

## M18 Stainless Steel, DC



You are in: **Crouzet Products /Switches and Sensors /Inductive Proximity Sensors /M18 Series /M18 Stainless Steel, DC**

### M18 Screened

| <u>Nominal Sensing Distance Sn (mm)</u> | <u>Connection</u> | <u>3-Wire DC Polarity PNP</u> | <u>3-Wire DC Polarity NPN</u> | <u>Part Number</u>     |
|-----------------------------------------|-------------------|-------------------------------|-------------------------------|------------------------|
| 5                                       | 2 m PVC Cable     | NO                            |                               | <b><u>84717250</u></b> |
| 5                                       | 2 m PVC Cable     | NC                            |                               | <b><u>84717251</u></b> |
| 5                                       | 2 m PVC Cable     |                               | NO                            | <b><u>84717350</u></b> |
| 5                                       | 2 m PVC Cable     |                               | NC                            | <b><u>84717351</u></b> |

### M18 Non-Screened

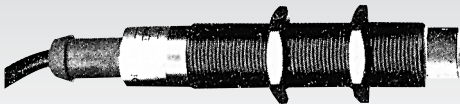
| <u>Nominal Sensing Distance Sn (mm)</u> | <u>Connection</u> | <u>3-Wire DC Polarity PNP</u> | <u>3-Wire DC Polarity NPN</u> | <u>Part Number</u>     |
|-----------------------------------------|-------------------|-------------------------------|-------------------------------|------------------------|
| 8                                       | 2 m PVC Cable     | NO                            |                               | <b><u>84717252</u></b> |
| 8                                       | 2 m PVC Cable     | NC                            |                               | <b><u>84717253</u></b> |
| 8                                       | 2 m PVC Cable     |                               | NO                            | <b><u>84717352</u></b> |
| 8                                       | 2 m PVC Cable     |                               | NC                            | <b><u>84717351</u></b> |

### M18 Long Barrel, Screened

| <u>Nominal Sensing Distance Sn (mm)</u> | <u>Connection</u> | <u>3-Wire DC Polarity PNP</u> | <u>3-Wire DC Polarity NPN</u> | <u>Part Number</u>     |
|-----------------------------------------|-------------------|-------------------------------|-------------------------------|------------------------|
| 5                                       | 2 m PVC Cable     | NO                            |                               | <b><u>84717050</u></b> |

Analog Inductive Proximity Detectors

The analog sensors offer an output voltage variation which is linear and proportional to the distance of the object being detected. The output voltage will be reduced as the object approaches the sensor.



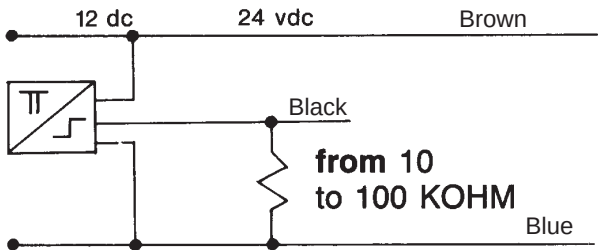
|                                      |                      |
|--------------------------------------|----------------------|
| Form                                 | M 18 x 1 x 80        |
| Sensing distance in linear zone (mm) | 5                    |
| Housing                              | Stainless Steel      |
| Connection type                      | PVC 2.0 meter cable  |
| Part number reference                | IMB1805T             |
| Min./max. supply voltage             | 12 to 24 VDC         |
| Own consumption (Io)                 | 1 mA                 |
| Output voltage at 5mm                | 3 V                  |
| Voltage limits in linear zone        | 0.4 to 3 V at 24 VDC |
| Load resistance                      | 10 to 100 kΩ         |
| Constant ratio in linear zone        | At 24 V              |
|                                      | At 12 V              |
| Switching frequency                  | 10 kHz               |
| Operating temperature                | 0 to 60°C            |

Accessories

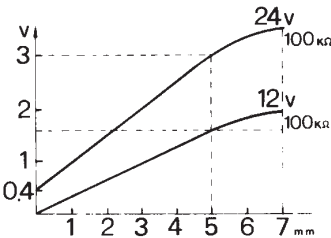
Mounting flanges, see page 3/102  
Connectors, see pages 3/100 to 3/101

Wiring

Wiring diagram



Response curve



Other Information:

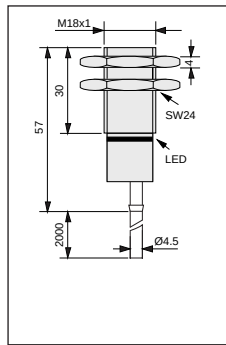
For other characteristics, longer cables, longer barrels, different connectors, please consult the factory.

To order, please specify: **IMB1805T** Normally stocked items ☐ Catalog items produced to order

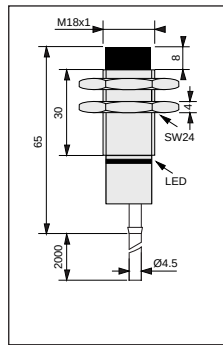
# Inductive Proximity Detectors - M18 - Stainless Steel



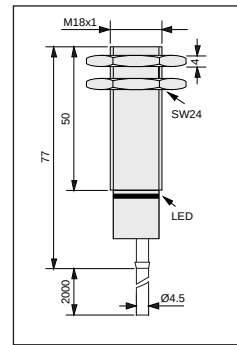
**Form**  
**Nominal sensing distance  $S_n$  (mm)**  
**Housing**  
 Tightening torque (Nm)  
 Termination



M18 screened  
 5  
 Stainless steel  
 50  
 2 m PVC cable  
 \*M12s/steel connector



M18 non-screened  
 8  
 Stainless steel  
 50  
 2 m PVC cable  
 \*M12s/steel connector



M18 long, screened  
 5  
 Stainless steel  
 50  
 2 m PVC cable

## Part numbers

### 3-wire DC types

**PNP**  
 NO   
 NC   
**NPN**  
 NO   
 NC

Min/max. supply voltage  
 Max. load current ( $I_a$ )  
 Residual open-state current ( $I_r$ ) / Own consumption ( $I_o$ )  
 Voltage drop in closed state ( $U_d$ ) / Max. ripple factor ( $V_r$ )  
 Switching frequency / Delay on pick-up ( $t_d$ )  
 LED indicator  
 Protection against permanent short-circuits and overloads  
 Protection against mis-connections of any type  
 Conductor cross-section / External cable diameter

**84 717 250**  
**84 717 251**  
**84 717 350**  
**84 717 351**

10 to 40 V  $\equiv$   
 200 mA  
 0.05 mA / 6.5 mA  
 2 V / < 10 %  
 500 Hz / 10 ms  
 yes  
 yes  
 yes  
 3 x 0.3 mm<sup>2</sup> / 5.2 mm

**84 717 252**  
**84 717 253**  
**84 717 352**  
**84 717 353**

10 to 40 V  $\equiv$   
 200 mA  
 0.05 mA / 6.5 mA  
 2 V / < 10 %  
 400 Hz / 10 ms  
 yes  
 yes  
 yes  
 3 x 0.3 mm<sup>2</sup> / 5.2 mm

**84 717 050**  
**84 717 051**  
**84 717 150**  
**84 717 151**

10 to 40 V  $\equiv$   
 200 mA  
 0.05 mA / 6.5 mA  
 2 V / < 10 %  
 500 Hz / 10 ms  
 yes  
 yes  
 yes  
 3 x 0.3 mm<sup>2</sup> / 5.2 mm

## Part numbers

### 2-wire AC types

**Polarity** NO   
**reversible** NC

Min/max. supply voltage  
 Min/max. load current ( $I_a$ )  
 Residual open-state current ( $I_r$ )  
 Voltage drop in closed state ( $U_d$ )  
 Switching frequency / Delay on pick-up ( $t_d$ )  
 LED indicator  
 Conductor cross-section

**84 717 650** **\*84 717 672**  
**84 717 651** **\*84 717 673**

20 to 250 V  $\sim$   
 5 to 500 mA  
 < 2 mA  
 < 8 V  
 5 Hz / 100 ms  
 yes  
 2 x 0.5 mm<sup>2</sup> / 5.2 mm

**84 717 652** **\*84 717 670**  
**84 717 653** **\*84 717 671**

20 to 250 V  $\sim$   
 5 to 500 mA  
 < 2 mA  
 < 8 V  
 5 Hz / 100 ms  
 yes  
 2 x 0.5 mm<sup>2</sup> / 5.2 mm

## Other information

Special adaptations are available depending on the type of request and quantity required. Eg. cable length, tube length, connector type, etc.