Pressure switches, monitors and limiters

How to monitor and limit pressure very reliably.
Pressure switches from SAUTER provide easy handling and reliable monitoring.

Only the best quality is good enough to monitor and limit pressures, because there can be no compromises when the safety of people and the environment is at stake. This is why we at Sauter manufacture our pressure switches ourselves. These devices protect your liquid, steam or gas plants against excessive pressure – in industrial plants, heating and steam boilers, and for storage, transport and distribution. Pressure switches have proven to be reliable for controlling, monitoring, limiting and securing pressures as they fall and rise in different media. Even after long shutdown periods, the mechanism reacts sensitively and reliably to the slightest pressure differences – and always at exactly the critical moment. Installation, setting and monitoring are also very easy and safe. As flexible and reliable OEMs, we have also been supplying our DS and DFC pressure switches to leading manufacturers of heating systems over the years.

Benefits in brief:-

- Non-corrosive housing
- Clear, reliable display
- Direct mechanical take-up of pressure and transmission via spring bellows
- Pressure sensors are individually tested for seal tightness
- Pressure sensors made of brass and stainless steel for use in aggressive media
- Designed according to Pressure Equipment Directive
- TÜV-certified
- Available with additional test certificates (e.g. GL, LRS etc.)
DFC pressure monitor
To monitor and limit pressure in liquids, gases and vapours. The sturdy light-alloy splash-resistant housing and the vibration-proof snap switch allow them to be used even with the heaviest loads.
These devices are also suitable for steam boilers and hot water systems. The upper and lower switching points can be set separately. The pressure sensors are made of brass for non-aggressive media, or stainless steel for aggressive media.

DSA pressure switches
Can control and monitor rising pressures without special requirements.

DSB/DSF pressure monitors
To control and monitor pressures.
• TÜV-tested as specially designed pressure monitors and pressure limiters.
• Functions with falling and rising pressure.

DSL/DSH pressure limiters
• TÜV-tested for falling and rising pressure.

Features of all of the above products:
• Electrical connection with plug
• Control and monitoring without auxiliary power

Liquid, gas or steam: **safety** is guaranteed.
For the most demanding requirements: the DFC.
DFC switches, limiters and monitors meet international safety regulations and are approved by major shipping registering companies (including German Lloyd).
Operation is simple and safe, switching points can be set clearly and conveniently – independently of each other on separate scales. The adjusters can be sealed.
Easy access to connection terminals ensures that electrical wiring and testing is convenient. Long lifetimes are guaranteed by highly reliable technology and sturdy design. The housing is made of aluminium, and the cover is in impact-resistant transparent plastic. For a higher degree of protection, the cover is made of aluminium with a glass window.

Areas of usage for the DFC
• Energy supply
• Industrial production
• Process engineering
• Transport and storage of liquids and gases
• Water supply
• Shipbuilding
• Plant engineering

Exclusively from Sauter: switching points that can be adjusted separately.
The two switching points can easily be set separately to meet individual requirements. On request, we will make the settings in our Basle factory. So with just one device, you have precise control over the upper and lower switching points.
Low or high pressure: this is the standard for quality and reliability.

Certification and extensive experience – SAUTER, the specialist for pressure switches, guarantees reliability.

A good product is one thing. But where safety is involved, more is needed: the certainty that you have the right partner by your side. Sauter is backed by over fifty years’ experience – as confirmed by the TÜV. It’s no coincidence that all the leading boiler manufacturers work with us.

Function profile

• Pressure controllers and monitors for rising and falling pressures
• Safety pressure limiters with mechanical lock for rising and falling pressures

Conformance

The pressure switches are tested for liquids, vapours and gases as per Pressure VdTÜV 100/1 and DIN 3398 Part 4, and are designed according to the Pressure Equipment Directive, 97/23/EC Cat. IV. Likewise, they conform to the Low Voltage Directive, 2006/95/EC and the EMC Directive, 2004/108/EC. These devices can be used as components according to the definition in the Machinery Directive, 89/37/EC, Annex II B.
### DSA, DSB/DSF, DSL/DSH, DFC

<table>
<thead>
<tr>
<th>Type</th>
<th>DSA</th>
<th>DSB/DSF</th>
<th>DSL/DSH</th>
<th>DFC</th>
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<td>Monitor (limiter)</td>
<td>Limiter</td>
<td>Switch (W/B: monitor, limiter)</td>
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<tr>
<td>Sensor material</td>
<td>Brass</td>
<td>Brass or stainless steel</td>
<td>Brass or stainless steel</td>
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<td>Pressure ranges</td>
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<tr>
<td>Adjustable setpoint</td>
<td>0.5...10 bar</td>
<td>-1...40 bar</td>
<td>-1...40 bar</td>
<td>-1...80 bar</td>
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<td>Adjustable switching difference</td>
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<tr>
<td>Max. pressure</td>
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<td>60 bar</td>
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<td>105 bar</td>
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<td>110 °C</td>
<td>110 °C</td>
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<tr>
<td>Permitted ambient temperature</td>
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<td>-20...70 °C</td>
<td>-40...70 °C</td>
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<td>Pressure switch</td>
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<td>DWFS (SDBF)</td>
<td>SDBF/SDB</td>
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</table>
|                            | DIN 3398-4 | DIN 3398-4 | DIN 3398-4 | DIN 3398-4, 97/23/EC |}

Contact load: 10 A (400 V~)
Pressure connection: G½”
*with external electric lock
Degree of protection: up to IP 67
Electrical connection via plug.
Protection class: I (IEC 60730);
Tested to VdTÜV Pressure 100/1

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