

PRESSURE TRANSDUCER

A range of stainless steel transducers covering the middle pressure ranges and extending up to 2000 bar. All transducers are available with either BSP or metric external threads to simplify transducer installation. The pressure sensing element is a one piece design, machined from stainless steel bar. The robust construction of this transducer is perfectly suited for the measurement of static or dynamic pressures in pneumatic or hydraulic systems, the bonded strain gauge system providing maximum freedom from secondary resonance.



Type GX22

Key Features

- 1/4" BSP – 3/8" BSP or M16 x 1.5 thread options
- High accuracy, better than 0.20%
- Pressure range from 200 to 2000 bar (3000 to 30000 psig)
- Bifilar Ni Cr bonded strain gauge elements.
- Choice of electrical termination.

Specification

Performance

Combined non-linearity and hysteresis	± 0.20% F.R.S
Full range sensitivity (FRS)	1.5 mV/Volt nominal
Residual unbalance	0.02 mV/Volt max
Resolution	Infinite

Electrical

Excitation voltage	10 Volt dc or Volt ac rms maximum
Bridge output resistance	350 Ohms ± 5%
Insulation resistance	100 megohms minimum at 100 Volt d.c.
Electrical connection : Standard	6 pin bayonet lock connector (mates with MIL-C-26482 size10)
Option (a)	1 metre 6 core screened PTFE insulated flying lead
Option (b)	2 metre 6 core PVC moisture proof(Max operating temp 85°C)

Environmental and Physical

Operational temperature range	-20 °C to +125 °C
Thermal zero shift	± 0.02% F.R.S. /°C
Thermal sensitivity shift	± 0.10% F.R.S. /°C
Material in contact with pressure media	Stainless steel
Static volume	Less than 1.0 ml
Volumetric change with pressure	Negligible
Pressure overload	50% above rated pressure
Weight	200 gram approx
Case material	Stainless steel

Dimensions

1/4" BSP Male Pressure Port	26 mm dia x 88.0mm overall length
3/8" BSP Male Pressure Port	26 mm dia x 90.5mm overall length
M16 x 1.5 Pressure Port	26 mm dia x 90.5mm overall length

Ordering Information

Specify transducer type, pressure range, pressure port thread and options.

Data Sheet No
DSGX22-0305

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Design authority and manufacture by Barnbrook Systems Limited

Barnbrook Systems reserves the right to alter specifications and design without notice

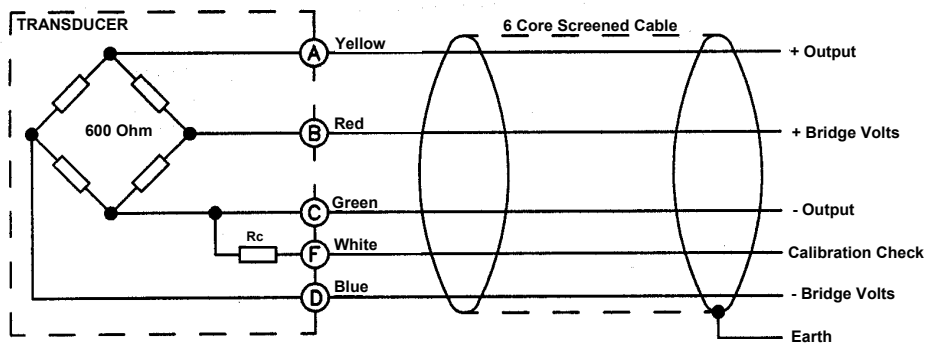
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CALIBRATION CHECK

To use the calibration check facility, join pin D to pin F. This will unbalance the bridge and produce a change in output approximately equal to 90% of the full range sensitivity (F.R.S.) The exact figure is recorded on the Calibration Certificate.

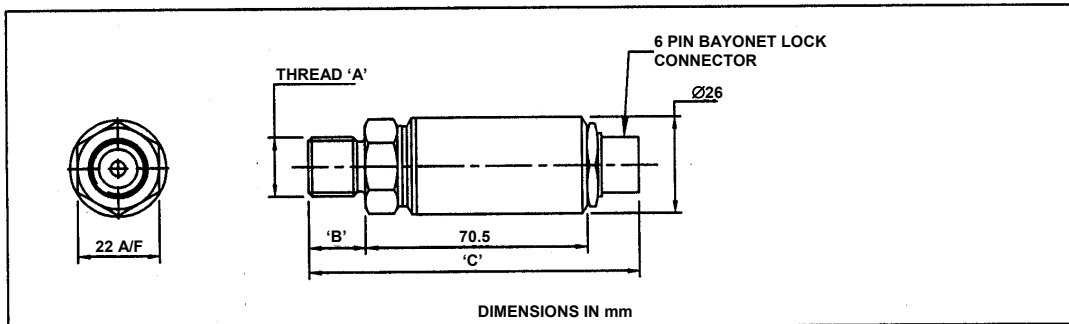
If the calibration check facility is not required then 4 core screened cable may be used in lieu of 6 core.



PRESSURE RANGES

Bar	200	250	350	500	700	1000		1500	2000
Psig	3000	3500	5000	7500	10000	15000	20000		30000
Port	1/4" BSP or M16 x 1.5					3/8" BSP or M16 x 1.5			

DETAIL DIMENSIONS



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