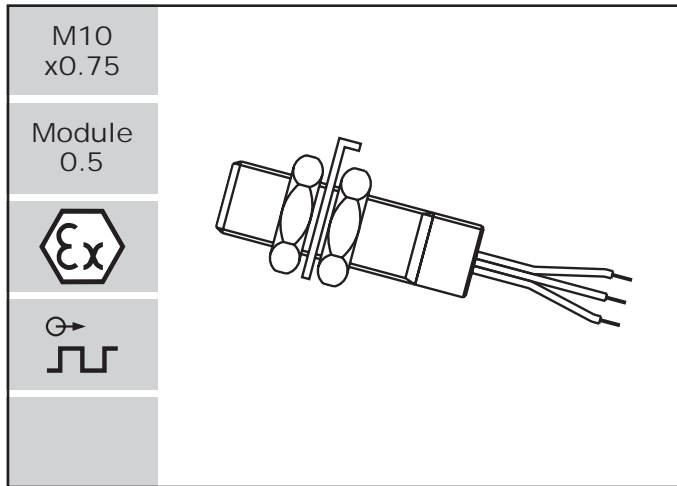


DSD 1005 K, P

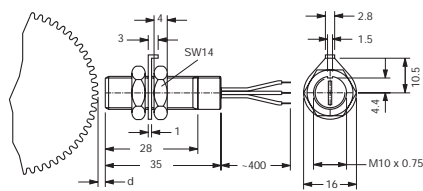


Features

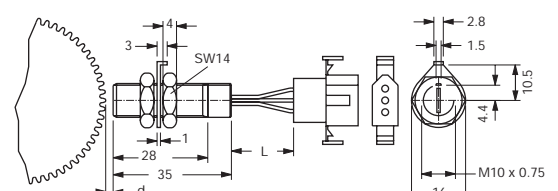
- With amplifier
- Dynamic characteristic
- Available as models FTG 1088.00 Ex and FTG 1088.01 Ex in intrinsically safe class EEx ia II C T5/T6
- Sensor housing must be aligned to the pole wheel

Dimensions

Version K



Version P



Model overview

| Type | Part nr. | Connections | Housing thread | Weight [g] | Operating [°C] | Notes |
|--------------------|------------|-------------|----------------|------------|-----------------------|---------------------------|
| DSD 1005.00 KTV | 343Z-03828 | Wire | M10x0.75 | 20 | -25...+85 | previously FTG 1088.00 |
| DSD 1005.00 KTV Ex | 343Z-03772 | Wire | M10x0.75 | 20 | -25...(T5)+75,(T6)+60 | previously FTG 1088.00 Ex |
| DSD 1005.00 PTV | 343Z-03835 | Connector | M10x0.75 | 23 | -25...+85 | previously FTG 1088.01 |
| DSD 1005.00 PTV Ex | 343Z-03770 | Connector | M10x0.75 | 23 | -25...(T5)+75,(T6)+60 | previously FTG 1088.01 Ex |

Differential Ferrostat Sensor

Type DSD 1005
Version K, P

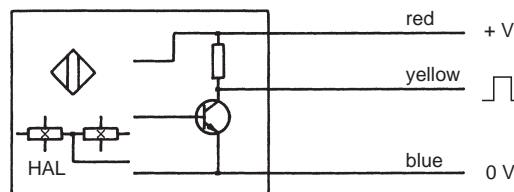
Technical data

| | |
|------------------------|---|
| Supply Power Supply | <u>Supply voltage:</u> 5 V \pm 10%, max. load 12 V, reverse polarity protection. <u>Current consumption:</u> max. 16 mA. |
|------------------------|---|

| | |
|--------------------------|--|
| Input Frequency range | 5 Hz...20 kHz |
| Noise immunity | Cable shield connected to the supply negative pole. Noise generator between housing and electronics. 1.5 kV/1.5 ms/max. 5 Hz (source resistance 500 Ω), 2.0 kV/HF-bursts (level 4 in accordance with IEC 801-4), 2.5 kV/1 MHz damped resonance (class III in accordance with IEC 255-4). |
| Pole wheel | Ferromagnetic toothed wheel (i.e. Ust37-2), involute gear form preferred. Module \geq 0.5, min. tooth width 3 mm, side offset with min. tooth width: < 0.2 mm, eccentricity < 0.2 mm, <u>Pole wheel-sensor gap with</u> Module 0.5: 0.1...0,4 mm Module 1.0: 0.1...1.0 mm \geq Module 2.0: 0.1...1.3 mm |

| | |
|-------------------------|--|
| Output Signal output | Square wave voltage, mark-space approx 1:1, D.C. coupled to the supply, signal-amplitude corresponding to supply voltage. (max. allowed sink current = 25 mA at a saturation voltage < 0,4V). The output is connected through a pull-up resistor of 1.8 k Ω to the plus pole of the power supply. |
|-------------------------|--|

Connections



| | |
|--------------------------------|---|
| Mechanical Protection class | IP68 (head), IP67 (wire connection), IP50 (jack connection). |
| Vibration immunity | 3 g _n in the range 4...100 Hz. |
| Shock immunity | 20 g _n during 11 ms, half-sine wave. |
| Operating temperature | Acc. to model overview. |
| Insulation | Housing and electronics galvanically isolated (500V/50 Hz/1 min). |
| Housing | Argentan (German silver) CuNi10Zn42Pb DIN 2.0770, front side hermetically sealed, sensor components moulded in chemical- and age-proof synthetic resin. Dimensions according to model overview and dimensional drawing. |
| Weight | Acc. to model overview. |
| Operating instructions | 343E-63725 |

| | |
|-----------------------|---|
| Versions Version K | Wires teflon insulated, length 400 mm, 0.22 mm ² (AWG 24). |
| Version P | Connector, Part nr. 343C-72577. |

DSD