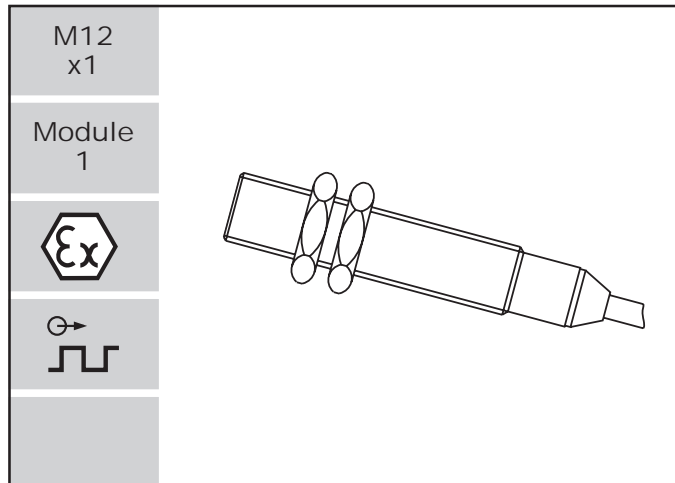


DSF 1210 A, S, M

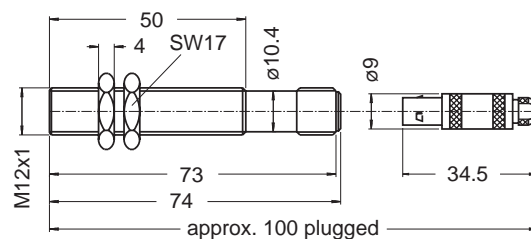


Features

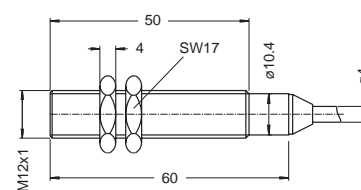
- With amplifier
- Dynamic characteristic
- Lower frequency limit 0.05 Hz
- Available as model DSF 1210.00..V Ex in intrinsically safe class EEx ia IIC T6-T1 (zone 1)
- Available in intrinsically safe class EEx ia I (with exception of types with integral connector) e.g. for the mining industry

Dimensions

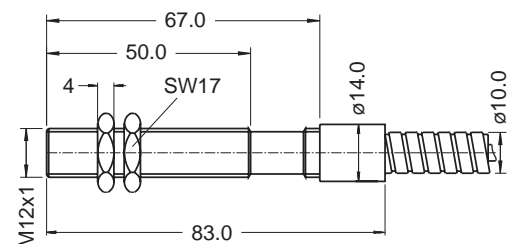
Version A



Version S



Version M



Model overview

| Type | Part nr. | Connection | Housing thread | Weight [g] | Operating temperature [°C] |
|--------------------|------------|--------------------|----------------|------------|----------------------------|
| DSF 1210.00 AHV | 374Z-03867 | Plug | M12x1 | 35 | -40...+125 |
| DSF 1210.00 AHV Ex | 374Z-03823 | Plug | M12x1 | 35 | certificate of conformity |
| DSF 1210.00 ATV | 374Z-03868 | Plug | M12x1 | 35 | -25...+85 |
| DSF 1210.00 MTV | 374Z-03970 | Protection hose 5m | M12x1 | 495 | -25...+85 |
| DSF 1210.00 SHV | 374Z-03869 | Wire 2 m | M12x1 | 100 | -40...+125 |
| DSF 1210.00 SHV | 374Z-03880 | Wire 5 m | M12x1 | 190 | -40...+125 |
| DSF 1210.00 SHV Ex | 374Z-03788 | Wire 2 m | M12x1 | 100 | certificate of conformity |
| DSF 1210.00 STV | 374Z-03870 | Wire 5 m | M12x1 | 160 | -25...+85 |
| DSF 1210.00 STV Ex | 374Z-03789 | Wire 5 m | M12x1 | 160 | certificate of conformity |

Ferrostat Sensor with amplifier

Type DSF 1210
Version A, S, M

Technical Data

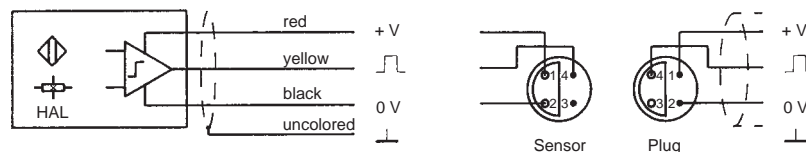
Supply
Power supply Supply voltage: 10...30 V D.C., (Ex 8...28 V D.C.), max. superimposed A.C. voltage of 25 mVpp, protected against reverse polarity. Current consumption: max. 14 mA (without load).

Input
Frequency range 0.05 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 ≥1, min. tooth width 6 mm, side offset with min. tooth width: < 0.2 mm, eccentricity < 0.2 mm.
Pole wheel-sensor gap with

| | |
|-------------|--------------|
| Module 1: | 0.2...1.0 mm |
| Module 2: | 0.2...2.5 mm |
| ≥ Module 4: | 0.2...4.5 mm |

Output
Signal output Square wave signals from push-pull stage-, D.C. coupled to the supply (negative pole = reference voltage), max. load 25 mA,
Output voltage-HI: > (supply voltage - 2.5 V) at I = 25 mA, Output voltage-LO: < 1.5 V at I = 25 mA, short circuit proof and protected against reverse polarity.

Connection



Shield to be connected to 0 V of power supply.

Mechanical
Protection class IP68 (head), IP67 (cable connection, IP50 (jack connection).
Vibration immunity 5 g_n in the range 5...2000 Hz.
Shock immunity 50 g_n during 20 ms, half sine wave.
Operating temperature Acc. model overview.
Insulation Housing, cable shield and electronics galvanically isolated (500 V/50 Hz/1 min).
Housing Stainless steel 1.4305, front side hermetically sealed, electronic components potted in a chemical- and age-proof synthetic resin. Dimensions acc. to model overview and dimensional drawings.
Weight Acc. model overview.
Operating instruction 374E-63710 version with integral connector, 374E-63709 version with integral cable, 374E-63901 intrinsically safe version.

Versions

Version A Connection type: Part nr. 820A-35922; Connection plug: Part nr. 820A-35921.
Version ST PVC cable: Part nr. 824L-35665, 3wire, 3 x 0.22 mm² (AWG 24), wire stranded (thermoplastic screening with continuity conductor, isolated from the housing), grey. Outer Ø max. 4.2 mm, Bending radius min. 60 mm, weight 25 g/m.
Version SH Teflon cable: Part nr. 824L-35053, 4wire, 4 x 0.24 mm² (AWG 24), wire stranded (metal net, insulated from the housing), white. Outer Ø max. 4.0 mm, bending radius min. 60 mm, weight 32 g/m.
Version MT Protection hose over PVC cable: Tube 825G-36148 made of profile milled steel plate with PUR cover, blue. Weather and waterproof, conditionally oil and acid resistant. Outer Ø 10 mm, bending radius min. 32 mm, weight 75 g/m.