

## Accelerometer with temperature output



Standard



-M1 Option

### Dynamic

|                                             |               |
|---------------------------------------------|---------------|
| FSO, $\pm 10\%$ , 24°C.....                 | $\pm 4000$ mV |
| Acceleration range(g) .....                 | 100           |
| Amplitude nonlinearity.....                 | 1%            |
| Frequency response( $\pm 5\%$ ).....        | 0~4700Hz      |
| Frequency response( $\pm 3\text{dB}$ )..... | 0~10000Hz     |
| Transverse sensitivity, max.....            | 3% of axial   |

### Electrical

|                                         |                 |
|-----------------------------------------|-----------------|
| Power requirement: .....                | 9 - 15 VDC      |
| Zero voltage.....                       | $5 \pm 10\%$    |
| Current consumption .....               | <15 mA          |
| Residual noise, Broadband Spectral..... | 300 $\mu$ V RMS |
| Output impedance.....                   | <100 $\Omega$   |
| Insulation resistance(@500Vdc).....     | >200 M $\Omega$ |
| Turn-on time.....                       | <100 mS         |

### Environmental

|                                               |               |
|-----------------------------------------------|---------------|
| Operation temperature.....                    | -40 to 120°C  |
| Thermal zero shift(max. ref.24°C).....        | $\pm 5\%$ FSO |
| Thermal sensitivity shift(max. ref.24°C)..... | $\pm 5\%$     |
| Vibration limit.....                          | 100 g peak    |
| Shock limit.....                              | 5,000 g peak  |
| Sealing .....                                 | IP68          |
| Dielectric Withstand Voltage.....             | 2500V (50Hz)  |

### Temperature output

|                                    |                             |
|------------------------------------|-----------------------------|
| Sensing element.....               | PT100                       |
| Temperature range.....             | -50 to 250°C                |
| Temperature accuracy(A class)..... | $0.3 + 0.005 \times  t $ °C |

### Physical

|                              |                     |
|------------------------------|---------------------|
| Sensing element.....         | MEMS(VC)            |
| Weight(W/O cable).....       | 185 grams max.      |
| Case material.....           | 304 stainless steel |
| Mounting.....                | M6 Screws           |
| Output connector option..... | HARTING             |

### Accessories

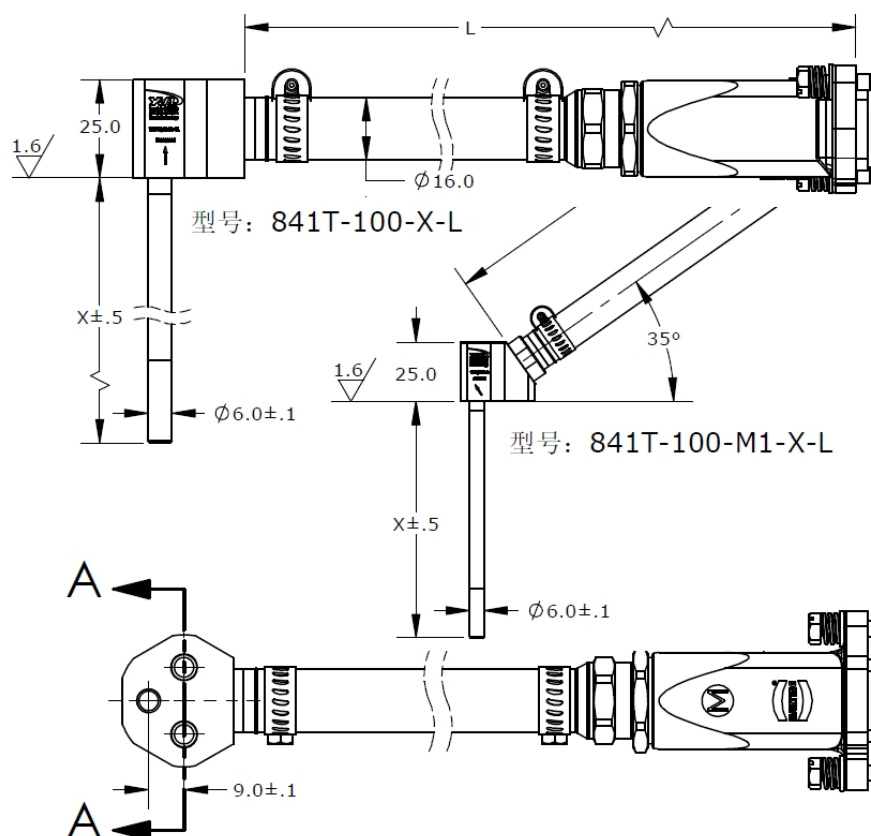
M6X45 mounting screw 2pcs(or customers specified)  
Calibration certificate

### Features

- Low frequency response
- 100g full scale
- Motion, low frequency
- Temperature compensation
- Temperature output
- Train/car motion monitoring
- Special cable exit available

### Ordering Information

|                    |                                      |
|--------------------|--------------------------------------|
| 841T-100-M1-80-120 |                                      |
| └──┘               | Cable length(mm)                     |
| └──┘               | Temperature probe length(mm)         |
| └──┘               | M1 for 45° upward cable(refer below) |
| └──┘               | Range in g                           |
| └──┘               | Temperature                          |
| └──┘               | Model                                |



| TABULATION 4         |           |
|----------------------|-----------|
| L                    | TOLERANCE |
| $L \leq 300$         | +25/0     |
| $300 < L \leq 1500$  | +50/0     |
| $1500 < L \leq 3000$ | +100/0    |
| $3000 < L \leq 9000$ | +150/0    |
| $9000 < L$           | +300/0    |

