

Pressure sensor DSD

Digital pressure switch for oil and fluid grease systems



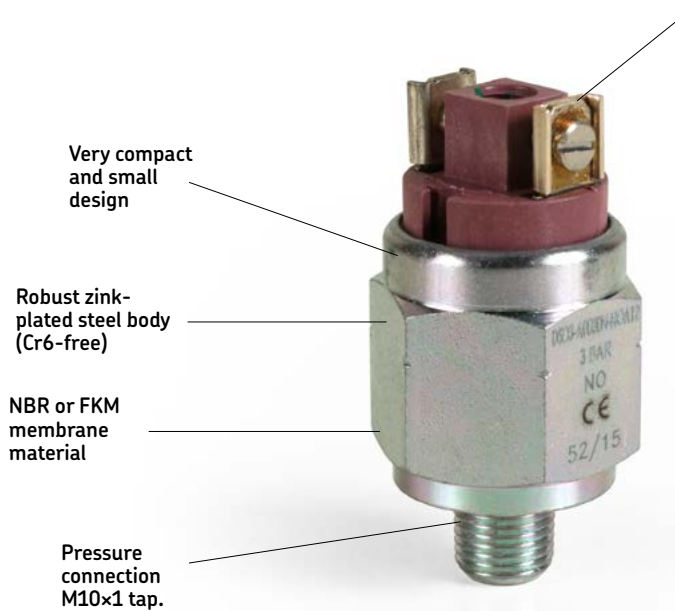
	Oil or fluid grease up to NLGI 0
	max. 150 bar (2 175 psi)
	-25 to +100 °C (-13 to 212 °F)
	M10×1 tap. connection thread
	M3 screw, tab connector, M12×1 or cubic plug



Applications

- Machine tools
- Printing machines
- Minerals and mining
- Food and beverage
- Wind turbines
- Service vehicles

Product information



3 possible electrical connection options:

- Combination plug - tab connector 6,3 × 0,8 or M3 screwed contacts (DSD3-A...A12)
- Cubic plug DIN EN 175301-803-A (DSD3-A...A14)
- M12×1 (DSD3-A...A13)



Description

DSD sensors are single, mechanical-diaphragm pressure switches. They are used for pressure monitoring and vary in regard of preadjusted pressures, electrical connections and dimensions. Under pressure, a pressure plunger carries the contact washer and moves it to the opposing contact and closes the electrical 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. In single-line systems, DSD sensors can be integrated before the last metering device at the end of the lubrication line.

Features and benefits

- Very small and compact design
- Available for a pressure rating from 0 to 45 bar (0 to 653 psi) in fixed increments
- Electrical connection is established via screwed contacts, tab connectors, circular or cubic plug connectors
- Pressure monitoring, dependent upon the mechanical design of resulting pressure and preloaded spring force of the pressure spring
- Mechanical switch can be used as both a normally closed contact (NC) and a normally open contact (NO)

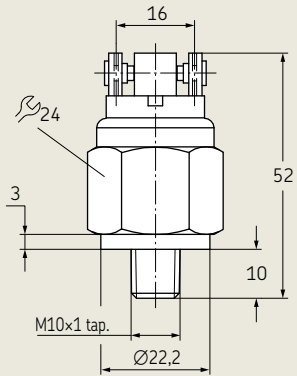
Technical data

Function principle	digital pressure switch
Lubricant	oil and fluid grease NLGI 000, 00, 0
Operating temperature:	
FKM membrane	-10 to +100 °C; -13 to +212 °F
NBR membrane	-25 to +100 °C; 14 to 212 °F
Operating pressure	max. 150 bar; max. 2 175 psi
Overpressure	max. 300 bar; max. 4 350 psi
Switching pressure	0,5 to 45 bar; 7.25 to 653 psi
Switch type	mechanical diaphragm pressure switch
Contact type	NO, NC (change-over with cubic plug connector only)
Contact rating:	
DSD3-A...A12/DSD3-A...A14	100 VA
DSD3-A...A13	24 VA
Switching voltage/current:	
DSD3-A...A12	48V DC/AC 2,5 A (min. 20 mA)
DSD3-A...A13	48V DC/AC 0,5 A (min. 20 mA)
DSD3-A...A14	30V DC 2,5 A/250V AC 5 A (min. 20 mA)
Electrical connection:	
DSD3-A...A12	combination plug - tab connector 6,3 × 0,8 mm or M3 screw
DSD3-A...A13	M12×1 plug
DSD3-A...A14	cubic plug DIN EN 175301-803-A
Pressure port	M10×1 tapered
Materials:	
Housing	steel, galvanized, Cr6-free
Contact	silver plated
Membrane	NBR or FKM
Protection class (housing)	IP 65
Dimensions, Ø × h:	
DSD3-A...A12	26,75 × 52 mm; 1.05 × 2.05 in
DSD3-A...A13	26,75 × 71 mm; 1.05 × 2.79 in
DSD3-A...A14 ¹⁾	26,75 × 85 mm; 1.05 × 3.34 in
Mounting position	any

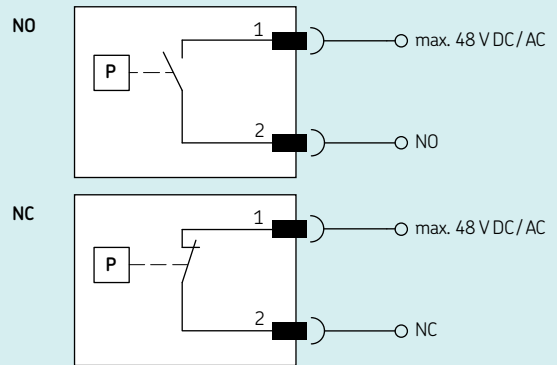
¹⁾ Dimensions without cubic plug

Drawings and plans

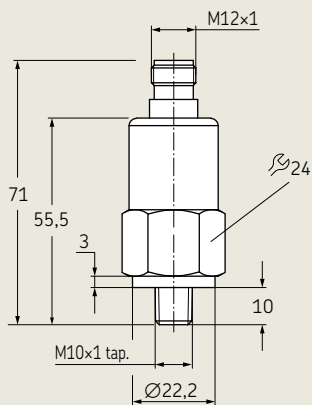
DSD3-A...A12



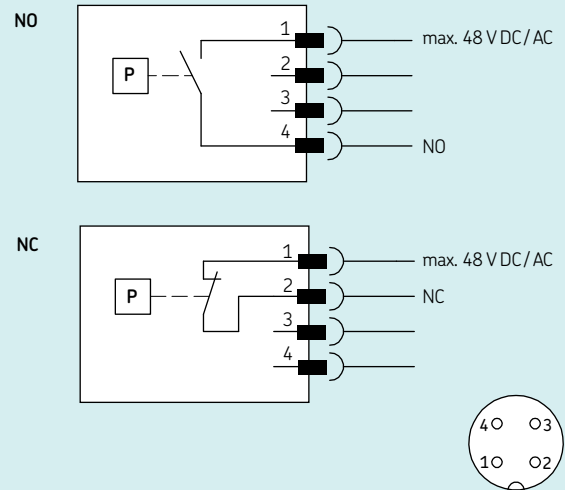
DSD3-A...A12



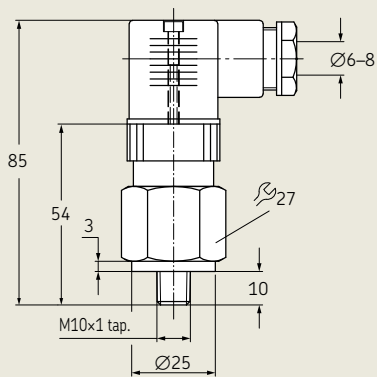
DSD3-A...A13



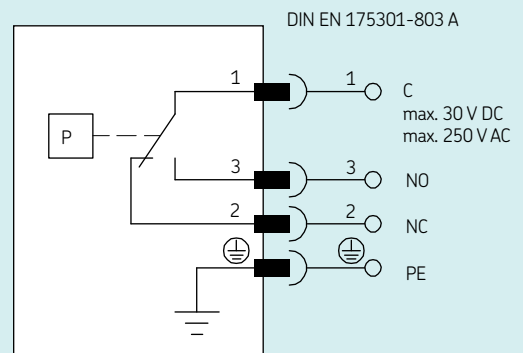
DSD3-A...A13



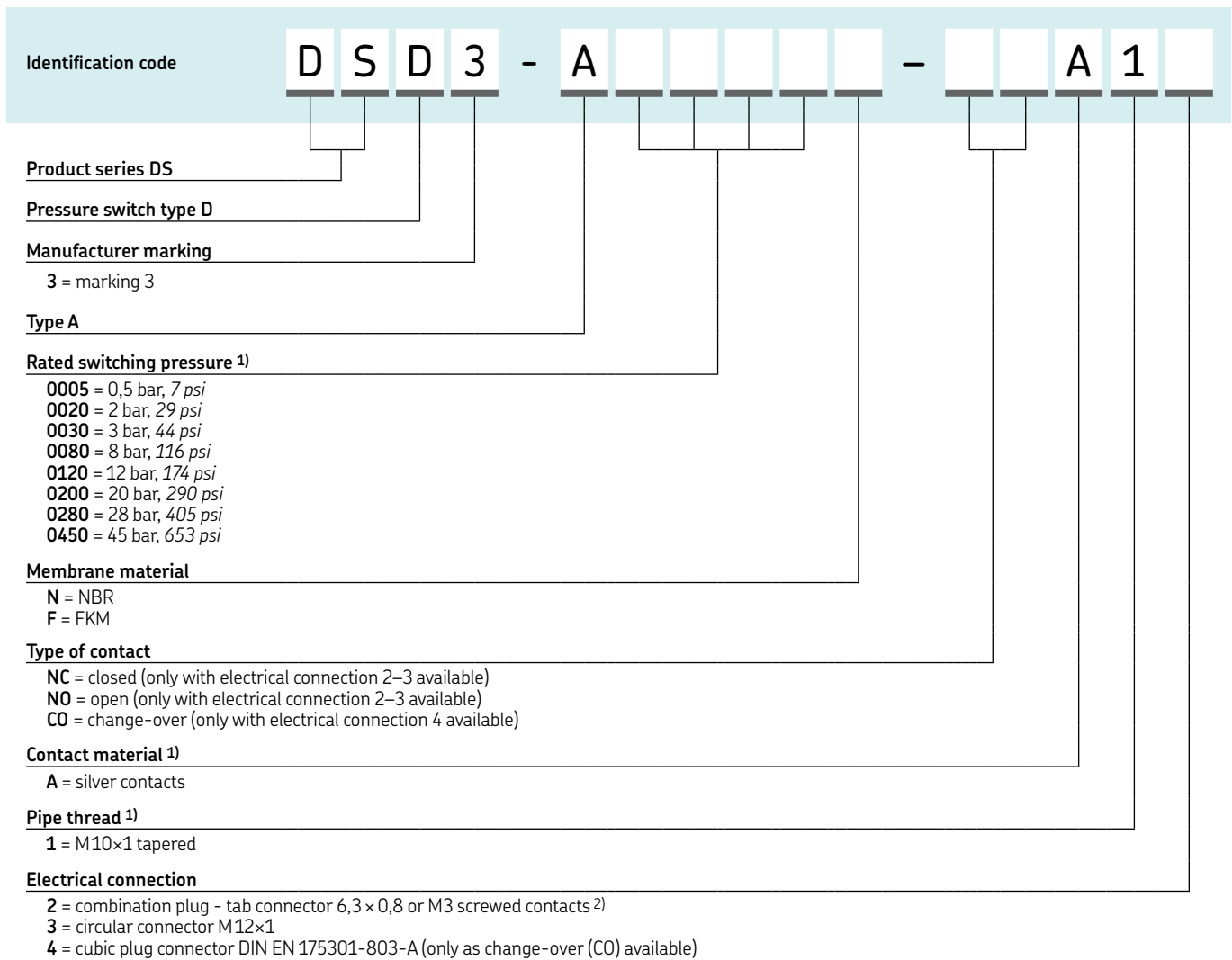
DSD3-A...A14



DSD3-A...A14



Order information



1) More versions available on request.
2) Protection cap 898-420-001 to be ordered separately

skf.com/lubrication

© SKF and Lincoln are registered trademarks of the SKF Group.

© SKF Group 2025

The contents of this publication are the copyright of the publisher and may not be reproduced (even extracts) unless prior written permission is granted. Every care has been taken to ensure the accuracy of the information contained in this publication but no liability can be accepted for any loss or damage whether direct, indirect or consequential arising out of the use of the information contained herein.

PUB LS/P2 19175 EN · March 2025

Certain image(s) used under license from Shutterstock.com.



CAD models:
skf-lubrication.partcommunity.com