger absolute value which of {V(P3,T1)-V(P3,T2)} and {V(P3,T3)-V(P3,T2)}

Temperature coefficient of output span voltage (%FS)

TCS = {max[SV(0),SV(25),SV(50)] - min[SV(0),SV(25),SV(50)]} / SV(25) x 100

Linearity (%FS)

NL = {V(P2,T2) - [V(P1,T2)+V(P3,T2)]/2} / SV(25) x 100

Pressure hysteresis (%FS)

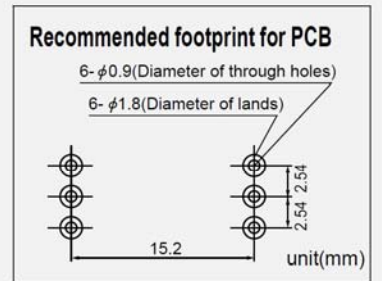
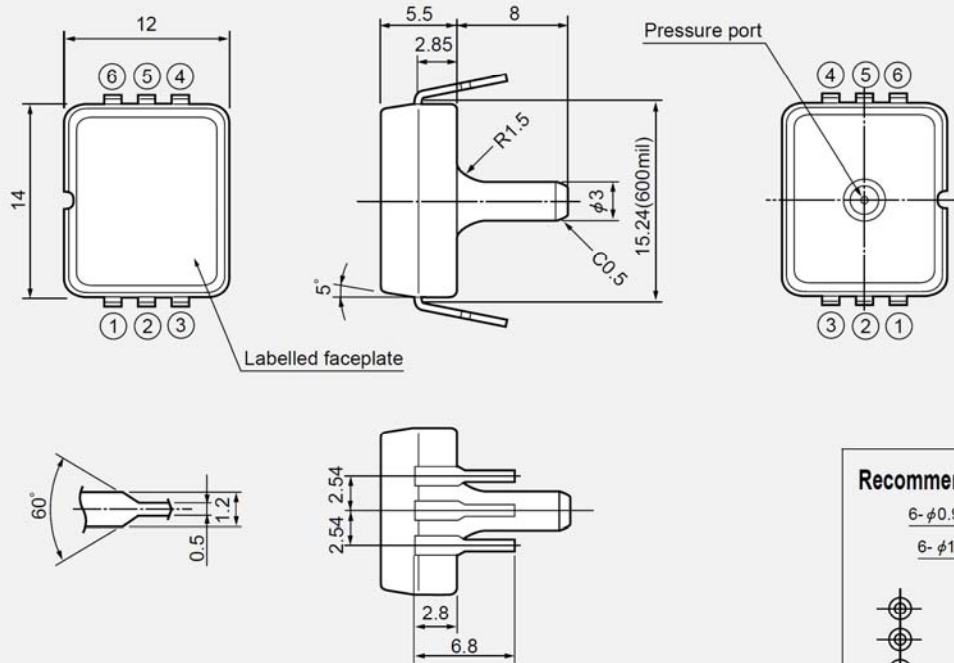
Phys = {V'(P3,T2) - V(P3,T2)} / SV(25) x 100

V'(P3,T2) : Output voltage against P1 after stressing by P3 pressure.

■ Outline dimensions ■

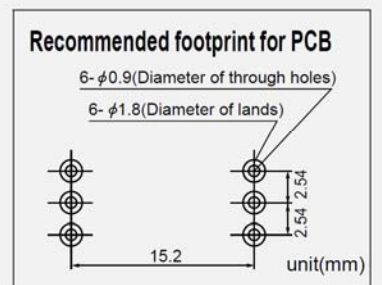
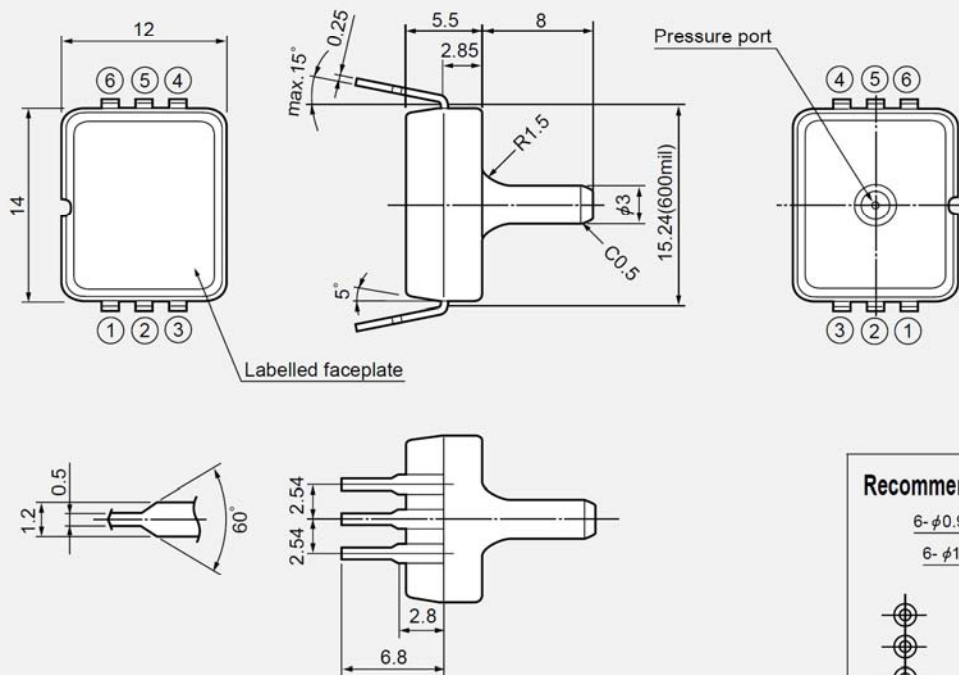
Unit (mm)

FPM (Absolute pressure)

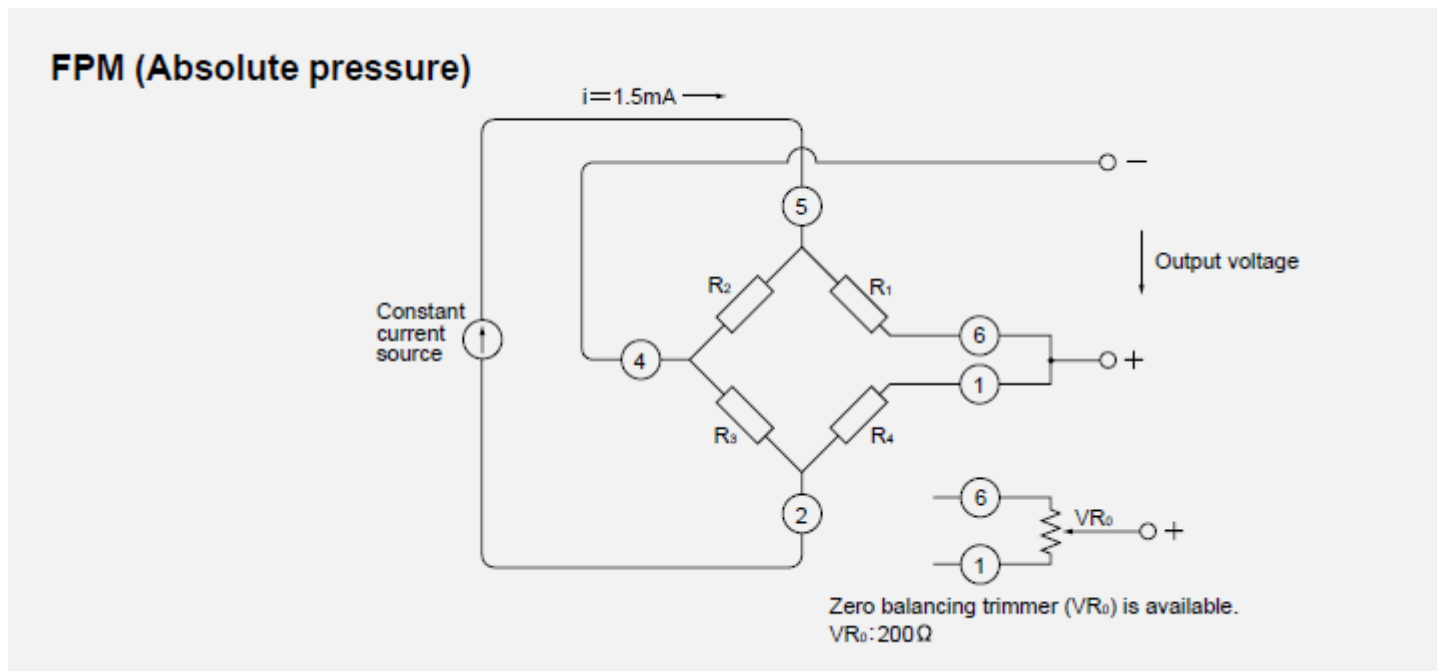


FPM-R (Absolute pressure)

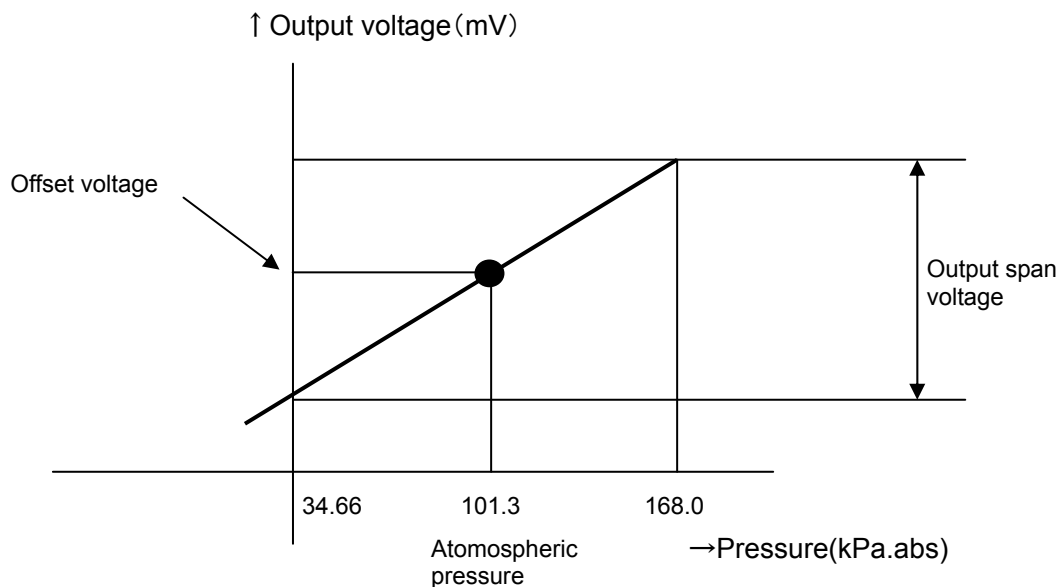
Unit (mm)



## ■ Connection diagram ■



## ■ Output characteristics ■



Note ; Please read instruction "Notes" before using the sensor.  
 Fujikura reserves the right to change specifications without notice.

Please keep the sensors sealed using static shielding bags on storage. The pins of the sensor are plated by Ag. If the sensors expose to an atmosphere, the pins will be black by sulfuration.

Please set Zero-calibration function up your products. The offset voltage may be shifted some mechanical stress such as mounting, installation and etc. over longtime using.

If you have any questions regarding technical issues or specifications, please contact us.  
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