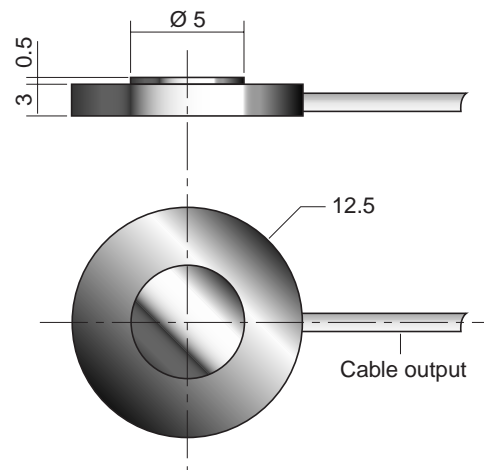


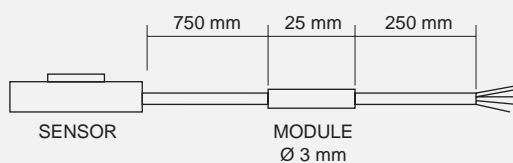
- Ranges 5 to 500 N (compression)
- Low profile (3.5 mm standard height)
- Only 12.5 mm diameter
- 150 mV output F.S.
- For static and dynamic applications



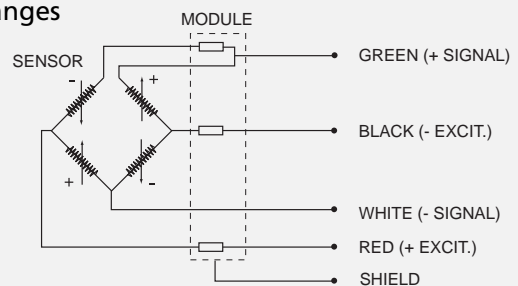
The XFL-125 series from GS Sensors are low profile miniature force transducers which can be used in both static and dynamic applications where the space available is at a premium. The transducers employ an aluminium alloy (AU4G) or stainless steel (APX4) sensing element, depending on the measurement range, and are fitted with a fully temperature compensated Wheatstone bridge equipped with high stability micro-machined silicon strain gauges. As with all GS Sensors' transducers, custom versions are available. The characteristics given overleaf assume that the load will be evenly distributed over the surface of the load cell.



Compensation module in cable



All ranges



Mechanical specifications

Standard range (Newton)	5	10	20	50	100	200	500
Overrange without damage	X2	X2	X2	X2	X2	X2	X2
Overrange without destruction	X3	X3	X3	X3	X3	X3	X3
Material	AU4G	AU4G	AU4G	AU4G	AU4G	APX4	APX4
Stiffness (N/m)	1.3x10 ⁶	3.6x10 ⁶	1x10 ⁷	4x10 ⁷	1.2x10 ⁸	1.9x10 ⁸	7.6x10 ⁸

Electrical specifications

Excitation : 10 Vdc

Sensitivity : 150 mV F. S. nominal

Input impedance : 1300 Ω nominal

Output impedance : 500 Ω nominal

Zero offset : ± 5 % F. S.

Insulation : 100 M Ω at 50 Vdc

Electrical connection : 1 m shielded silicon cable with 4 Teflon wires AWG36

Accuracy

Linearity : ± 1 % F. S.

Hysteresis : ± 0.5 % F. S.

(the force must be evenly distributed over the surface of the load cell)

Temperature specifications

Operating temperature range (OTR) : -40 to +120 °C

Compensated temperature range (CTR) : 0 to 60 °C

Zero shift in CTR : < 2 % F. S.

Sensitivity shift in CTR : < 2 % of reading

Options

ZI • Improved zero shift in standard CTR : < 1 % F.S.

ET • Extended CTR : -40 to +120 °C

EC • Extra cable length (m)

Ordering format

XFL-125 - X - X

Ranges in Newton •
Options •

ET, ZI,... (any combination)

Example : XFL-125-200-ZI-EC10 = XFL-125, range 200 N, improved zero shift, 10 m extra cable