# SENSORS.NL

Air Differential Pressure Switches with on/off Output

## 930series

June 2018





#### Features

- Electrical rating 250 Vac
- 9 different pressure ranges
- Switching pressure to be adjusted easy on a scaled adjustment knob
- · Static, over, underpressure and vaccum

#### Can be deliveried in 3 different alternatives

- 1. Only the pressure switch
- 2. The pressure switch separately packed and the duct fixing kit separately packed.
- 3. The pressure switch and the duct fixing kit packed together in one small carton.

### Ordering

Type no.	Adjustment range	Switching differential
Air differentia	I pressure switch	

930.80 222511	20–200 Pa	10 Pa
930.00 222311	20–200 F a	IUFa
930.80 222511N	20–300 Pa	10 Pa
930.84 222511	30– 400 Pa	15 Pa
930.83 222511	50– 500 Pa	20 Pa
930.85 222511	200–1.000 Pa	100 Pa
930.85 222511N	100–1.000 Pa	100 Pa
930.86 222511	500–2.500 Pa	150 Pa
930.87 222511	1000–4.000 Pa	250 Pa
930.87 222511N	1000–5.000 Pa	250 Pa
DFK 200	Duct fixing kit	

Air differential pressure switch with duct fixing kit (DFK 200), packed together into a carton.

930.80 222534	20–200 Pa	10 Pa
930.80 222534N	20–300 Pa	10 Pa
930.84 222534	30– 400 Pa	15 Pa
930.83 222534	50– 500 Pa	20 Pa
930.85 222534	200–1.000 Pa	100 Pa
930.85 222534N	100–1.000 Pa	100 Pa
930.86 222534	500–2.500 Pa	150 Pa
930.87 222534	1000–4.000 Pa	250 Pa
930.87 222534N	1000–5.000 Pa	250 Pa



930series

#### Technical data

Output	on/off
Max. operating pressure	10 kPa
Medium	Air, non-combustible and non-aggressive gases.
Temp. range	Medium and ambient temp.from -20°C to +85°C. Storage temperature from -40°C to +85°C.
Diaphragm material	Silicone, tempered at +200°C, free of gas emissions. Other materials available on request.
Pressure connections	2 plastic pipe connection pieces (P1 and P2), external diameter 6.0 mm: P1 for connection to higher pressure (marked +) P2 for connection to lower pressure (marked –)
Housing materials	Switch body made of PA 6.6. Cover made of PS.
Weight	150 g
Mechanical working life	Over 10.000.000 switching operations
Electrical rating	max. 1.0 A (0.4 A) / 250 Vac
Electrical connections	AMP flat plug 6.3 mmx 0.8 mm in accordance with DIN 46244 or push-on screw terminals. Cable conduit M16 with cable strain
Protection	IP 54
CE Conformity	r Each depending on technical specification: Directive 2006/95/EC; RoHS Directive 2002/95/EC; Gas Appliance Directive 90/396/EC

#### Description

The 930 differential pressure switch is suitable for low differential pressure switching applications in air-conditioning systems for providing indication of fan status or 'filter dirty'.

With this pressure switch the switching pressure can be adjusted manual by hand or with a screwdriver using a scaled adjustment knob located under the cover.

Tolerance for upper and lower switching pressure is +/-15%.

Switching pressure specifications apply to vertical installation which is also the recommended position with pressure-pipe connections pointing downwards.

If the switches are installed horizontally with AMP connection terminals uppermost, the switching values are approx. 20 Pa higher.

#### Applications

Adjustable differential pressure switch for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases.

Possible fields of application include:

- Monitoring air filters and ventilators
   Monitoring industrial cooling-air circuits
   Overheating protection for fan heaters
   Monitoring flows in ventilation ducts
   Controlling air and fire-protection flaps
   Frost protection for heat exchangers

  Electrical connection
  3 COM 1.
  - 1. Break contact
  - 2. Operating contact
  - 3. Power supply line

#### The cable gland

The cable gland using a cap nut offers highly effective strain relief and a considerably better sealing function.

1 NC

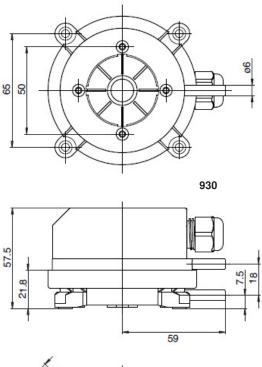
The installation of this gland has become easier since the integrated radial seal needs a lower torque, mainly less tightening forces, to ensure the sealing function as required by protection class IP 54.

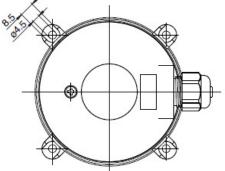
This gland is designed for round cables with a diameter of 5 to 10 mm, while an optional reducer from 5 mm down to a diameter 3 mm is available for thinner cables. The nut has a width across flats of 20 mm, is made of polyamide and is provided with an NBR seal.



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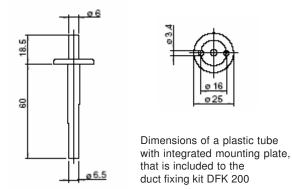
**Dimensions (mm)** 





### **Duct Fixing Kit**

Duct fixing kit DFK 200 includes 2 plastic tubes with integrated mounting plate, 2 metres PVC hose and 4 screws



We reserve the right to make changes in our products without any notice which may effect the accuracy of the information contained in this leaflet.