

User Manual

FY/JC 20 A/O 15/05 V1.5



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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

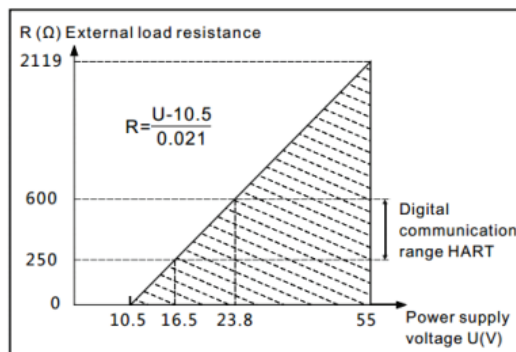
Adjust requirements: lower range value (LRV) and upper range value (URV) can be adjusted within the scope of upper and lower range limit, when $|URV| \geq |LRV|$, needs $|URV| \geq$ smallest calibratable span
when $|URV| < |LRV|$, needs $|LRV| \geq$ smallest calibratable span.

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 = $|URV - LRV| \geq$ smallest calibratable span.

Power supply and load requirements



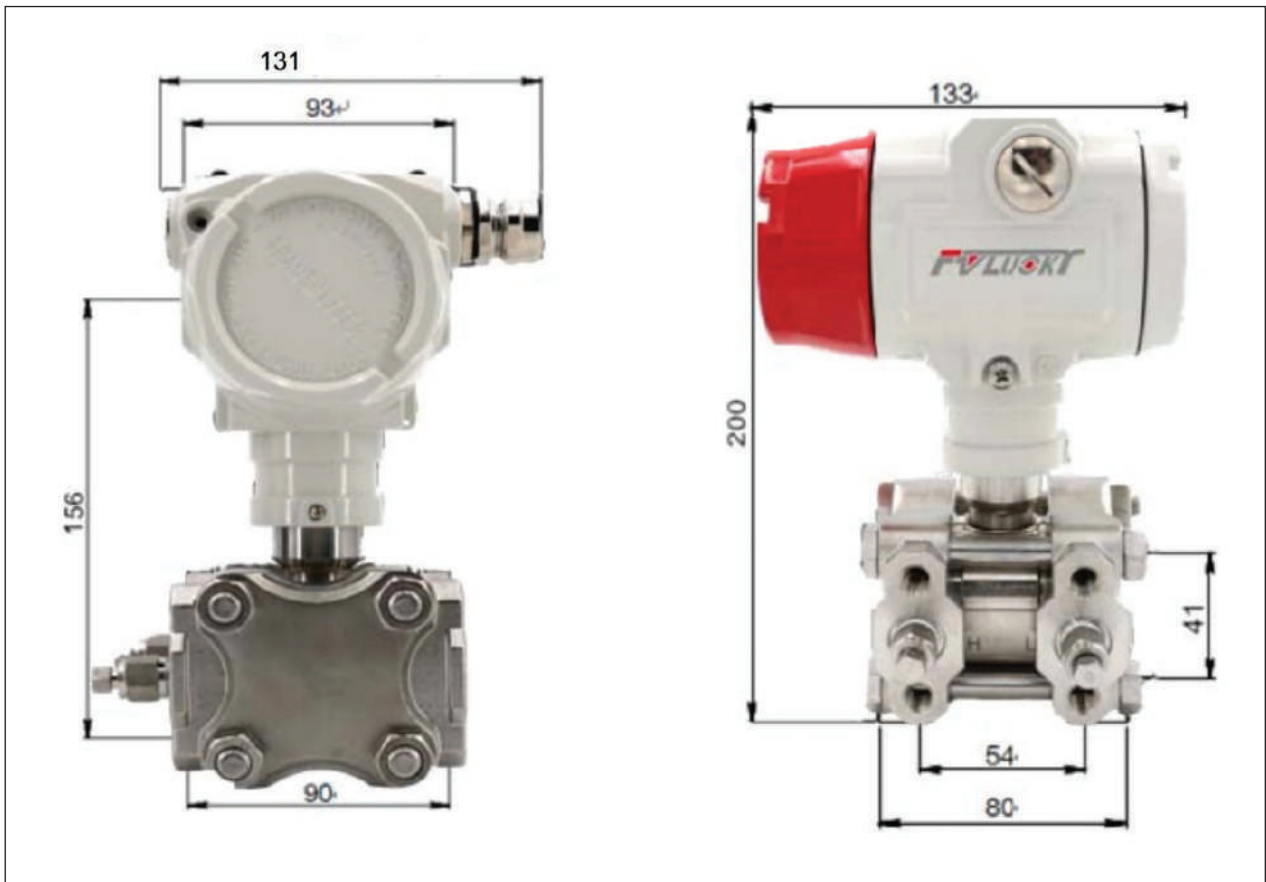
EMC environment

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)

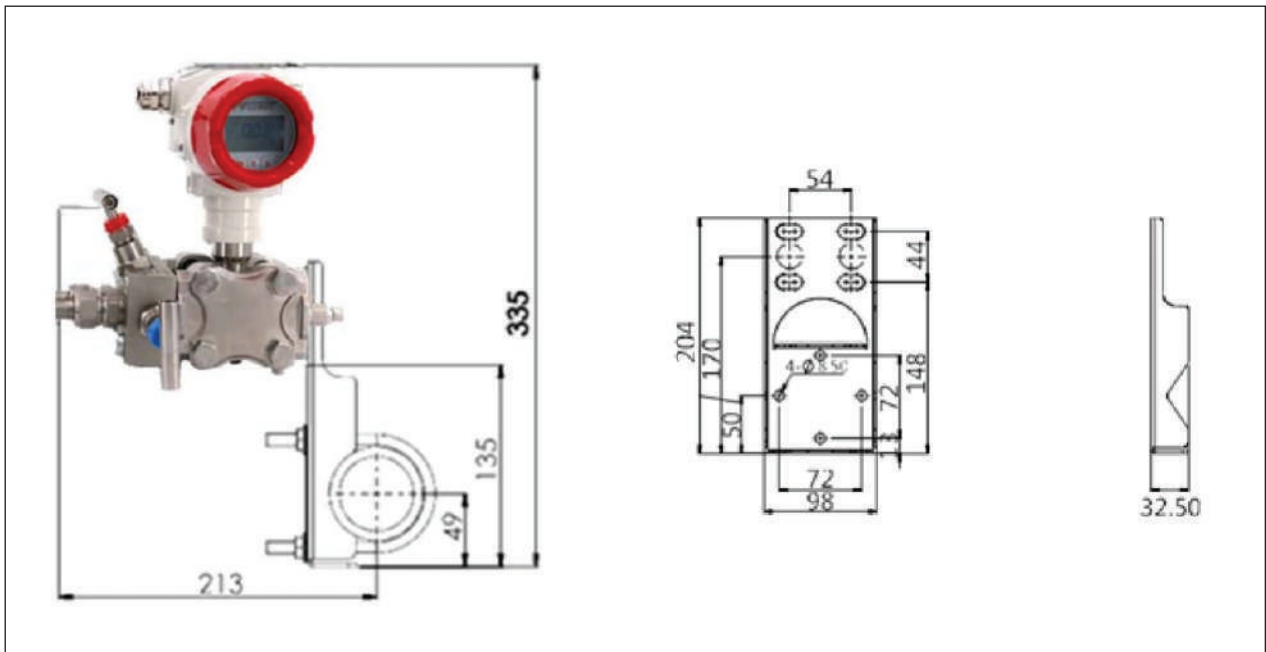
(Note 1) Performance level A: The performance within the limits of normal technical specifications.

(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





FDP3000-T Thread 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. The design of multiple structures is sufficient to measure industrial pressure.

Main parameter

Type : 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 : $\pm 0.1\%$
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 : 3kg
Keys : 3pcs outside , 3pcs inside

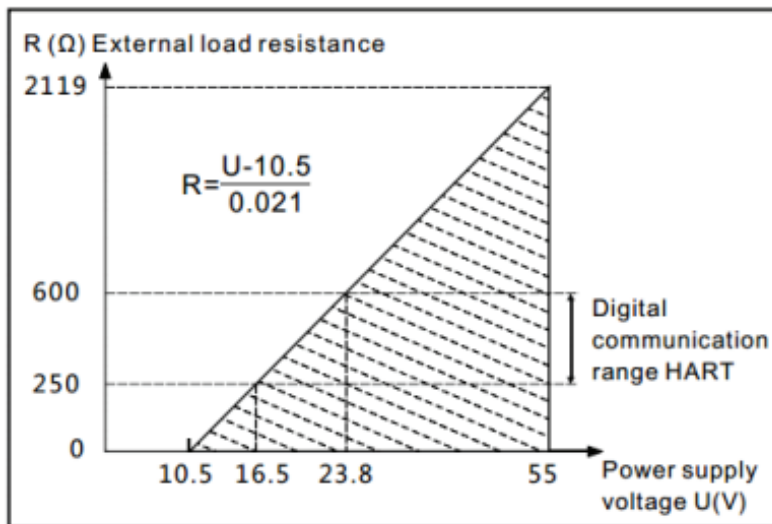


Range and scope

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
6 kPa	1 kPa	-6 kPa	6 kPa	25 MPa
40 kPa	2 kPa	-40 kPa	40 kPa	25 MPa
250 kPa	12.5 kPa	-100 kPa	250 kPa	25 MPa
1 MPa	50 kPa	-100 kPa	1 MPa	25 MPa
3 MPa	150 kPa	-0.1 MPa	3 MPa	25 MPa
10 MPa	500 kPa	-0.1 MPa	10 MPa	25 MPa

The unit of the measuring range above can be converted into kg/m², MPa and kPa, etc. Provide other measuring range according to 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 $\leq |URV - LRV| \leq URL$

Power supply and load requirements



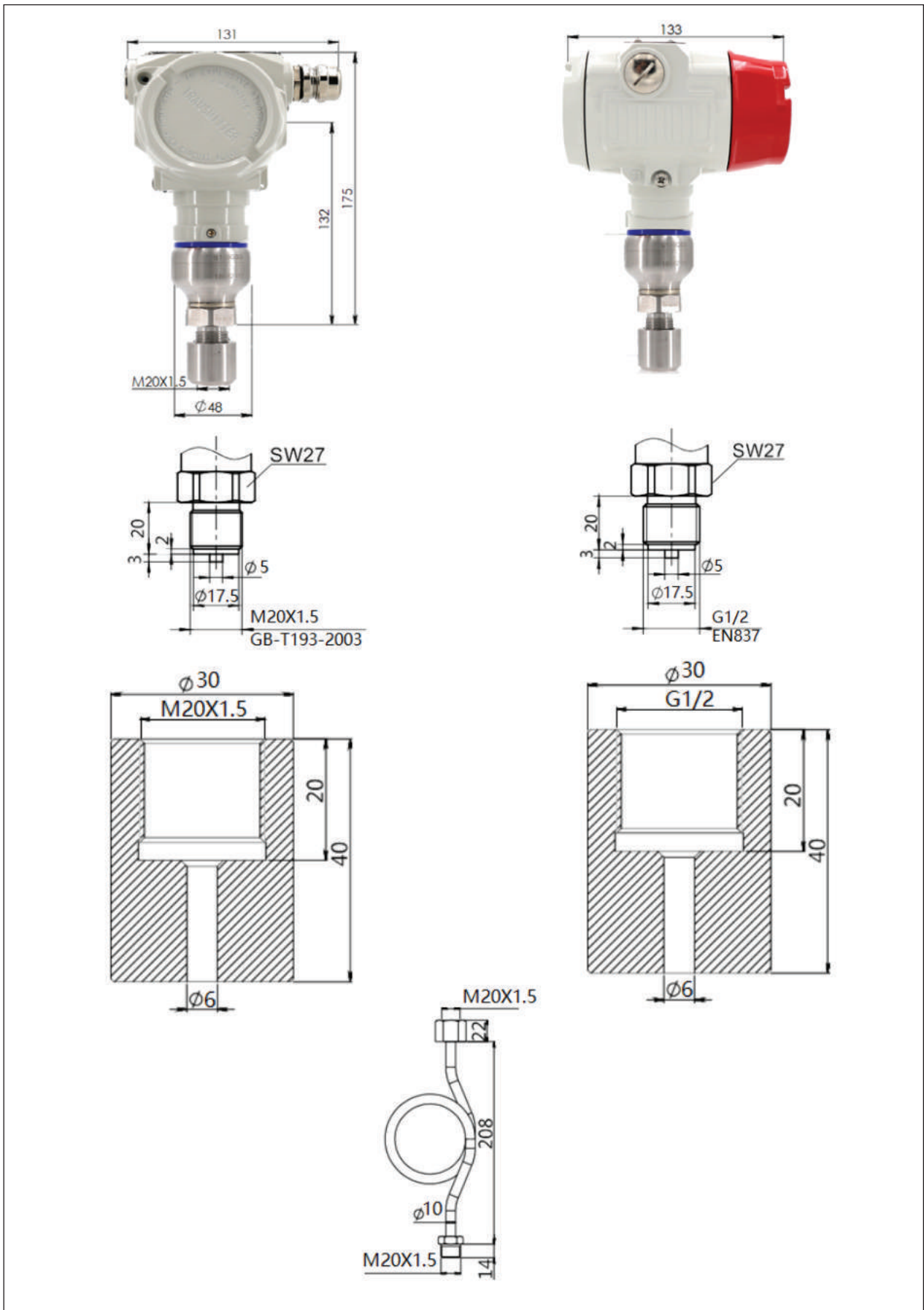
EMC environment

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)



FDP3000-I Input 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. The design of multiple structures is sufficient to solve the problem of liquid level measurement in industry.

Main parameter

Type : Liquid level
Wetted Materials : SUS304, SUS316, SUS316L
Diaphragm Material : SUS304, SUS316, SUS316L, Ceramic
Shell Material : Cast aluminum
Pressure Range : 2kPa-10MPa
Output Signal : 4 ~ 20mA+ HART two wire system
Accuracy : $\pm 0.1\%$
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 : 2.5kg
Keys : 3pcs outside , 3pcs inside

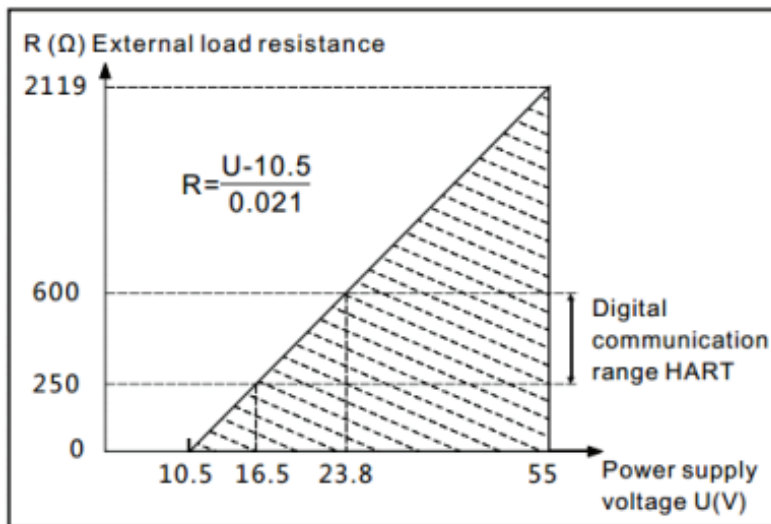


Range and scope

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
20 kPa	10 kPa	0 kPa	20 kPa	600 kPa
40 kPa	20 kPa	0 kPa	40 kPa	600 kPa
100 kPa	40 kPa	0 kPa	100 kPa	1 MPa
200 kPa	100 kPa	0 kPa	200 kPa	1.8 MPa
400 kPa	200 kPa	0 kPa	400 kPa	2.5 MPa
1 MPa	400 kPa	0 kPa	1 MPa	4 MPa
2 MPa	1 MPa	0 kPa	2 MPa	4 MPa

The unit of the measuring range above can be converted into mH₂O@ 4 C, mmH₂O@ 4 C, inH₂O@ 4 C, mm and mHg@ 0 C.
Please provide the density of measuring medium if the unit is m, mm.
Other measuring range is available according to requirements. (1 MPa = 102 mH₂O@ 4 C.

Power supply and load requirements



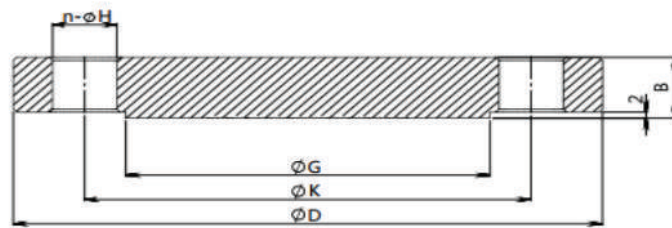
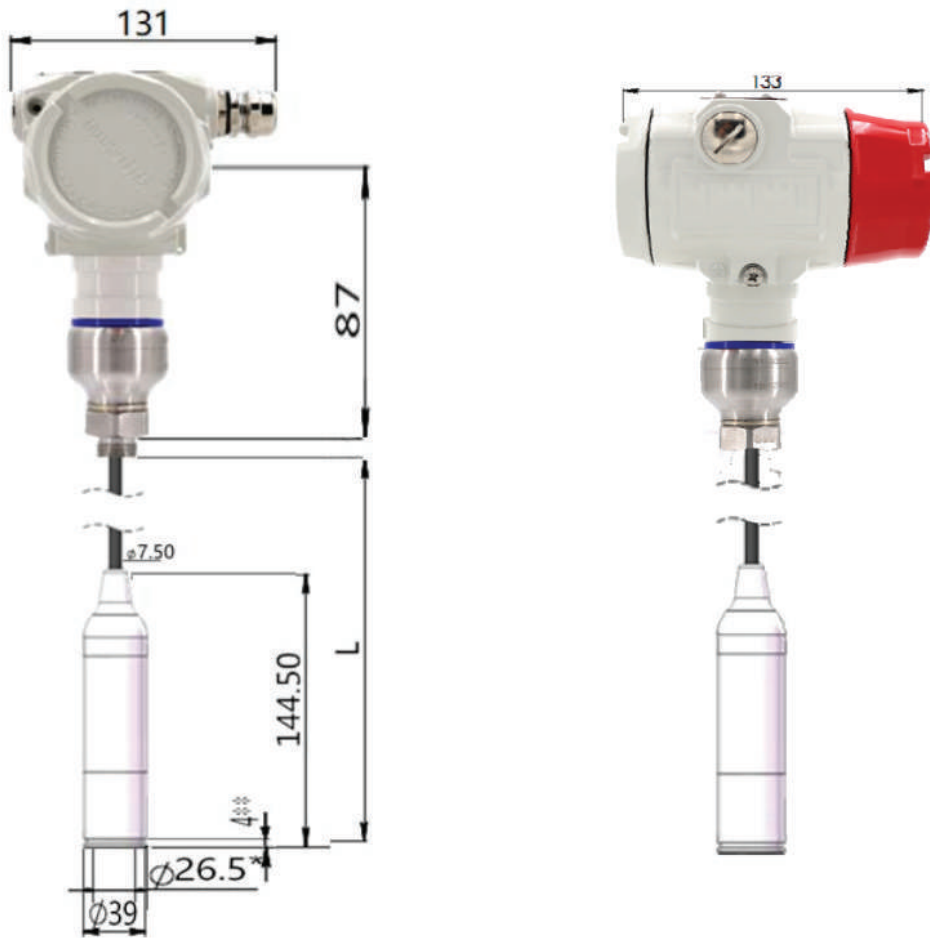
EMC environment

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($\varnothing D$)	Thickness(B)
HG/T20592-2009	DN50PN10-PN40	165	20
HG/T20592-2009	DN25PN10-PN40	115	16
Hole circle($\varnothing K$)	Raised-face diameter($\varnothing G$)	Hole diameter($\varnothing H$)	Number(N)
125	102	18	4
85	68	14	4

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FDP3000-H Sanitary 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 : $\pm 0.2\%$

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 : 4kg

Keys : 3pcs outside , 3pcs inside



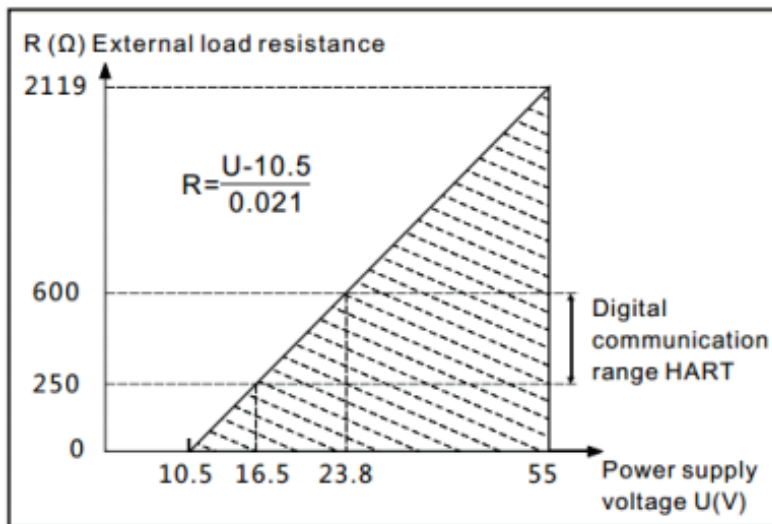
Range and scope

Nominal Valve	Smallest Calibration Span	Lower Range Limit (LRL)	Upper Range Limit (URL)	Overload Limit
40kPa	10 kPa	-40 kPa	40 kPa	1 MPa
250 kPa	25 kPa	-100 kPa	250 kPa	4 MPa
1 MPa	100 kPa	-100 kPa	1 MPa	6 MPa
3 MPa	300 kPa	-100 kPa	3 MPa	15 MPa

The unit of the measuring range above can be converted into kg/m², MPa and kPa. Provide other measuring range according to 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 | <= maximum measuring range.

*Overvoltage value : depending on the pressure value of the weakest parts.

Power supply and load requirements

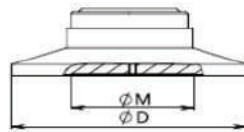


EMC environment

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)

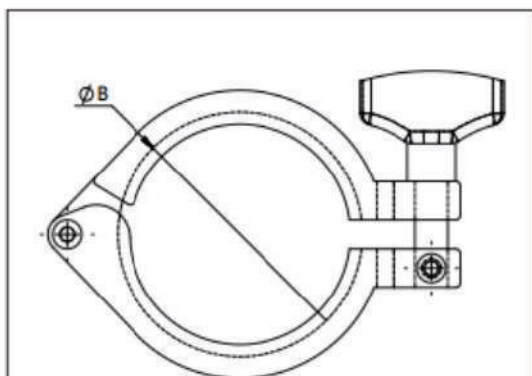
(Note 1) Performance level A: The performance within the limits of normal technical specifications.
 (Note 2) Performance level B: Temporary reduction or loss of functionality or performance, it can restore itself. The actual operating conditions, storage and data will not be changed.

Outline dimensional drawing (unit : mm)



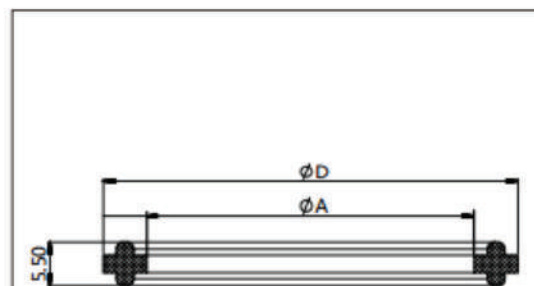
Standard	Specification	Size(ϕD)	Diaphragm size(ϕM)
Tri-Clamp	1-1/2"	50.5	31
Tri-Clamp	2"	64	42

Clamp(G1-G2)(unit: mm)



Standard	Specification	Dimension(ϕB)
Tri-Clamp	1-1/2"	53.9
Tri-Clamp	2"	67.4

Sealing gasket (M1-M2) (unit: mm)



Standard	Specification	Size (ϕD)	Size(ϕA)
Tri-Clamp	1-1/2"	50.5	35
Tri-Clamp	2"	64	47.8

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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 : ExIICT4 , ExdIICT6

Weight : 4kg

Keys : 3pcs outside , 3pcs inside

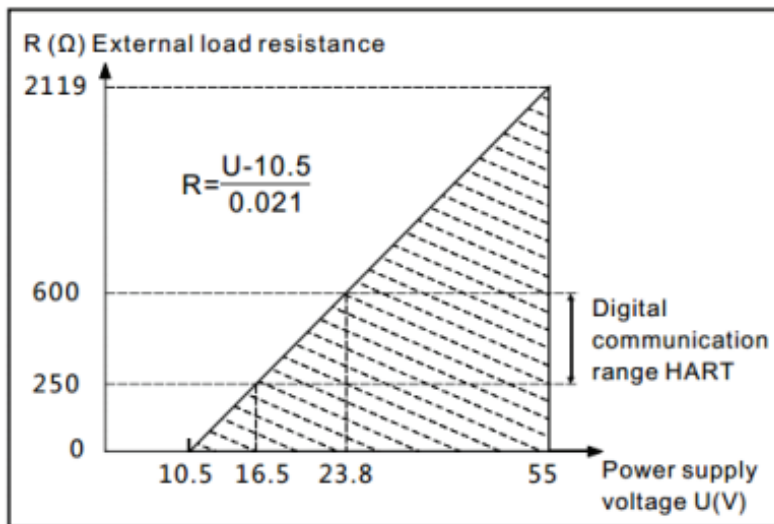


Range and scope

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/cm², 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



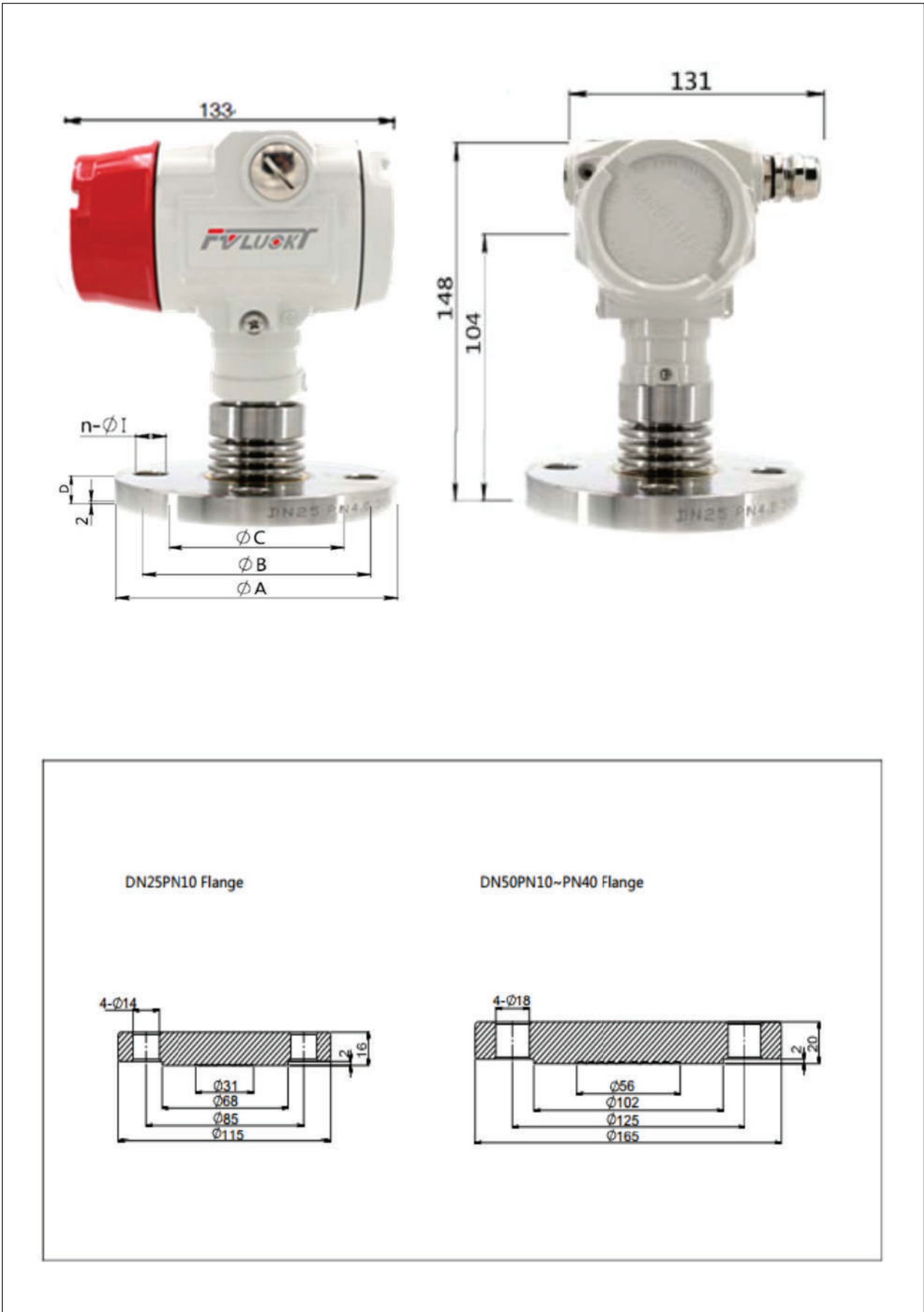
EMC environment

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.

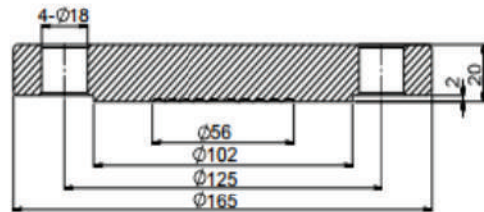
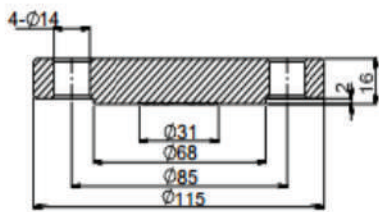
(Note 2) Performance level B: Temporary reduction or loss of functionality or performance, it can restore itself. The actual operating conditions, storage and data will not be changed.

Outline dimensional drawing (unit : mm)



DN25PN10 Flange

DN50PN10~PN40 Flange



FDP3000-F Single 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. The design of various structures is enough to measure pressure, differential pressure and liquid and level in industry.

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, 1/2" NPT

Surrounding temperature : $-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$

IP grade : IP67

Explosion-proof Grade : ExiaIICT4 , ExdIICT6

Weight : 6kg

Keys : 3pcs outside , 3pcs inside



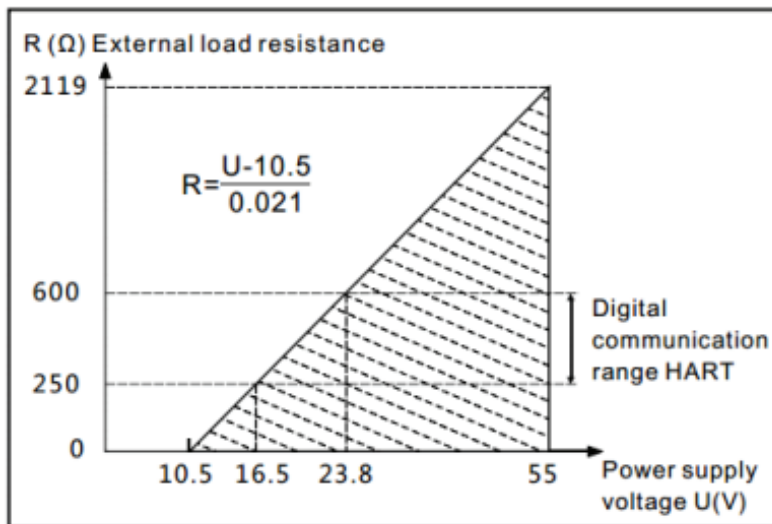
Range and scope

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



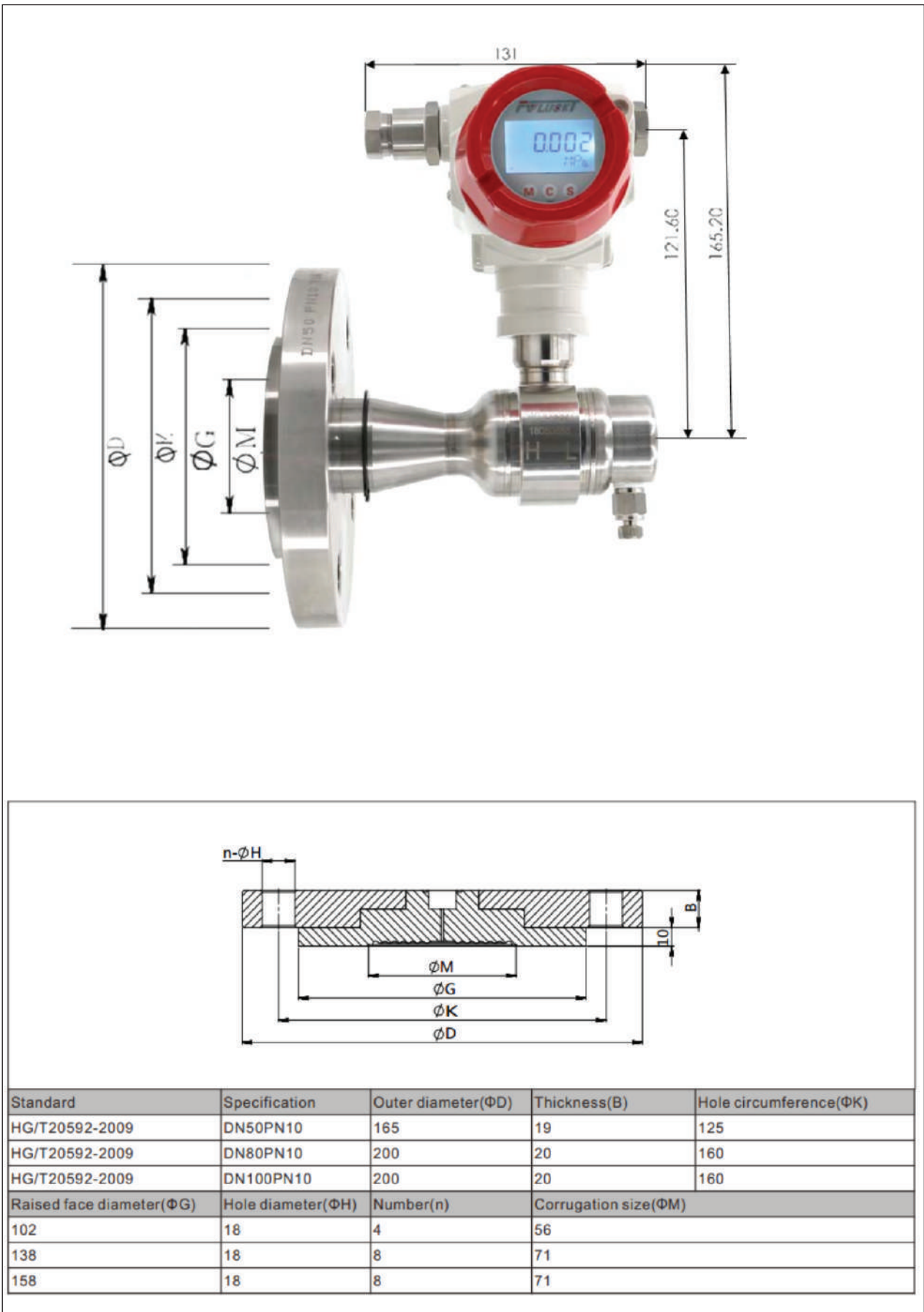
EMC environment

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)



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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



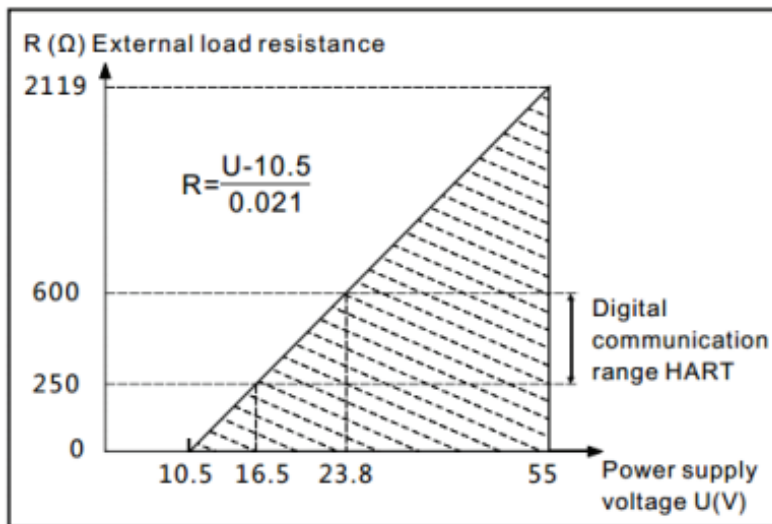
Range and scope

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



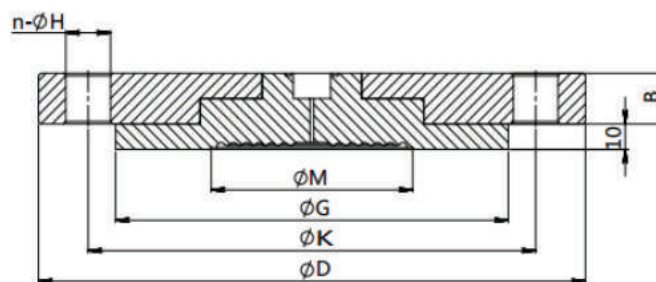
EMC environment

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.

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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	

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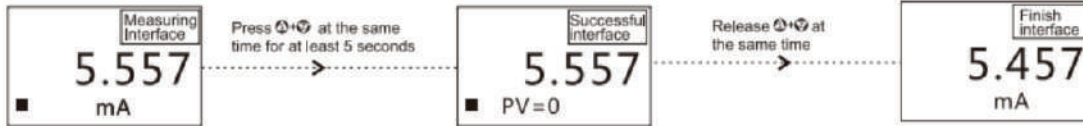
Operation Manual

The pressure/ differential pressure transmitter factory settings

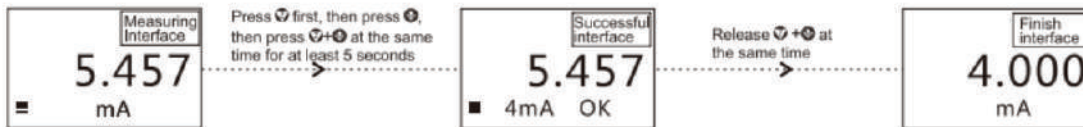
Parameters : Measurement range -10 - 100 kPa

Process display : Unit mA, placed in the atmosphere operation

Set PV=0



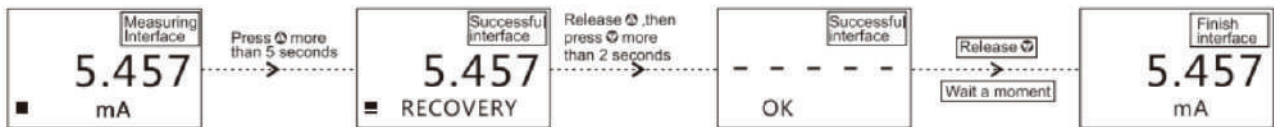
4mA re-range with pressure



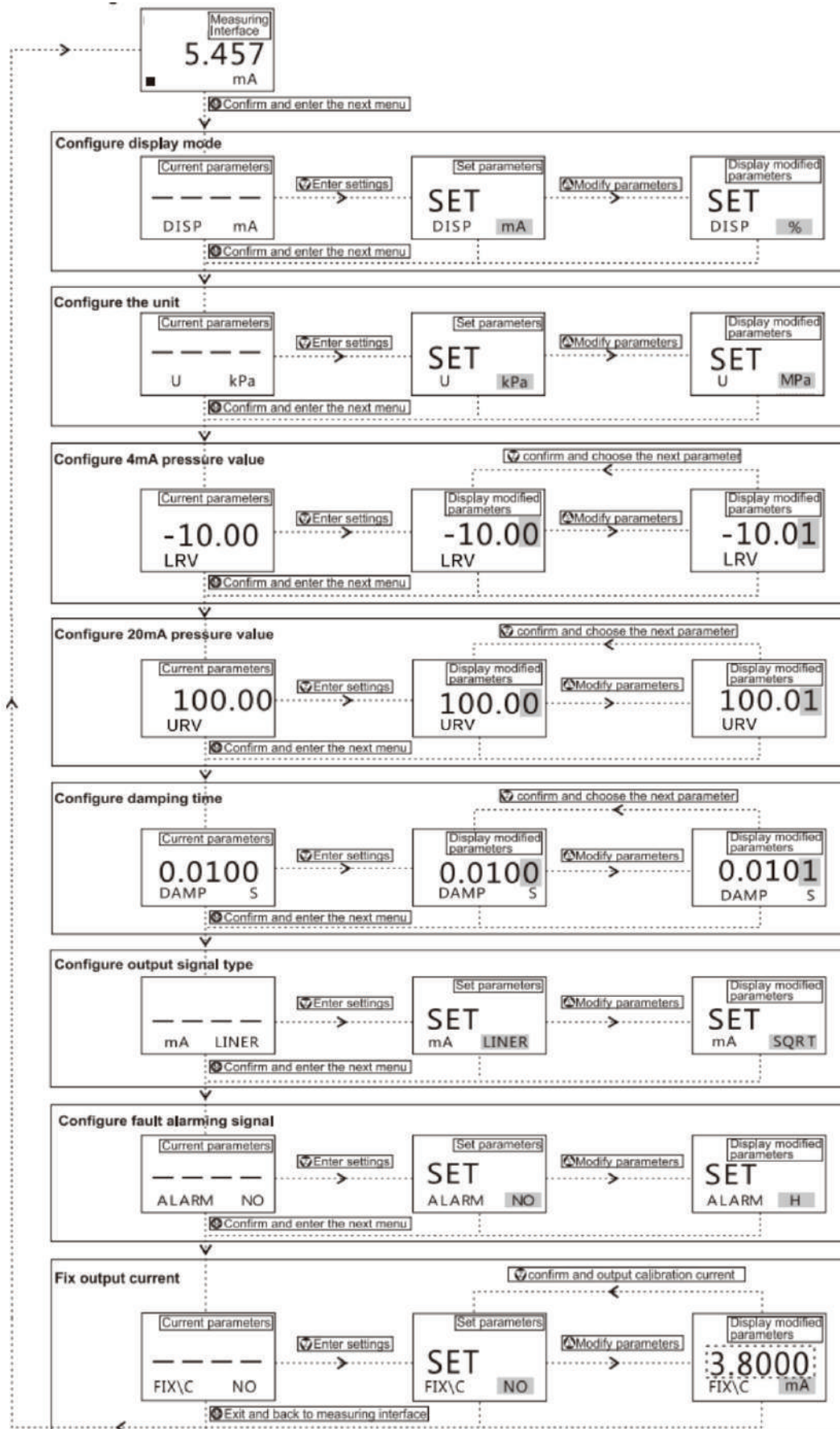
20mA re-range with pressure



Restore factory settings



Measuring Interface



Selection Code

Sensor code						Transmitter code				Optiona	Content description
FDP3000-	X	X	-X	X	X	-X	X	-X	X	-X	-Measure range(MPa)
Type	B										Model type
	T										Thread type
	I										Input type
	H										Sanitary type
	V										diaphragm type
	F										Single flange
	Y										Double flange
Ex type	--										Standard
	Ex										Ex ia (d) II CT4-6
Diaphragm material	-V										SUS 316L
	-C										Harris alloy C
	-T										tantalum
Auxiliary parts material	N										SUS 304
	L										SUS 316
Temperature scope	1										0~80°C
	2										-10~180°C
	3										-45~205°C
Current signal output	-1										4~20MA+24V DC (2 wire)
	-2										4~20MA +24V DC (2 wire) +HART
shell+ display method	1										Cast aluminum+ display
	2										Cast aluminum+ no display
	3										SUS 304+display
	4										SUS 304+ no display
Electric interface	-M										M20*1.5
	-N										1/2" NPT
Precision grade	A										0.1
	B										0.05
Accessories										flange、capillary (__meter)	

Example

Model: FT3000-B-VN1-11-MA

Type of intelligent transmitter : model type, Diaphragm material : 316L stainless steel, Auxiliary parts material : 304 stainless steel, temperature scope : 0-80, powder supply : 24VDC, output signal : 4~20MA, Cast aluminum housing with LCD display, electric interface : M20*1.5, accuracy : 0.1



Thailand Distributor

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