

General purpose, top-entry accelerometer with DC output proportional to acceleration. Made from robust stainless steel throughout for continuous vibration monitoring in harsh environments. Sealed to IP68 with industry standard two wire 4-20mA output proportional to sensor range that can connect directly to PLC, DCS and other industrial controllers. Includes integral heavy duty polyurethane cable and is available with a wide range of mountings.

## MTN/1187W



## Applications

- Centrifuges
- Building services
- Submersible pumps and fans

## Technical

|                |  |
|----------------|--|
| Output current | 4-20mA DC proportional to rms acceleration (g rms) |
|----------------|--|

|                |                    |
|----------------|--------------------|
| Supply voltage | 12-32V DC (4-20mA) |
|----------------|--------------------|

|                    |                        |
|--------------------|------------------------|
| Frequency response | 2Hz to 1kHz $\pm 10\%$ |
|--------------------|------------------------|

|                        |                |
|------------------------|----------------|
| Mounted base resonance | 5kHz (nominal) |
|------------------------|----------------|

|           |               |
|-----------|---------------|
| Isolation | Base isolated |
|-----------|---------------|

|               |          |
|---------------|----------|
| Dynamic range | 50g peak |
|---------------|----------|

|                        |              |
|------------------------|--------------|
| Transverse sensitivity | Less than 5% |
|------------------------|--------------|

|                       |             |
|-----------------------|-------------|
| Operating temperature | -25 to 90°C |
|-----------------------|-------------|

|                         |          |
|-------------------------|----------|
| Temperature sensitivity | 0.08%/°C |
|-------------------------|----------|

|               |                 |
|---------------|-----------------|
| Case material | Stainless steel |
|---------------|-----------------|

|       |  |
|-------|--|
| Cable | Integral polyurethane - length to be specified at point of order |
|-------|--|

|                      |      |
|----------------------|------|
| Maximum cable length | 100m |
|----------------------|------|

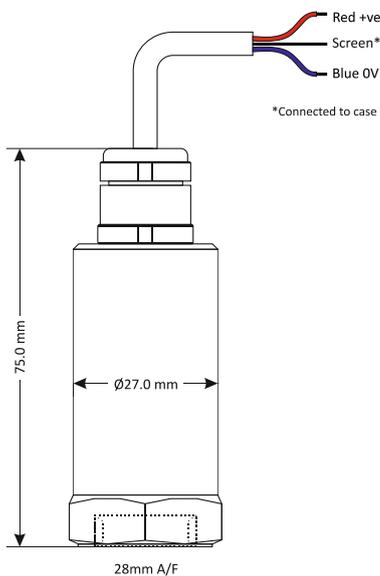
|                 |     |
|-----------------|-----|
| Mounting torque | 8Nm |
|-----------------|-----|

|        |                |
|--------|----------------|
| Weight | 150g (nominal) |
|--------|----------------|

|         |      |
|---------|------|
| Sealing | IP68 |
|---------|------|

|                   |                 |
|-------------------|-----------------|
| Submersible depth | 5m max (0.5bar) |
|-------------------|-----------------|

## Dimensions



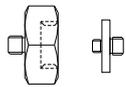
For pricing or any further information, please contact Omni Instruments Ltd.

## Studs and grub screws



| Part # | From           | To             |
|--------|----------------|----------------|
| MS036  | ¼"-28 UNF Male | M6 Male        |
| MS039  | ¼"-28 UNF Male | 10-32 UNF Male |
| MS067  | ¼"-28 UNF Male | M8 Male        |
| MS068  | ¼"-28 UNF Male | ¼"-28 UNF Male |
| MS124  | ¼"-28 UNF Male | M10 Male       |
| MS132  | ¼"-28 UNF Male | M12 Male       |

## Quick fit adapters



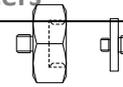
| Part # | From     | To             |
|--------|----------|----------------|
| MS001  | Q/F Male | Glue base      |
| MS002  | Q/F Male | M8 Male        |
| MS003  | Q/F Male | M10 Male       |
| MS004  | Q/F Male | ¼"-28 UNF Male |
| MS006  | Q/F Male | M6 Male        |

## Options

- Filters
- Mounting threads
- High temperatures
- Other ranges (see below)

| Part #        | Mounting     | xx = Optional acceleration (g rms) |
|---------------|--------------|------------------------------------|
| MTN/1187W-xx  | ¼"UNF Female | 0-1<br>0-2<br>0-5                  |
| MTN/1187WQ-xx | Q/F Female   | 0-10<br>0-20                       |

## Mounting adapters

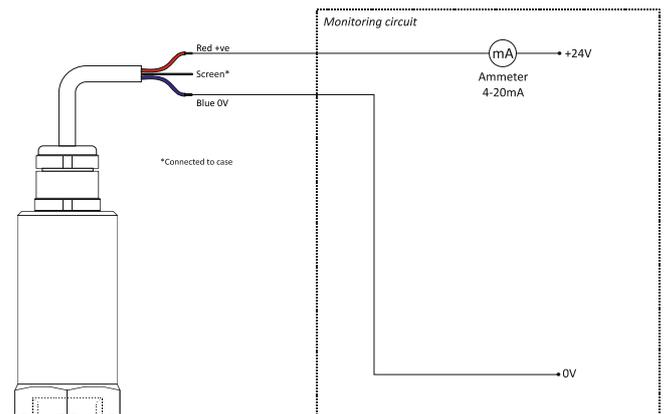


| Part # | From           | To               |
|--------|----------------|------------------|
| MS005  | Q/F Male       | ¼"-28 UNF Female |
| MS007  | Q/F Male       | 10-32 UNF Female |
| MS008  | Q/F Male       | M8 Female        |
| MS011  | ¼"-28 UNF Male | Q/F Female       |
| MS013  | ¼"-28 UNF Male | Glue base        |
| MS033  | ¼"-28 UNF Male | Q/F Female       |
| MS038  | Q/F Male       | M8 Conical Male  |
| MS061  | ¼"-28 UNF Male | 10-32 UNF Male   |
| MS079  | ¼"-28 UNF Male | Q/F Female       |
| MS106  | Q/F Male       | M10 Female       |

## Isolation

| Part # | From           | To               |
|--------|----------------|------------------|
| MS034  | ¼"-28 UNF Male | ¼"-28 UNF Female |
| MS093  | Q/F Male       | M8 Male          |

## System connection



Whilst every effort has been made to ensure the accuracy of this specification, we cannot accept responsibility for damage, injury, loss or expense from errors or omissions. In the interest of technical improvement, this specification may be altered without notice.

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