

FDP3000-Y Double Flange 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, liquid level and other measurements.

Main parameter

Type : pressure, differential pressure, liquid level

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 : $\pm 0.2\%$

Powder 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 : 10kg

Keys : 3pcs outside , 3pcs inside



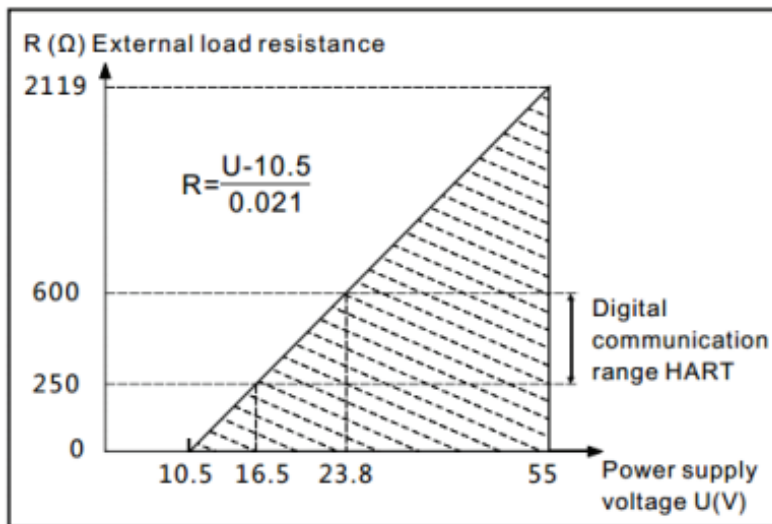
Range and scope

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
40 kPa	4 kPa	-40 kPa	40 kPa	10 MPa	10 MPa	100 MPa
250 kPa	25 kPa	-250 kPa	250 kPa	10 MPa	10 MPa	500 kPa
1 MPa	100 kPa	-500 kPa	1 MPa	10 MPa	10 MPa	500 kPa

Above requirements : lower range value (LRV) and upper range value (URV) can be adjusted within the scope of the upper and lower range limit, when $|URV| \geq |LRV|$, need $|URV| >$ smallest calibratable span; when $|URV| \leq |LRV|$, need $|LRV| \geq$ smallest calibratable span.

*Limit value of overpressure : depends on the pressure value of the parts with lowest pressure capacity.

Power supply and load requirements



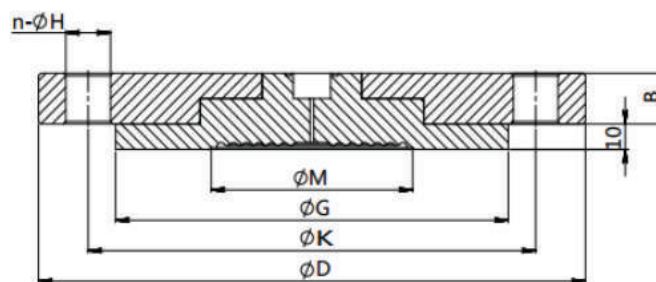
EMC environment

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)



Standard	Specification	Outer diameter(ϕD)	Thickness(B)	Hole circumference(ϕK)
HG/T20592-2009	DN50PN10	165	19	125
HG/T20592-2009	DN80PN10	200	20	160
HG/T20592-2009	DN100PN10	200	20	160
Raised face diameter(ϕG)	Hole diameter(ϕH)	Number(n)	Corrugation size(ϕM)	
102	18	4	56	
138	18	8	71	
158	18	8	71	