Genspec®GS4000

Standard Pressure Transmitter

- Suitable for the majority of industrial applications
- Pressure ranges available from 0-500 mbar to 0-700 bar
- Gauge or Absolute reference
- Reliable pressure measurement
- Long service life
- Robust yet compact designs

RoHS 2011/65/EU

Vers. 20/1/Eng

CE

Genspec® GS4000 Standard Pressure Transmitter

Description

The Genspec GS4000 series of general-purpose pressure transducers is designed for applications where economical price and reliable pressure measurement is required. Incorporating bonded strain gauge technology and utilising unique manufacturing techniques results in a low cost, high quality transducer ideal for O.E.M applications.

Constructed from stainless steel with 17/4 PH stainless steel diaphragm for ranges above 20 bar, and a ceramic diaphragm for lower ranges, the GENSPEC series of transducers are of a robust yet compact design. Applications include the continuous monitoring of oil, gas, water and other liquids in a wide range of industries.

GENSPEC transducers are compatible with the PM8000 range of panel meters and controllers to produce a simple low cost and accurate pressure measuring and control system.

Available in pressure ranges from 0-0.5 bar to 0-700 bar, gauge or absolute and electrical outputs 0-2 mV/V, 0-5 Vdc, 0-10 Vdc and 4-20 mA (two wire).

Dimensions
(in mm)

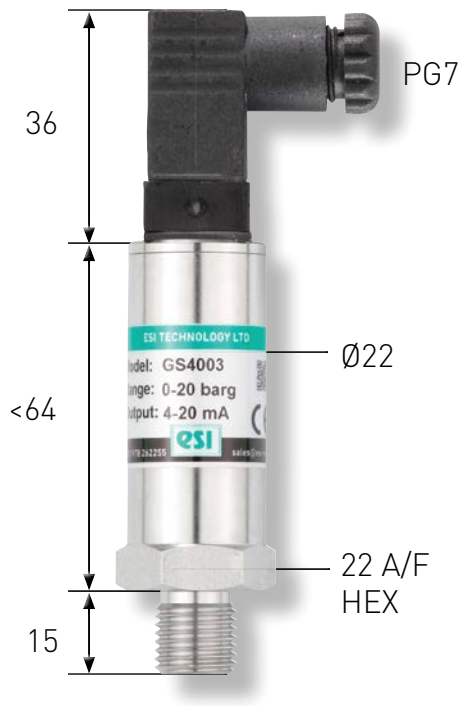
Model	Dimension 'A'
GS4000/GS4100	36
GS4101,2,3	55
GS4001,2,3	64

ELECTRICAL CONNECTION (mA)

Pin No.	2 wire
1	+supply
2	4-20mA signal
3	not fitted
⏚	to case

ELECTRICAL CONNECTION (Vdc)

Pin No.	4 wire	3 wire
1	-supply	common
2	+supply	+supply
3	+output	+output
⏚	-output	to case



Model shown GS4003

Technical Data

Type	GS4000/GS4100	GS4xx1	GS4xx2	GS4003/GS4103
Sensor Technology:	Ceramic Thick Film or Bonded Foil Strain Gauge			
Output Signal:	2 mV/V typical (4 wire)	0 – 5 V (3 or 4 wire)	0 – 10 V (3 or 4 wire)	4 – 20 mA (2 wire)
Supply Voltage:	10 VDC (5 – 15 V)	13 – 30 VDC	13 – 30 VDC	13 – 36 VDC
Pressure Reference:	Gauge (up to 700 bar) or Absolute (up to 400 bar)			
Protection of Supply Voltage:	Protected against supply voltage reversal up to 50 V (amplified versions)			
Standard Pressure Ranges (bar):	0 – 1 bar Vac; 0 – 0.5 bar; 0 – 1 bar; 0 – 10 bar; 0 – 25 bar; 0 – 100 bar; 0 – 250 bar; 0 – 700 bar (other ranges available)			
Standard Pressure Ranges (psi):	0-30 in Hg; 0-7.5 psi; 0-15 psi; 0-150 psi; 0-300 psi; 0-1,500 psi; 0-3,000 psi; 0-10,000 psi (other ranges available)			
Overpressure Safety:	1.6x from ranges -1 bar to 20 bar; 2x for ranges 25 bar to 250 bar; 1.5 for ranges 400 bar (6,000 psi) to 700 bar (10,000 psi)			
Load Driving Capability:	4 – 20 mA: RL < [UB - 13 V] / 20 mA (e.g. with supply voltage (UB) of 36V, max. load (RL) is 1150 Ω); 2 mV/V: n/a; 0 – 5 V: max. load RL > 5 KΩ; 0 – 10 V: max. load RL > 10 KΩ			
Accuracy NLHR:	≤ ±0.4 % of span BFSL			
Zero Offset and Span Tolerance:	±1.0 %FS at room temperature (GS4000/GS4100: ±0.2 mV)			
Operating Ambient Temperature:	-20 °C to +85 °C (-4 °F to +185 °F)			
Operating Media Temperature:	-20 °C to +85 °C (-4 °F to +185 °F)			
Storage Temperature:	+5 °C to +40 °C (+41 °F to +104°F) Recommended Best Practice			
Temperature Effects:	±2% FS total error band for -20 °C to +70 °C. Typical thermal zero and span coefficients ±0.03 %FS/°C			
Electromagnetic Compatibility:	Emissions: EN61000-6-3; Immunity: EN61000-6-2; Certification: CE Marked			
Insulation Resistance:	> 100 MΩ @ 50 VDC			
Response time 10-90 %:	1 mS			
Wetted Parts:	SAE 303 stainless steel, alumina and nitrile (NBR) seal for ranges up to 20 bar gauge and 400 bar absolute. 17/4PH and SAE 303 stainless steel for ranges above 20 bar gauge			
Pressure Media:	All fluids compatible with SAE 303 stainless steel, alumina and nitrile (NBR) seal for ranges up to 20 bar, and 17/4PH stainless steel for ranges above 20 bar			
Pressure Connection:	1/4" BSP male (G1/4) or 1/4" NPT male (others options available)			
Electrical Connection:	Mating micro DIN socket EN175301-803 Form C (ex DIN43650), a screw terminal connector rated IP65 (other options available)			
Net. Weight (Kg):	0.2 Kg for ranges up to 20 bar. 0.1 Kg for ranges above 20 bar			

Order Matrix

Output	Sensor range	Wires	Type	Electrical Connection/ Options	Pressure Range	Process Connection
2 mV/V	Model above 20 bar	4	GS4000			
	Model up to 20 bar		GS4100			
0-5 Vdc	Model above 20 bar	4	GS4001			
		3	GS4011			
	Model up to 20 bar	4	GS4101			
		3	GS4111			
0-10 Vdc	Model above 20 bar	4	GS4002			
		3	GS4012			
	Model up to 20 bar	4	GS4102			
		3	GS4112			
4-20 mA	Model above 20 bar	2	GS4003			
	Model up to 20 bar		GS4103			

Electrical Connection/Options	
DIN plug and socket	-
Cable outlet 1m screened	A
M12 connector	B
Cable outlet 1m screened IP67 protection	C

Pressure Range in bar	
0-1 bar Vac	V001
0-0.5 bar	0.05
0-1 bar	0001
0-10 bar	0010
0-25 bar	0025
0-100 bar	0100
0-250 bar	0250
0-700 bar	0700

Process Connection	
1/4" BSP male (G1/4)	AB
1/4" NPT Male	AM

Order Number Example	GS4003-V001AB

For options not listed please contact the sales team

DISCLAIMER : ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment, traceable to national measurement standards.