

## FDP3000-V Diaphragm 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 are sufficient to solve pressure measurements in industry.

### Main parameter

Type : Gauge pressure

Wetted Materials : SUS304, SUS316, SUS316L

Diaphragm Material : SUS316L, C-276, Ta

Shell Material : Cast aluminum

Pressure Range : 2kPa-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 (internal tooth) , 1/2" NPT (internal tooth)

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

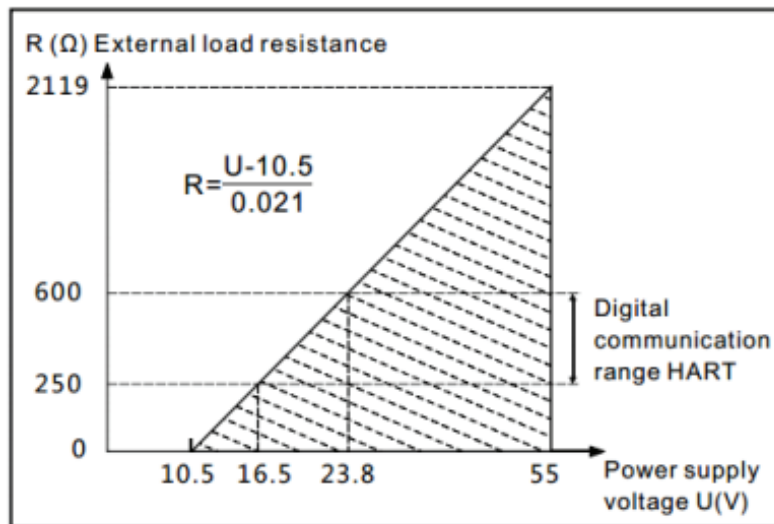


## Range and scope

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
40 kPa	2 kPa	-40 kPa	40 kPa	1 MPa
250 kPa	12.5 kPa	-100 kPa	250 kPa	4 MPa
1 MPa	50 kPa	-100 kPa	1 MPa	6 MPa

Above measurement range can be replaced by kg/cm<sup>2</sup>, MPa and kPa units. Which can provide other measurement range according to the requirements. Adjust requirements : lower range value (LRV) and upper range value (URV) can be adjusted within the scope of the upper and lower range limit, smallest calibratable span <= | URV - LRV | <= upper range limit

## 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)

