

GPS3051 SERIES INTELLIGENT PRESSURE TRANSMITTER

FEATURES

- ◎ Advanced monocrystalline silicon
- ◎ 4~20mA +HART protocol
- ◎ Intelligent LCD display with backlight
- ◎ Local zero and pressure range adjustment functions
- ◎ Explosion-proof isolation housing with strong resistance to frequency conversion interference
- ◎ Patented double overload protection diaphragm design
- ◎ Integrated lightning protection circuit design



INTRODUCTION

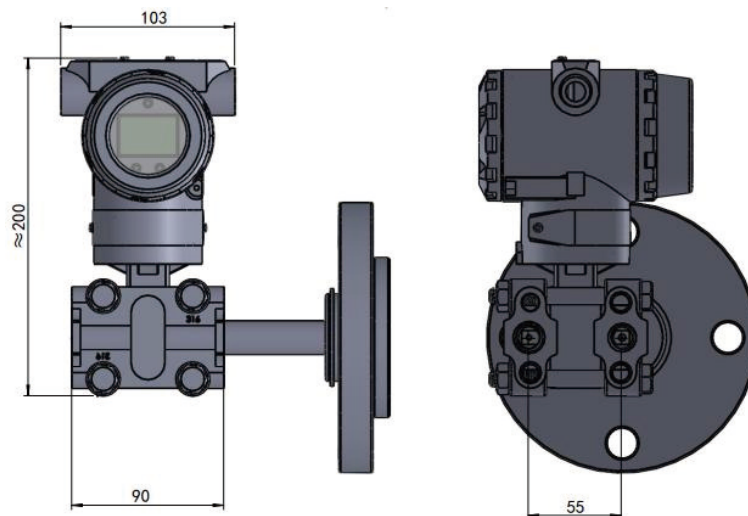
The GPS3051 series intelligent flange-mount pressure transmitter incorporates advanced monocrystalline silicon pressure sensor technology and a patented encapsulation process. It is a high-performance pressure transmitter featuring cutting-edge international technology. With its patented double overload protection diaphragm and internal surge protection circuitry, this product is ideal for measuring liquid, gas, or steam levels, density, pressure, and flow rates. It then converts these measurements into a 4-20mA + HART current signal output.

SPECIFICATIONS

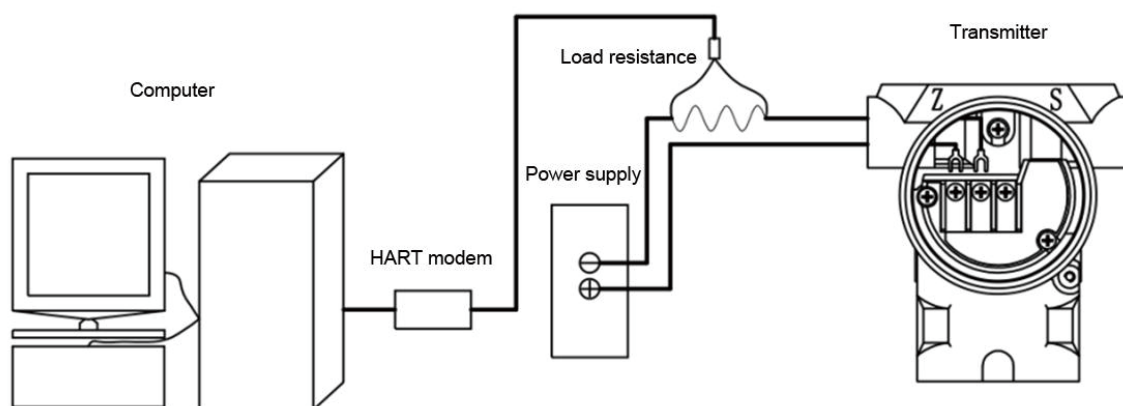
Pressure type	Gauge pressure
Pressure range	0MPa~10kPa...3MPa
Power supply	10.5VDC ~ 36VDC (Standard 24VDC)
Output signal	4mA ~ 20mA+HART protocol
Overload pressure	≤ 200%
Response time	≤ 10ms(10%~90%)
Media temperature	-40℃ ~ 125℃
Accuracy	0.1%FS
Temperature drift	0.25%FS
Insulation resistance	≥ 200MΩ/250VDC
Measuring medium	Fluid compatible with 304 and 316L
Protection	IP67
Static pressure impact	Zero 0.15%FS/4MPa Span 0.25%FS/4MPa
Long-term stability	±0.2%FS/2 years
Diaphragm material	316L, Hastelloy C, tantalum, other materials on request

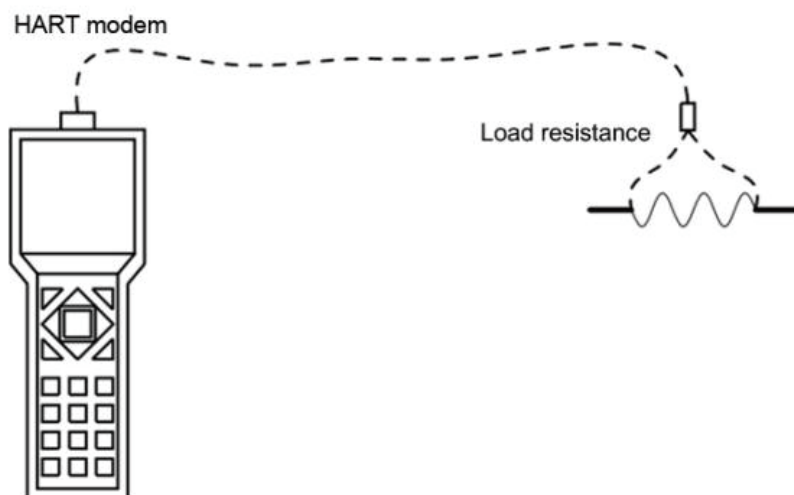
Exhaust/Drain valve	Stainless steel
O-ring	VITON
Filling liquid	Silicon oil
Clamp block	SS304
Flange	316
Housing material	Die-cast aluminum alloy shell, painted epoxy resin coating
Electrical connection	M20×1.5 ,NPT1/2 female
Pressure connection	DN25 PN40, DN40 PN40, DN50 PN40, DN80 PN16 options Flange execution standard GB/T 9119-2010, other standards can be customized

DIMENSIONS DRAWING(MM)



HART COMMUNICATION DIAGRAM





ORDER FORMAT

GPS3051 - 40KPa - F3 - HC - D1

Pressure Range	Code
0~Xbar	XBar
0~XKPa	XKPa
0~XMPa	XMPa
0~XPSI	XPSI

Flange size	Code
316 DN25 PN40 RF	F1
316 DN40 PN40 RF	F2
316 DN50 PN40 RF	F3
316 DN80 PN16 RF	F4
Others on request	

Code	Electrical connection
H1	3051 housing (M20X1.5)
D1	3051 Ex-proof housing(M20X1.5)
D2	3051 Ex-proof housing(NPT1/2)

Code	Diaphragm material
HC	Hastelloy C
TA	Tantalum
3L	316L