## Kromschroder

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CPS 330 - 4000

### **Pressure switches for air**

- Precision differential pressure switches
- Monitoring of air and other non-flammable gases
- High switching point stability
- Switching point selection via hand wheel
- Screw terminals for electrical connections
- Flexible mounting options
- All connections accessible from one side
- CE and ROHS compliant

### **Application**



Easy-to-install connections, accessible from one side.

Pressure switches for air CPS can be used as excess pressure, negative pressure and differential pressure switches for air and other non-flammable gases. They monitor extremely slight pressure differences and trigger switch-on, switch-off or switch-over operations if a set value is reached.

Fields of application include air flow monitoring, fan monitoring or filter monitoring on intake and extract ventilation systems, on air-conditioning systems and in kitchens, frost-protection control on heat exchangers and closed-loop control of butterfly valves for air and fire dampers.

The pneumatic and electrical connections are accessible from the same side in order to ensure space-saving installation.

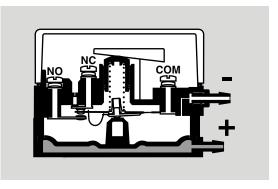


Pressure switch for fan monitoring in laboratories.



CPS for filter monitoring in kitchens.

### Example applications



#### Excess pressure measurement

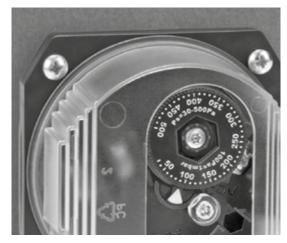
For instance for checking fan function.

#### Negative pressure measurement

For instance for monitoring air locks and checking fan function.

#### Differential pressure measurement

For instance for safeguarding an air flow rate and for monitoring filters and fans.



#### Simple mounting

By means of two screws on the mounting plate or air duct.





# Mounting without the need for tools or screws

Optional S-clip for fast installation and removal of the pressure switch. Only two holes in the mounting plate or air duct are required for secure mounting.





#### Rugged, locked mounting

Optional, L-shaped or Z-shaped angle bracket for fast installation and removal with diverse mounting options, even with only one screw. The angle bracket increases the distance between pressure switch and mounting plate and protects against hot mounting plates.





# Clearer handling in complex installations

Optional scale marking, e.g. for pressure switches with the same switching point setting. Can simply be plugged on. In various colours.

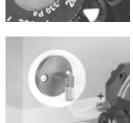




### Easier diagnosis and maintenance

Red pilot lamp, green pilot lamp or red-green LED to indicate the switching status of the pressure switch. Optional mounting hardware set.





# Safe, no-pressure-loss connection with optional set of tubes

Duct connection flange and angular hose connector for no-kink connection of pressure switch and pressure measuring point.



Add-ons for use on insulated and lagged ducts.



Angle connector for boosting air streams which are too low for the adjusting range of the pressure switch.

#### **Technical data**

| Туре     | Adjusting range | Switching hysteresis |
|----------|-----------------|----------------------|
|          | Pa              | Pa                   |
| CPS 330  | 20 - 330        | 8 - 20               |
| CPS 450  | 30 - 500        | 12 - 30              |
| CPS 510  | 100 - 510       | 15 - 30              |
| CPS 800  | 50 - 800        | 18 - 35              |
| CPS 1100 | 100 - 1100      | 20 - 40              |
| CPS 1600 | 400 - 1600      | 35 - 60              |
| CPS 2400 | 200 - 2400      | 40 - 70              |
| CPS 4000 | 500 - 4000      | 60 - 100             |

Microswitch to EN 61058-1, Switching capacity:

CPS: 24 V (min. 0.05 A) to 250 V AC

(max. 5 A, at  $\cos \phi$  0.6 = 1 A)

CPS..G: 12 V (min. 0.01 A) to 250 V AC $(\text{max. 5 A, at } \cos \varphi \text{ 0.6 = 1 A})$ 

12 V (min. 0.01 A) to 48 V DC (max. 1 A)

If the CPS..G has switched a voltage >  $24 \, \text{V}$  and a current >  $0.1 \, \text{A}$  once, the gold plating on the contacts will have been burnt through. It can then only be operated at this power rating or higher power rating.

Contact gap < 3 mm ( $\mu$ ).

Line entrance: M16 × 1.5.

Enclosure to IEC 60529: IP 54.

Safety class II to VDE 0106-1.

Diaphragm:

Tempered LSR diaphragm system.

Max. inlet pressure pe or differential pressure: 5000 Pa.

Ambient temperature:

-15 to +85°C.

Storage and transport temperature:

-40 to +85°C.

Installation position: Arbitrary.

### Type code

| Code | Description      |  |
|------|------------------|--|
| CPS  | Adjusting range: |  |
| 330  | 20 – 330 Pa      |  |
| 450  | 30 - 500 Pa      |  |
| 800  | 50 – 800 Pa      |  |
| 1100 | 100 - 1100 Pa    |  |
| 1600 | 400 – 1600 Pa    |  |
| 2400 | 200 – 2400 Pa    |  |
| 4000 | 500 - 4000 Pa    |  |
| G    | Gold contacts    |  |

#### **Maintenance**

We recommend a function check once a year.

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