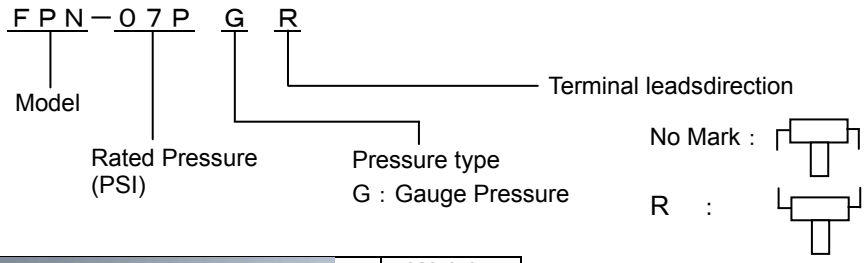
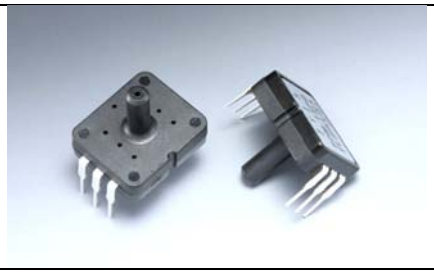
■Features

Dual-in-line package (DIP)

■Ordering Information



| Weight (grams) |
|---|
| 1.1 |

**RoHS compliance**

| Measurable pressure range(kPa) | Part number | |
|---|---|---|
| -13.79 to 13.79 | FPN-02PG | FPN-02PGR |
| -34.47 to 34.47 | FPN-05PG | FPN-05PGR |
| -48.26 to 48.26 | FPN-07PG | FPN-07PGR |

■Specifications

| Model | | 02PG | 05PG | 07PG | Unit |
|---|---|---|---|---|---|
| Recommended operating conditions | | | | | |
| Pressure type | | Gauge pressure | | | - |
| Rated pressure | | 13.79 | 34.47 | 48.26 | kPa |
| Measurable pressure range | | -13.79 to 13.79 | -34.47 to 34.47 | -48.26 to 48.26 | kPa |
| Temperature range | | 0 to 50 | | | deg.C |
| Pressure media | | Non-corrosive gases only (No liquid) | | | - |
| Excitation current (Constant) | | 1.5 | | | mADC |
| Absolute maximum rating | | | | | |
| Maximum load pressure | | Twice of rated pressure | | | - |
| Maximum excitation current | | 3.0 | | | mADC |
| Operating temperature | | 0 to 80 | | | deg.C |
| Storage temperature | | -20 to 100 | | | deg.C |
| Operating humidity | | 30 to 80 (Non dew condition) | | | %RH |
| Electric characteristics (Drive Current 1.5mA constant ,ambient temperature Ta=25deg.C) | | | | | |
| Output span voltage | | 40 to 130 (at 0kPa to rated pressure) | | | mV |
| Offset voltage | | +/-25 (at 0kPa) | | | mV |
| Bridge resistance | | 4000 to 6000 | | | Ω |
| Response time | | 2 (for the reference) | | | msec. |
| Accuracy | TSO* | +/-10 | +/-8 | | %FS/0-50deg.C |
| | TCS* | 5.0 | 2.5 | | %FS/0-50deg.C |
| | Linearity | +/-0.6 | +/-0.3 | | %FS |
| | Pressure hysteresis | +/-1.0 | +/-0.7 | | %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)

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P1= 0 kPa T1= 0 deg.C
P2= 1/2 x P3 (kPa) T2= 25 deg.C
P3= reted pressure (kPa) T3= 50 deg.C

Offset voltage (mV)
Voff = V(P1,T)
Voff(0) = V(P1,T1)
Voff(25) = V(P1,T2)
Voff(50) = V(P1,T3)

Output voltage at full scale (mV)
Vfs = V(P3,T)
Vfs(0) = V(P3,T1)
Vfs(25) = V(P3,T2)
Vfs(50) = V(P3,T3)

Output span voltage (mV)
SV = Vfs - Voff
SV(0) = Vfs(0) - Voff(0)
SV(25) = Vfs(25) - Voff(25)
SV(50) = Vfs(50) - Voff(50)

Temperature sensitivity of offset voltage (%FS)
TSO = {LARGER ONE} / SV(25) x 100
LARGER ONE = larger absolute value which of {Voff(0)-Voff(25)} and {Voff(50)-Voff(25)}

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

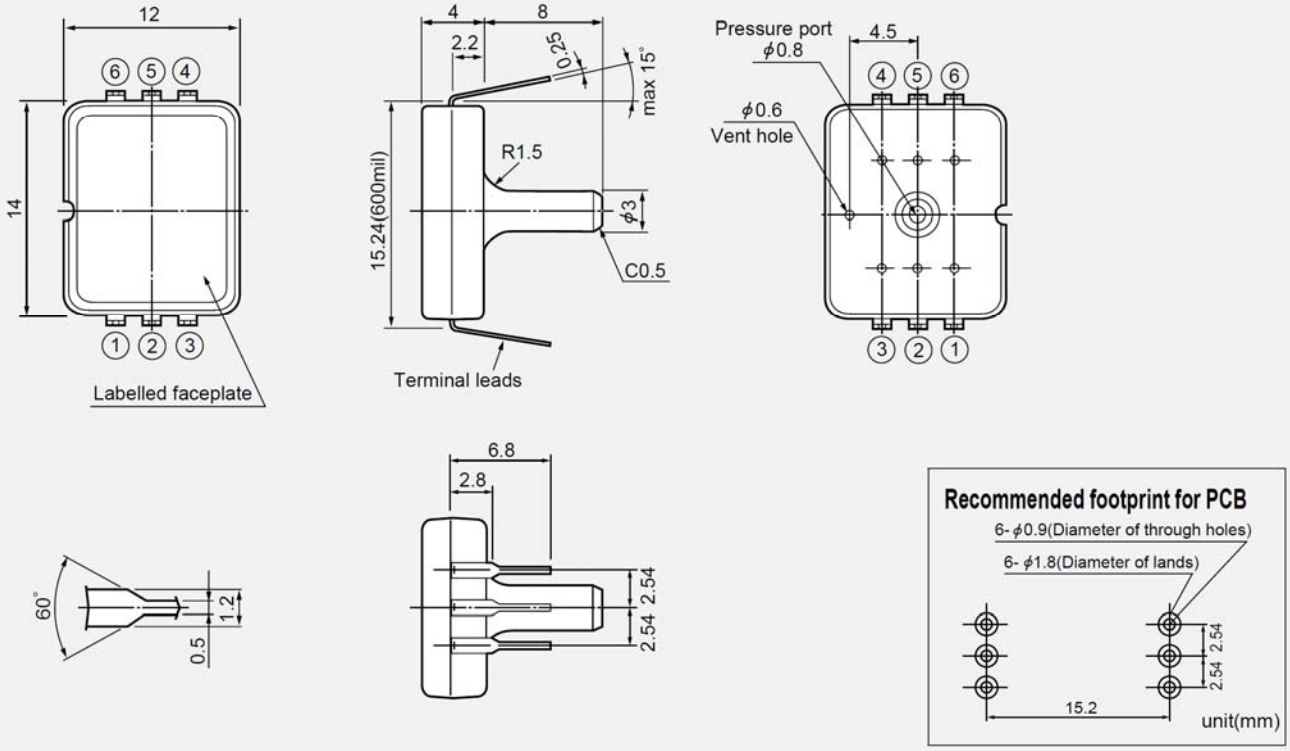
Linearity (%FS)
NL = {V(P2,T2) - [Voff(25)+Vfs(25)]/2 } / SV(25) x 100

Pressure hysteresis (%FS)
Phys = {Voff'(25) - Voff(25) } / SV(25) x 100
Voff'(25) : Output voltage against P1 after stressing by P3 pressure.

■Outline dimensions■

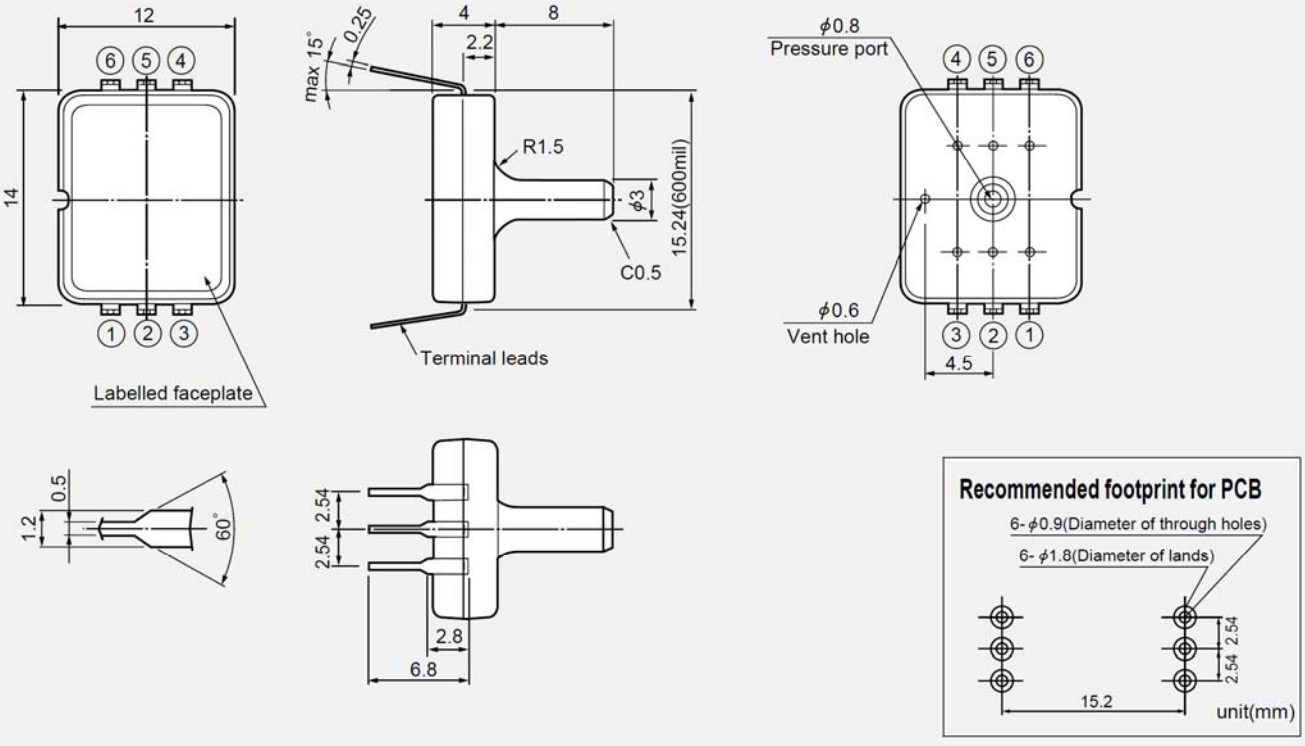
unit(mm)

## FPN

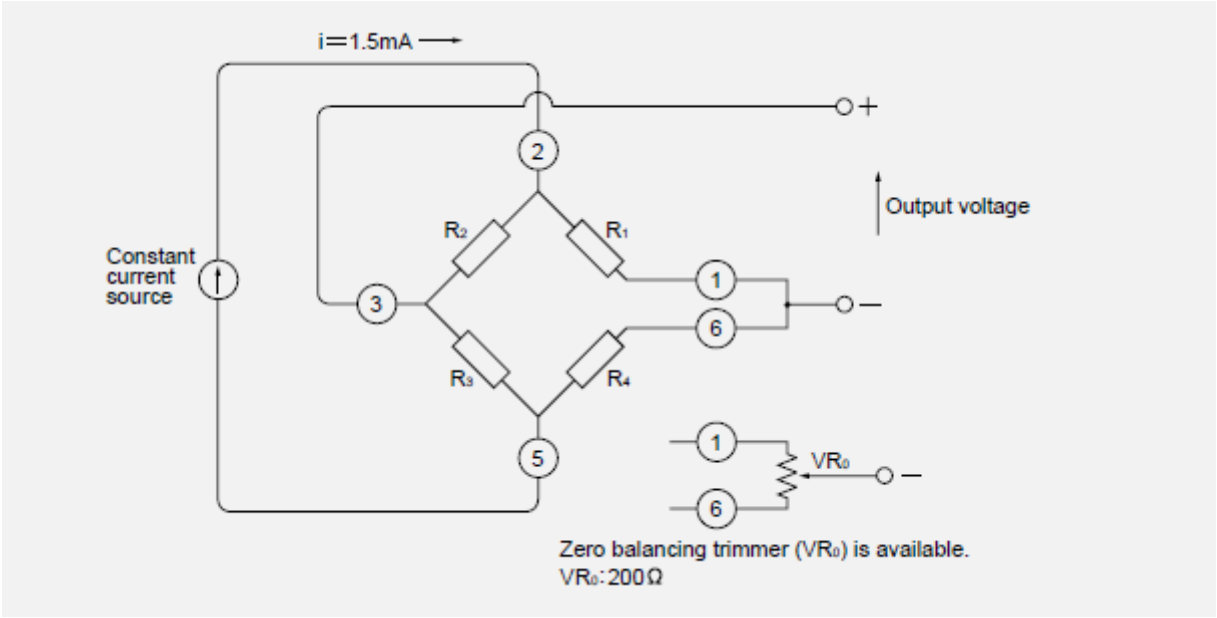



unit(mm)

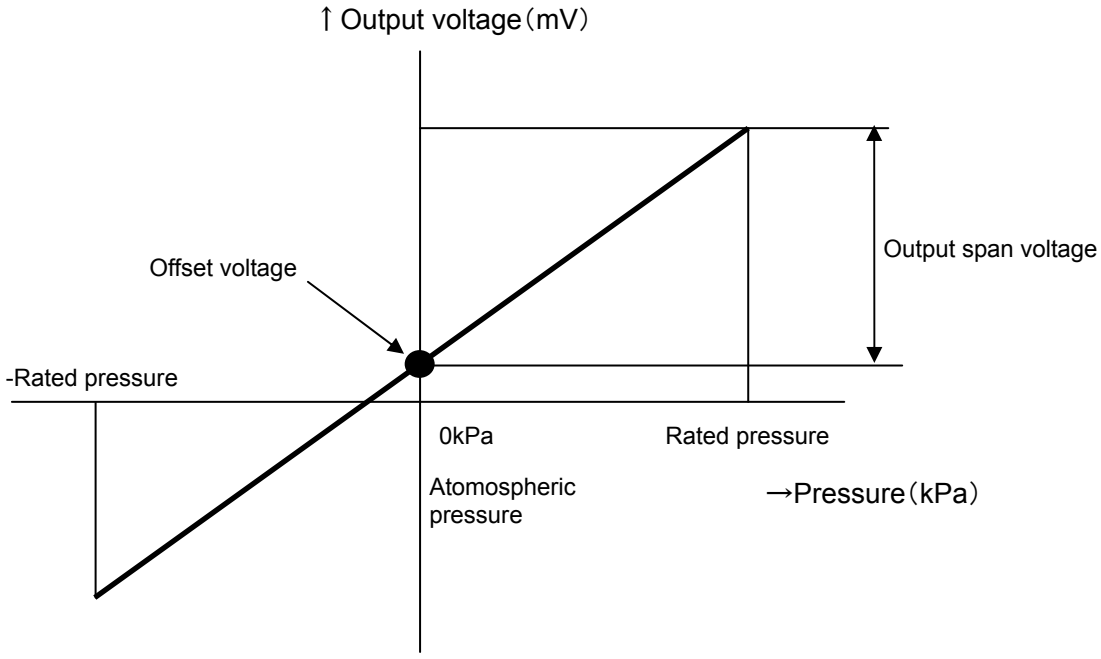
## FPN-R



■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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