



Genspec[®] GS4000

GENERAL PURPOSE TRANSDUCER



- THICK FILM STRAIN GAUGE TECHNOLOGY
- PRESSURE RANGES
0-500mbar TO 0-700bar
- OUTPUT OPTIONS 2mV/V,
0-5Vdc, 0-10Vdc AND 4-20mA
- ACCURACY $\pm 0.40\%$ NLHR
- ALL STAINLESS STEEL
CONSTRUCTION
- LOW COST

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 17/4PH stainless steel diaphragm for ranges above 20bar, and a ceramic diaphragm for lower ranges, the GENSPEC series of transducers are of a robust yet compact design. Applications include the continuous pressure 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 which together offer a simple low cost and accurate pressure measuring and control system.

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

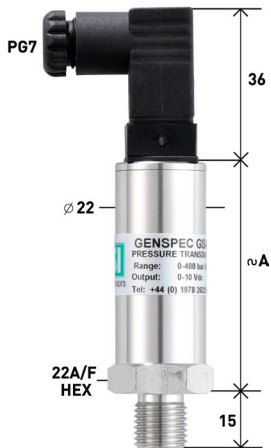


PRESSURE RANGES

0 - 1 bar vac through to 700bar, see table below for list of all standard pressure ranges.

Range (bar)	Order Code	Range (bar)	Order Code	Abs Range (bar)	Order Code
0-1 Vac	V001	0-25	0025	0-0.5	0.5A
0-0.5	00.5	0-40	0040	0-1	001A
0-1	0001	0-60	0060	0-1.6	1.6A
0-1.6	01.6	0-100	0100	0-2.5	2.5A
0-2.5	02.5	0-160	0160	0-4	004A
0-4	0004	0-250	0250	0-6	006A
0-6	0006	0-400	0400	0-10	010A
0-10	0010	0-600	0600	0-16	016A
0-16	0016	0-700	0700	0-25	025A

DIMENSIONS (in mm)

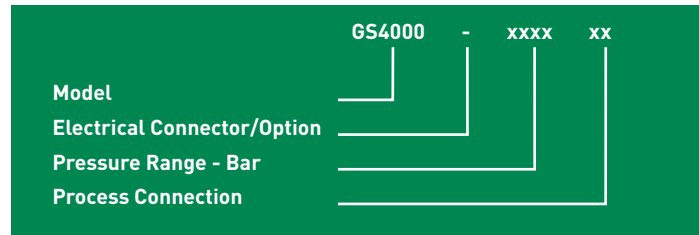


Model	Dimension 'A'
GS4000/GS4100	36
GS4101,2,3	55
GS4001,2,3	64

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

ORDERING INFORMATION



Output	Model No.	Ranges
2mV/V	GS4000	above 20 bar
0-5Vdc	GS4001	above 20 bar
0-10Vdc	GS4002	above 20 bar
4-20mA	GS4003	above 20 bar
2mV/V	GS4100	20 bar and below
0-5Vdc	GS4101	20 bar and below
0-10Vdc	GS4102	20 bar and below
4-20mA	GS4103	20 bar and below

Electrical Connection / Option

- Micro DIN plug and socket
- Cable outlet 1 metre screened
- M12 connector
- Cable outlet 1metre IP67 gland

Process Connection

- 1/4" BSP male thread
- 1/4" NPT male thread

EXAMPLE

Output signal 4-20mA (20 bar and below)

Micro DIN plug and socket

Pressure range 0-6 barg

Pressure connection 1/4" BSP male

Correct Part Number

For options not listed contact sales team

Order Code

-

A

B

L

Order Code

AB

AM

Order Code

GS4103

-

0006

AB

GS4103-0006AB

SPECIFICATION

PRESSURE REFERENCE

Gauge (to 700bar) or absolute (to 25bar)

OVERPRESSURE

Pressure can exceed rated range by the multiple shown below with no damage or change in calibration above $\pm 0.5\%$ FS.

1.6x for ranges -1bar to 20bar

2x for ranges 25bar to 250bar

1.5 for 400bar to 700bar

OUTPUT SIGNAL (OPTIONS)

4-20mA (2 wire),
0-5Vdc (3 or 4 wire),
0-10Vdc (3 or 4 wire),
2mV/V (4 wire)

ZERO OFFSET AND SPAN TOLERANCE

$\pm 1.0\%$ FS

SUPPLY VOLTAGE (U_b)

Measured across supply terminals on connector plug

13-36Vdc for 4-20mA versions

13-30Vdc for 0-5Vdc and 0-10Vdc versions

5-15Vdc for 2mV/V versions

PROTECTION OF SUPPLY VOLTAGE

Protected against supply voltage reversal up to 50Vdc

LOAD DRIVING CAPABILITY(4-20mA VERSION ONLY)

Calculate maximum load $R_s = (U_b - 13V) / 20mA$

e.g. with supply voltage load of 36Vdc, maximum load is 1150ohms.

ACCURACY (NON LINEARITY, HYSTERESIS & REPEATABILITY)

$\pm 0.40\%$ FS. Typical max. Best fit straight line.

PRESSURE MEDIA

All fluids compatible SAE 303 stainless steel, Alumina and Nitrile seal for ranges up to 20bar, and 17/4PH and SAE 303 stainless steel for ranges above.

OPERATING TEMPERATURE RANGE

Ambient/Media: -20°C to +85°C

Storage: +5°C to +40°C

TEMPERATURE EFFECTS

$\pm 2\%$ FS total error band for -20°C to +70°C Typical thermal zero and span coefficients $\pm 0.03\%$ FS/°C

ELECTROMAGNETIC-COMPATIBILITY

Emissions; EN61000-6-4

Immunity; EN61000-6-2

Certification; CE marked

PRESSURE CONNECTION

1/4" BSP or 1/4" NPT male (others on request)

ELECTRICAL CONNECTION

Mating micro DIN socket with screw terminal connections, rated IP65. Options include flying lead with optional cable length and IP67 cable gland or M12.

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 with traceability to international standards.

