## Metal-diaphragm differential pressure switch Type DPD1T-.../DPD2T-...

## Mechanical single/dual pressure switch <br> Repeatability $\pm 1.0 \%$ at constant temperature

## Features

Metal-diaphragm differential pressure switch Switching point can be adjusted with corresponding reference unit during operation

## Applications

machine and tool engineering,
autoclaves, pump control, refrigerant monitoring ship building applications


## Technical Data

| medium-contacting parts: | Stainless steel 17-7PH nickel-faced aluminium O-rings: FKM |
| :---: | :---: |
| Repeatability: | $\pm 1 \%$ at constant temperature |
| Switching rate: | max. 20/min |
| Temperature range: | $-40^{\circ} \mathrm{C} \ldots+75^{\circ} \mathrm{C}$ |
| System of protection | IP65 |
| Housing: | anodized aluminium |
| Process connection: | 1/8" NPT female thread |
| Electrical connection: | internal terminal strip (0.5-2.5 mm²) <br> Standard: WAGO terminal and cable gland M20×1.5; clamping range $\varnothing 5 \ldots 11 \mathrm{~mm}$ |
|  |  |


| Electrical load capacity and <br> hysteresis: | Many microswitch versions with <br> different switching powers and <br> hysteresis are applicable and make <br> it possible to make customized <br> changes. |
| :--- | :--- |
| Weight: | DPD1T-...: approx. 1.6 kg <br> DPD2T-...: approx. 1.7 kg |
| Switching point <br> adjustment: | Switching point lowers by turning <br> the adjustment screw clockwise. |
| Inherent safety: | The switches are also applicable <br> for inherent safety applications. <br> Add "Exi" in case of ordering. The <br> following max. values are valid when <br> using those switches: <br> Umax 28 V <br> Imax $=50 \mathrm{~mA}$ |
| Approval: | --- |

## Pressure stages

Values shown in red (max. pressure rising) = max. operating pressure

* possible operating pressures up to 28 bar. Differential pressure of the adjustment range must not be exceeded.

| Pressure stage <br> code | Adjustment range [bar] * |  |  | Test pressure <br> [bar] | Max. hysteresis of the different switches <br> in bar (end of range) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Analog Input | rising pressure | lowering pressure | (short time) | H, GH [bar] | M, GM [bar] |  |
| Overpressure |  |  |  |  |  |  |
| 3SS | $0.01 \ldots$ | 0.2 | $0.002 \ldots$ | 0.2 | 0.7 | 0.008 |
| 18SS | $0.04 \ldots$ | 1.2 | $0.03 \ldots$ | 1.2 | 4.0 | 0.022 |
| 80SS | $0.14 \ldots$ | 5.5 | $0.030 \ldots$ | 5.4 | 10.9 | 0.140 |
| 150SS | $0.30 \ldots$ | 10.3 | $0.100 \ldots$ | 10.1 | 20.0 | 0.260 |

## Dimensions (in mm / inch)



## Load capacity

| Microswitch | special features | $\begin{aligned} & \text { Volt AC } \\ & 50 / 60 \mathrm{~Hz} \end{aligned}$ | Ind. load A | Res. load A | Volt DC | Ind. load A | Res. load A | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| H | Microswitch with silver contacts | $\begin{aligned} & 125 \\ & 250 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | $\begin{array}{r} 6 \\ \text { to } \\ 28 \end{array}$ | 0.50 | 0.5 | low change-back values; high AC-/ low DC-load |
| M | Microswitch with silver contacts | $\begin{aligned} & 125 \\ & 250 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | $\begin{array}{r} 12 \\ 24 \\ 250 \end{array}$ | $\begin{aligned} & 5.00 \\ & 1.00 \\ & 0.25 \end{aligned}$ | $\begin{array}{r} 15.0 \\ 2.0 \\ 0.4 \end{array}$ | intermediate change-back <br> values; <br> high AC- and <br> DC-loads |
| GH <br> gm | Microswitch with gold contacts for low voltage and low current | $\frac{125}{30}$ | $\frac{1}{0.1}$ | $\frac{1}{0.1}$ | $\frac{24}{30}$ | $\frac{1.00}{0.10}$ | $\frac{1.0}{0.1}$ | low change-back values intermediate change-back values |

## Options

|  | DPD1T-... |  |  |
| :--- | :--- | :--- | :--- |
| ST1 | Plug, 3-pin + E, DIN EN 175 301-801-A (prev. DIN 43650) | ST3 | Plug, 6-pin + E, DIN 43651 |
| ST2 | Amphenol plug 4-pin + E | EXI | for intrinsically safe application |
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## Ordering

## Example for order number



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