

# **Beck.**

## **The factory-set pressure switches with UL approval**



# Pressure switch 901

with factory-set pressure setting  
with UL approval



## Application

Factory-set pressure switch monitoring overpressure, vacuum or differential pressure of liquid and gaseous – also aggressive – media

Pressure setting and switching differential are factory-set by the manufacturer.

## Temperature range

Ambient temperature from  $-20^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$   
Temperature of media up to  $85^{\circ}\text{C}$  depending on material of pressure connection and diaphragm

## Diaphragm material

Depending on media NBR, Silicone, FKM (Viton<sup>®</sup>), EPDM

## Electrical rating

|                     |                          |
|---------------------|--------------------------|
| Standard version    | max. 6 (1.5) A / 250 VAC |
|                     | max. 10 (2) A / 250 VAC  |
|                     | max. 2 A / 24 VDC        |
| Low-voltage version | max. 100 mA / 24 VAC     |
|                     | max. 30 mA / 24 VDC      |

## Electrical connection

Tab terminal 6.3 mm x 0.8 mm in accordance with DIN 46244

## Life

Mechanically more than  $10^6$  cycles

## Conditions of Acceptability

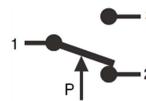
Consideration must be given to the following when the component is used in or with another product:

1. Suitability of the strain relief should be evaluated when installed in the end product.
2. A suitable power-supply cord shall be installed in the end product.

## Arrangement of contacts

for 901.1xU, 901.41U,  
901.51U

only for 901.2xU



## Damping

Restrictors alternatively with 0.3/0.5/0.8 mm diameter

## Mounting position

Mounting in any position, to be specified for settings below 100 mbar

## Protection

IP00 without protection cap  
IP44 / IP54 / IP65 depending on the used protection cap

## Protection class

Protection class II is only met by using a protection cap from our accessories program.  
The pressure switch without protection cap is provided for installation in equipment. The construction of the equipment and the type of installation determine the protection class.

## Conformity

ANSI / UL508; CSA C22.2#14

## Warning

Read instructions before use. This regulating and control unit must be installed in compliance with the applicable regulations.

## Accessories

Various mounting brackets and protection caps with IP 44, IP44, IP54 and IP 65

## Pressure connection

| Type    | Tube connection |         |         | Threaded connection          |                              |                              |        |
|---------|-----------------|---------|---------|------------------------------|------------------------------|------------------------------|--------|
|         | 5.0 mm          | 6.5 mm  | 10.0 mm | M10x1                        | G1/8                         | G1/4                         | G1/2   |
| 901.1xU | PA              | PA, PPS | PA, PPS | PA, PVDF<br>CuZn40, AISI 316 | PA, PVDF<br>CuZn40, AISI 316 | PA, PVDF<br>CuZn40, AISI 316 | CuZn40 |
| 901.2xU | PA              | PA, PPS | PA, PPS | PA, PVDF<br>CuZn40, AISI 316 | PA, PVDF<br>CuZn40, AISI 316 | CuZn40, AISI 316             | CuZn40 |
| 901.41U |                 | PA, PPS | PA, PPS | PA, PVDF<br>CuZn40, AISI 316 | PA, PVDF<br>CuZn40, AISI 316 | CuZn40, AISI 316             | CuZn40 |
| 901.51U |                 |         |         | CuZn40, AISI 316             | CuZn40, AISI 316             | CuZn40, AISI 316             |        |

PA = polyamide, PVDF = polyvinylidene fluoride, PPS = polyphenylsulfide, CuZn40 = brass, AISI 316 = stainless steel

For temperature above 85° C metal or PPS pressure connection is required. Upon request pressure connections of other sizes, other plastics or brass nickel-plated are available.

Viton® is a registered trademark of DuPont Dow Elastomers.

## Overpressure range

| Type    | Factory-set trip pressure |            | Switching differential (Hysteresis) |                    | Tolerance band of trip pressure | Maximum positive working pressure<br>standard/extended | Maximum negative working pressure<br>standard/extended |
|---------|---------------------------|------------|-------------------------------------|--------------------|---------------------------------|--|--|
|         | between                   | and        | lower end of range                  | upper end of range |                                 |  |  |
| 901.1xU | 5 mbar                    | 200 mbar   | 2.5 mbar                            | 50 mbar            | ± 10 %                          | 0.5 / 4 bar  | - / - 1 bar  |
|         | 200 mbar                  | 1,000 mbar | 50 mbar                             | 150 mbar           | ± 10 %                          | 1 / 4 bar  | - / - 1 bar  |
| 901.41U | 500 mbar                  | 3,000 mbar | 200 mbar                            | 600 mbar           | ± 10 %                          | 10 bar*  | - 1 bar  |
| 901.51U | 1.0 bar                   | 12 bar     | 0.2 bar                             | 1.5 bar            | ± 10 %                          | 25 bar   | - 1 bar  |

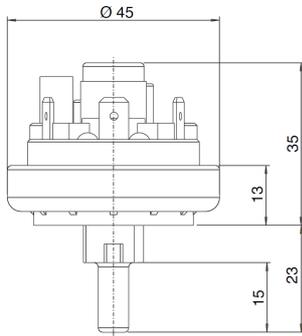
\*For pressure connections made of plastic, the maximum permissible working pressure is 7 bar!

## Vacuum range

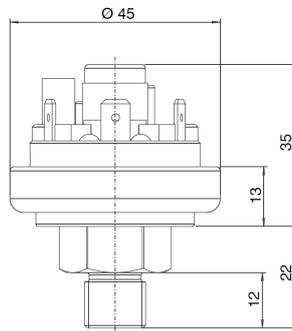
| Type    | Factory-set trip pressure |           | Switching differential (Hysteresis) |                    | Tolerance band of trip pressure | Maximum positive working pressure<br>standard/extended | Maximum negative working pressure<br>standard/extended |
|---------|---------------------------|-----------|-------------------------------------|--------------------|---------------------------------|--|--|
|         | between                   | and       | lower end of range                  | upper end of range |                                 |  |  |
| 901.2xU | -5 mbar                   | -200 mbar | 2.5 mbar                            | 50 mbar            | ± 10 %                          | 0.5 / 4 bar  | - 1 bar  |
|         | -200 mbar                 | -900 mbar | 50 mbar                             | 150 mbar           | ± 10 %                          | 1 / 4 bar  | - 1 bar  |

# Dimensional Drawings

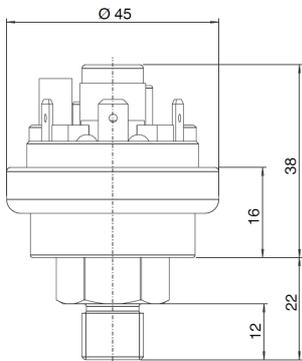
**901.10U/20U**



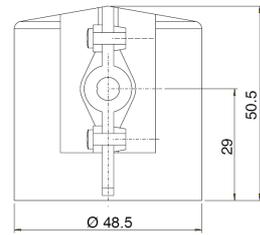
**901.11U/21U/41U**



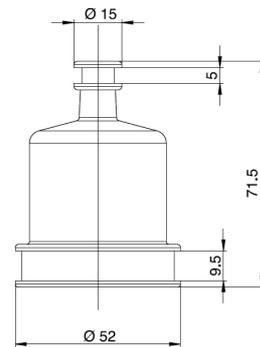
**901.51U**



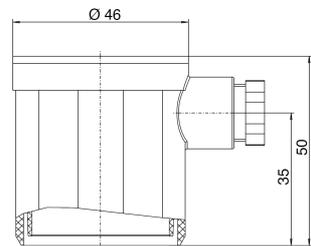
**Protection caps  
6329 IP44**



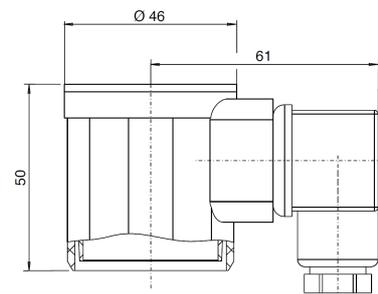
**6345 IP54**



**6371 IP54 / 6372 IP65**

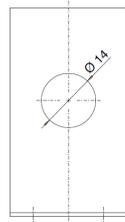


**6374 IP54 / 6375 IP65**

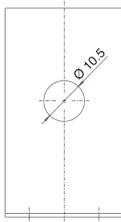


**Mounting brackets**

**6403**



**6404**



**6405**

