



### Inductive Ultra Compact LVDT Sensor

- Versatile short body compact LVDT
- Large stroke up to 16 / 20 mm
- Pressure resistance of up to 200 bar
- Suitable for hydraulic applications
- OEM applications / customisation

#### Technical data

|   |                  |           | DM 16 (G)              |
|---|------------------|-----------|------------------------|
| Nominal stroke up to                      | mm               |           | ±8 (= 16)              |
| Ext. stroke up to (frequency dependant)   | mm               |           | ±10 (= 20)             |
| Dimension A (core position inside sensor) | mm               | ±0,5 mm   | 2,4                    |
| Dimension B                               | mm               |           | 35                     |
| Transducer weight                         | g                | approx..  | 50                     |
| Core weight (w/o rod)                     | g                | approx.   | 3                      |
| Sensitivity                               | mV/V/mm          | typical   | 40                     |
| Primary impedance (core @ zero)           | Ohm              |           | > 400                  |
| Excitation voltage                        | V <sub>eff</sub> | max.      | 20                     |
| Excitation frequency                      | kHz              |           | 5                      |
| Non-linearity for ±5 mm stroke            | % ref. to        | ±8 (= 16) | ±1,0                   |
| Non-linearity above ±5 mm stroke          |                  |           | depending on frequency |
| Operational temperature                   | °C               |           | -30 ... +100           |
| Protection class (DIN 40050)              |                  |           | IP 68                  |
| Pressure resistance                       |                  |           | 200 bar                |

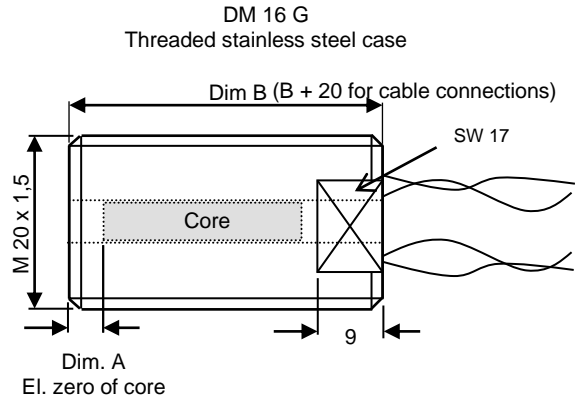
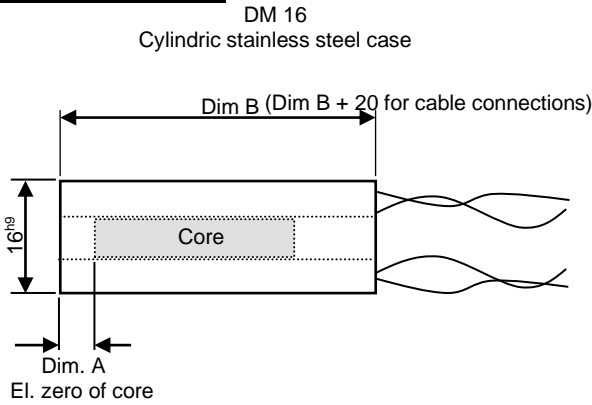
#### Model list

Order code: DM      nnn      N      /Option1 /Option2

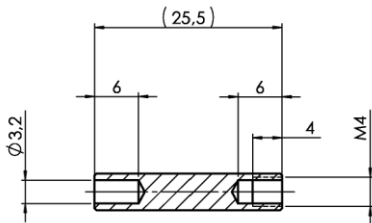
| Series | Stroke | Connection          |                           | Options                            |   |
|--------|--------|---------------------|---------------------------|------------------------------------|---|
|        |        | Leads <sup>1)</sup> | Axial cable <sup>2)</sup> | Customised length of cable / wires | Core rod supplied, with custom length (dimension A) |
|        |        | o.                  | K                         | /TF xx                             | /TA xx  |
| DM     | 16     | X                   | O                         | O                                  | O   |
| DM     | 16G    | X                   | O                         | O                                  | O   |

X = available standard model      O = option      -- = not available  
 1) with axial lead connection only      2) longer body

## Mechanical drawings



## Core (supplied)



Note:

- 1) Core is made of magnetic stainless steel.  
Use (core) extension rod of non-magnetic materials.
- 2) Core rod supplied as an option

## Connection

|                           | Leads                  | Cable K          |
|---------------------------|------------------------|------------------|
| <b>Type of connection</b> | PTFE leads 250 mm long | PTFE cable 2,5 m |
| <b>configuration</b>      |                        |                  |
| <b>Excitation +</b>       | White                  | White            |
| <b>Excitation -</b>       | Blue                   | Blue             |
| <b>Measuring signal +</b> | Red                    | Red              |
| <b>Measuring signal -</b> | Black                  | Black            |

## DM 16 - Variations

