



- LATEST STRAIN GAUGE TECHNOLOGY
- ALL STAINLESS STEEL CONSTRUCTION
- PRESSURE RANGES 0-500mbar TO 0-700bar
- OUTPUT OPTIONS 0-20mV, 0-5V, 0-10V, and 4-20mA
- EXCELLENT STABILITY/ ACCURACY
- LOW COST
- O.E.M. APPLICATIONS
- CE APPROVED

DESCRIPTION

The Genspec GS4000 series of general-purpose pressure transducers are designed for applications where economical price and reliable pressure measurement is required. Incorporating the latest strain gauge technology and utilising unique manufacturing techniques have resulted 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 20 bar, and a ceramic diaphragm for lower ranges, the GENSPEC series of transducers are extremely rugged yet of compact design.

Applications include the continuous monitoring of oil, gas, water and other liquids in the process, industrial, medical and aerospace industries. Also the measurement and control of pressure in refrigeration, pneumatic, compressor, HVAC and engine monitoring systems.

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 0.5bar to 0-700bar, gauge or absolute and electrical outputs 0-20mV, 0-5Vdc, 0-10Vdc and 4-20mA.

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ellison sensors international

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SPECIFICATION

PRESSURE RANGES:

0 to 1barVAC and 0 to 0.5bar through to 700 bar, see table below for list of all standard pressure ranges.

PRESSURE REFERENCE:

Gauge or absolute

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):

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

ZERO OFFSET AND SPAN SETTING:

$\pm 0.5\%$ FS

SUPPLY VOLTAGE:

Measured across supply terminals on connector plug

13-36Vdc for 4-20mA versions

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

5-15Vdc for 0-20mV versions

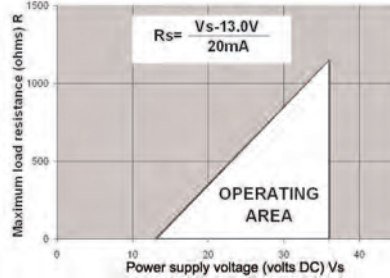
REVERSAL OF SUPPLY VOLTAGE:

Protected against supply voltage reversal up to 50Vdc

LOAD DRIVING CAPABILITY

(4-20mA version only):

Calculate maximum load see chart below.



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

COMBINED NON-LINEARITY AND HYSTERESIS:

$\pm 0.25\%$ FS best fit straight line definition.

REPEATABILITY:

$\pm 0.1\%$ FS defined as maximum error between 3 consecutive pressure cycles.

LONG TERM STABILITY:

$\pm 0.2\%$ FS/year non-cumulative

PRESSURE MEDIA:

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

OPERATING TEMPERATURE RANGE:

Ambient: -20° to $+85^{\circ}$ C

Storage: 5° to $+40^{\circ}$ C

TEMPERATURE EFFECTS:

$\pm 2\%$ FS total error band for -20° to 70° C

Typical thermal zero and span coefficients

$\pm 0.03\%$ FS/ $^{\circ}$ 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)

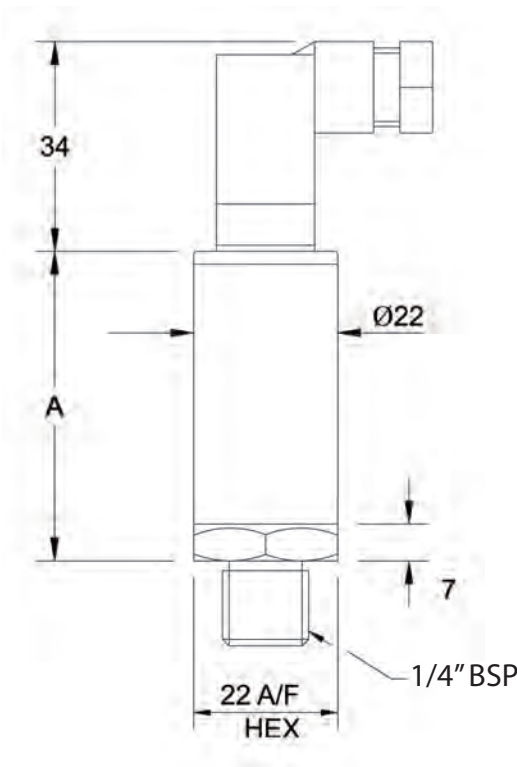
ELECTRICAL CONNECTION:

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

WEIGHT:

95 grams for standard unit with DIN socket fitted.

DIMENSIONS (in mm)



TOP VIEW, MICRO DIN SOCKET REMOVED



MODEL NO.	A
GS4000	
GS4100	37
GS4001/2	
GS4101/2	64
GS4003	
GS4103	55

ELECTRICAL CONNECTION

Pin No.	2 wire	4 wire
1	+supply	+supply
2	4-20mA signal	-supply
3	not fitted	+output
$\frac{1}{2}$	to case	-output

ORDER DETAILS

State model number and pressure range required:-
e.g. GS4100 0-6bar

Model No.	DESCRIPTION
GS4x00	2mV/V, 4 WIRE
GS4x01	0-5V, 4 WIRE
GS4x02	0-10V, 4 WIRE
GS4x03	4-20mA, 2 WIRE

PRESSURE RANGES

-1 - 0 bar Vac	0 - 25 barg
0 - 500 mbarg	0 - 40 barg
0 - 1 barg	0 - 60 barg
0 - 1.6 barg	0 - 100 barg
0 - 2.5 barg	0 - 160 barg
0 - 4 barg	0 - 250 barg
0 - 6 barg	0 - 400 barg
0 - 10 barg	0 - 600 barg
0 - 16 barg	0 - 700 barg

CALIBRATION

All products manufactured by Ellison Sensors are calibrated using precision calibration equipment with traceability to international standards.

Ellison Sensors operates a policy of continuous product development. We reserve the right to change specification without prior notice.

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