

FDP3000-B Model Type

Summary

FDP3000 single crystal silicon intelligent transmitter. Original imported chip and packaging technology. The smart transmitter can cope with the most demanding industrial environment. A variety of structural designs can measure pressure, differential pressure and flow rate in industry

Main parameter

Type : Pressure, Differential pressure
Wetted Materials : SUS304, SUS316, SUS316L
Diaphragm Material : SUS316L, C-276, Ta
Shell Material : Cast aluminum
Measure Scope :
 Pressure : 2kPa-10MPa
 Differential Pressure : 200 kPa -10MPa
Output Signal : 4 ~ 20mA+ HART two wire system
Accuracy : $\pm 0.1\%$, $\pm 0.05\%$
Stability : $\pm 0.2\%$
Power Supply : 10.5-55VDC
Electrical Interface : M20*1.5 , 1/2" NPT
Surrounding temperature : $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
IP grade : IP67
Explosion-proof Grade : ExiaIICT4 , ExdIICT6
Weight : 4kg
Keys : 3pcs outside , 3pcs inside



Range and scope

Differential pressure measure range :

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Static Pressure Limit	High Pressure Side Overload Limit	Low Pressure Side Overload Limit
6 kPa	200 Pa	-6 kPa	6 kPa	25 MPa	25 MPa	16 MPa
40 KPa	400 Pa	-40 KPa	40 KPa	40 MPa	25 MPa	16 MPa
250 kPa	2.5 kPa	-250 kPa	250 kPa	40 MPa	25 MPa	16 MPa
1 MPa	10 kPa	-500 kPa	1 MPa	40 MPa	25 MPa	16 MPa
3 MPa	30 kPa	-500 kPa	3 MPa	40 MPa	25 MPa	16 MPa
10 MPa	100 kPa	-500 kPa	10 MPa	40 MPa	25 MPa	16 MPa

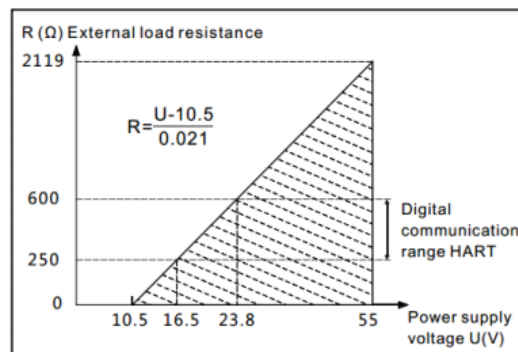
Adjust requirements: lower range value (LRV) and upper range value (URV) can be adjusted within the scope of upper and lower range limit, when | URV | >= | LRV |, needs | URV | >= smallest calibratable span
when | URV | <= | LRV |, needs | LRV | >= smallest calibratable span.

Pressure measure range :

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
6 kPa	200 Pa	-6 kPa	6 kPa	25 MPa
40 kPa	400 Pa	-40 kPa	40 kPa	25 MPa
250 kPa	2.5 kPa	-100 kPa	250 kPa	25 MPa
1 MPa	10 kPa	-100 kPa	1 MPa	25 MPa
3 MPa	30 kPa	-100 kPa	3 MPa	25 MPa
10 MPa	100 kPa	-100 kPa	10 MPa	25 MPa
40 MPa	400 kPa	-100 kPa	40 MPa	25 MPa

Adjust requirements: lower range value (LRV) and upper range value (URV) can be adjusted within the scope of the upper and lower range limit, span = | URV - LRV | >= smallest calibratable span.

Power supply and load requirements



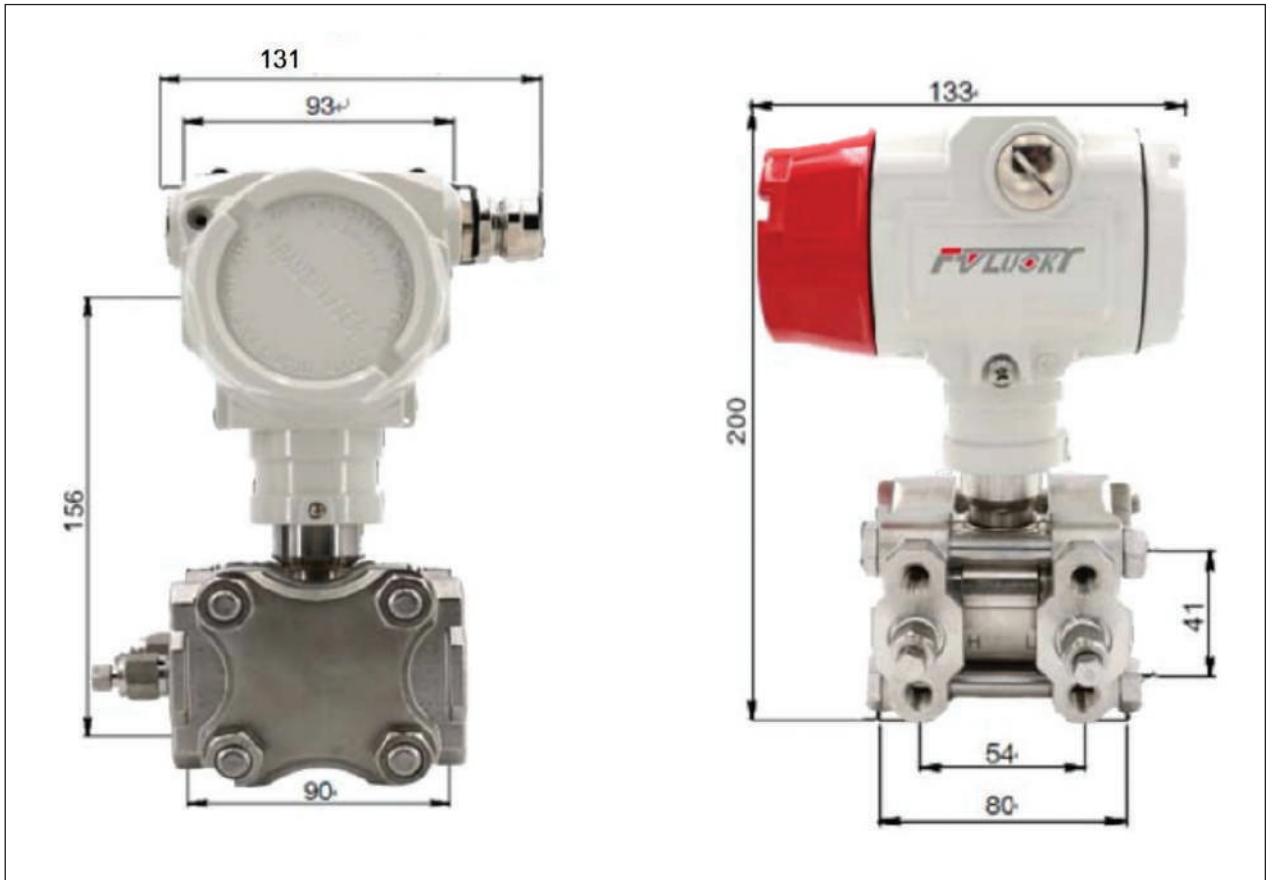
EMC environment

No.	Test items	Basic standards	Test conditions	Performance level
1	Radiated interface	GB/T 9254/CISPR22	30 MHz - 1000 MHz	OK
2	Conducted interface (DC power port)	GB/T 9254/CISPR22	0.15 MHz - 30 MHz	OK
3	Electrostatic discharge immunity test (ESD)	GB/T 17626.2/IEC61000-4-2	4 kV (Contact), 8 kV (Air)	B (Note 2)
4	Immunity to radio frequency EM-field	GB/T 17626.3/IEC61000-4-3	10 V/m (80 MHz - 1 GHz)	A (Note 1)
5	Power frequency magnetic field immunity test	GB/T 17626.8/IEC61000-4-8	30 A/m	A (Note 1)
6	Electrical fast transient/ Burst immunity test	GB/T 17626.4/IEC61000-4-4	2 kV (5/50 ns, 100 kHz)	B (Note 2)
7	Surge immunity requirements	GB/T 17626.5/IEC61000-4-5	1 kV (Line to Line) 2 kV (Line to ground) (1.2 us/ 50 us)	B (Note 2)
8	Immunity to conducted disturbances induced by radio frequency fields	GB/T 17626.6/IEC61000-4-6	3 V (150 kHz - 80 MHz)	A (Note 1)

(Note 1) Performance level A: The performance within the limits of normal technical specifications.

(Note 2) Performance level B: Temporary reduction or loss of functionality or performance, it can restore itself. The actual operating conditions, storage and data will not be changed.

Outline dimensional drawing (unit : mm)



Pipe mounting bracket diagram

