DPG800 SERIES

DIFFERENTIAL PRESSURE TRANSMITTER

FEATURES

- ◎ compact size, easy to install
- ◎ high stability, low drift
- ◎ Static pressure resistance ≤ 20MPa
- ◎ Static pressure influence ≤ 0.05%FS/100KPa

INTRODUCTION

The DPG800 series is a compact differential pressure transmitter. It features high-reliability silicon piezoresistive sensors as the core components, providing output through temperature compensation, digital correction, and signal conditioning. Each product undergoes rigorous design, component selection, process verification, curing, cyclic loading, aging, and environmental testing to ensure stability and reliability.

APPLICATION

The DPG800 series differential pressure transmitter is widely used in various pressure differential measurement due to its excellent accuracy and reliability. Especially in coal mine, oil field, chemical industry, civil explosion, environmental protection, medicine, water affairs, shipping and other industries.

SPECIFICATIONS

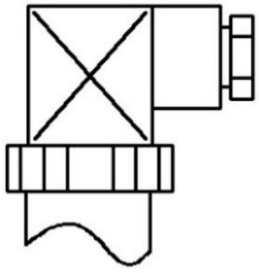
Pressure type	Differential pressure
Pressure range	-0.1MPa~0kPa~10kPa...3.5MPa
Power supply	10VDC ~ 30VDC (Standard 24VDC)
Output signal	4mA ~ 20mA,RS485, I^2C, 0V~10V (Others on request)
Overload pressure	≤ 200%
Response time	≤ 3ms(10%~90%)
Media temperature	-40℃ ~85℃
Accuracy	0.1%FS, 0.25%FS, 0.5%FS
Nonlinear	≤ 0.1%FS, ≤ 0.2%FS, ≤ 0.4%FS
Hysteresis, repeatability	≤ 0.05%FS, ≤ 0.05%FS, ≤ 0.1%FS

Email: info@dwelsensor.com | Tel: +86 28 87461653 | www.dwelsensor.com

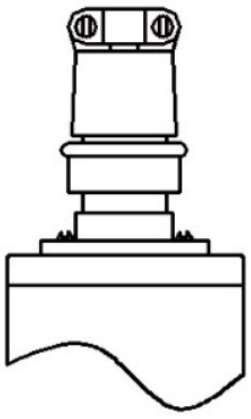
Zero and sensitivity temperature drift	≤ 0.015%FS, ≤ 0.03%FS, ≤ 0.05%FS
Diaphragm material	316L
Shell material	304, 316L/aluminum alloy
Measuring medium	Fluid compatible with 304 and 316L
Interface	304, 316L optional
Protection	IP65

ELECTRICAL CONNECTION

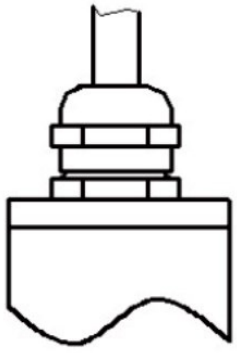
DIN43650 connector



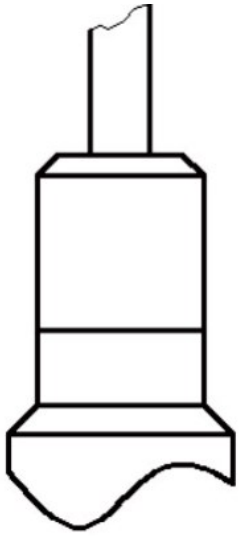
M12 connector



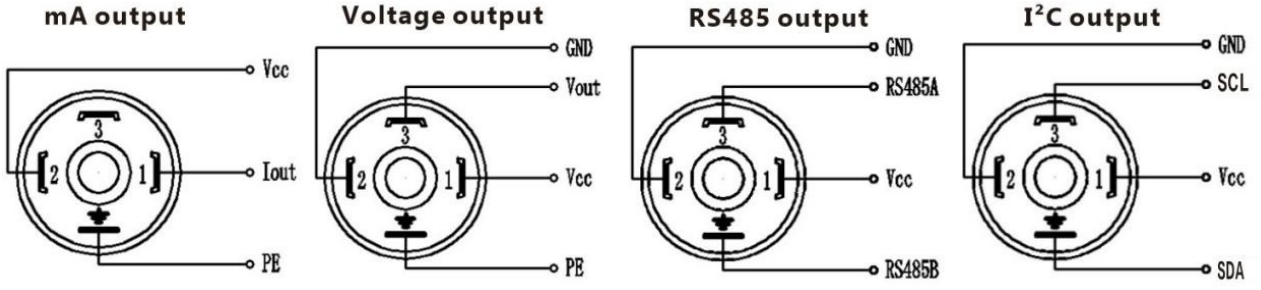
Waterproof joint cable leads



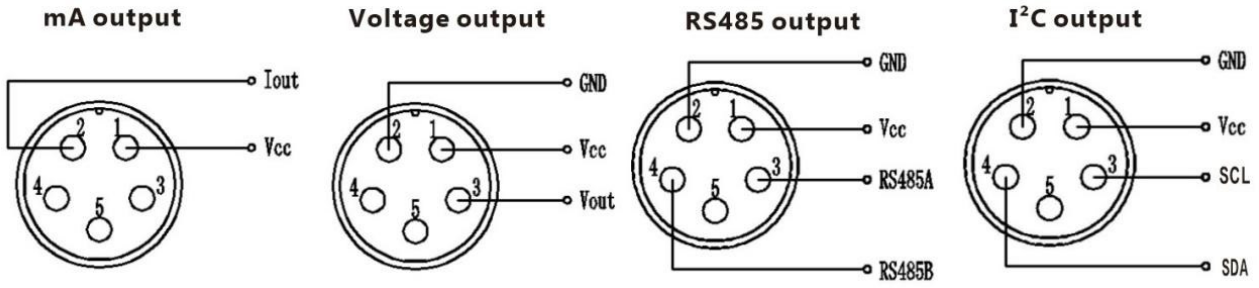
Level cable leads



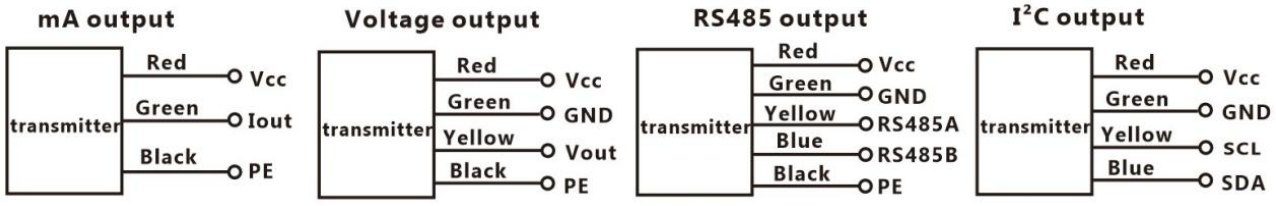
DIN43650 connector wiring



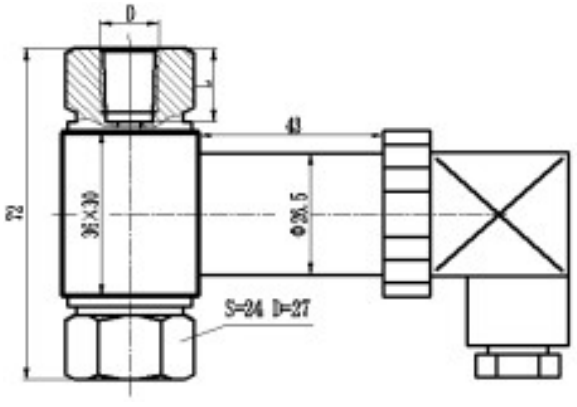
M12 connector 5 pin wiring



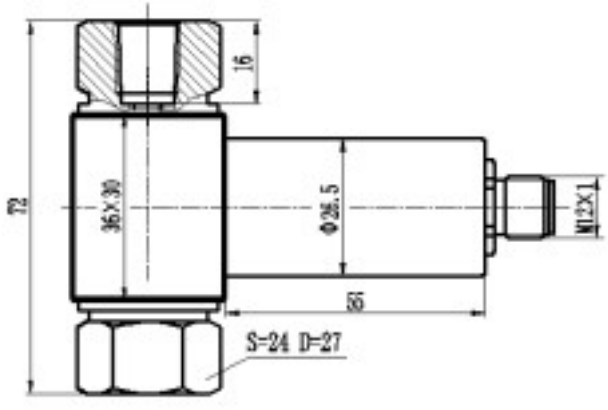
Cable leads wiring



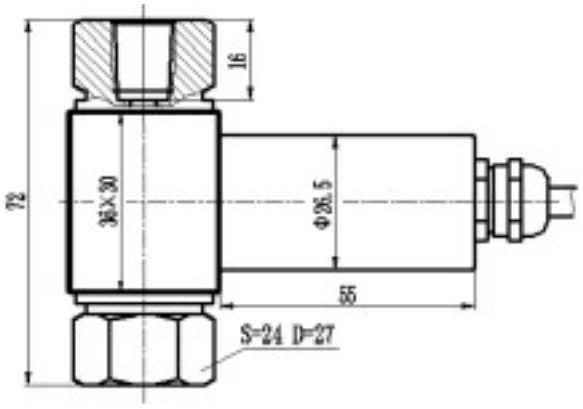
MECHANICAL CONNECTION



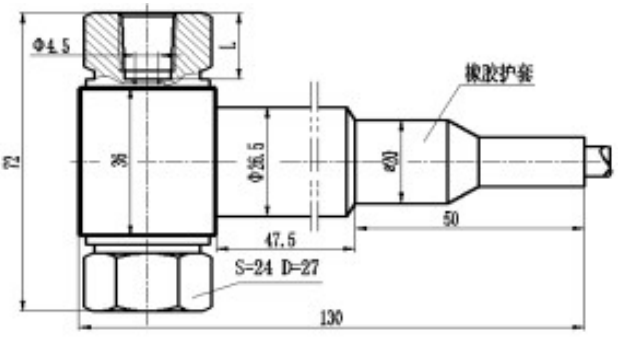
DPG810 DIN43650 connector



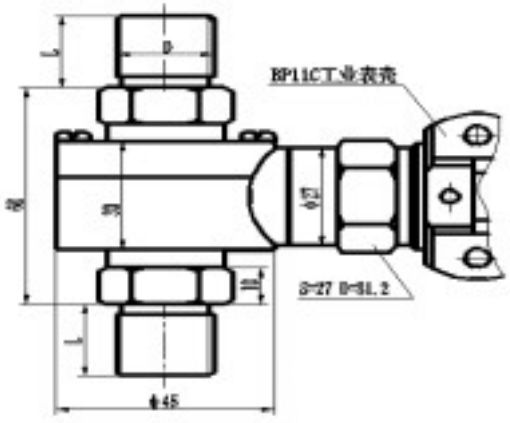
DPG820 M12 connector



DPG830 waterproof joint cable lead



DPG840 level cable lead



DPG850 with display

Dimension D	Length L
M22×1.5	15
M20×1.5	15
M18×1.5	15
M16×1.5	15
M14×1.5	15

Dimension D	Length L
M12×1	15
M10×1	12
M8×1	12
G1/2	15
G1/4	15

Dimension D	Length L
G1/8	12
G3/8	15
1/2NPT	18
1/4NPT	15
1/8NPT	12

Dimension D	Length L
3/8NPT	15
1/2PT	18
1/4PT	15
1/8PT	12
3/8PT	15

ORDER FORMAT

DPG810 - H - 10KPa - G1/2 - MA

Model
DPG810
DPG820
DPG830
DPG840
DPG850

Accuracy	Code
0.1%FS	C
0.25%FS	H
0.5%FS	M

Code	Pressure Range
0~Xbar	XBar
0~XKPa	XKPa
0~XMPa	XMPa
0~XPSI	XPSI
-x~Xbar	MxXB
-x~XKPa	MxXK

Code	Output signal
MA	4~20mA
V1	0~10V
R4	RS485
HT	HART protocol
I2	I^2C protocol

Code	Thread size
G1/2	G1/2
G1/4	G1/4
1/2NPT	1/2NPT
1/4NPT	1/4NPT
M20	M20X1.5