T2906-G Monocrystalline Silicon Pressure Transmitter

Features

- Advanced MEMS monocrystalline silicon pressure sensor chip adopted
- Wide pressure range covering
- Double-wire mode, 4~20mA HART® protocol digital communication option
- Intelligent LCD gauge outfit with backlight
- With both the remote transmission and the local zero and pressure range adjustment
- Complete varieties, high accuracy, good stability,
- Isolation ex-proof housing structure, strong resistance to the frequency conversion interference
- No mechanical transmission parts, strong anti-vibration

Applications and industries

- Process control fields for the industries such as petroleum, chemical industry, metallurgy, electricity, food, papermaking, medicine, machine manufacturing, scientific experiment and military aviation etc.

Notes:

1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.

2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.

3 Strictly follow the wiring method for wiring, Otherwise it may cause product damage or other potential faults.

4 Misuse of the product may cause danger or personal injury.

Product overview

T2906-G chip adopts advanced MEMS monocrystalline silicon pressure sensor chip. The sensor signal is converted into a standard signal output by a dedicated signal processing module. After long-term aging and stability screening, the product performance is stable and reliable. It is applied to the outdoor scene where the environment is harsh. At the same time, it can display on-site pressure, zero point and full range migration.

The installation port form of T2906G monocrystalline silicon pressure transmitter can be processed according to the requirements of users, and can also be compatible with other brands of transmitters. This series of products are widely used in industrial process control, petroleum, chemical, metallurgical and other industries.

Notes:

1 Do not misuse documentation.

2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.

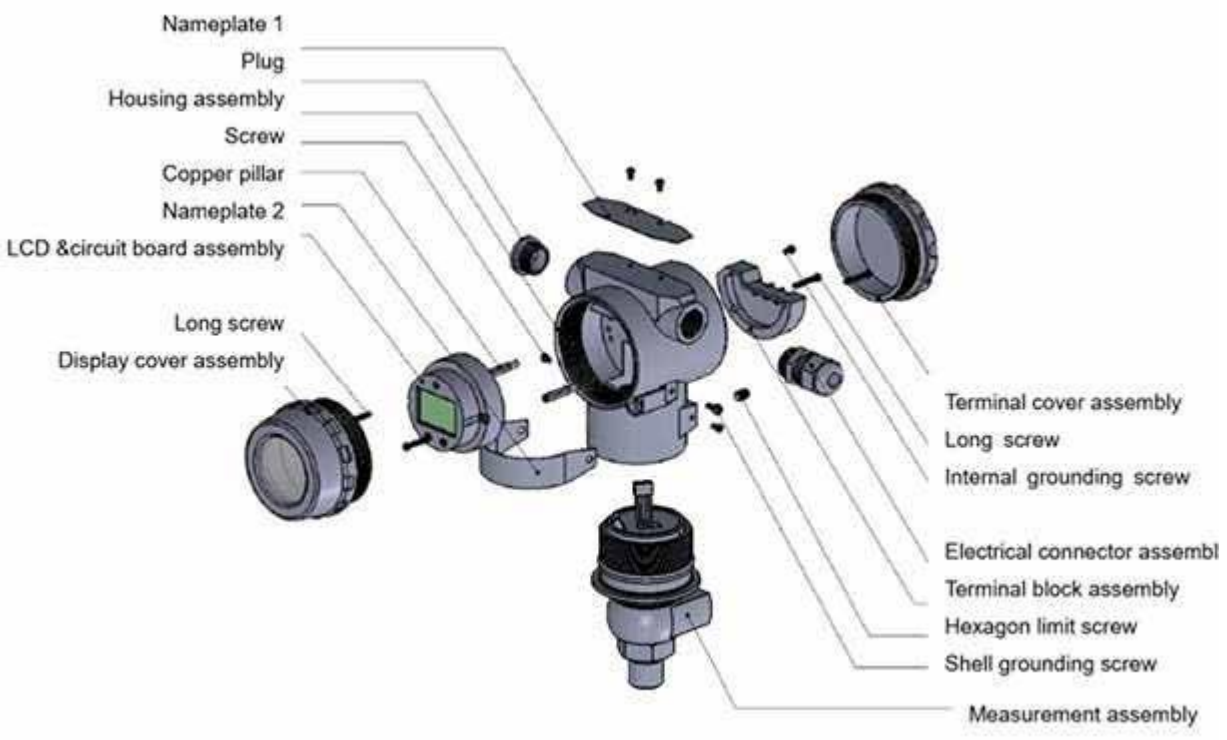
3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

4 Misuse of the product may cause danger or personal injury.

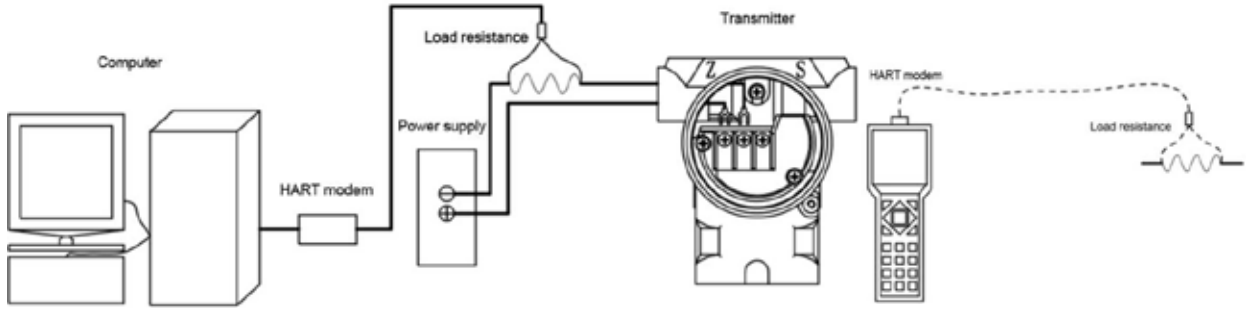
Performance Parameters

Pressure range	0~6kPa…100MPa
Pressure reference	Gauge pressure, Sealed gauge pressure
Supply & output	4~20mA+HART® protocol (18V~36V, usually 24V)
Zero temp. coefficient	±0.3%FS
Full span temperature coefficient	±0.5%FS
Ambient temperature	-30°C~80°C; with LCD gauge outfit -30°C~70°C
Medium temp.	-40C~104°C
Storage temp.	-40C~85°C
Insulation resistance	S100M▲/500VDC (200M▲/250VDC)
Mechanical vibration	20g (20~5000Hz)
Shock	100g (11ms)
Accuracy	0.075%FS
Overpressure	Please see pressure range selection
Long-term stability	±0.2%FS/year
Protection grade	IP65
Ex-proof grade	Exd II BT6 Gb
Material	Housing low copper aluminum alloy, isolation diaphragm 316L, Hastelloy C, tantalum
Medium compatibility	All kinds of media compatible with SS316L
Response time	S1ms (up to 90%FS)

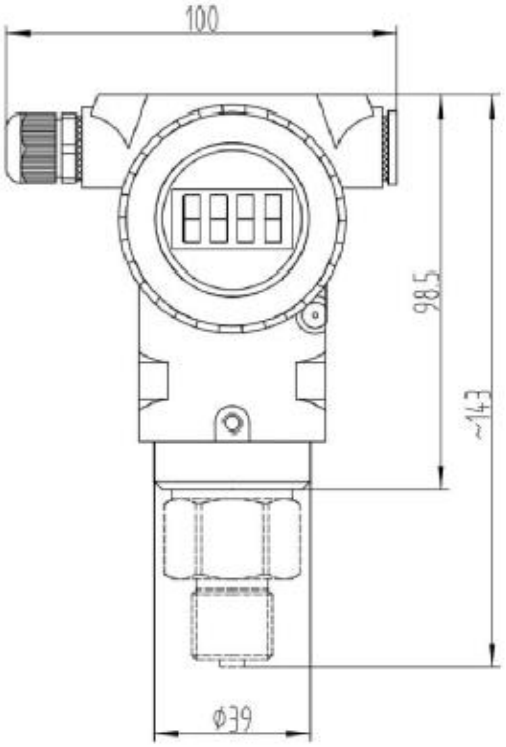
Compenent Diagram



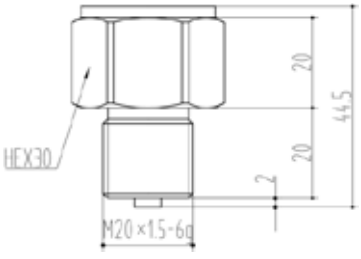
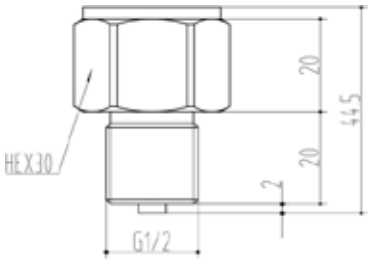
HART communication connection diagram

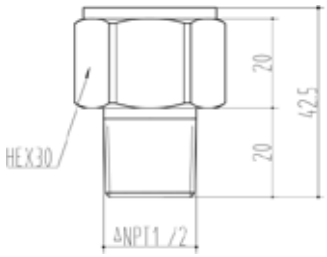
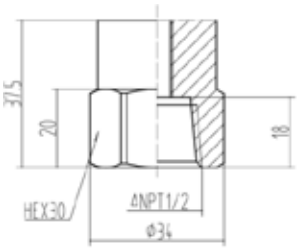


Outline dimension

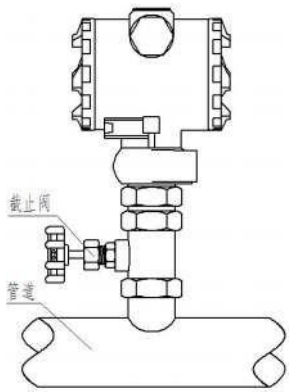
Product model	Dimension drawing	In mm
Standard type		

Pressure Connection

Thread code	C1：M20×1.5-6g	C2：G1I2
Dimension In mm		

Recommended torque	15~25Nm	15~25Nm
Thread code	**C7 = NPT1I2**	**C7F = NPT1I2⊂Female∋**
Dimension In mm		
Recommended torque	15~25Nm	15~25Nm

Installation diagram (for reference only)



Installation tips:

(1) The product is installed vertically on pressure port on site.

(2) When installing outdoor, the transmitter should be placed in a ventilated and dry place as far as possible to avoid direct sunlight and rain, otherwise the performance will be deteriorated or malfunction.

(3) When the product is installed in frequent lightning areas, it should be marked with “Lightning Protection” when ordering. It is also recommended that users install lightning protection device on site and ensure reliable grounding of product and power supply, which can reduce the probability of lightning damage to the transmitter.

(4) If the transmitter is found to have no output or the output is abnormal after installation, please check:

a Whether the electrical connection is accurate and firm

b Is the supply voltage too low or the load resistance is too large

Pressure range selection

Pressure range code	Pressure range	Overpressure
6kG	0~6kPa	300kPa
35kG	0~35kPa	1MPa
100kG	0~100kPa	2MPa
250kG	0~250kPa	4MPa
1MG	0~1MPa	6MPa
3MG	0~3MPa	12MPa
10MS	0~10MPa	20MPa
20MS	0~20MPa	40MPa
40MS	0~40MPa	60MPa
60MS	0~60MPa	70MPa
100MS	0~100MPa	110MPa

Note: G: Gauge pressure, S: Sealed gauge pressure

How to order

T2906-G 40kG B1H C7 J22X

Product model : T2906-G

Pressure range 6kG=6kPa
Gauge 40kG=40kPa
Gauge 100kG=100kPa
Gauge 250kG=250kPa
Gauge 1MG=1MPa Gauge
3MG=3MPa Gauge
10MS=10MPA Sealed Gauge
20MS=20MPA Sealed Gauge
40MS=40MPASealed Gauge
60MS=60MPASealed Gauge
100MS=100MPASealed Gauge

Output:

B1H=4~20mA+HART® protocol

Electrical connection:

J8 = Housing (M20×1.5 female)

J8X= Housing with display (M20×1.5 female)

J12 = Isolation ex-proof housing (M20×1.5 female)

J12X = Isolation ex-proof housing with display (M20×1.5 female)

J22 = Isolation ex-proof housing (NPT1/2 female)

J22X = Isolation ex-proof housing with display (NPT1/2 female)

Pressure connection:

C1=M20×1.5

C2=G1/2

C7=NPT1/2

C7F=NPT1/2 female