

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

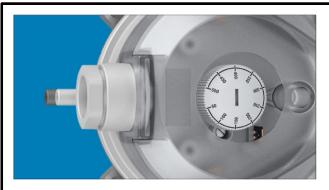


#### **Features**

9 different pressure ranges

930.80, pressure range 20-200 Pa 930.80N, pressure range 20-300 Pa 930.84, pressure range 30-400 Pa 930.83, pressure range 50-500 Pa 930.85, pressure range 200-1.000 Pa 930.85N, pressure range 100-1.000 Pa 930.86, pressure range 500-2.500 Pa 930.87, pressure range 1.000-4.000 Pa 930.87N, pressure range 1.000-5.000 Pa

- · Electrical rating 250 Vac
- IP54 and IP65 (IP65 is new 2021)



Switching pressure to be adjusted easy on a scaled adjustment knob

# **Applications**

Air differential pressure switch 930-series used for monitoring overpressure, vacuum and differential pressure of air or other non-combustible, non-aggressive gases.

Class of control and regulation function: A

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

### Can be deliveried in 3 different alternatives

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



## **Ordering**

Туре по.	Adjustment range	IP rating	
Air differential pr	essure switch		
930.80 222511	20-200 Pa	IP54	
930.80 222511N	20-300 Pa	IP54	
930.84 222511	30- 400 Pa	IP54	
930.83 222511	50- 500 Pa	IP54	
930.85 222511	200-1.000 Pa	IP54	
930.85 222511N	100-1.000 Pa	IP54	
930.86 222511	500-2.500 Pa	IP54	
930.87 222511	1000-4.000 Pa	IP54	
930.87 222511N	1000-5.000 Pa	IP54	

Above types 930.8x 222511 are without duct fixing kit DFK 200. Duct fixing kit DFK 200 to be ordered separately if required.

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

930.80 222534	20-200 Pa	IP54
930.80 222534N	20-300 Pa	IP54
930.84 222534	30- 400 Pa	IP54
930.83 222534	50- 500 Pa	IP54
930.85 222534	200-1.000 Pa	IP54
930.85 222534N	100-1.000 Pa	IP54
930.86 222534	500-2.500 Pa	IP54
930.87 222534	1000-4.000 Pa	IP54
930.87 222534N	1000-5.000 Pa	IP54

## Air differential pressure switch

930.80 222711	20-200 Pa	IP65
930.80 222711N	20-300 Pa	IP65
930.84 222711	30- 400 Pa	IP65
930.83 222711	50- 500 Pa	IP65
930.85 222711	200-1.000 Pa	IP65
930.85 222711N	100-1.000 Pa	IP65
930.86 222711	500-2.500 Pa	IP65
930.87 222711	1000-4.000 Pa	IP65
930.87 222711N	1000-5.000 Pa	IP65



Above types  $930.8x\ 222711$  are without duct fixing kit DFK 200. Duct fixing kit DFK 200 to be ordered separately if required.

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

930.80 222734	20-200 Pa	IP65
930.80 222734N	20-300 Pa	IP65
930.84 222734	30- 400 Pa	IP65
930.83 222734	50- 500 Pa	IP65
930.85 222734	200-1.000 Pa	IP65
930.85 222734N	100-1.000 Pa	IP65
930.86 222734	500-2.500 Pa	IP65
930.87 222734	1000-4.000 Pa	IP65
930.87 222734N	1000-5.000 Pa	IP65





### **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,

free of gas emissions.

Other materials available on request.

Pressure

2 plastic pipe connection pieces connections

(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 and cover of plastic

Weight 150 g

Mechanical

working life

Over 10.000.000 switching operations

**Electrical** rating

Standard

version max. 1.5 A (0.4 A) / 250 Vac

Low voltage

version max. 0.1 A /24 Vdc (on request)

**Electrical** 

connections Tab terminal 6.3 mmx 0.8 mm

> in accordance with DIN 46244 or push-on screw terminals.

Cable conduit M16 with cable strain

**Protection** IP54 or IP65

Cap nut conduit AF20

on request M20x1.5 and NPT1/2

### Cont. Technical data

Protection class Protection class II (with cover)

> The pressure switch without cover is provided for installation in equipment. The construction of the equipment and the type of installation determine the

protection class.

**CE Conformity** Each depending on technical specification:

> Low Voltage Directive RoHS Directive Gas Directive

**Specifications** according to

EN1854 Deviation: ≤±15 %, min. ±10 Pa

Drift: ≤±15 %

#### **Versions**

The switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob.

Туре	Adjusti from	ment range to	Switching differential*	Repeatability of the switching pressure
930.80	20	200 Pa	10 Pa	±5 %, min. ±5 Pa
930.80N	20	300 Pa	10 Pa	±5 %, min. ±5 Pa
930.84	30	400 Pa	15 Pa	±5 %, min. ±5 Pa
930.83	50	500 Pa	20 Pa	±2.5 %, min. ±5 Pa
930.85N	100	1000 Pa	50 Pa	±2.5 %, min. ±5 Pa
930.85	200	1000 Pa	100 Pa	±1 %, min. ±5 Pa
930.86	500	2500 Pa	150 Pa	±1 %
930.87	1000	4000 Pa	250 Pa	±1 %
930.87N	1000	5000 Pa	250 Pa	±1 %

<sup>\*</sup> typically, at beginning of setting range

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 the tab terminals uppermost, the switching values are approx. 20 Pa higher.



# **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.

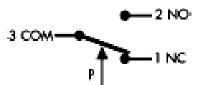
### **Applications**

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:

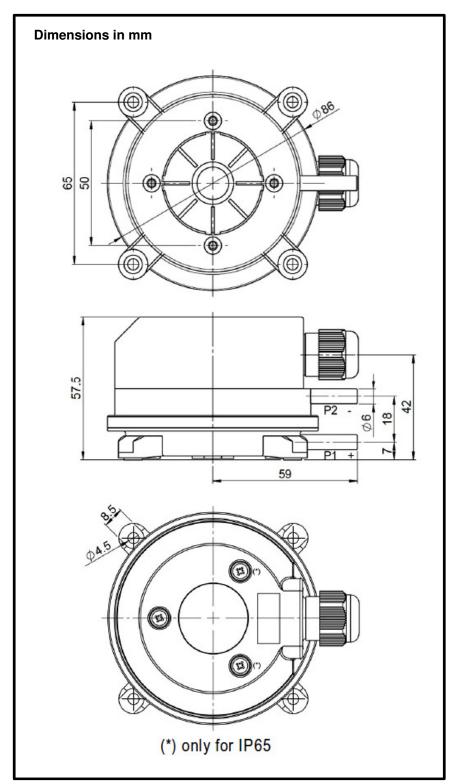
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- Monitoring industrial cooling-air circuits
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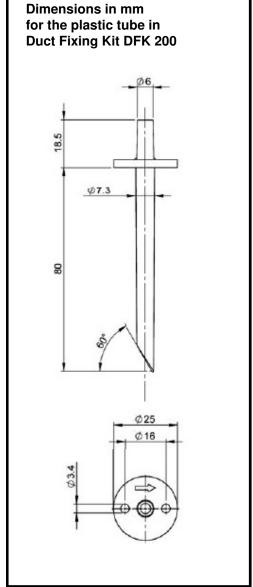
### **Arrangement of contacts**



- 1 Break contact
- 2 Operating contact
- 3 Power supply line







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