Pressure Switches

Product series DSA, DSB, DSC, DSD

For oil, fluid grease and grease
For use in SKF centralized lubrication systems, hydraulic and compressed-air systems

SKF pressure switches monitor the pressure of a centralized lubrication system to assess and help to ensure its proper function. Important monitoring parameters in an intermittently operated centralized lubrication system with SKF MonoFlex single-line distributors are pressure buildup, pressure head, and pressure reduction.

In SKF CircOil circulating-oil lubrication systems, the pressure of the pipe system and thereby the function of the centralized lubrication system are monitored.

Depending on the design, SKF pressure switches can be used for oil, fluid greases of NLGI Grades 000, 00, and 0, and NLGI Grade 1-2 greases.

SKF pressure switches are available as NC contacts, NO-contacts, or changeover contacts and monitor:

- Function of a lubrication pump unit (pressure buildup and reduction)
- Function of a directional control valve (zoned centralized lubrication systems)
- Function of a filter (degree of contamination)
- Piping (leakproof closure, etc.)
Product group DSx

Overview

Product series DSA

- DSA pressure switch
  - Electrical connection as DIN plug in middle

Product series DSB

- DSB pressure switches
- DSB pressure switch with measurement connector for a test gauge
- DSB pressure switches
  - Dual design with pressure gauge

Product series DSC

- Pressure switch DSC1
- Pressure switch DSC2
- Pressure switch DSC3

Product series DSD

- Pressure switch DSD with screwed contacts
- Pressure switch DSD with circular connector
- Pressure switch DSD with rectangular plug connector
## Product group DSx

### Selection table

<table>
<thead>
<tr>
<th>Product range</th>
<th>Lubricant</th>
<th>Switching pressure</th>
<th>Electrical limit values</th>
<th>Temperature range</th>
<th>Contact type / signal output</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product series</td>
<td>Oil</td>
<td>Fluid grease</td>
<td>Grease</td>
<td>[bar]</td>
<td>[°C]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSA</td>
<td>•</td>
<td>•</td>
<td>1 – 30</td>
<td>250 V AC / 30 V DC</td>
<td>+10 to 60</td>
<td>4</td>
</tr>
<tr>
<td>DSB</td>
<td>•</td>
<td>•</td>
<td>20 – 300</td>
<td>30 V AC / 36 V DC</td>
<td>–25 to +80</td>
<td>6</td>
</tr>
<tr>
<td>DSC</td>
<td>•</td>
<td>•</td>
<td>0 – 100</td>
<td>9 – 35 V DC</td>
<td>–10 to +80</td>
<td>10</td>
</tr>
<tr>
<td>DSD</td>
<td>•</td>
<td>•</td>
<td>0.5 – 45</td>
<td>250 V AC / 36 V DC</td>
<td>–10 to +100</td>
<td>13</td>
</tr>
</tbody>
</table>

**An important criterion for the proper function of a centralized lubrication system is the period of time between starting the lubrication pump unit or the directional control valve when filling the system and the time at which the pressure switch responds. Similarly, an important criterion of pressure relief of the centralized lubrication system is the time between switching off the device and achieving a minimum residual pressure. The control unit or the machine control unit evaluates the electrical signal from the pressure switch. This data can be used for purposes such as warning messages or switching the machine off.**

**SKF pressure switches are available in a wide range of versions. They can therefore be used in many applications and fields, for example in machine tools and printing machines and the wind, vehicle, steel and heavy industries.**

**DSA pressure switches:**
- For oil, fluid grease, and oiled compressed air
- Reliable switching function using microswitches
- Changeover contact
- Available with DIN or M12x1 plug
- Any mounting position
- Gold-plated contacts
- Membrane material FKM (FPM)
- Used in SKF MonoFlex single-line systems

**DSB pressure switches:**
- For grease
- Adaptable to lubricant distributors of product series VR due to same hole pattern, same wall distance, and same connections (G1/4)
- Changeover contact
- Gold-plated contacts
- No grease bleeding at measuring point, as the pressure switch permits continuous lubricant flow without dead space
- Used in SKF MonoFlex single-line systems and SKF DuoFlex dual-line systems

**DSC pressure switches:**
- For oil and fluid grease
- Various pressure units selectable
- Dual output with digital display for pressure and switching point
- Used in SKF MonoFlex single-line systems

**DSD pressure switches:**
- For oil and fluid grease
- Cost-effective and space-saving
- Available as NO-contact, NC-contact or CO-contact
- Used in SKF MonoFlex single-line systems

---

**CAUTION**

The important information on product usage located on the back cover applies to all systems described in this brochure.

---

**Note**
During installation, ensure that both the pressure switch is attached and the connected piping are installed without stress.
SKF pressure switches of the DSA series are inexpensive mechanical diaphragm pressure switches. The microswitch is designed as a changeover switch and can therefore be used as both a normally closed contact (NC) and a normally open contact (NO). They are available for rising and falling pressures from 1 to 30 bar and have non-adjustable increments.

**Design**

The pressure cell containing the membrane and the pressure plunger is assembled with the microswitch in a compact plastic housing. The housing contains mounting feet so that the pressure switch can be mounted in any position. The electrical contacts of the microswitch are gold-plated. The membrane is made of FKM (FPM). The pressure switch housing is made of glass fiber-reinforced polyamide.

The electrical connection is established with an M12x1 circular plug or a DIN plug per DIN EN 175301-803A. Its position on the housing can be selected according to the specifics of the installation. The hydraulic connection is available as a plug connector or a solderless pipe union (DIN 3862) for pipes with diameters of 6 mm.

---

### DSA pressure switches

**DSA1-...-1M1A**

**DSA1-...-1L1A**

**DSA1-...-1M2A**

---

1) **Pipe thread with counterbore for solderless pipe union, pipe ø 6**

2) **For connector plugs per DIN EN 175301-803A and circular plugs, cable sockets must be ordered separately; see brochure 1-1730-EN.**
DSA pressure switches

Order example

**Order code**

<table>
<thead>
<tr>
<th>D</th>
<th>S</th>
<th>A</th>
<th>1</th>
<th>-</th>
<th>W</th>
<th>-</th>
<th>A</th>
</tr>
</thead>
</table>

Pressure switch DS
Pressure switch type A

Switching direction
S = switch on increasing pressure
F = switch on decreasing pressure

Rated switching pressure
01 = 1 bar, 02 = 2 bar, 03 = 3 bar, 05 = 5 bar,
08 = 8 bar, 12 = 12 bar, 20 = 20 bar, 25 = 25 bar, 30 = 30 bar

Type of contact
W = Changeover

Pressure port
1 = DIN 3862, ø6 mm for solderless pipe union
2 = Plug connector for pipe ø6 mm

Position of electrical connection
M = Middle
R = Right
L = Left

Electrical connection
1 = DIN EN 175301-803 A (DIN plug)
2 = M12×1 circular plug (only for design with electrical connection in center)

Switching voltage, max.
A = 250 V AC, 30 V DC

Technical data

- **Rated switching pressure** ................. 1 to 30 bar
- **Switching pressure tolerance** .............. 1 bar +0.3; 2 bar +0.5; 3 bar +0.5; 5 bar ±0.5;
  ≥ 8 bar ±0.5/-1.5
- **Permissible operating pressure** 1) ........ 45 bar
- **Contact rating, max.** .................. 125 VA
- **Switching voltage, max.** .............. 250 V AC / 30 V DC
- **Switched current** .................. 2 mA min. / 300 mA max.
- **Safety class IEC 61140** ............. II
- **Operating temperature** .............. +10 to 60 °C
- **Type of contact** .................. Changeover
- **Switching rate, max.** .............. 30 per min
- **Mechanical service life** ............... 5 x 10^6 switching cycles
- **Protection class (with cable box)** ...... IP 65
- **Housing material** ................ Pa6 6GF30
- **Contact material / switch module** ...... AuAg25Pt6
- **Membrane material** ................ FKM (FPM)
- **Lubricant** .......................... Oil and fluid grease of NLGI Grades 000, 00, 0
- **Mounting position** .................. Any

1) A pressure regulating valve must be installed in the system to prevent operating pressure from exceeding the permissible level.
DSB pressure switches

SKF pressure switches of product series DSB are mechanical piston pressure switches that are specially designed for use with NLGI Grade 1-2 greases. The location of the actuating piston inside the pressure switch housing helps to ensure a continuous exchange of grease around the measuring point (pressurization point between grease and actuating piston). This reliably prevents the same grease from being pressurized repeatedly, which could cause grease bleeding (separation of the soap skeleton of the grease from the stored oil). Pressure switches of product series DSB are designed for corrosivity category C3 or C5M per ISO 12944 and are certified by Germanischer Lloyd.

Design
Based on the application, the pressure switch can be configured as a single or double design and with or without a measurement connector. The microswitch is designed as a changeover contact. This allows the circuitry to operate as an NC contact or NO-contact.

DSB pressure switches are available for rising and falling pressures from 20 to 300 bar in 10-bar increments. The pressure switch housing and the mounting rail are made of aluminum. The electrical contacts of the microswitch are gold-plated. The electrical connection is established via a DIN plug per DIN EN 175301-803A. The hydraulic connection is designed as a female thread G1/4.

The fastening holes, wall distance, and hydraulic connections are identical with SKF MonoFlex single-line distributors of product series V.
DSB pressure switches

Configurator

<table>
<thead>
<tr>
<th>Order code</th>
<th>D</th>
<th>S</th>
<th>B</th>
<th>1</th>
<th>-</th>
<th>-</th>
<th>-</th>
<th>1</th>
<th>-</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
</table>

- **Pressure switch DS**
- **Pressure switch type B**
  (for grease, 20–300 bar)
- **Pressure switch I**
  - S = switch on increasing pressure
  - F = switching on decreasing pressure
- **Pressure switch I**
  - 02 = 20 bar, 03 = 30 bar, 04 = 40 ... (in 10-bar increments up to) 30 = 300 bar
- **Pressure switch II**
  - 0 = no pressure switch
  - S = switch on increasing pressure
  - F = switching on decreasing pressure
- **Pressure switch II**
  - 00 = no pressure switch
  - 02 = 20 bar, 03 = 30 bar, 04 = 40 ... (in 10-bar increments up to) 30 = 300 bar
- **Measurement connector**
  - A = measurement connector for pressure gauge M16×2
  - G = with pressure gauge 250 bar
  - H = with pressure gauge 400 bar
  - X = no measurement connector

**Electrical connection**
- 1 = DIN EN 175301-803 A (DIN plug)

**Design**
- A = standard, based on corrosivity category C3 per ISO 12944, certified by Germanischer Lloyd
- B = based on corrosivity category C5M per ISO 12944, certified by Germanischer Lloyd, suitable for offshore applications

**Design key**
- 01 = basic design (with thread G1/4)

**Order example**

**DSB1-S25000H-1A-01**
- DSB1 pressure switch with a pressure switch that switches on rising pressure
- Pressure switch 250 bar
- Pressure gauge 400 bar
- Standard design, based on corrosivity category C3 per ISO 12944

**Electrical connection for DSB1**

* Drawing shows non-pressurized condition
DSB pressure switches

Installation drawings

**Technical data**

- **Switching pressure, max.** 300 bar
- **Switching pressure tolerance** ±15% < 100 bar; ±10% > 100 bar
- **Permissible operating pressure** Max. 315 bar
- **Breaking capacity, ohm load** Max. 1.2 VA
- **Operating voltage** Max. 30 V AC / 36 V DC
- **Operating current** Max. 50 mA, min. 1 mA
- **Operating temperature** –25 to +80 °C
- **Type of contact** Changeover
- **Mechanical service life** 10⁵ switching cycles
- **Protection class per DIN EN 60529** IP65

- **Housing material** Aluminum, anodized
- **Contact material** Silver alloy, hard gold plating
- **Connector socket 3+PE** DIN EN 175 301-803 A
- **Compatible electr. line** Ø4.5 to 7 mm
- **Permissible operating pressure** Max. 315 bar
- **Certification** Germanischer Lloyd (GL)
- **Breaking capacity, ohm load** Max. 1.2 VA
- **Operating voltage** Max. 30 V AC / 36 V DC
- **Operating current** Max. 50 mA, min. 1 mA
- **Operating temperature** –25 to +80 °C
- **Type of contact** Changeover
- **Mechanical service life** 10⁵ switching cycles
- **Protection class per DIN EN 60529** IP65

- **Housing material** Aluminum, anodized
- **Contact material** Silver alloy, hard gold plating
- **Connector socket 3+PE** DIN EN 175 301-803 A
- **Compatible electr. line** Ø4.5 to 7 mm
- **Permissible operating pressure** Max. 315 bar
- **Certification** Germanischer Lloyd (GL)
- **Breaking capacity, ohm load** Max. 1.2 VA
- **Operating voltage** Max. 30 V AC / 36 V DC
- **Operating current** Max. 50 mA, min. 1 mA
- **Operating temperature** –25 to +80 °C
- **Type of contact** Changeover
- **Mechanical service life** 10⁵ switching cycles
- **Protection class per DIN EN 60529** IP65
DSB pressure switches

Accessories

<table>
<thead>
<tr>
<th>Order number</th>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>169-125-003</td>
<td>6</td>
<td>Test gauge 250 bar (with fitting for measurement connector)</td>
</tr>
<tr>
<td>169-140-003</td>
<td>6</td>
<td>Test gauge 400 bar (with fitting for measurement connector)</td>
</tr>
<tr>
<td>471-010-161</td>
<td>7</td>
<td>Threaded socket for pipe 10 mm (for connecting DSB1 and VR distributors)</td>
</tr>
<tr>
<td>441-110-162</td>
<td>7</td>
<td>Straight connector (for connecting DSB1 and VR distributors)</td>
</tr>
</tbody>
</table>

Test gauge 250 bar (with fitting and sealing ring) 169-125-000.U1
Test gauge 400 bar (with fitting and sealing ring) 169-140-001.U1
Measurement connector 441-100-112
Connector socket 179-990-803

1st step: Screw the straight connector (A) tight into the pressure switch. Remove the union nut from the threaded socket (B). Screw the threaded socket (B) tight into the VR lubricant distributor.

2nd step: Screw both components together tight using the union nut of the straight connector (A) of the pressure switch.

Note
To obtain optimum performance from the pressure switch in a centralized lubrication system, the pressure switch must always be placed before the last distributor.
DSC pressure switches

Product series DSC consists of electronic pressure switches with integrated digital display for relative pressure measurement. They are available in three different designs. They are used primarily for pressure monitoring; depending on the design, they can also assume control functions. Pressure switch points, pressure indication, and the switching logic can be configured and programmed easily.

The system pressure can be indicated in the pressure units bar, Psi and Mpa. Two independently programmable signal outputs can be used as normally open (NO) and normally closed (NC) contacts.

**Product series DSC1**

**Design**

DSC1 pressure switches are suitable for rising and falling pressure from 0 to 40 bar in 0.2-bar increments. Their housing is made of stainless steel and the control panel is made of polycarbonate. The values are shown by LEDs on a backlit, four-digit liquid crystal display. The electrical connection is established via an M12x1 plug connector (IP 65) and the hydraulic connection is established via a female thread of size G 1/8. The DSC1 can operate in switching point, hysteresis, and window function modes and can be separately programmed for each output.

**Features**

- Encodable access protection
- Digital and analog output
- UL certification

**Product series DSC2**

**Design**

DSC2 pressure switches are suitable for rising and falling pressures from 0 to 100 bar in 0.5-bar increments. Their housing is made of aluminum and stainless steel. The control panel is made of a polyester film. The display is a four-digit digital display that indicates switching with LEDs. The electrical connection is established via an M12x1 plug connector (IP 67) and the hydraulic connection is established via a T connector with two female threads of size G 1/8. This allows the DSC2 to be integrated ideally into a lubrication line. It can be operated in switching point or window function modes and can be separately programmed for each output.

**Features**

- Diagnostic output based on the DESINA specification
- UL certification

**Product series DSC3**

DSC3 pressure switches made of plastic are suitable for rising and falling pressures from 1 to 100 bar in 0.5-bar increments. They have a pivoted, four-digit digital display. The electrical connection is established via an M12x1 plug connector (IP 67) and the hydraulic connection is established via a female thread of size G 1/8. The DSC3 can operate in switching point, hysteresis, and window function modes and can be separately programmed for each output.

**Features**

- Programming lock to protect against unauthorized adjustment of the device
- Switching displayed using LEDs
# DSC pressure switches

## Technical data

<table>
<thead>
<tr>
<th>Order No.</th>
<th>DSC1-A040A-1A2A</th>
<th>DSC2-A100E-2A2B</th>
<th>DSC3-A100K-3A2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated pressure range</td>
<td>1–40 bar in 0.2 increments</td>
<td>0–100 bar in 0.5 increments</td>
<td>1–100 bar in 0.5 increments</td>
</tr>
<tr>
<td>Permissible overpressure</td>
<td>100 bar</td>
<td>300 bar</td>
<td>300 bar</td>
</tr>
<tr>
<td>Burst pressure</td>
<td>&gt;150 bar</td>
<td>&gt;650 bar</td>
<td>&gt;500 bar</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>–10 to +80 °C</td>
<td>20 g (10–2000 Hz)</td>
<td>10 g (5–500 Hz)</td>
</tr>
<tr>
<td>Vibration resistance, max.</td>
<td>10 g (5–500 Hz)</td>
<td>100×10&lt;sup&gt;6&lt;/sup&gt; pressure changes</td>
<td>100×10&lt;sup&gt;6&lt;/sup&gt; pressure changes</td>
</tr>
<tr>
<td>Service life, max.</td>
<td>100×10&lt;sup&gt;6&lt;/sup&gt; pressure changes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class</td>
<td>IP65</td>
<td>IP67</td>
<td>IP67</td>
</tr>
<tr>
<td>Material</td>
<td>Aluminum</td>
<td>Stainless steel</td>
<td>Plastic</td>
</tr>
<tr>
<td>Mounting position</td>
<td>Any</td>
<td>Any</td>
<td>Any</td>
</tr>
</tbody>
</table>

### Electrical characteristics

| Operating voltage | 10–32 V DC | 18–30 V DC | 9–35 V DC |
| Power consumption, max. | 50 mA | 35 mA | 35 mA |
| Current-carrying capacity | 0.5 A | 0.15 A | 1.2 A |
| Number of signal outputs | 2 | 2 | 2 |
| Type of signal outputs | PNP transistor stages | PNP/NPN | PNP transistor stages |
| Electrical connection M12×1 | 5-pin | 4-pin | 4-pin |
| Pressure port | G1/8 | G1/4 | G1/8 |

---

### Installation drawings

#### DSC1-A040A-1A2A

[Diagram of DSC1-A040A-1A2A]

#### Electrical connection for DSC1

[Diagram of electrical connection]

#### DSC1 connector pin assignment

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Wire color</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(+)</td>
<td>Brown (BN)</td>
</tr>
<tr>
<td>2</td>
<td>Output 2</td>
<td>White (WH)</td>
</tr>
<tr>
<td>3</td>
<td>(−)</td>
<td>Blue (BU)</td>
</tr>
<tr>
<td>4</td>
<td>Output 1</td>
<td>Black (BK)</td>
</tr>
<tr>
<td>5</td>
<td>PE</td>
<td>Green/yellow (GR/YE)</td>
</tr>
</tbody>
</table>

*When using a customized cable with cable socket, see brochure 1-1730-EN.*
DSC pressure switches

Installation drawings

DSC2-A100E-2A2B

Electrical connection for DSC2

DSC2 connector pin assignment

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Wire color *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(+)</td>
<td>Brown (BN)</td>
</tr>
<tr>
<td>2</td>
<td>Output 2</td>
<td>White (WH)</td>
</tr>
<tr>
<td>3</td>
<td>(–)</td>
<td>Blue (BU)</td>
</tr>
<tr>
<td>4</td>
<td>Output 1</td>
<td>Black (BK)</td>
</tr>
</tbody>
</table>

*) When using a customized cable with cable socket, see brochure 1-1730-EN.

Electrical connection for DSC3

DSC3 connector pin assignment

<table>
<thead>
<tr>
<th>Pin</th>
<th>Function</th>
<th>Wire color *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(+)</td>
<td>Brown (BN)</td>
</tr>
<tr>
<td>2</td>
<td>Output 2</td>
<td>White (WH)</td>
</tr>
<tr>
<td>3</td>
<td>(–)</td>
<td>Blue (BU)</td>
</tr>
<tr>
<td>4</td>
<td>Output 1</td>
<td>Black (BK)</td>
</tr>
</tbody>
</table>

*) When using a customized cable with cable socket, see brochure 1-1730-EN.

1) Counterbore per DIN 974-1 (2 M5 fastening bolts and lock washers are supplied detached)
DSD pressure switches

Product series DSD consists of mechanical diaphragm pressure switches. They are available as normally open (NO) or normally closed (NC) contacts for a pressure range from 0.5 to 45 bar with fixed increments. Their electrical contacts are silver-coated, the membranes are made of NBR, and the pressure switch housing is made of galvanized steel (Cr6-free). The electrical connection is established via screwed contacts, tab connectors, circular connectors, or rectangular plug connectors. The hydraulic connection is designed as a male thread M10x1 taper.

Function of NO-contact
The membrane (2) is pressurized through the pressure port (1). If the resulting pressure is greater than the preloaded spring force of the pressure spring (3), a pressure plunger (4) that carries the contact washer (5) moves to the opposing contact (6) and closes the circuit.

If the pressure is reduced by the amount of hysteresis, the switch opens again. On an NC contact, contacts are made in the opposite way.

Technical data

Rated switching pressure .......................... 0.5 – 45 bar
Switching pressure tolerance for pressure switch 1)
  with screwed contacts ......................... 0.5 bar +0.3/-0.1; 2–8 bar +0.5/-1.5;
                                             12 bar +0.5/-1.5; 20 bar +2/-1; 28 bar +2/-1; 45 bar ±2
  with tab connector/screwed contacts,
  circular and rectangular plug connector .... 0.5 bar ±0.1; 2–3 bar ±0.3; 8 bar ±0.5;
                                             12–20 bar ±1; 28–45 bar ±2
Max. permiss. operating pressure, static/dynamic 300 bar/150 bar
Max. contact rating for pressure switch
  with screwed contacts .......................... 90 VA
  with tab connector/screwed contacts and
  circular connector ............................. 18 VA
  with rectangular plug connector ............. 100 VA
Max. switching voltage/switched current 2) for pressure switch
  with screwed contacts .......................... 36 V DC / 2.5 A
  with tab connector/screwed contacts and
  circular connector ............................. 36 V DC / 0.5 A
  with rectangular plug connector ............. 36 V DC / 2.5 A
                                             250 V AC / 5 A
Operating temperature for pressure switch
  with screwed contacts .......................... –30 to +100 °C
  with tab connector/screwed contacts, circular and rectangular plug connector ... –10 to +100 °C
Type of contact for pressure switch
  with screwed contacts, circular and
  tab connector/screwed contacts .......... NC- or NO-contact
  with rectangular plug connector .......... CO-contact
Max. Switching rate for pressure switch 3)
  with screwed contacts .......................... 60 cycles/min
  with tab connector/screwed contacts and
  circular connector ............................. 5 (200) cycles/min
  with rectangular plug connector ............. 5 (60) cycles/min
Mechanical service life .......................... 10k switching cycles
Type of protection housing ....................... IP 65
Type of protection connection terminals ....... IP 00
Material
  Membrane material ............................. NBR
  Housing material ............................. Steel, galvanized, Cr6-free
  Contact material / switch module ............ versilbert
  Lubricant .......................... Oil and fluid grease of NLGI Grades 000, 00, 0
  Mounting position ............................. Any

1) Tolerances at +20°C
2) Resistive load
3) Consider EMC measures at more than 5 cycles/min.
DSD pressure switches

Configurator

<table>
<thead>
<tr>
<th>Order code</th>
<th>D</th>
<th>S</th>
<th>D</th>
<th>-</th>
<th>A</th>
<th>N</th>
<th>-</th>
<th>A</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure switch DSD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure switch type D</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturer marking</td>
<td>1 = Marking 1 (only with electrical connection 1)</td>
<td>3 = Marking 3 (only with electrical connection 2–4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rated switching pressure</td>
<td>0005 = 0.5 bar, 0020 = 2 bar, 0030 = 3 bar, 0080 = 8 bar</td>
<td>0120 = 12 bar, 0200 = 20 bar, 0280 = 28 bar, 0450 = 45 bar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membrane material NBR = N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of contact</td>
<td>NC = Closed (only with electrical connection 1–3 available)</td>
<td>NO = Open (only with electrical connection 1–3 available)</td>
<td>CO = Changeover (only with electrical connection 4 available)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact material</td>
<td>A = Silver contacts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pipe thread</td>
<td>1 = M10×1 tap.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrical connection</td>
<td>1 = Screwed contacts M3</td>
<td>2 = tab connector 6.3×0.8/screwed contacts M3</td>
<td>3 = circular connector M12×1</td>
<td>4 = rectangular plug connector DIN EN 175301-803-A (only as changeover (CO) available)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Order example
DSD1-A0005-NOA11
• Pressure switch type D
• Manufacturer marking 1
• Typ A
• Switching pressure 0.5 bar
• Membrane material NBR
• NC-contact
• Pipe thread M10×1 tap.
• Electrical connection screwed contacts
DSD pressure switches

Installation drawings

1) Cap, order No. 898-420-001, is ordered separately.

Electrical connection DSD circular connector (3)

Electrical connection DSD rectangular plug connector (4)
Important information on product usage

SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1,013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Further brochures:

1-0103-EN  Fittings and Accessories
1-1730-EN  Electrical Plug-In Connections
1-9201-EN  Transport of Lubricants in Centralized Lubrication Systems

This brochure replaces brochure 1-1701-1-EN.

SKF and Lincoln lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1,013 mbar) by more than 0,5 bar at their maximum permissible temperature.

Further brochures:

1-0103-EN  Fittings and Accessories
1-1730-EN  Electrical Plug-In Connections
1-9201-EN  Transport of Lubricants in Centralized Lubrication Systems

This brochure replaces brochure 1-1701-1-EN.