

# esi

## 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



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 lowcost, high quality transducer ideal for O.E.M applications.

## Specifications

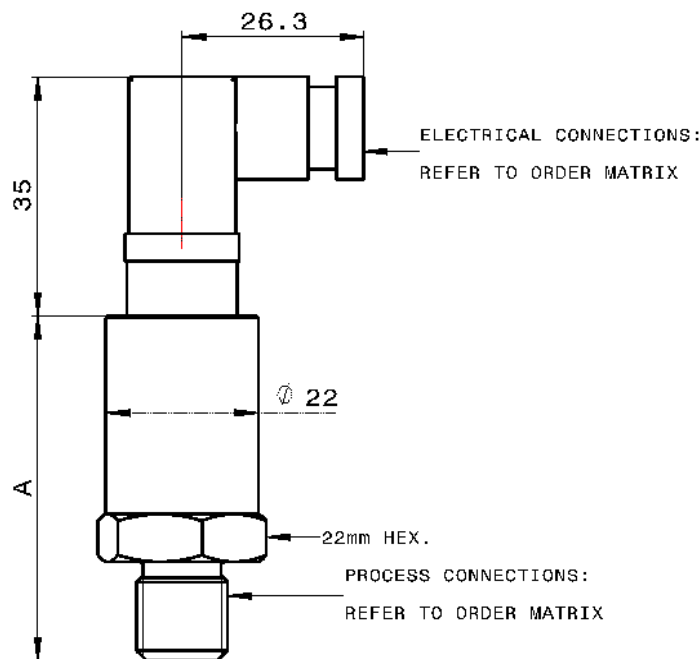
The GENSPEC GS4000 series is constructed from stainless steel with 17/4 PH stainless steel diaphragm for ranges above 20 bar, and a ceramic diaphragm for lower ranges, the GENSPEC series of transducers are of a robust yet compact design.

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).

**Typical applications include:**

- The continuous motoring of oil, gas, water and other liquids in a wide range of industries

## Dimensions (in mm)



Model	Dimension 'A' (typ.)
GS4000/GS4100	36
GS4001/2/3 & GS4101/2/3	64

## Electrical Connections

Pin No.	mA		VDC	
	2 wire	3 wire	4 wire	4 wire
1	+supply	common	-supply	-supply
2	4-20mA	+supply	+supply	+supply
3	N/C	+output	+output	+output
⏏	to case	to case	-output	-output

## Technical Data

Type	GS4000/GS4100	GS4001/GS4101	GS4002/GS4102	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; 0-1500 psi; 0-3000 psi; 0-10000 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 (6000 psi) to 700 bar (10000 psi)			
Load Driving Capacity:	<b>4 – 20 mA:</b> $RL < [UB - 13 V] / 20 \text{ mA}$ (e.g. with supply voltage (UB) of 36V, max. load (RL) is 1150 Ω); <b>2 mV/V:</b> n/a; <b>0 – 5 V:</b> max.load RL > 5 KΩ; <b>0 – 10 V:</b> max. load RL > 10 KΩ			
Accuracy NLHR:	≤ ±0.4 % of span BFUL			
Zero Offset and Span Tolerance:	±1.0 %FS at room temperature (GS4000/GS4100: ±0.2 mV)			
Operating Temperatures:	-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: UKCA & 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 SAE303 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 stainlesssteel 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 optionsavailable)			
Net Weight:	0.2 Kg for ranges up to 20 bar. 0.1 Kg for ranges above 20 bar			

## Order Matrix

Output	Sensor range	Wires	Type	Options	Pressure Range	Process Connection
2 mV/V	Model above 20 bar	4	GS4000			
	Model up to 20 bar		GS4100			
0-5 V	Model above 20 bar	4	GS4001			
		3	GS4011			
	Model up to 20 bar	4	GS4101			
		3	GS4111			
0-10 V	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			
<b>Electrical Connection/Options</b>						
DIN plug and socket				-		
Cable outlet 1m screened				A		
M12 connector				B		
Cable outlet 1m screened IP67 protection				C		
<b>Pressure Range in bar</b>						
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	
<b>Process Connection</b>						
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.