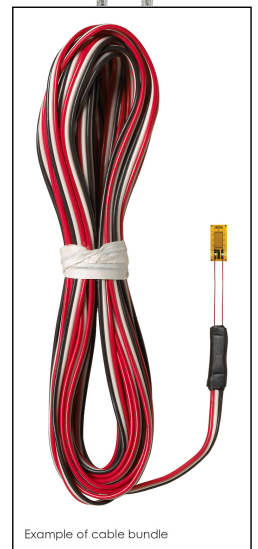
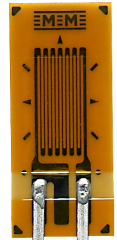


## Customer Requirements

- Temperature range:  $>-60^{\circ}\text{F}$  to  $+180^{\circ}\text{F}$  ( $-50^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ )
- Uniaxial strain pattern with a 0.125 inch active grid length and fully encapsulated
- Temperature compensated for Concrete, Steel, Stainless (17-4 and 17-7)
- Resistance:  $350\ \Omega$
- Leadwire: 10 ft of 326-DFV, preattached
- Elongation:  $\pm 3\%$  (30,000  $\mu\epsilon$ ) one time elongation;  $\pm 1500\ \mu\epsilon$  for  $10^6$  cycles
- Pre-attached vinyl insulated cables makes installation fast and much easier



Example of cable bundle

## Applications

- Automotive
- Oilfield
- Composites testing
- Rail
- Crane
- Other applications on steel alloys

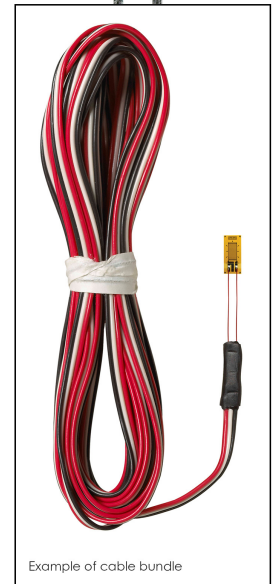
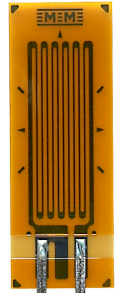
Datasheet:

<http://www.vishaypg.com/doc?11200>



## Customer Requirements

- Temperature range:  $>-60^{\circ}\text{F}$  to  $+180^{\circ}\text{F}$  ( $-50^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ )
- Uniaxial strain pattern with a 0.250 inch active grid length and fully encapsulated
- Temperature compensated for Concrete, Steel, Stainless (17-4 and 17-7)
- Resistance: 350  $\Omega$
- Leadwire: 10 ft of 326-DFV, preattached
- Elongation:  $\pm 3\%$  (30,000  $\mu\epsilon$ ) one time elongation;  $\pm 1500 \mu\epsilon$  for  $10^6$  cycles
- Pre-attached vinyl insulated cables makes installation fast and much easier



## Applications

- Automotive
- Oilfield
- Composites testing
- Rail
- Crane
- Other applications on steel alloys

Datasheet:

<http://www.vishaypg.com/doc?11297>



## Customer Requirements

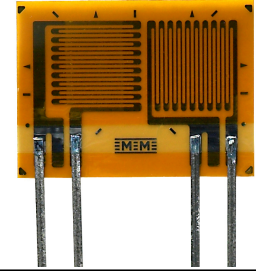
- Temperature range:  $>-60^{\circ}\text{F}$  to  $+180^{\circ}\text{F}$  ( $-50^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ )
- Biaxial strain pattern (T-rosette) with a 0.125 inch active grid length and fully encapsulated
- Temperature compensated for Concrete, Steel, Stainless (17-4 and 17-7)
- Resistance: 350  $\Omega$
- Leadwire: 10 ft of 326-DFV, preattached
- Elongation:  $\pm 3\%$  (30,000  $\mu\epsilon$ ) one time elongation;  $\pm 1500$   $\mu\epsilon$  for  $10^6$  cycles
- Pre-attached vinyl insulated cables makes installation fast and much easier

## Applications

- Automotive
- Oilfield
- Composites testing
- Rail
- Crane
- Other applications on steel alloys including structural health monitoring (SHM), pressure vessel and tank applications where maximum and minimum, or longitudinal and hoop, strain measurements are required

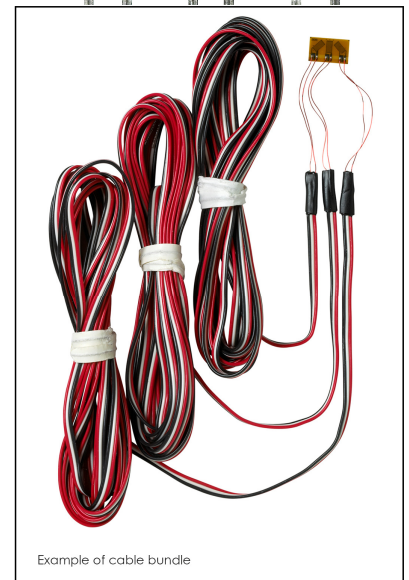
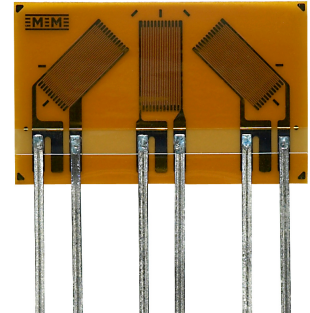
Datasheet:

<http://www.vishaypg.com/doc?11199>



## Customer Requirements

- Temperature range:  $>-100^{\circ}\text{F}$  to  $+350^{\circ}\text{F}$  ( $-75^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$ )
- Three-element rectangular rosette pattern with a 0.125 inch active grid length and fully encapsulated
- Temperature compensated for Concrete, Steel, Stainless (17-4 and 17-7)
- Resistance: 350  $\Omega$
- Large copper tabs allow for direct lead attachment
- Elongation:  $\pm 3\%$  (30,000  $\mu\epsilon$ ) one time elongation;  $\pm 1500$   $\mu\epsilon$  for  $10^6$  cycles
- Ideal for stress states where the magnitude and direction need to be determined
- Pre-attached vinyl insulated cables makes installation fast and much easier
- Three discrete measurements allow for calculation of maximum and minimum principal strains, direction, shear strains as well as tension/compression measurements



## Applications

- Automotive
- Oilfield
- Composites testing
- Rail
- Crane
- Other applications on steel alloys including structural health monitoring (SHM)

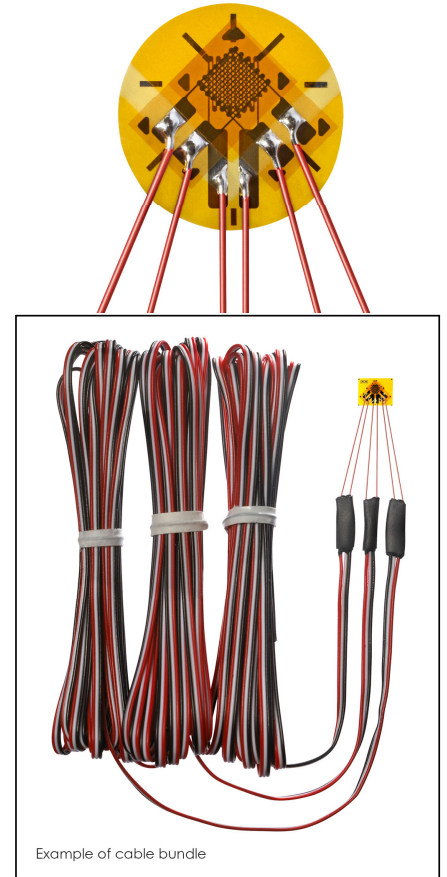
Datasheet:

<http://www.vishaypg.com/doc?11198>



### Customer Requirements

- Temperature range:  $>-60^{\circ}\text{F}$  to  $+180^{\circ}\text{F}$  ( $-50^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ )
- Miniature (5mm diameter matrix) three-element stacked rosette
- Temperature compensated for FR4 Circuit Board, Steel
- Resistance:  $350\ \Omega$
- Leadwire: 10 ft of 326-DFV, preattached
- Elongation:  $\pm 3\%$  ( $30,000\ \mu\epsilon$ ) one time elongation;  $\pm 1500\ \mu\epsilon$  for  $10^6$  cycles
- Ideal for placement with limited space such as the corners of BGA's for testing per IPC/JEDEC publications
- The three discrete measurements allow for calculation of maximum and minimum principal strains, direction, shear strains as well as tension/compression measurements



### Applications

- Circuit Board Testing
- Automotive
- Aircraft
- Where small footprint with less averaging is required

Datasheet:

<http://www.vishaypg.com/doc?11377>

