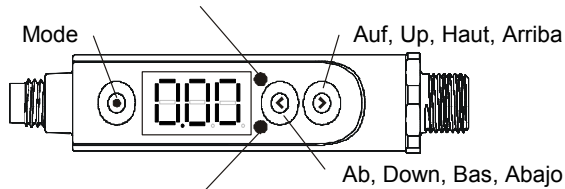


pico PSPDD 0 – 10 bar



pico PSVDD 0 – -1 bar

LED grün Status Schaltausgang 2
 LED green Status of output 2
 DEL Verte Statut de la sortie 2
 Indicador luminoso verde Estado de la salida 2



LED rot Status Schaltausgang 1
 LED Red Status of output 1
 DEL Rouge Statut de la sortie 1
 Indicador luminoso rojo Estado de la salida 1

Zubehör, Fittings, Raccords, Conexiones,

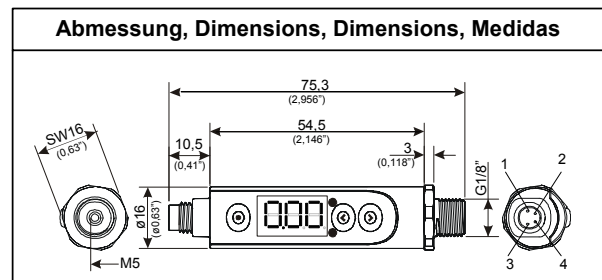
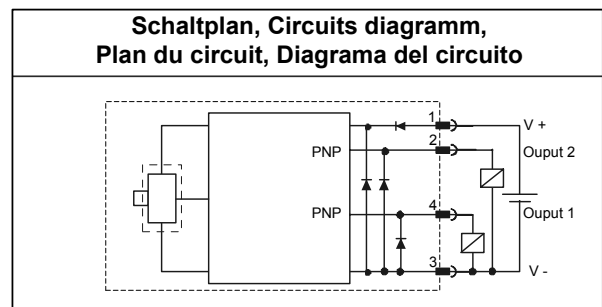
Bestellnummer, Order number,
 Numéro de commande, Número de pedido

- 110 26 300 4 pol. Kabel 5 m gewinkelt,
 • angled 4-pin, 5 m cable,
 • Câble serti à 4 broches,
 de 5 mètres de long
 • Cable con 4 clavijas de
 5 metros y conexión en ángulo

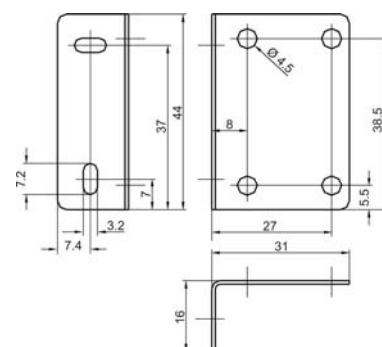
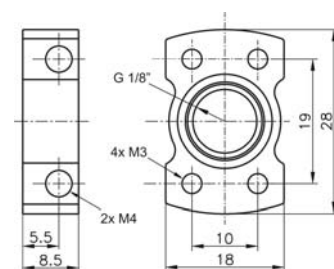
- 110 26 310 4 pol. Kabel 5 m gerade,
 • straight 4-pin, 5 m cable,
 • Câble droit à 4 broches,
 de 5 mètres de long,
 • Cable con 4 clavijas de
 5 metros y conexión recta

- 080 41 730 Adapterflansch mit O-Ring
 • Adapter flange with O-ring
 • Bride d'adaptateur équipée
 d'un joint torique
 • Brida adaptadora con junta tórica

- 080 40 610 Haltewinkel mit Adapterflansch
 080 41 730, O-Ring und
 Befestigungsteile
 • Fixing bracket with adapter
 flange 080 41 730, fixing material
 • Support de fixation équipé d'une
 bride d'adaptateur 080 41 730,
 pièces de fixation
 • Soporte de sujeción con brida
 adaptadora 080 41 730 y
 conexiones



- 1 = braun, brown, brun, marrón
 2 = weiß, white, blanc, blanco
 3 = blau, blue, bleu, azul
 4 = schwarz, black, noir, negro





Start-up

→ Apply voltage



→ Display

1.) Factory settings

OU1	Output 1	OU2	Output 2	SF	Special functions
	PSPDD / PSVDD		PSPDD / PSVDD		
HY1	Hysteresis- Mode	HY2	Hysteresis- Mode	PU	Pressure unit bar
S1	4,6 bar / -0,46 bar	S2	7,9 bar / -0,79 bar	UnL	Unlock
H1	0,7 bar / -0,07 bar	H2	0,7 bar / -0,07 bar		
nc1	NC-Mode	nc2	NC-Mode		
E01	0 sec.	E02	0 sec.		
E1	0 sec.	E2	0 sec.		

The Clear All special function loads the factory settings, and all previous settings are cancelled.

2.) Settings options

OU1	Output 1	OU2	Output 2	SF	Special functions
HY1	Hysteresis mode	CP2	Comparator mode	PU	Pressure unit
S1	Switching threshold	U1	Upper switching threshold	CLR	Factory settings
H1	Hysteresis	L1	Lower switch threshold	UnL	Unlock
nc1	Normally closed	no1	Normally open	DEU	Rotate display 180°
E01	Closing delay	E02	Closing delay		
E1	Release delay	E2	Release delay		

- The menu items listed under OU1 are settings specific to output 1
- The menu items listed under OU2 are settings specific to output 2
- The menu items listed under SF OU2 are general settings which influence both outputs.

Output settings options

- Hysteresis mode
- Switching threshold
 - Hysteresis
 - Type of contact (normally open, normally closed)
 - Closing delay
 - Release delay
- Comparator mode
- upper switching threshold
 - lower switching threshold
 - Type of contact (normally open, normally closed)
 - Closing delay
 - Release delay

Special functions settings options

- Pressure unit => bar, mmHg, inHg, Kpa
- Clear All => factory setting loaded
- Key lock activated = BLC, inactive = UnL
- Rotate display 180°

3.) General procedure for adjusting settings

By following the flow diagram, you can move to any menu item you wish using the three buttons (Up, Down and Mode).

- For example: output 2
- Comparator mode
 - lower threshold PSPDD = 3,0 bar PSVDD = -0.3 bar
 - upper threshold PSPDD = 5,0 bar PSVDD = -0.5 bar
 - Position of normally closed contact
 - Closing delay 0 sec.
 - Release delay 0 sec.
- Procedure: Measure mode output
- Briefly press Mode button => OU1 display
 - Briefly press Up button => OU2 display
 - Briefly press Mode button to enter Menu level. => HY2 display
 - Proceed to desired menu item with Up or Down button and confirm by pressing Mode button.
 - In this case: confirm HY2 with Mode button. => HY2 display flashes
 - Go to the desired setting with the Up or Down button. In this case: CP2. Then confirm setting with Mode button.
 - To adjust further settings, follow the procedure in d) above. In this case, set U-2 (lower threshold) and confirm with Mode button. => U-2 display flashes
 - Adjust the desired setting with the Up or Down button. In this case: set U-2 to 0.50 and then confirm setting with Mode button.
 - Proceed in the same way for all other settings.
 - To enter another setting level, e.g. output 1 (OU1) or special functions (SF), you use the Up or Down button to go to the menu item rEt (Return). If this is

confirmed with the Mode button, you arrive at the previous level. In this case you would arrive at the menu item OU2 and now you can switch between the menu items Output 1 or Special functions with the Up or Down button in order to adjust settings.

4.) Activate key lock

The locking function ensures that the switch settings are safeguarded against unintentional changes or manipulation. To activate the locking function, proceed as follows:

- Starting state is Measure => Display: Pressure activated
- Briefly press Mode button (select level) => Display OU1
- Press Up or Down button until SF reached => Display SF
- Briefly press Mode button until menu entered => Display PU
- Press Up or Down button until UnL reached => Display UnL
- Briefly press Mode button until menu entered => Display UnL flashes
- Set BLC with Up or Down button => Display BLC flashes
- Confirm setting with Mode button => Display Measure

5.) Deactivate key lock

- Briefly press Up, Down and Mode buttons simultaneously => Display BLC
- Briefly press Mode button once => Display BLC flashes
- Set UnL with Up or Down button => Display UnL flashes
- Confirm with Mode button => Display UnL static
- Return to Measure state via rEt (Return) menu item

6.) Selectable display units

The following units of measurement are available

Display	Procedure for adjusting settings
-6A bar	- Looking at the flow diagram, select the menu item SF (special functions) and briefly press Mode button.
-PA KPa	- PU appears on the display (pressure unit).
-A9 mmHg	- Select PU with Mode button. Now the desired unit can be selected with the Up or Down button.
-A8 inHg	- Confirm the selected unit with the Mode button and exit the menu via the rEt function (Return).

7.) Setting display to zero

- Operate switch in Measure mode
- Depress Mode button for 3 sec.
- Display is set to zero

8.) Peak values

- Briefly press Down button, the lowest measured value will be displayed for 3 sec.
- Briefly press Up button, the highest measured value will be displayed for 3 sec.

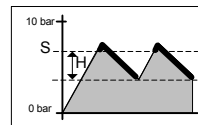
9.) Error messages

Error messages	Cause	Remedy
PSPDD / PSVDD	PSPDD / PSVDD	PSPDD / PSVDD
001 Overcurrent Out 1	Output 1 overloaded (current > 125 mA)	Increase load impedance
002 Overcurrent Out 2	Output 2 overloaded (current > 125 mA)	Increase load impedance
-FF Vacuum instead of pressure / pressure instead of vacuum	Vacuum instead of Pressure / Pressure instead of Vacuum	Apply pressure / vacuum
FFF Pressure / vacuum applied > pressure range	Pressure / Vacuum applied exceeds pressure range	Set pressure / vacuum inside the pressure range
E12 EEPROM defective	EEPROM defective, data memory defective	Switch defective, replace
E13 Distance to zero point > 3%	Vacuum or pressure was higher than +/- 3% of the measuring range	Reset zero point to ambient pressure

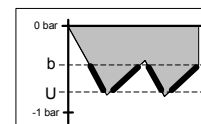
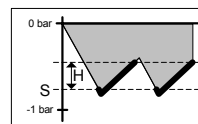
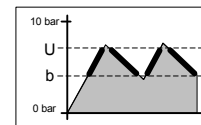
10.) Selecting the operating mode

Each output needs to be programmed individually, as they are completely independent and can work in different operating modes and under various settings.

Hysteresis mode



Window Comparator mode





Technical Data *pico* PSPDD / PSVDD

Electrical Data

- Response time <2.5 ms
- Operating frequency 200 Hz
- Supply voltage 10.8–30 VDC, keyed residual ripple 10%, Power supply must be limited to 150 VA max
- Input current during programming <55 mA
- Input current normal operation <30 mA
- Switchable outputs 2x PNP 125 mA short-circuit- proof
- 3-digit 7-segment display
- Ambient temperature influence 3% of measured value at 0 to 50°C
- Repeat accuracy 0.2% of measured value
- Hysteresis adjustable 0 to 100%
- Measuring range PSPDD 0 to 10 bar,
 PSVDD 0 to -1 bar
- Max. excess pressure PSPDD 16 bar,
 PSVDD 5 bar

Operating Conditions

- Not to be used at altitudes exceeding 2000 m above sea level
- Not permitted for use as safety device or pressure limiter
- May only be used in enclosed spaces

Environmental Conditions and Care

- Class of protection: IP65; with correctly fastened cable connector
- Measuring medium: non-corrosive gases, oil-free air
- Emitted interference adheres to DIN EN 50081-1
- Interference immunity adheres to DIN EN 50082-2
- Test voltage 1000 VDC 1 min
- Insulation resistance >100 M at 500 VDC
- Operating temperature 0 to +50°C
- Storage temperature -20 to +85°C
- Permissible humidity 10 to 90% RH
- Shock resistance 10G XYZ
- Vibration resistance 10 to 55 Hz, 1.5 mm, XYZ 2 hours
- Clean with a damp cloth. Do not use solvents.
- Dispose of equipment in an environmentally responsible manner

Mechanical Data

- Electrical connector plug M8 x 1 -4 pin
 - Measuring medium connector female thread IG M5, AG 1/8"
 - Weight ca. 25 g
 - max. cable length 10 m
 - Continuously rotating control device
Warning: Do not rotate the sensor on the wire
-