

## LVDT series - gauges with external controller



**Proven LVDT technology**  
**Measuring ranges  $\pm 1 \dots \pm 10\text{mm}$**   
**Excellent price/performance ratio, especially for high volume applications**  
**Sensor diameter  $\varnothing 8\text{mm}$**   
**Version with pneumatic push**

LVDT gauging sensors DTA-xG8 are primarily used for the measurement and inspection of work-piece geometry (length, width, diameter, thickness, depth, height). These new gauges are available in two basic versions: feather or pneumatic. The entire housing has a diameter of 8mm. All gauges include a cable that extends axially from the housing. Due to its special design, this series offers a very attractive price/performance ratio, especially for high volumes.

### Article

DTA - 5 G8 - 3 - CA - V

Principle: differential transformer (LVDT) — DTA

Excitation AC — 5

Measuring range  $\pm$  mm — G8

Function: gauging sensor — 3

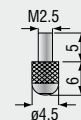
Linearity 3 ( $\pm 0.3\%$ ) — CA

Connection (axial): CA integral cable (3m) — CA

Gauging sensor option: V pneumatic push — V

### Probe tips

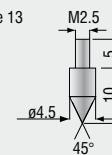
Standard: type 2



Option: type 11

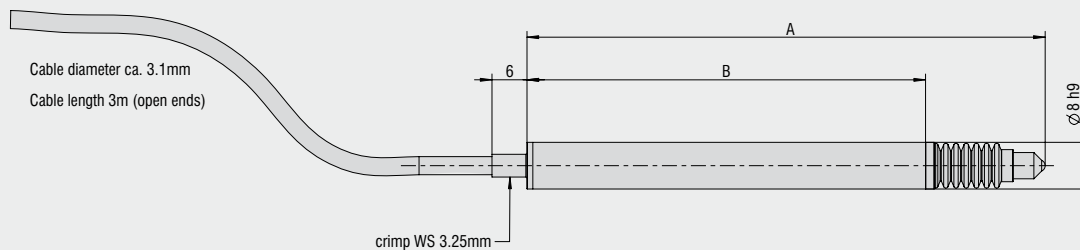


Option: type 13

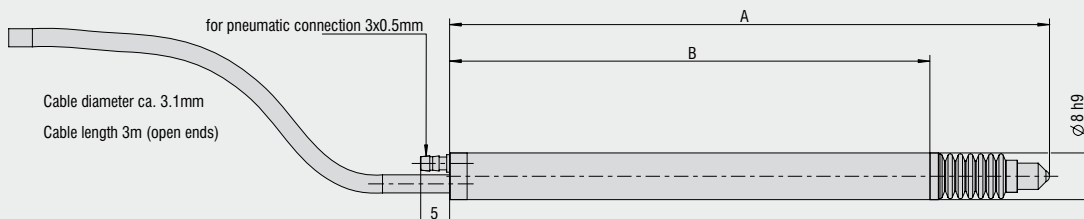


| Model                      | DTA-1G8  | DTA-3G8    | DTA-5G8    | DTA-10G8   | DTA-1G8-V   | DTA-3G8-V  | DTA-5G8-V  | DTA-10G8-V |
|----------------------------|--|------------|------------|------------|-------------|------------|------------|------------|
| Measuring range            | ±1mm   | ±3mm       | ±5mm       | ±10mm      | ±1mm        | ±3mm       | ±5mm       | ±10mm      |
| Linearity                  | 0.3 % FSO  |            |            |            |             |            |            |            |
| Repeatability              | 0.15µm   | 0.45µm     | 0.75µm     | 1.5µm      | 0.15µm      | 0.45µm     | 0.75µm     | 1.5µm      |
| Temperature stability      | 250ppm/°C  |            |            |            |             |            |            |            |
| Temperature range          | -20...+80 °C (without bellows) / 0...+80 °C (with bellows) |            |            |            |             |            |            |            |
| Diameter                   | 8h9mm  |            |            |            |             |            |            |            |
| Sensor material            | stainless steel / FPM                                      |            |            |            |             |            |            |            |
| Connection / pin connector | open ends  |            |            |            |             |            |            |            |
| Protection class sensor    | IP65 (with bellows) / IP54 (without bellows)               |            |            |            |             |            |            |            |
| Cable output               | axial  |            |            |            |             |            |            |            |
| Sensor cable length        | 3m   |            |            |            |             |            |            |            |
| Life cycle MTBF            | 5 million cycles   |            |            |            |             |            |            |            |
| Sensitivity                | 133 mV/mm/V  | 85 mV/mm/V | 53 mV/mm/V | 44 mV/mm/V | 133 mV/mm/V | 85 mV/mm/V | 53 mV/mm/V | 44 mV/mm/V |
| Electronics                | MSC710 (page 8 - 9)  |            |            |            |             |            |            |            |

FSO = Full Scale Output

**DTA-xG8-3-CA**

| Model         | A (zero position) | B       |
|---------------|-------------------|---------|
| DTA-1G8-3-CA  | 83mm              | 64.3mm  |
| DTA-3G8-3-CA  | 89mm              | 68.3mm  |
| DTA-5G8-3-CA  | 118mm             | 89.5mm  |
| DTA-10G8-3-CA | 155mm             | 121.7mm |

**DTA-xG8-3-CA-V**

| Model           | A (zero position) | B       |
|-----------------|-------------------|---------|
| DTA-1G8-3-CA-V  | 95mm              | 76.3mm  |
| DTA-3G8-3-CA-V  | 103mm             | 82.3mm  |
| DTA-5G8-3-CA-V  | 134mm             | 105.3mm |
| DTA-10G8-3-CA-V | 170.8mm           | 137.3mm |