



With display and control panel

## Smart DCM

### Electronic pressure switches

The robust, microprocessor-supported electronic pressure switches in the Smart DCM series from Honeywell FEMA measure relative pressures in ranges from -1 ...+1 bar and 0-40 bar. They are particularly suitable for controlling system pressures in the fields of mechanical engineering, supply engineering, environmental technology and HVAC. The equipment can be

installed directly in the pressure line using the G1/2" external thread. Entering switching points is easy with the generously proportioned keyboard and graphic display. For OEM applications, devices can be supplied with fixed parameter and switching point adjustment.

#### Technical data

<b>Measuring ranges</b> relative	1... +40 bar
<b>Ambient temperature</b>	-20...+70 °C
<b>Storage temperature</b>	-30...+80 °C
<b>Medium temperature</b>	-20...+70 °C
<b>Relative humidity</b>	0...95 % non-condensing
<b>Overall accuracy</b>	0.5% of full scale
<b>Weight</b>	350 grams
<b>Parts in contact with medium</b>	Stainless steel (1.4571)
<b>Process connection</b>	Pressure gauge connection G1/2" external thread
<b>Electrical connection</b> Plug connection	5-pin M12x1
<b>Protection class</b>	II as per EN 61010 IP65
<b>Power supply</b> <b>EMC</b>	18...35 Vdc as per EN 61326
<b>Switching output</b> Contact load	Open collector 250 mA (protected against excess current)
Upper value (min.)	Supply -2 V
Lower value (max.)	GND + 0,5 V
Switching differential	SP and RP in the menu free choice
Warning output	Pin 2
<b>Housing and cover</b>	PA66 GF25

#### Functions

- Configuration of open collector switching output as:
  - minimum pressure monitor,
  - maximum pressure monitor,
  - pressure window monitoring
- Configuration of switching contact as:
  - normally closed
  - normally open
- Setting the switching and reset point over the entire pressure range
- Switch on/off delay
- Simulation mode
- Devices without display are factory-configured
- Devices with display and keyboard can be easily configured by the customer
- The optional Hard- and Softwaretool CFT1 allows simple configuration and parametrization of all Smart SNDCM models by PC

#### Smart DCM display functions (device series with display only)

- Rotation of graphics display in 90° steps, possible by means of software.
- Current pressure display
- Switching state display
- Two-colour background lighting for warning signals

#### Other features:

- Restore function
- Warning function for implausible switching points, sensor fault, overload and overheating
- Manual zero adjustment
- 4-digit code enables locking

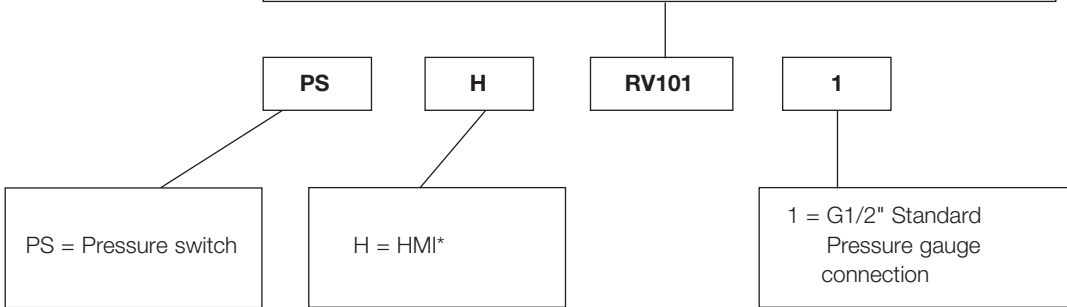
#### Electrical connection:

- 5-pin M12x1 plug connector, Form A
- M12x1 connector included
- Middle pin don't connect



Product Summary

RV101 = -1... +1 bar relative
RB001 = 0... 1 bar relative
RB004 = 0... 4 bar relative
RB010 = 0... 10 bar relative
RB016 = 0... 16 bar relative
RB025 = 0... 25 bar relative
RB040 = 0... 40 bar relative



\* HMI = **H**uman **M**achine **I**nterface = Digital display + Data input via buttons

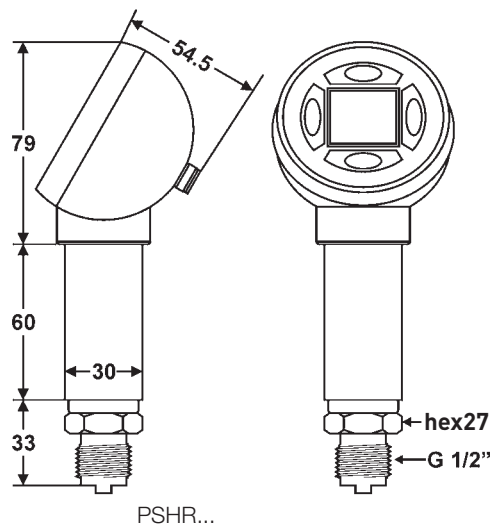
Type	Pressure in bar	Max. permissible pressure (bar)
PSHRV1011	-1...+1	6
PSHRB0011	0...1	3
PSHRB0041	0...4	12
PSHRB0101	0...10	30
PSHRB0161	0...16	48
PSHRB0251	0...25	50
PSHRB0401	0...40	80

Configurations Tool for Windows XP and Win7

Type                      Function

**CFT1**                      Software and data interface for easy adjustment of switching points, switch on/off delay, for example; as well as checking for excess pressure/temperature, see also page 147

Dimensioned drawings (mm)





With display  
and control  
panel

## Smart DCM DIFF

### Electronic differential pressure switches

The microprocessor-supported electronic differential pressure switches in the Smart DCM DIFF series from Honeywell FEMA measure differential pressures and relative pressures in 6 pressure stages from 0-100 mbar to 0-20 bar.

Electronic differential pressure switches are highly suitable for a wide variety of applications, including the accurate measurement, monitoring and control of differential pressures. The principal applications are in pump and filter monitoring.

#### Technical data

<b>Measuring ranges</b>	relative 0-100 mbar to 0-20 bar
<b>Ambient temperature</b>	-20...+70 °C
<b>Storage temperature</b>	-30...+80 °C
<b>Medium temperature</b>	-20...+80 °C
<b>Relative humidity</b>	0...95 % non-condensing
<b>Accuracy</b>	1 % except PSH DM 1002
<b>Weight</b>	450 g
<b>Parts in contact with medium</b>	Stainless steel 1.4404 (AISI 316 L)
<b>Process connection</b>	2x G1/4" internal thread
<b>Electrical connection</b>	5-pin M12x1 plug, "A"
<b>Protection class</b>	III as per EN 61140 (PELV) IP65
<b>Versions with HMI</b>	
<b>Climate class</b>	
Indoor	4K4H as per EN 60721-3-4
Outdoor	3K8H as per EN 60721-3-3
<b>Mechanical stability</b>	
Vibration	20g as per IEC 68-2-6 (up to 2000 Hz)
Mechanical shock	100g as per IEC 68-2-27
<b>Power supply</b>	18...35 Vdc, max. 30 mA
<b>Open collector switching output</b>	
Contact load	250 mA (protected against excess current)
Upper value (min.)	Supply - 2 V
Lower value (max.)	GND + 0.5 V
<b>Response time</b>	max. 300 ms
<b>Hysteresis</b>	SP and RP in the menu free choice
<b>Housing and cover</b>	PA66 GF25, Chemical resistance 4C4 as per EN 60721-3-4
<b>Display screen cover</b>	PMMA (Plexiglas)
Membrane keyboard	Polyester

#### Functions

- Configuration of open collector switching output as:
  - minimum pressure monitor,
  - maximum pressure monitor,
  - pressure window monitoring
- Configuration of switching contact as:
  - normally closed
  - normally open
- Setting the switching and reset point over the entire pressure range
- Switch on/off delay
- Simulation mode
- Devices with a display and keyboard can be easily configured by the customer

#### Smart DCM DIFF display functions (device series with display only)

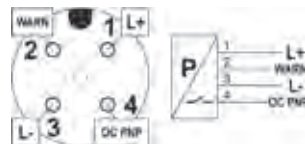
- Displays current pressure in bar, Pa, psi und %
- Switching state display
- Two-colour background lighting for warning signals

#### Other:

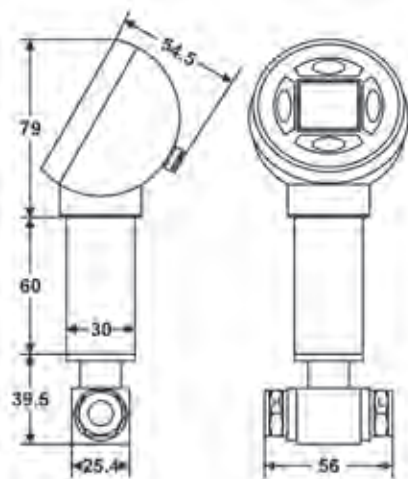
- Restore function
- Warning function for implausible switching points, sensor fault, overload and overheating
- Manual zero adjustment
- 4-digit code enables locking

#### Electrical connection:

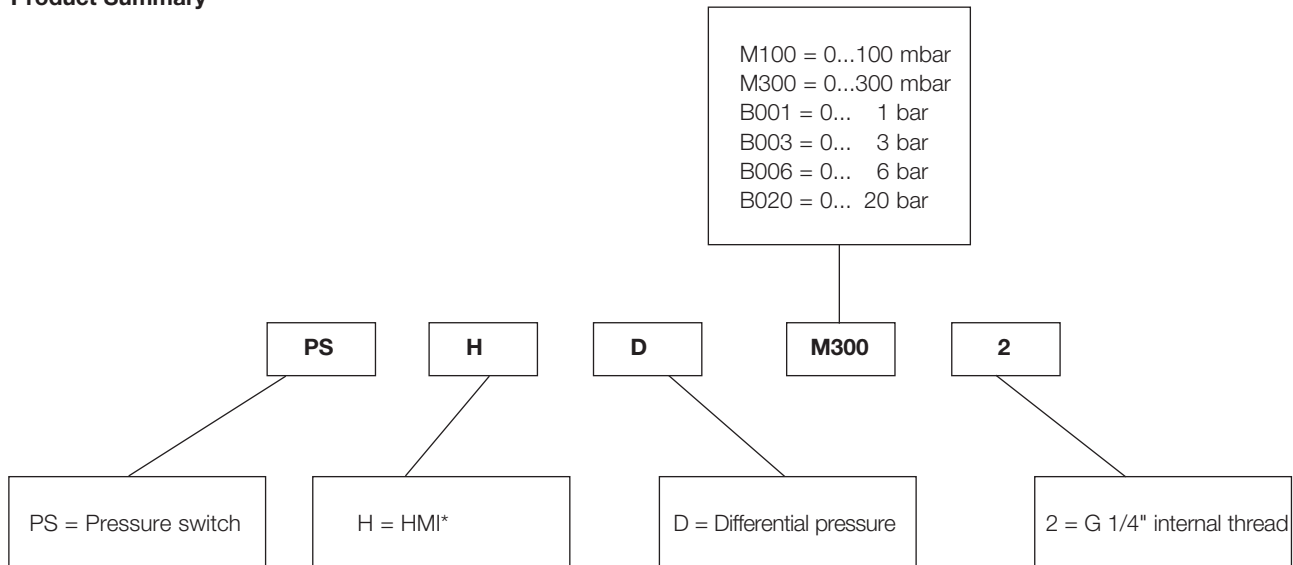
- 5-pin M12x1 plug connector, Form A
- M12x1 connector included
- Middle pin do not connect



## Dimensioned drawings (mm)



Product Summary



\* HMI = **H**uman **M**achine **I**nterface = Digital display + Data input via buttons

Type	Measuring range (bar)	Max. permissible differential pressure (bar)	Bursting pressure (bar)	Overrange pressure (bar)	Max. permissible system pressure (bar)
PSHDM1002	0-0,1	0,9	1,2	0,9	70
PSHDM3002	0-0,3	0,9	1,2	0,9	70
PSHDB0012	0-1	3	4	3,0	70
PSHDB0032	0-3	9	12	7,0	70
PSHDB0062	0-6	21	28	7,0	70
PSHDB0202	0-20	60	70	7,0	70

**Measuring range:**

Calibrated measuring range of device. The switching and resetting points can be set within this pressure range. This pressure range is given in the product ordering code **PSHDM3002**, for example. Here **M300** means pressure range 0-300 mbar.

**Maximum permissible differential pressure:**

Maximum pressure difference that may be connected between the two connections "H" and "L" without knocking the sensor element out of adjustment or causing it long-term damage.

**Bursting pressure:**

Above the stated bursting pressures, the sensors are subject to mechanical failure. This removes the security of separation between the "H" and "L" connections and the sensor housing may even rupture.

**Maximum permissible system pressure:**

System pressure that may be allowed to bear on both pressure connections without knocking the sensor element out of adjustment or causing it long term damage. Within these limits, the pressure may be allowed to reach the maximum permissible differential pressure on the overpressure side "H" without putting the sensors out of adjustment or causing them long-term damage.

**Attention:**

According to intended use, the lower pressure needs to be connected to the "L" marked port and the higher pressure to "H" marked port. Interchange of both ports (high pressure at "L" port) may lead to damage of the differential pressure measurement cell.



Smart Press PST

## Smart Press PST/PST-R

### Electronic pressure switches/pressure transmitters

Honeywell Fema PST and PST...R series pressure switches are highly versatile, can be adjusted and configured in two modes and are used for fine adjustment and monitoring of system pressures in plant engineering, fluidics, process engineering and pneumatics, and for monitoring and control of pumps and compressors. They are all fitted with a WARNING system and have a standardized 20 mA warning output. The equipment is

therefore also used in manufacturing lines in the automotive industry and in many areas of mechanical and special-purpose engineering. With an overall accuracy of 0.5% of full scale, these pressure switches/transmitters are also suitable for measurement monitoring in many laboratory applications.

#### Technical data

<b>Measuring ranges</b>	-1... + 600 bar
<b>Ambient temperature</b>	-20...+60 °C
<b>Storage temperature</b>	-35...+80 °C
<b>Medium temperature</b>	-20...+100 °C
<b>Relative humidity</b>	0...95 % non-condensing
<b>Overall accuracy</b>	≤ 0.5 % of full scale
<b>Weight</b>	depends on model
<b>Parts in contact with medium</b>	1.4571 and 1.4542 (250 - 600 bar), 1.4571 and 1.4435 (< 250 bar and flush to the front)
<b>Process connections</b>	
Pressure gauge connection	G 1/2" external thread
Quasi-flush	G 3/4" external thread
<b>Electrical connections</b>	
PST	2 x 5-pin M 12 plug, as per DIN IEC 60947-5-2 (available as accessory)
PST...-R versions	Additional 3-pin M 12 plug (available as accessory)
<b>Protection class</b>	II as per EN 60335-1 IP 65 as per EN 60529
<b>Climate class</b>	C as per DIN EN 60654
<b>Power supply</b>	14...36 VDC
<b>EMC</b>	as per EN 61326/A1
<b>Outputs</b>	
2 open collector	250 mA at 14...36 VDC,
Switching outputs	Configurable as high-side/low-side switching and as push/pull outputs
<b>Switching differential</b>	(SP and RP) selectable via software
<b>Reaction time</b>	30 ms
<b>Relay outputs (PST...-R)</b>	
Permissible resistive load	250 VAC, 5 A,
Permissible inductive load	250 VAC, 0.8 A (200 VA)
Contact type	1 changeover contact (1 x UM)
Service life	at least 250,000 switching cycles
<b>Warning output</b>	
Output configuration	Warning output on plug 2 max. 20 mA, 14...36 VDC
<b>Transmitter output</b>	
Voltage/current	0-10 V or 4-20 mA, configurable (also invertible) in expert mode
<b>Housing and cover</b>	Polybutylene terephthalate PBT-GF30, resistant to chemicals and stress cracking
<b>Display screen cover</b>	Polycarbonate PC
<b>Weight</b>	approx. 380 g

#### Functions

The 2 switching outputs can be configured as:

- Minimum pressure monitors, maximum pressure monitors, pressure window monitoring
- Configurable as normally closed or normally open, high-side or low-side switching and as a push/pull output
- Relay output assigned to channel 1 or 2 or to the warning output (in the case of PST...-R)

#### Configuration of the analog output:

- 0-10 V, 4-20 mA or 10-0 V and 20-4 mA
- Analog measuring range can be limited to a minimum of 50 % of the total measuring range
- Select pressure unit: bar, Pa or psi

#### Smart Press display functions:

- 4-digit digital display with bar graph for pressure trend, settings and set parameters
- 2 three-colour LEDs to show the switching state of the outputs, implausible settings and as a warning status indicator

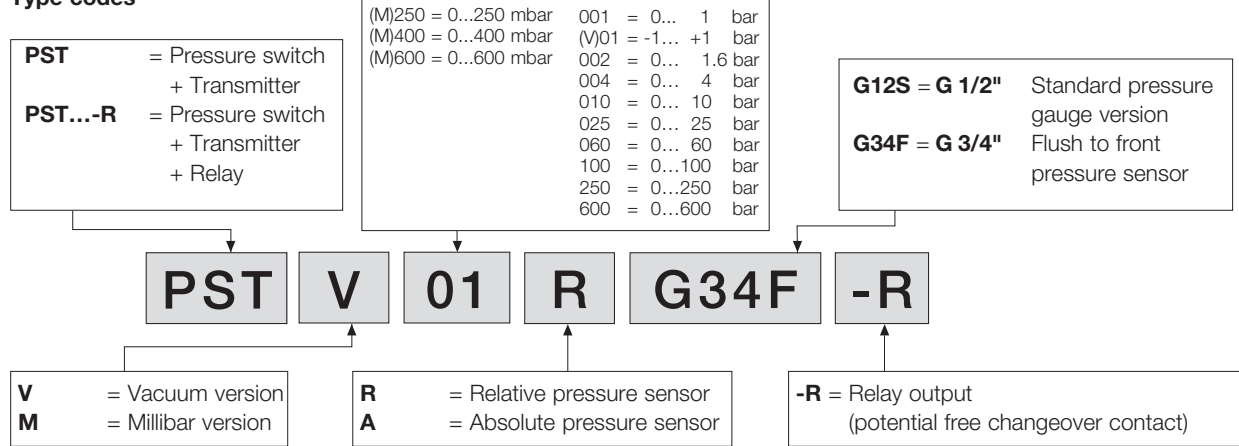
#### Electrical pin connection:

- Two 5-pin M12 plug connections for power supply, switching outputs and analog output
- One 3-pin M12 plug connection for the relay output (PST...-R versions)

#### Plus:

- Pressure peak filter
- Pressure simulation and switching simulation modes
- Restore function
- Warning function for implausible switching points, sensor fault, overload and overheating
- Manual zero adjustment

Type codes



Type	Pressure in bar	Max. permissible pressure (bar)	Type	Dimensioned drawing pg. 83
PSTV01RG12S	-1... +1	6	PSTV01RG12S-R	
PSTM250RG12S	0 – 250 mbar	1	PSTM250RG12S-R	
PSTM400RG12S	0 – 400 mbar	2	PSTM400RG12S-R	
PSTM600RG12S	0 – 600 mbar	2	PSTM600RG12S-R	
PST001RG12S	0 – 1 bar	6	PST001RG12S-R	
PST002RG12S	0 – 1,6	6	PST002RG12S-R	
PST004RG12S	0 – 4	12	PST004RG12S-R	
PST010RG12S	0 – 10	30	PST010RG12S-R	
PST025RG12S	0 – 25	75	PST025RG12S-R	30 +
PST060RG12S	0 – 60	180	PST060RG12S-R	31
PST100RG12S	0 – 100	300	PST100RG12S-R	
PST250RG12S	0 – 250	500	PST250RG12S-R	32
PST600RG12S	0 – 600	1000	PST600RG12S-R	
PSTV01RG34F	-1... +1	6	PSTV01RG34F-R	
PSTM250RG34F	0 – 250 mbar	1	PSTM250RG34F-R	
PSTM400RG34F	0 – 400 mbar	2	PSTM400RG34F-R	
PSTM600RG34F	0 – 600 mbar	2	PSTM600RG34F-R	
PST001RG34F	0 – 1 bar	6	PST001RG34F-R	
PST002RG34F	0 – 1,6	6	PST002RG34F-R	
PST004RG34F	0 – 4	12	PST004RG34F-R	33
PST010RG34F	0 – 10	30	PST010RG34F-R	
PST025RG34F	0 – 25	75	PST025RG34F-R	
PST002AG12S	0 – 2	6	PST002AG12S-R	30 +
PST010AG12S	0 – 10	30	PST010AG12S-R	31
PST002AG34F	0 – 2	6	PST002AG34F-R	33
PST010AG34F	0 – 10	30	PST010AG34F-R	

PST plug requirement (not included) please see page 80

PST...

- as transmitter One ST12-5
- as switch One ST12-5
- as transmitter + switch Two ST12-5

PST... R

- as transmitter + relay One ST12-5 + One ST12-4
- as switch + relay One ST12-5 + One ST12-4
- as transmitter + switch + relay Two ST12-5 + One ST12-4

### + Accessories (to be order separately)

#### Cable socket Type

##### For output 1+2

<b>ST12-5-A</b>	5-pin	A-coded	Right-angle version
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##### For output 3 (relay output)

<b>ST12-4-A</b>	4-pin	B-coded	Right-angle version
<b>ST12-4-AK</b>	4-pin	B-coded	Right-angle version with 2 m cable
<b>ST12-4-GK</b>	4-pin	B-coded	Straight version with 2 m cable

##### Plug protection cap

<b>STA12</b>	IP 65
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## Electrical connection

### Electrical connection and contact assignment

Electrical connection is via M12 plugs on the back of the unit. Depending on the version, either 2 (PST) or 3 (PST...-R) M12 connector plugs are available (not supplied with the unit).

#### Contact assignment on plug 1 (A-coded)

Pin 1: Supply voltage 14...36 VDC  
 Pin 2: OUT 2 (output 2) open collector output  
 Pin 3: 0 volt (ground)  
 Pin 4: OUT 1 (output 1) open collector output  
 Pin 5: Serial interface (locked for calibration)

#### Special characteristic of open collector outputs:

Depending on the design, the output voltage at open collector outputs can be up to 2.5 V lower than the applied supply voltage.

Example: Supply voltage 14 V... output voltage OUT 1 approx. 11.5 V.

#### Contact assignment on plug 2 (A-coded)

All versions of series PST and PST...-R are also equipped with an A-coded M 12 plug.

Pin 1: Supply voltage 14...36 VDC  
 Pin 2: WARN (warning output max. 20 mA)  
 Pin 3: 0 V (ground)  
 Pin 4: Analogue output AOUT  
 Pin 5: Serial interface (for factory calibration only)

Units of the PST series can be powered both via plug 1 and via plug 2. If the PST is used purely as a transmitter, only one connection via plug 2 is needed, because the supply voltage can be connected here too (see "Contact assignment on plug 1").

#### Contact assignment on plug 3 (B-coded)

All versions of series PST...-R are also equipped with a B-coded M 12 plug.

Pin 1: Common contact  
 Pin 2: normally closed contact  
 Pin 3: normally open contact

### Contacting

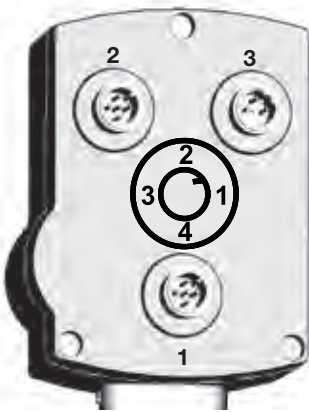
#### ST12-4-AK and ST12-4-GK

Relais contact	colour	Contact
1	brown	common
2	white	NC
3	blue	NO
4	green/yellow	n. a.

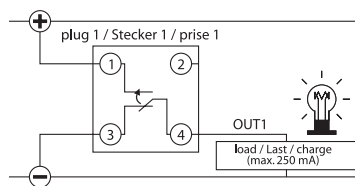
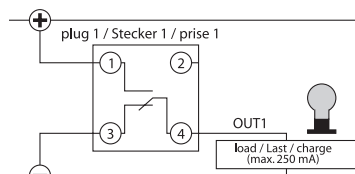
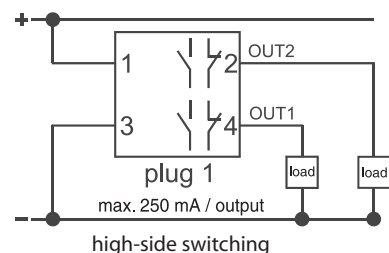
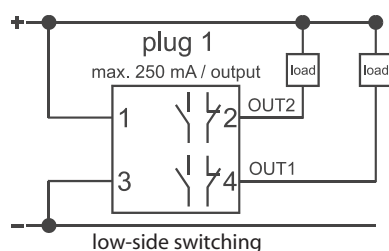
### NB – For IP65 special plug protection cap STA12 is required

Observance of IP65 water and dust proofing requires the secure sealing of electrical connections not closed with plugs.

The soft rubber dust caps fitted for shipping do not fulfil this requirement. A reliable seal can only be achieved by the **STA12** protection cap.



## Switch outputs



High-side switching push/pull outputs

### Switch output OUT1 and OUT2:

The switch outputs can be configured via the software (at expert level) both as normally closed / normally open, and as high-side and low-side switching.

- In **normally closed configuration**, the selected voltage potential (ground or supply voltage) occurs at the output in the **unswitched** state.
- In **normally open configuration**, the selected voltage potential (ground or supply voltage) occurs at the output in the **switched** state.
- In the **low-side switching configuration**, the outputs switch the voltage potential 0V (ground) with respect to a consumer connected to OUT1 or OUT2.
- In the **high-side switching configuration**, the outputs switch the supply voltage potential (minus approx. 2V) with respect to a consumer connected to OUT1 or OUT2.

**If the power supplies of the pressure switch and connected load are independent of one another, the following must be taken into account: The potential difference between OC output and ground and OC output and supply voltage must not exceed 36 VDC. If the unit is configured for low-side switching, the external supply voltage must have the same ground reference as the unit itself. If the unit is defined as high-side switching, the external supply voltage must be linked to the supply voltage of the unit. It is important to note that the voltage drop in the through-connected state can be as much as 2 V. The maximum permitted current at the OC is 250 mA per switch output (OUT1, OUT2). A maximum switching current of 250 mA may flow through each channel.**

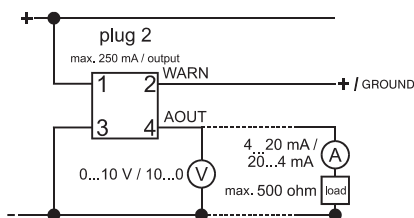
The switching channels are short-circuit-proof and they are monitored for current and temperature. Where current limiting is used and on overheating, both LEDs light up red (WARN function).

The freely configurable outputs can connect both the supply voltage (+ potential) itself and the ground (- potential) of the supply voltage to the output. If plus potential exists at the output, ground minus potential occurs after switching over.

If ground minus potential exists at the output, plus potential occurs after switching over.

**Advantage:** The output behaves like a mechanical changeover contact which emits either plus or minus potential. In other words, the open output is never electrically undefined, as is the case with an open collector output. Pull-up resistors are therefore unnecessary.

## Analogue output and relay output



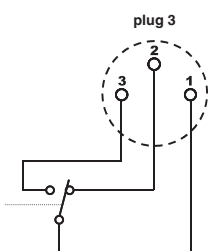
### Analogue output AOUT:

The analogue output (AOUT) is available in versions PST and PST...-R. In expert mode it is configurable both as a 0-10 V/10-0 V, and as a 4-20 mA/20-4 mA output. The unit is supplied with the output configured for 0-10 V. The input impedance of the connected consumer **must not exceed 500 ohms**.

### Relay output REL:

The relay output is available in version PST...-R. In expert mode the analogue output can be coupled via the software with output 1 (OUT1) and output 2 (OUT2), and with the WARN function. This means that the user can choose a potential-free output for these 3 important functions. The changeover contact of the relay is designed for a maximum resistive load of 4 A and an inductive load of 200 VA. At the lower end the 5 μ gold-plated silver contacts are designed for a minimum load of 50 mW. (5 V at 10 mA).

**It should always be remembered that after a one-off maximum load, use at minimum load is no longer possible.**

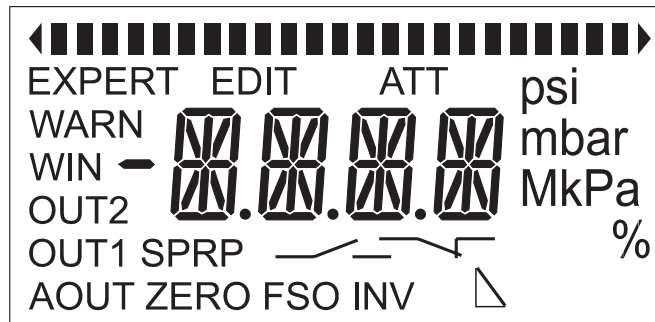




## Indicators and display

### The indicators in the display have the following meanings:

ATT	Attenuation (for setting a filter)
EXPERT	Expert mode (allows the user to configure the unit, e.g. as maximum detector or minimum detector or for window monitoring)
WARN	Warning function / alarm
WIN	Window monitoring (for monitoring a pressure window to detect exceeding or falling below a selected pressure window)
OUT1	Switch output OC 1
OUT2	Switch output OC 2
SP	Switching point
RP	Reset point Switch contact configured as normally open Switch contact configured as normally closed
AOUT	Analogue output (if the current pressure is outside the currently set range, the "AOUT" symbol is not visible).
ZERO	Zero point display for the analogue output or display symbol if output 1 or output 2 defined as low-side switching (unit switches power supply plus to the output). Combined with "FSO" in the switch configuration menu as indicator for the push/pull function.
FSO	Upper limit of the selected analogue display range or display symbol if output 1 or 2 defined as high-side switching. (unit switches power supply minus to the output). Combined with "ZERO" in the switch configuration menu as indicator for the push/pull function.
INV	Inversion of the analogue signal (i.e. "INV" appears if, instead of a standard analogue signal 0...10 V or 4...20 mA, the analogue signal output is set to 10...0 V or 20...4 mA).



### Display

The unit has a 4-digit digital display with 3 decimal points and a minus sign. There are also other symbols for the different settings and configurations.

The display also includes a **bar graph**. This is at the top of the display and consists of a row of separately addressable individual segments with arrow symbols at either end.

As soon as the unit is powered up, all symbols appear on the display for 1 second as a test and the two LEDs light up briefly. The unit then goes into display mode, showing the current system pressure and the selected unit (bar, PSI or Pa). In addition the pressure trend (falling or rising) is indicated by an arrow at the left (falling) or right (rising) end. The "AOUT" indicator tells the user that the pressure is currently in the predefined pressure range for the analogue signal.

### Meaning of LED colours

LED status		Meaning	
LED 1 lit	LED 2 lit	Output 1 Status	Output 2 Status
green	green	inactive	inactive
green	orange	inactive	active
orange	green	active	inactive
orange	orange	active	active
red	red	SP/RP implausible	
red	red	error	

### Status LEDs

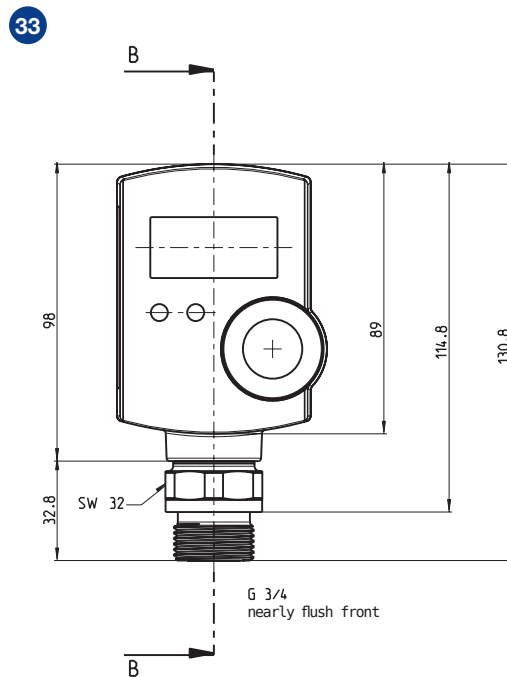
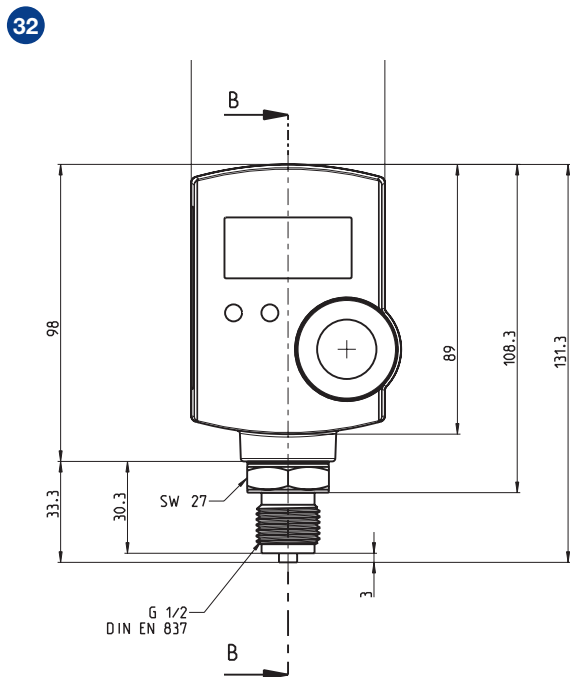
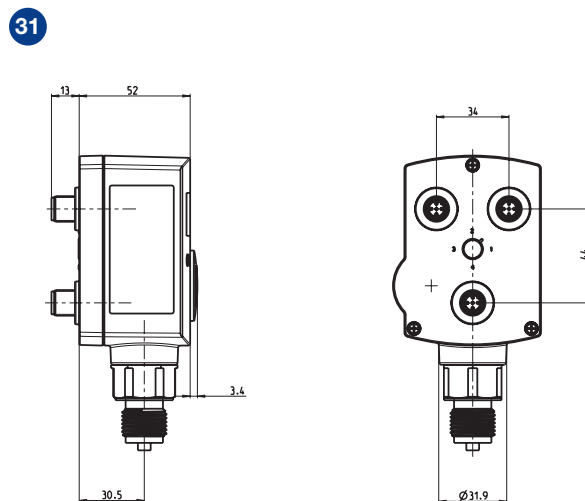
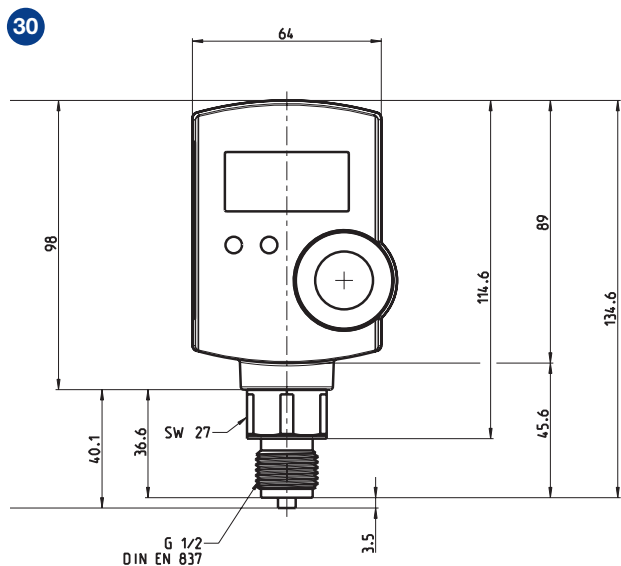
The current status of the switch outputs is displayed by 2 LEDs located beneath the display (LED 1 and LED 2). The two 3-colour LEDs indicate the switching status of the corresponding output and the warning function.

- Orange: the output is **ACTIVE**
- Green: the output is **INACTIVE** (if defined as WARN output, likewise INACTIVE)
- During input of the switching points, only the LED of the switching channel currently being modified is active. When switching points are entered, if an implausible entry is made for the maximum detector, e. g. SP < RP, the relevant channel LED lights up red.
- Both status LEDs light up red as soon as a WARN state occurs (e. g. electronics faulty and unit overheating).

### Warning with both LEDs RED and WARN output active

Display indication	Display indication
- on sensor failure	- overload output 1
- under-voltage	- overload output 2
- under-temperature	- overload output 1 and 2
- over-temperature	

## Dimensioned drawings (mm)



# Specifications

## Pressure switches

### Type series Pressure switches

<b>PST...</b>	Electronic pressure switches for liquid and gaseous media with 2 open collector switching outputs and analogue output, power supply 14...36V DC, protection class IP 65, switching points freely adjustable from ... to ... bar. Freely programmable analogue output 4–20 mA or 0–10 V (may also be inverted), process connection G 3/4" or G 1/2", absolute or relative pressure versions Type: PST...
<b>PST...R</b>	Electronic pressure switches for liquid and gaseous media with 2 open collector switching outputs, analogue output and potential-free relay output, power supply 14...36V DC, type of protection IP 65, switching points freely adjustable from ... to ... bar. Freely programmable analogue output 4–20 mA or 0–10 V (may also be inverted), process connection G 3/4" or G 1/2", absolute or relative pressure versions Type: PST...R
<b>DCM...</b>	Pressure switch with plug connection to DIN EN175301. Switch housing made of diecast aluminium GD Al Si 12, protection class IP 54. Range of adjustment from ... to ... bar/mbar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DCM...
<b>DNM.../ VNM...</b>	Pressure switch with plug connection to DIN EN175301. Sensor housing made of stainless steel 1.4104. Switch housing made of diecast aluminium GD Al Si 12, protection class IP 54. Range of adjustment from ... to ... bar/bar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DNM...
<b>DNS.../ VNS...</b>	Pressure switch with plug connection to DIN EN175301. Sensor made entirely of stainless steel 1.4571. Switch housing made of diecast aluminium GD Al Si 12, protection class IP 54. Range of adjustment from ... to ... bar/bar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DNS...VNS...
<b>DNS...351/ VNS...351</b>	Pressure switch with terminal connection. Sensor made entirely of stainless steel 1.4571. Switch housing made of diecast aluminium GD Al Si 12, plastic-coated housing, protection class IP 65. Range of adjustment from ... to ... bar/bar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DNS..., VNS...
<b>DDCM252... DDCM6002</b>	Differential pressure switch with plug connection to DIN EN175301. Sensor made of aluminium, measuring diaphragm of Perbunan. Pressure connection G 1/4, internal, switch housing made of diecast aluminium GD Al Si 12, protection class IP 54. Range of adjustment from ...to...bar/bar Type DDCM...
<b>DDCM1... DDCM16</b>	Differential pressure switch with plug connection to DIN EN175301 Sensor made of stainless steel 1.4104 and 1.4571. Pressure connections G 1/4, internal. Switch housing made of diecast aluminium GD Al Si 12, protection class IP 54. Range of adjustment from ...to ...bar/bar Type: DDCM...Type series
<b>DWAM.../ DWAMV...</b>	Pressure monitor "of special construction" for maximum pressure monitoring with self-monitoring sensor (safety sensor). Tested according to VdTÜV Memorandum "Pressure 100". Switch housing made of diecast aluminium GD Al Si 12, plug connection to DIN EN175301, protection class IP 54. Range of adjustment from ... to ... bar/bar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DWAM...
<b>SDBAM...</b>	Pressure limiter "of special construction" for maximum pressure monitoring. With internal interlock (reclosing lockout) with self-monitoring sensor (safety sensor), tested according to VdTÜV Memorandum "Pressure 100". Switch housing made of diecast aluminium GD Al Si 12, plug connection to DIN EN175301, protection class IP 54. Range of adjustment from ... to ... bar/mbar. Pressure connection G 1/2, external and G 1/4, internal Type: SDBAM...
<b>DWR.../ DWR...203</b>	Pressure monitor "of special construction" for maximum and minimum pressure monitoring. Tested according to VdTÜV Memorandum "Pressure 100" and EN. Switch housing made of diecast aluminium GD Al Si 12, plug connection to DIN EN175301, protection class IP 54. Range of adjustment from ... to ... bar/bar. Switching differential adjustable / not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DWR...

### Type series Pressure switches

<b>DWR...205/ DWR...206</b>	Pressure limiter "of special construction" for maximum pressure (205) or minimum pressure monitoring (206). With locking of switching state (reclosing lockout). Tested according to VdTÜV Memorandum "Pressure 100" and DIN EN175301. Switch housing made of diecast aluminium GD Al Si 12, plug connection to DIN EN175301, protection class IP 54. Range of adjustment from ... to ... bar/bar. Pressure connection G 1/2, external and G 1/4, internal Type: DWR...
<b>DGM...</b>	Pressure monitor for gas with plug connection to DIN EN175301. DVGW-tested according to DIN EN1854. Sensor casing of Cu/Zn/ high grade steel 1.4104. Switch housing of diecast aluminium GD Al Si 12, plug connection to DIN EN175301, protection class IP 54. Range of adjustment from ... to ... bar/bar. Switching differential not adjustable. Pressure connection G 1/2, external and G 1/4, internal Type: DGM...
<b>DWAM...576</b>	Pressure monitor "of special construction" for maximum pressure monitoring. With self-monitoring sensor (safety sensor), positive opening contacts (gold-plated). Resistor combination for wire break and short-circuit monitoring. Tested according to VdTÜV Memorandum "Pressure 100". Switch housing made of diecast aluminium GD Al Si 12, protection class IP 65. Range of adjustment from ... to ... bar/bar. Pressure connection G 1/2, external and G 1/4, internal Type: DWAM...576
<b>FD16 –326</b>	Pressure monitor "of special construction" for maximum pressure monitoring in liquid gas systems with self-monitoring sensor (safety-sensor). Resistor combination for wire break and short-circuit monitoring. TÜV-tested according to VdTÜV Memorandum "Pressure 100" and DIN EN764-7. Explosion protection: Ex-i. Switch housing made of GD Al Si 12, protection class IP 65. Adjustable from 3 to 16 bar. Pressure connection G 1/2, external and G 1/4, internal Type: FD16 –326
<b>FD16 –327</b>	Pressure limiter "of special construction" for maximum pressure monitoring in liquid gas systems with self-monitoring sensor (safety-sensor). Switching state interlock (reclosing lockout). Resistor combination for wire break and short-circuit monitoring. TÜV-tested according to VdTÜV Memorandum "Pressure 100" and DIN EN764-7, Part 4. Explosion protection: Ex-i. Switch housing made of GD Al Si 12, protection class IP 65. Adjustable from 3 to 16 bar. Pressure connection G 1/2, external and G 1/4, internal Type: FD16-327

The specifications refer to the listed normal versions of the pressure switches. In the case of Ex versions or devices with additional functions, the texts must be supplemented or amended accordingly.