Beck. The adjustable differential pressure switches.





Differential pressure switch 930.8x Climair®

with adjustable switching pressure



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

Versions

With this pressure switch the switching pressure can be adjusted without a pressure gauge using a scaled adjustment knob. The switching differential can also be adjusted with a screwdriver.

| Туре | | ment range for switching re to | Switching differential set to | Tolerance for upper and lower switching pressure |
|--------|------|---|-------------------------------------|--|
| 930.80 | 20 | 200 Pa | 10 Pa | ± 15% |
| 930.84 | 30 | 400 Pa | 15 Pa | ± 15% |
| 930.83 | 50 | 500 Pa | 20 Pa | ± 15% |
| 930.85 | 200 | 1000 Pa | 100 Pa | ± 15% |
| 930.86 | 500 | 2500 Pa | 150 Pa | ± 15% |
| 930.87 | 1000 | 4000 Pa | 250 Pa | ± 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.

Maximum operating pressure

10 kPa for all pressure ranges.

Medium

Air, non-combustible and non-aggressive gases.

Temperature range

Medium and ambient temperature from -20° C to $+85^{\circ}$ C. Storage temperature from -40° C to $+85^{\circ}$ 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

With cover 150 g Without cover 110 g

Mechanical working life

Over 10⁶ switching operations.

Electrical rating

| Standard version | max. 1.0 A (0.4 A) / 250 VAC |
|---------------------|------------------------------|
| Low-voltage version | max. 0.1 A / 24 VDC |

Electrical connections

AMP flat plug 6.3 mm x 0.8 mm in accordance with DIN 46244 or push-on screw terminals. Cable conduit PG-11 or M20x1.5 with cable strain relief.

Arrangement of contacts



1 Break contact 2 Operating contact 3 Power supply line

Protection category IP 54 with cover

IP 00 without cover

Approvals

CE marking according to EC Low Voltage Directive 73/23/EEC.

Accessories

See order matrix.

Order matrix

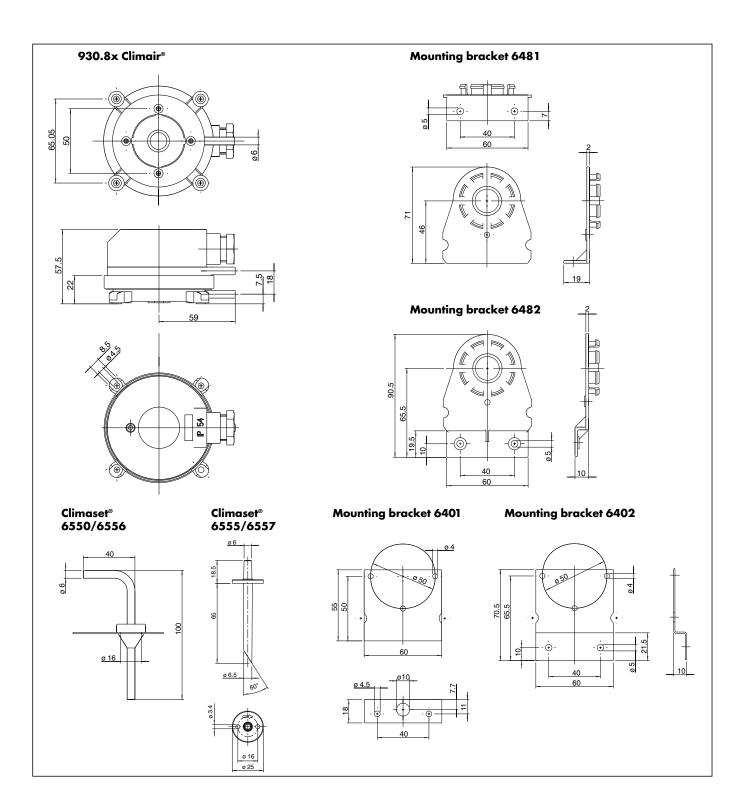
| Pressure ranges | 20 to 200 Pascal (0.2 to 2.0 mbar) 930.8 30 to 400 Pascal (0.3 to 4.0 mbar) 50 to 50 to 500 Pascal (0.5 to 5.0 mbar) 200 to 200 to 1000 Pascal (2.0 to 10.0 mbar) 500 to 500 to 2500 Pascal (5.0 to 25.0 mbar) 1000 to 1000 to 4000 Pascal (10 to 40 mbar) 500 mbar) | 0 4 3 5 6 7 | | | | | | |
|-----------------------------------|---|----------------------------|------------------|---|--------|------------------|-------------|---|
| Switching contacts | gold-plated for low voltages, screw terminals enclosed up to maximum 1.0 A (0.4) / 250 VAC, screw terminals enclosed up to maximum 1.0 A (0.4) / 250 VAC with 6.3x0.8 mm flat plugs gold-plated for low voltages with 6.3x0.8 mm flat plugs | | 1 2 3 4 | | | | | |
| Fitting method Adjustment knob | mounted directly without bracket scale in mbar | | | 2 | 1 | | | |
| Adjusiment knob | scale in Pascal scale in Pascal and inWC | | | | 2 3 | | | |
| IP protection category | IP 54 with cable conduit PG-11 IP 54 with cable conduit M20x1.5 IP 54 with cable conduit NPT1/2″ IP 00 without cover | | | | | 1 2 3 4 | | |
| Packaging | bulk packed, 45 pcs. per carton bulk packed, folding boxes included individually boxed | | | | | | 1 2 3 | |
| Accessories | without accessories with S-shaped metal mounting bracket 6402 with L-shaped metal mounting bracket 6401 with Climaset® 6555 with Climaset® 6550 with S-shaped metal mounting bracket 6402 and Climaset® 6555 with S-shaped metal mounting bracket 6401 and Climaset® 6555 with L-shaped metal mounting bracket 6401 and Climaset® 6555 with L-shaped metal mounting bracket 6401 and Climaset® 6550 with L-shaped metal mounting bracket 6481 with S-shaped snap-on plastic bracket 6482 with S-shaped snap-on plastic bracket 6482 and Climaset® 6555 with S-shaped snap-on plastic bracket 6481 with S-shaped snap-on plastic bracket 6481 and Climaset® 6555 with L-shaped snap-on plastic bracket 6481 and Climaset® 6555 | | | | | | | 1 2 3 4 5 6 7 8 9 A B C D E F |

Accessories

| Metal mounting bracket S-shaped | Article No. 6402 |
|--|------------------|
| Metal mounting bracket L-shaped | Article No. 6401 |
| Snap-on plastic bracket S-shaped | Article No. 6482 |
| Snap-on plastic bracket L-shaped | Article No. 6481 |
| Climaset [®] consisting of 2 m PVC hose and 2 plastic tubes | Article No. 6555 |
| Climaset [®] consisting of 2 m Silicone hose and 2 plastic tubes | Article No. 6557 |
| Climaset [®] consisting of 2 m PVC hose and 2 angled metal pipes | Article No. 6550 |
| Climaset [®] consisting of 2 m Silicone hose and 2 angled metal pipes | Article No. 6556 |
| Set consisting of three push-on screw terminals | Article No. 6415 |
| Plastic tube for Climaset® 6555 | Article No. 6551 |
| Angled metal pipe for Climaset® 6550 | Article No. 6552 |
| Rubber grommet for Climaset® 6550 | Article No. 6553 |
| Roll with 100 m PVC hose | Article No. 6424 |
| PG-11 cable conduit including sealing and counter screw | Article No. 6358 |
| M20x1.5 cable conduit including sealing and counter screw | Article No. 6568 |
| NPT1/2" cable conduit without counter parts | Article No. 6561 |
| Cardbox for single packing (without accessories) | Article No. 6428 |
| Cardbox for single packing (with accessories) | Article No. 6429 |
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