



## Universal Sensor robust, accurate and reasonable

- Full (symmetric) LVDT configuration
- Outer diameter: Ø20 mm
- With leads, cable or connector connection
- using separate pressure tubes it is suitable for hydraulic applications

### Technical data

|                                 |                            | DK 2 | DK 5 | DK 10       | DK 20 | DK 25 | DK 50 | DK 100 | DK 150 | DK 200 | DK 250 |
|---------------------------------|----------------------------|------|------|-------------|-------|-------|-------|--------|--------|--------|--------|
| Nominal stroke                  | mm                         | ±1   | ±2,5 | ±5          | ±10   | ±12,5 | ±25   | ±50    | ±75    | ±100   | ±125   |
| Mechanical stroke               | mm                         | 5    | 10   | 15          | 25    | 35    | 60    | 110    | 160    | 210    | 260    |
| Dimension A                     | mm                         | 30   | 40   | 40          | 40    | 40    | 50    | 100    | 130    | 150    | 180    |
| Dimension B                     | mm                         | 30   | 45   | 80          | 90    | 120   | 165   | 255    | 330    | 420    | 510    |
| Inner diameter D                | mm                         | 6    | 6    | 4 option: 8 |       |       |       |        |        |        |        |
| Transducer weight (approx.)     | g                          | 50   | 70   | 120         | 130   | 170   | 230   | 350    | 460    | 580    | 700    |
| Plunger weight (approx.)        | g                          | 3    | 4    | 6           | 7     | 8     | 10    | 16     | 20     | 25     | 30     |
| Excitation voltage (eff.)       | up to 5 V                  |      |      |             |       |       |       |        |        |        |        |
| Excitation frequency *)         | 5 kHz option: 10 kHz       |      |      |             |       |       |       |        |        |        |        |
| Linearity *)                    | ±0,5% F.S.O. option: 0,25% |      |      |             |       |       |       |        |        |        |        |
| Temperature coefficient of zero | ±0,1% / 10K                |      |      |             |       |       |       |        |        |        |        |
| Temperature coefficient of span | ±0,15% / 10K               |      |      |             |       |       |       |        |        |        |        |
| Operating temperature           | -50°C ... +80°C            |      |      |             |       |       |       |        |        |        |        |
| Protection class (Din 40050)    | IP 64                      |      |      |             |       |       |       |        |        |        |        |

\*) select option when ordering

### Model list

Order code

| DK     | nnn                | NN          |              |                           |              |                                | n,n%            |       | n kHz                |        | /Option1 /Option2                        |               |                                  |                        |
|--------|--------------------|-------------|--------------|---------------------------|--------------|--------------------------------|-----------------|-------|----------------------|--------|------------------------------------------|---------------|----------------------------------|------------------------|
| Series | Stroke             | Connection  |              |                           |              |                                | Linearity (FSO) |       | Excitation frequency |        | Options                                  |               |                                  |                        |
|        | See technical data | Axial leads | Radial leads | Axial cable <sup>1)</sup> | Radial cable | Radial connector <sup>2)</sup> | 0,5%            | 0,25% | 5 kHz                | 10 kHz | temperature and oil resistant PTFE cable | 6-wire-option | Ø8 mm bore hole <sup>3)</sup> 4) | Customised dimension A |
|        |                    | -           | QL           | K                         | Q            | R                              |                 |       |                      | /10k   | /TF                                      | /6            | /D8                              | /Axx                   |
| DK     | 2 ... 5            | X           | --           | --                        | --           | --                             | X               | --    | X                    | O      | --                                       | --            | --                               | O                      |
| DK     | 10...250           | X           | O            | O                         | O            | O                              | X               | O     | X                    | O      | O                                        | O             | O                                | O                      |

X = available standard model

O = option

-- = not available

1) Core channel non-continuous

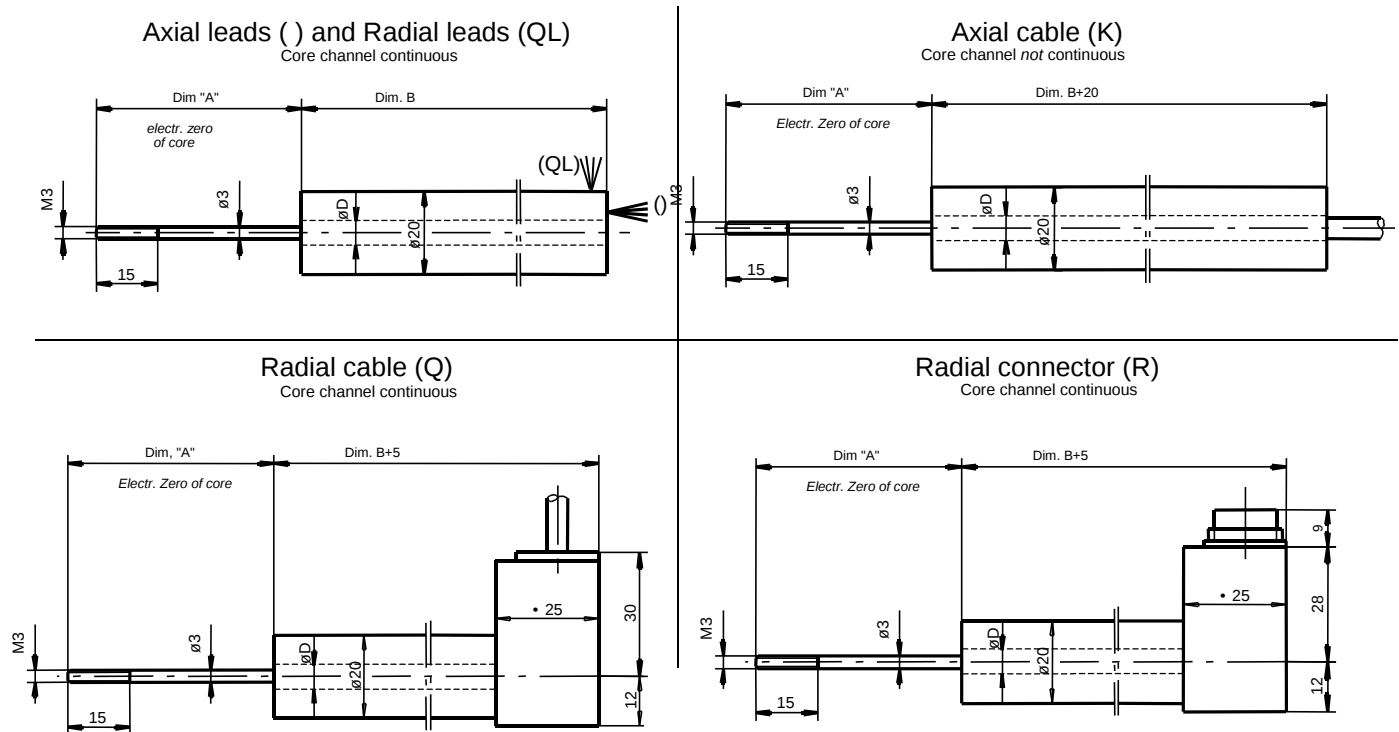
2) Mating connector supplied

3) after consulting MESSOTRON

4) not available for /K, /Q, /R

## Sensor DK

### Mechanical drawings / mech. connections



### Connection

|                               | Leads                            | Leads 6-wires                    | K / Q                                     | R                        |
|-------------------------------|----------------------------------|----------------------------------|-------------------------------------------|--------------------------|
| <b>Type of connection</b>     | PTFE leads AWG 26<br>250 mm long | PTFE leads AWG 26<br>250 mm long | PE-cable 2,5 m long<br>Option: PTFE cable | Amphenol C 091 connector |
| <b>Pin configuration</b>      |                                  |                                  |                                           |                          |
| <b>Excitation +</b>           | Brown                            | White                            | White                                     | 2                        |
| <b>Excitation -</b>           | Blue                             | Blue                             | Blue                                      | 3                        |
| <b>Measuring signal +</b>     | Red                              | Red                              | Red                                       | 1                        |
| <b>Measuring signal -</b>     | Black                            | Black                            | Black                                     | 4                        |
| <b>Tap sek. 1</b>             | -                                | Green                            | -                                         | -                        |
| <b>Tap sek. 2</b>             | -                                | Yellow                           | -                                         | -                        |
| <b>Mating plug (supplied)</b> | -                                | -                                | -                                         | Amphenol C 091           |