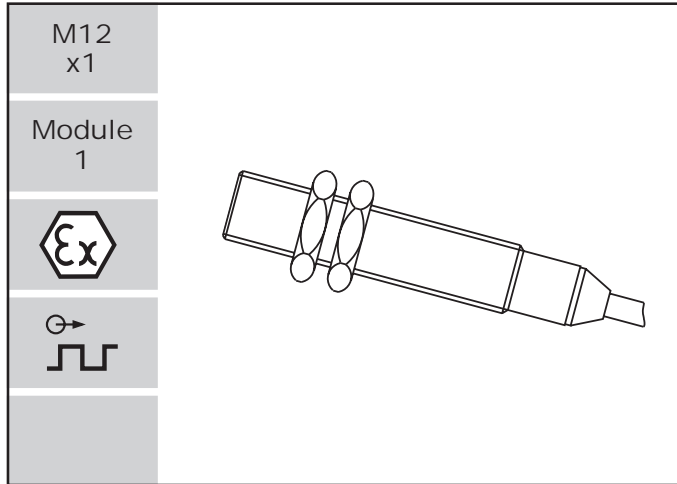


## DSF 1210 A, S, M

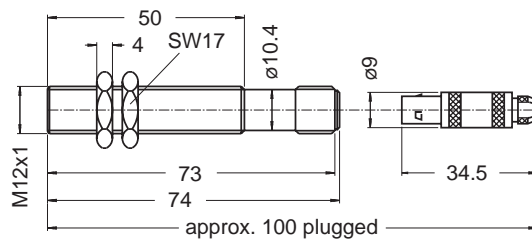


### Features

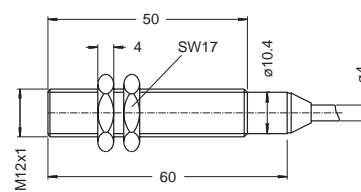
- With amplifier
- Dynamic characteristic
- Lower frequency limit 0.05 Hz
- Available as model DSF 1210.00..V Ex in intrinsically safe class EEx ia IIC T6-T1 (zone 1)
- Available in intrinsically safe class EEx ia I (with exception of types with integral connector) e.g. for the mining industry

### Dimensions

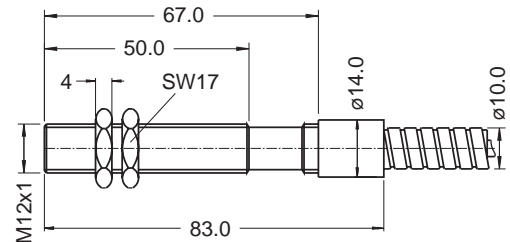
Version A



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

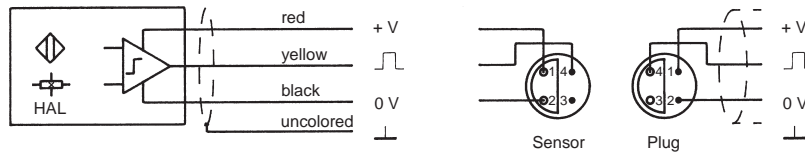
**Supply**  
Power supply      **Supply voltage:** 10...30 V D.C., (Ex 8...28 V D.C.), max. superimposed A.C. voltage of 25 mVpp, protected against reverse polarity. **Current consumption:** max. 14 mA (without load).

**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<sub>n</sub> in the range 5...2000 Hz.  
Shock immunity      50 g<sub>n</sub> 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 mm<sup>2</sup> (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 mm<sup>2</sup> (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.

DSF  
...V