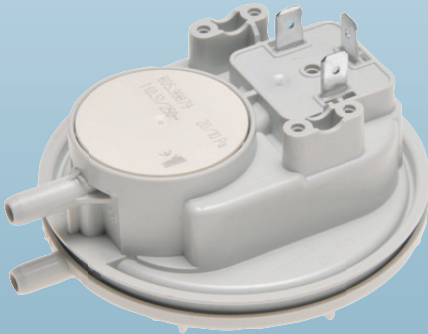




Mechanical pressure switch



# Huba Control

## OEM Relative and differential pressure switch

### Type 605

Type 605 pressure switches are specially developed for use in gas fired heating systems.

There are more than 40 million switches in use worldwide. Produced on a fully automated production line.

High setting accuracy and repeatability, combined with excellent reliability characterise a quality of switch above the industry norm.

**Pressure range**  
**20 ... 400 Pa**

- + Fitting of the switch – Fast mounting with snap bracket system
- + Adjusting security
- + High contact strength (typically 10 cN)
  - Essentially less susceptibility to pollution of contact
- + Roll operation of contact surface
  - Less sensitive to contact pollution through self cleaning effect
- + Diaphragm design / material
  - Better long term stability achieved through the use of a 2 component silicon diaphragm.
  - Unique trapezoid diaphragm design provides for a better contact release and therefore a more accurate switching point

## Technical overview

### Pressure range

|                           |                             |
|---------------------------|-----------------------------|
| Relative and differential | 20 ... 400 Pa <sup>1)</sup> |
|---------------------------|-----------------------------|

### Operating conditions

|                                                  |                                      |                 |
|--------------------------------------------------|--------------------------------------|-----------------|
| Medium                                           | Air and neutral gases                |                 |
| Temperature <sup>2)</sup>                        | Medium / ambient                     | -30 ... +110 °C |
|                                                  | Storage                              | -30 ... +110 °C |
| Tolerable overload on one side                   | < +85 °C                             | 5000 Pa         |
|                                                  | +85 ... +110 °C                      | 1500 Pa         |
| Smallest turn on pressure of 20 Pa <sup>3)</sup> | Smallest switching differential 8 Pa |                 |

### Materials in contact with the medium

|        |                             |
|--------|-----------------------------|
| Sensor | Silicone LSR                |
| Case   | PC Lexan 500R <sup>4)</sup> |

### Electrical overview

|                |                            |                                    |
|----------------|----------------------------|------------------------------------|
| Switching load | See Nominal loading limits |                                    |
| Contact system | Changeover switch          |                                    |
| Service life   | Mechanically               | > 10 <sup>6</sup> switching cycles |

### Protection standard

|                           |       |
|---------------------------|-------|
| Not mounted               | IP 00 |
| With contact safety guard | IP 30 |
| With cover, without seal  | IP 54 |
| With cover and seal       | IP 65 |

### Reproducibility

|         |        |
|---------|--------|
| Between | ± 1 Pa |
|---------|--------|

### Electrical connection

|                             |        |
|-----------------------------|--------|
| AMP connector <sup>5)</sup> | 6.3 mm |
|                             | 4.8 mm |

### Pressure connections

|                                                                     |          |
|---------------------------------------------------------------------|----------|
| Pipe                                                                | Ø 6.2 mm |
| Orifice installed for damping pulsating pressure at P1, P2 (option) |          |

### Mounting instructions

|                          |                                          |
|--------------------------|------------------------------------------|
| Installation arrangement | Please indicate installation arrangement |
| Mounting                 | With several brackets                    |
|                          | Fastening clip for quick mounting        |

### Tests / Admissions

|                                 |                     |
|---------------------------------|---------------------|
| UL                              | MFHX2/8 or XAAK2/8  |
| DVGW                            | acc. to DIN EN 1854 |
| EC type examination certificate | CE-0085AP0974       |
| Low voltage directive           | 2014/35/EU          |
| Gas appliance directive         | 2016/426/EU         |

### Weight

|                     |        |
|---------------------|--------|
| Without accessories | ~ 60 g |
|---------------------|--------|

### Packaging

|                                 |                                  |
|---------------------------------|----------------------------------|
| Multiple packaging in cardboard | 300 pieces                       |
|                                 | 1200 pieces (4 boxes per pallet) |

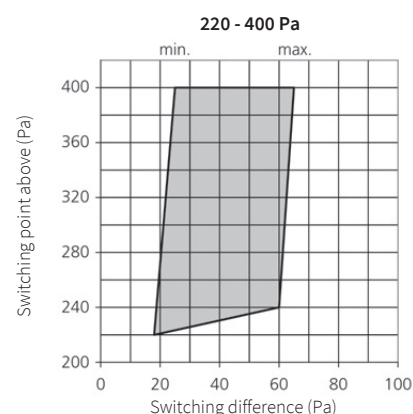
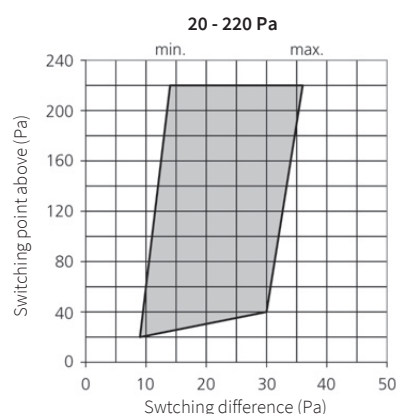
## Adjustable switching differences

Switching difference adjustment only inside shaded area:

Example: Upper switching point 220 pascal.  
Switching difference between 14 and 36 pascal.

Example: Upper switching point 40 pascal.  
Switching difference between 9 and 30 pascal.

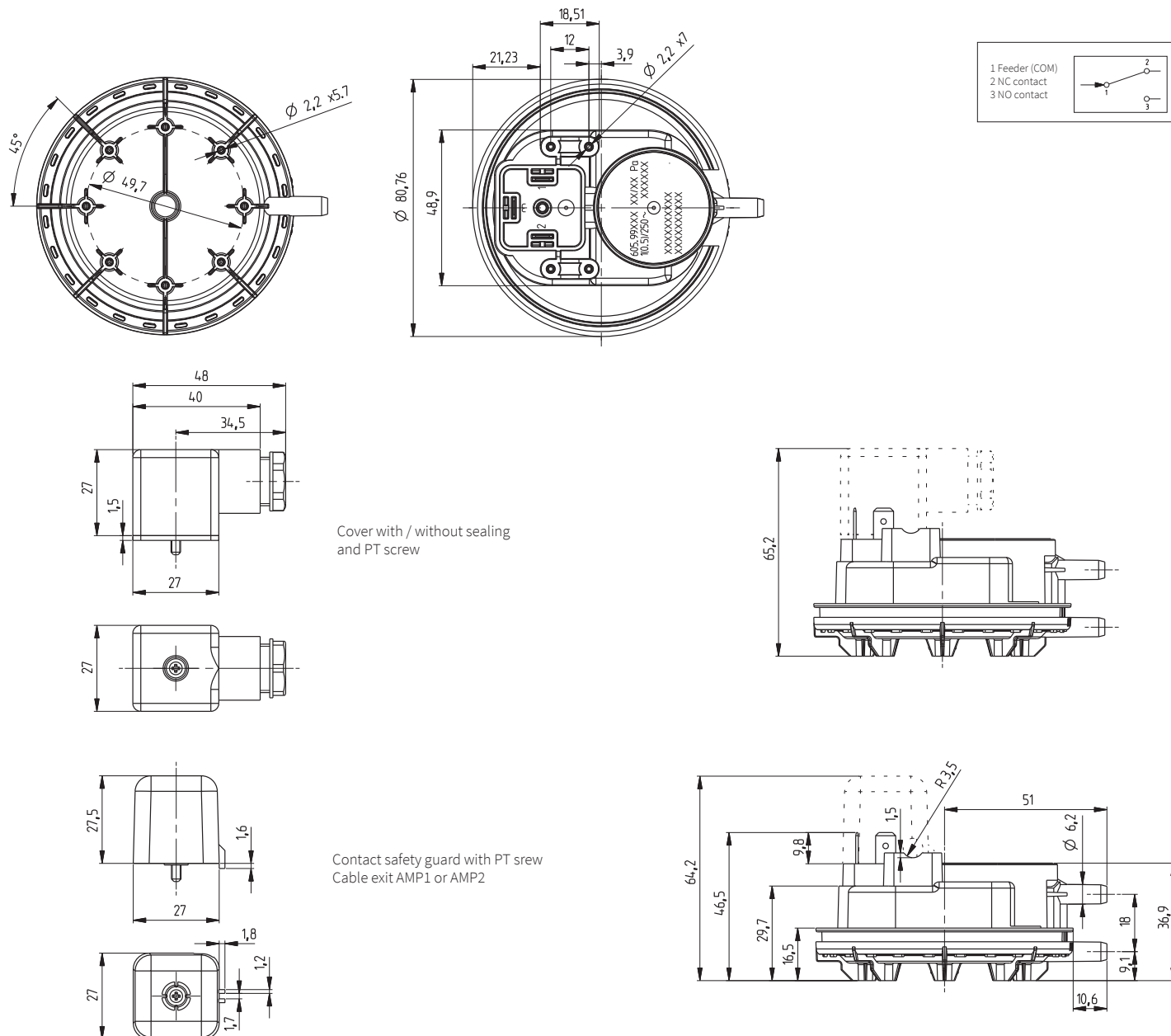
Example: Upper switching point 20 pascal,  
smallest switching difference 8 pascal.



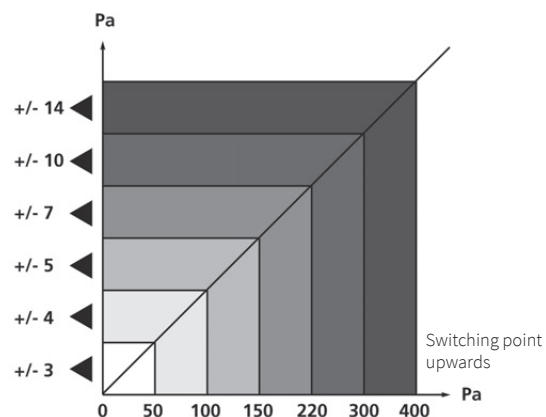
<sup>1)</sup> Higher pressures on request  
<sup>4)</sup> Fiberglass reinforced plastic 10% GF

<sup>2)</sup> Higher temperatures on request  
<sup>5)</sup> According to DIN 46244

<sup>3)</sup> Switching differential is factory-set

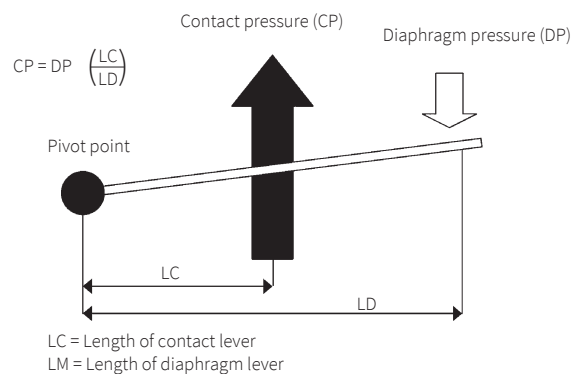


## Tolerance of switching point

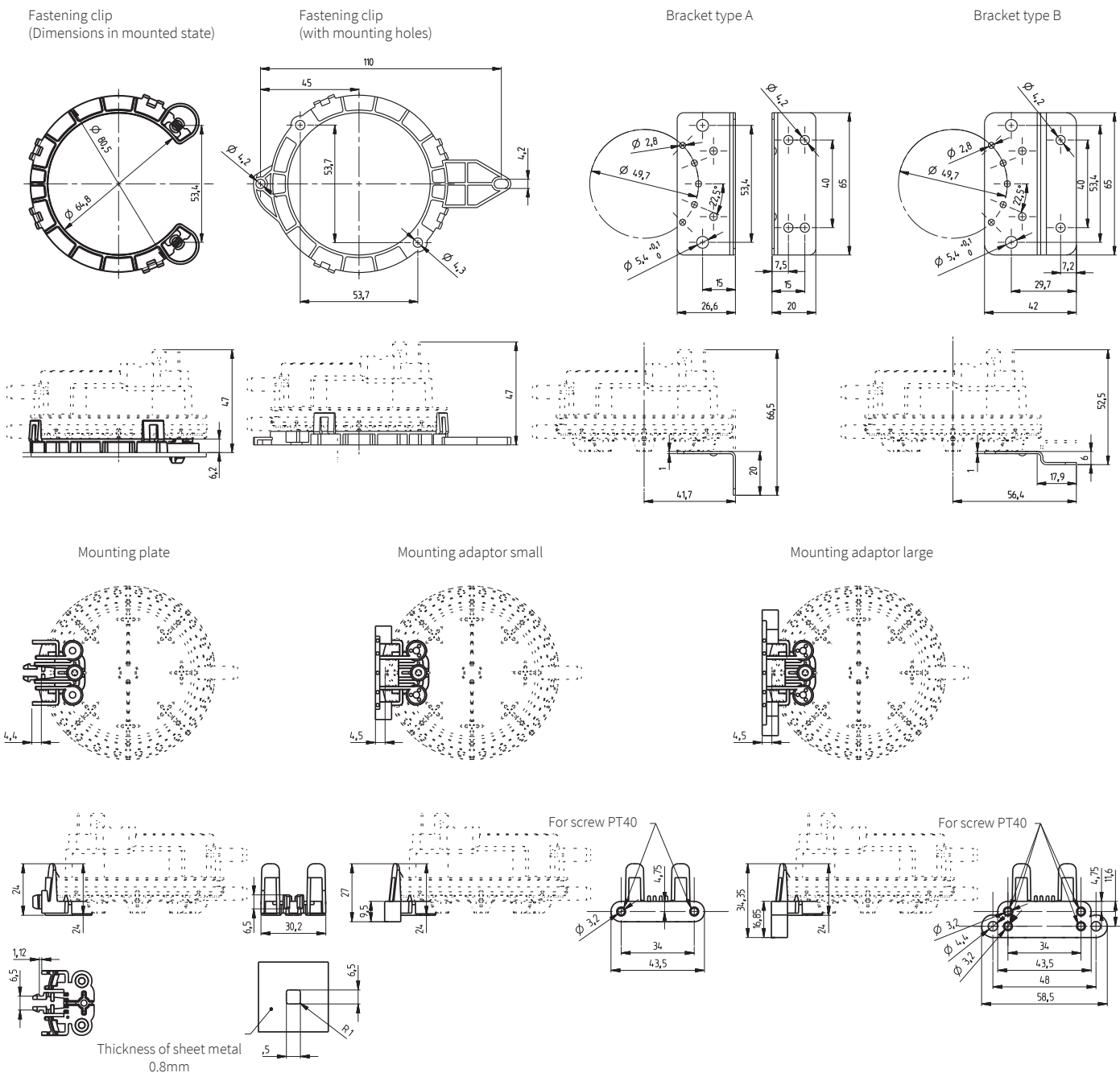


## The principle of high contact pressure

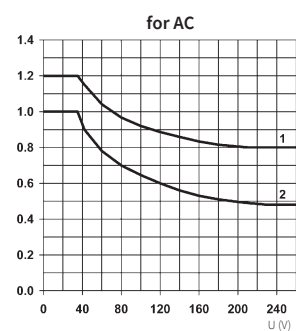
Simplified representation of the new DPS 605 contact system. The high contact pressure results from the optimized length ratios of LC and LD.



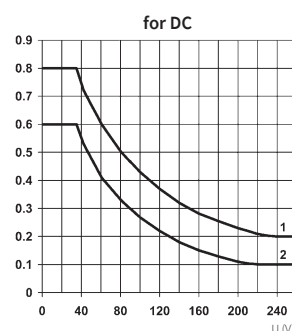
| Accessories <i>(supplied loose)</i>                       | Order number               |
|-----------------------------------------------------------|----------------------------|
| Cover with seal and PT screw                              | 100306                     |
| Cover without seal and PT screw                           | 100307                     |
| Cover with PT screw and cable output AMP-1                | 100297 + 102981 (PT screw) |
| Cover with PT screw and cable output AMP-2                | 100298 + 102981 (PT screw) |
| Fastening clip                                            | 100294                     |
| Fastening clip (with mounting holes)                      | 100293                     |
| Bracket type A                                            | 106790                     |
| Bracket type B                                            | 100295                     |
| Mounting plate                                            | 100296                     |
| Mounting adaptor small                                    | 106707                     |
| Mounting adaptor large                                    | 111223                     |
| Calibration certificate (at factory set switching points) | 112985                     |
|                                                           | 104551                     |



## Nominal loading limits



1 = ohmic  
2 = inductive ( $\cos\varphi$  0.7)



1 = ohmic  
2 = inductive  
Can also be operated with TTL-load

**Huba Control AG**

Headquarters Schweiz  
Industriestrasse 17  
CH-5436 Würenlos  
Telefon +41 56 436 82 00  
Fax +41 56 436 82 82  
info.ch@hubacontrol.com

**Huba Control AG**

Niederlassung Deutschland  
Schlattgrabenstrasse 24  
D-72141 Walddorfhäslach  
Telefon +49 7127 2393 00  
Fax +49 7127 2393 20  
info.de@hubacontrol.com

**Huba Control AG**

Vestiging Nederland  
Hamseweg 20A  
NL-3828 AD-Hoogland  
Telefoon +31 33 433 03 66  
Telefax +31 33 433 03 77  
info.nl@hubacontrol.com

**Huba Control SA**

Succursale France  
Rue Lavoisier  
Technopôle Forbach-Sud  
F-57602 Forbach Cedex  
Téléphone +33 3 87 84 73 00  
Télécopieur +33 3 87 84 73 01  
info.fr@hubacontrol.com

**Huba Control AG**

Branch Office United Kingdom  
Unit 13 Berkshire House, County Park  
Business Centre, Shrivenham Road  
Swindon, Wiltshire SN1 2NR  
Phone +44 1993 77 66 67  
Fax +44 1993 77 66 71  
info.uk@hubacontrol.com

**[www.hubacontrol.com](http://www.hubacontrol.com)**

