ER-QPS-13 High Precision Quartz Thin-film Pressure Sensor

Introduction

ER-QPS-13 High Precision Quartz Thin-film Pressure Sensor international advanced nano-thin film technology to make quartz insulation crystal with titanium elastic alloy diaphragm material effectively unifies in together. Quartz crystal insulator has a very good elasticity and insulating properties, not lag, fatigue and creep phenomenon. It is insensitive to the change of temperature has a good performance, strong anti radiation characteristics, applied to a variety of complex environment.

Features

Wide range of pressure measurement (-0.1~1.0MPa/100MPa/300MPa)

Temperature measurement range (-45~+85℃ +125 ℃ /150 ℃/200℃)

Combination of end face seal and double "O" type sealing ring;

Application

Aviation, aerospace and other laboratory equipment;

Petroleum, chemical and metallurgical industries;

Thermoelectricity, metallurgy, machinery, light industry;

Hydraulic, marine, diesel engine industry.

Specifications

Name	Parameter
Measuring medium	Suitable for all kinds of liquid and gas of titanium alloy and stainless steel
Pressure type	Gage pressure, negative pressure, absolute pressure

Measurement range	-0.1MPa~1.0MPa/100MPa/300MPa optional
Power supply voltage	10~36VDC (two wire system)
Output signal	4~20mA 0~10VDC 0~5VDC 1.5~2.0mV/V
Comprehensive accuracy	±0.1%FS±0.25%FS±0.5%FS
Environment temperature	-30~+85℃
Storage temperature	-45~+90℃
Relative humidity	≤95％(40℃)
Thread connection	M20*1.5, M10*1, 1/2NPT, 1/4NPT external thread
Overload pressure	Normal 1.5x limitation 2.0x full scale
temperature drift	Less than 0.05%FS / C (including zero and full scale temperature effect)
Temperature range	-20~85℃
Temperature compensation range	0~85℃
Stability error	General: + 0.1%FS / year maximum: + 0.2%FS / year
Response time	≤10ms
Liquid material	Conventional 316L or titanium alloy, typical ceramic, hastelloy, tantalum metal
Electrical connection	Directly lead, CONINVERS, Hirschmann plug
Comprehensive accuracy	±0.1%F.S±0.25%±0.5%
Stability error	General: + 0.1%FS / year maximum: + 0.2%FS / year
Input impedance	Rin≥300MΩ
Output impedance	Rin≥300MΩ

Dimension: