

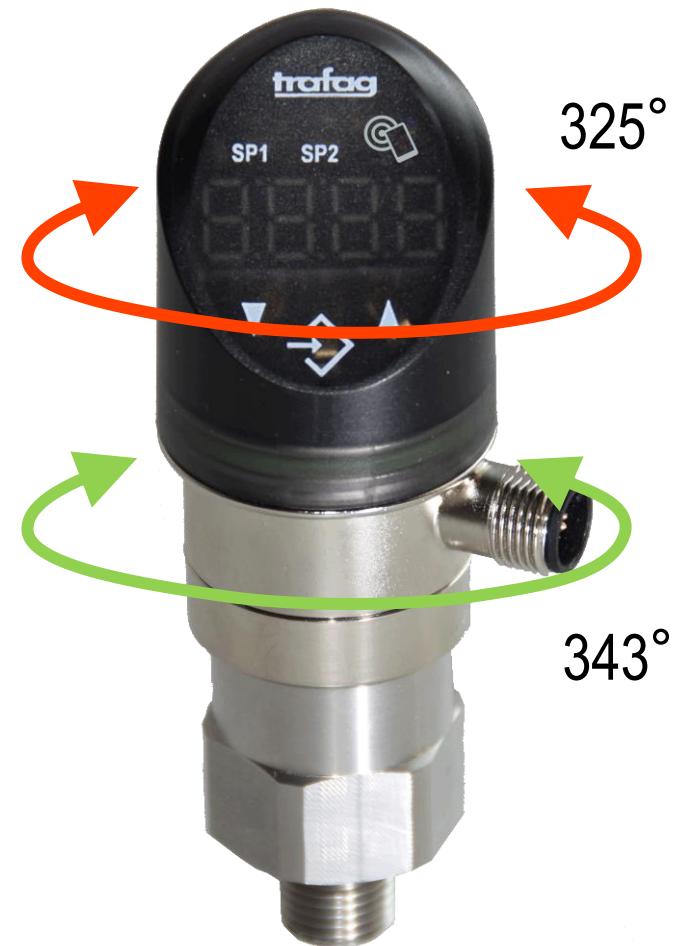
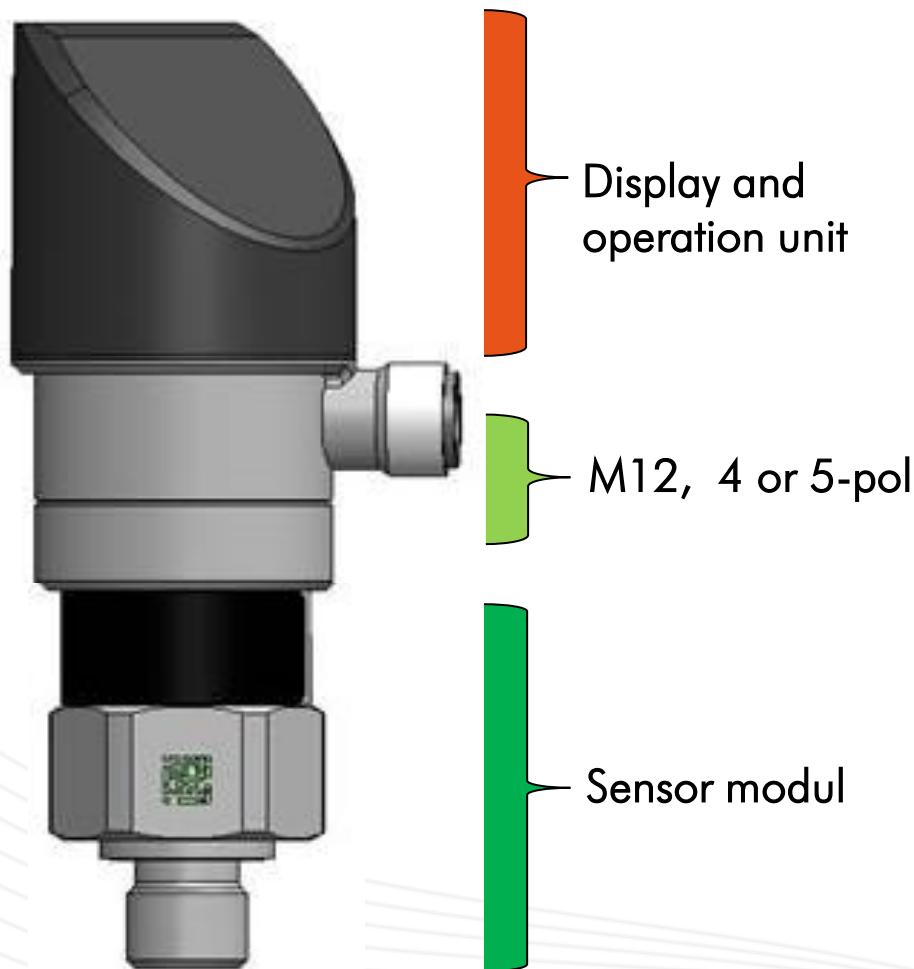
DPC 8380 PRESSURE SWITCH WITH DISPLAY

Content

- Electronic Pressure switch basics
- DPC 8380 Pressure Switch with Display
- Smartphone App life view



Device concept



Basic characteristics

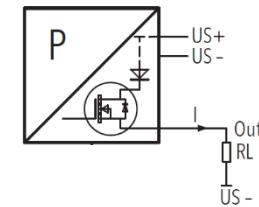
- Based on ECT, Ceramic Sensor
-1 ... 0 to 0 ... 100 bar
- Based on NAT, Thin-film-on-steel Sensor
0 ... 2.5 to 0 ... 600 bar
- Pressure sensor
 - Relative
 - Absolute
- Accuracy 0.5 %
- Material of the pressure connection
 - 1.4305
 - 1.4404/1.4435
 - 1.4462
 - Titan Grad 5



- 4 Digit LED Display, 3 operation buttons
 - Bar, MPa, kPa, psi, mWG, mmWG
- Housing:
 - steel + zinc die-cast + display housing in plastic
- Twistable display housing: 335°
display can be flipped by SW, 180°
- Twistable M12 connection: 343°
- IP67



- Adjustable range: 50 ... 100 % FS
- Analog output: 4 ... 20 mA, 0 ... 5 VDC, 1...6 VDC, 0 ... 10 VDC
- Switchable analogue output: V / mA
- 2 transistor outputs PNP; max 0.5 A each output
- Menu according VDMA 24574-1
- Parametrizing via NFC Smartphone App,
also without power supply USP
- Integrated simple pressure logging,
data download via Smartphone app USP



- Power supply: 15...30 VDC $I_{\text{supply}}: \leq 30 \text{ mA}$
- Inverse-polarity protection, short-circuit strength
- Electrical connection **M12 x 1**

5-pin

Code	Pin 1	Pin 2	Pin 3	Pin 4	Pin 5
P1	U+	Analog	U-	SP1	SP2
P2	U+	SP2	U-	SP1	Analog

4-pin

Code	Pin 1	Pin 2	Pin 3	Pin 4
P3	U+	Analog	U-	SP1
P4	U+	SP2	U-	SP1

- P3 and P4 according to VDMA 24574-1
- Shield recommended

Switching Output Function

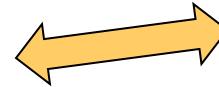
Hysteresis	Window	Delay
<p>The graph shows a signal P over time t. It starts at a reset point rP, crosses a switching point SP, reaches a peak, and then returns to rP. Two hysteresis zones are defined: Hno (normally open) where the signal is ON, and Hnc (normally closed) where the signal is OFF. Below the graph are two logic diagrams showing the state of normally open and normally closed contacts.</p>	<p>The graph shows a signal P over time t. It crosses a window defined by FH (high) and FL (low) levels. The signal is ON during the window period. Two windows are shown: Fno (normally open) and Fnc (normally closed). Below the graph are two logic diagrams showing the state of normally open and normally closed contacts.</p>	<p>The graph shows a signal P over time t. It crosses a switching point SP and a reset point rP. After crossing SP, it has a delay before crossing rP again. Two delays are indicated: dS (delay switching point) and dr (delay reset point). Below the graph are two logic diagrams showing the state of normally open and normally closed contacts.</p>
<p>SP = Switching point rP = reset point Hno = Hysteresis, normally open Hnc = Hysteresis, normally closed</p>	<p>FH = Window high FL = Window low Fno = Window, normally open Fnc = Window, normally closed</p>	<p>dS = delay Switching point Dr = delay reset point</p>

Operating and parameterization concept

Operating Menu



NFC
also without power supply



Parameter-set
Log data

Parameter-set

Switch points

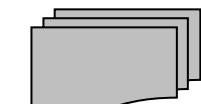
More parameters
Expert mode

Logger

Log data

save

save



Parameter-sets



Parameter-sets

Parameters

- Switching point, reset point Hysteresis / Window
- Switching delay time
- Switching function NO  NC 
- Pressure unit
- Analog output type
- Pressure end point (adjustable range)
- Damping for the analog outputs
- Display rotate
- Display mode
- Display update rate
- Access code definition
- Reset of highest / lowest measured pressure