

BENDING SENSOR

S100

APPLICATIONS

- Medical instrumentation force, displacement
- Acceleration Measurement
- Battery powered equipment
- Food dispensing equipment
- Robotics



DESCRIPTION

F1200-range sensors are designed to measure forces by operating on both bending directions, through a measuring range from 0.5N (full scale) to 125N P.E.

This is the first low cost range of sensors offering accurate readings. Features proposed by vaccuum-packed stress gauges are excellent, including exceptional long-lasting stability.





F1200

BENDING SENSOR

S100

TECHNICAL FEATURES

| Capacity | 0.5 - 1 - 2 | 2 – 5 – | 10 - 20 - | - 50 – | 125 N |
|----------|-------------|---------|-----------|--------|-------|
| | | | | | |

| Rated output | 1mV/V nominal | |
|------------------------------------|------------------|--|
| Static overload (safe) | 200% R.C. | |
| Hysteresis | 0.03% R.O. | |
| Non repeatability | 0.05% R.O. | |
| Creep (30 min) | 0.05% R.O. | |
| Terminal resistance (input-output) | 1000Ω | |
| Temperature range | -10°C to +70°C | |
| Temp. Effect on output | 0,03% Reading/°C | |
| Temp. Effect on Zero balance | 0,03% R.O./°C | |
| Exitation (recommended) | 10 VDC ou VAC | |
| Insulation Resistance | 1000 GΩ à 50 VDC | |

| Rated capacity (N) | 0 ,5 | 1 | 2 | 5 | 10 | 20 | 50 | 125 |
|------------------------|------|-----|-----|-----|-----|-----|-----|-----|
| Natural frequency (Hz) | 80 | 130 | 180 | 350 | 500 | 590 | 830 | TBD |

| E.M. (Newton) | Epaisseur (mm) | Déflexion (mm) |
|------------------|-------------------|-------------------|
| 0,5 | 3,0 | 0,76 |
| 1 | 3,0 | 0,56 |
| 2 | 3,0 | 0,41 |
| 5 | 3,0 | 0,28 |
| 10 | 3,0 | 0,24 |
| 20 | 5,0 | 0,25 |
| 50 | 5,0 | 0,14 |
| 125 | 5.0 | < 0,10 |



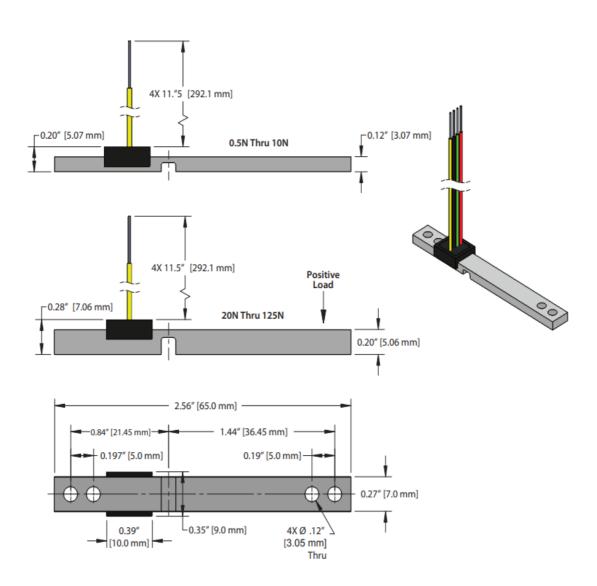


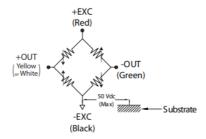
F1200

BENDING SENSOR

S100

STANDARD DIMENSIONS





SPHEREL Systems reserves the right to make any kind of design or functional modification at any moment without prior notice.

