

# Metal Diaphragm Diff. Press. Switches

## DPD1T/DPD2T

Mechanical single/dual pressure switch  
Repeatability  $\pm 1.0$  % at constant temperature

### Features

- ▶ Metal diaphragm pressure switches
- ▶ Wetted parts welded
- ▶ Direct action, no friction, high accuracy
- ▶ Approvals: Ex ia, marine, SIL2 (IEC 61508)

### Adjustment ranges

0.02 ... 10.2 bar, differential pressure

### Applications

Machine and tool engineering,  
Autoclaves,  
Pump control,  
Refrigerant monitoring,  
Ship building applications



### Technical Data

<b>Wetted parts:</b>	Stainless steel 17 - 7PH Aluminium, nickel-plated O-rings: FKM
<b>Repeatability:</b>	$\pm 1$ % at constant temperature
<b>Switching rate:</b>	max. 20/min
<b>Temperature range:</b>	-40 °C... +75 °C
<b>Protection class:</b>	IP65
<b>Housing:</b>	Top part: aluminium powder coated Bottom part: aluminium nickel-plated
<b>Process connection:</b>	1/8" NPT female thread
<b>Electrical connection:</b>	Internal terminal strip (0.5 - 2.5 mm <sup>2</sup> ) Standard: WAGO terminal and cable gland M20 x 1.5; clamping range $\varnothing 5$ ... 11 mm

<b>Electrical ratings and hysteresis:</b>	A large variety of micro switches offers different electrical ratings and hysteresis for many applications.
<b>Weight:</b>	DPD1T-...: approx. 1.6 kg DPD2T-...: approx. 1.7 kg
<b>Set point adjustment:</b>	Turn the adjustment screw clockwise to decrease the set point
<b>Intrinsically safe:</b>	The switches are designed for intrinsically safe applications. In this case we recommend gold contacts. Please add "Exi" to your ordering details when placing an order. To comply with the intrinsically safe approval following max. ratings must not be exceeded: U <sub>max</sub> = 28 V; I <sub>max</sub> = 50 mA
<b>Approval:</b>	---

### Pressure Ranges

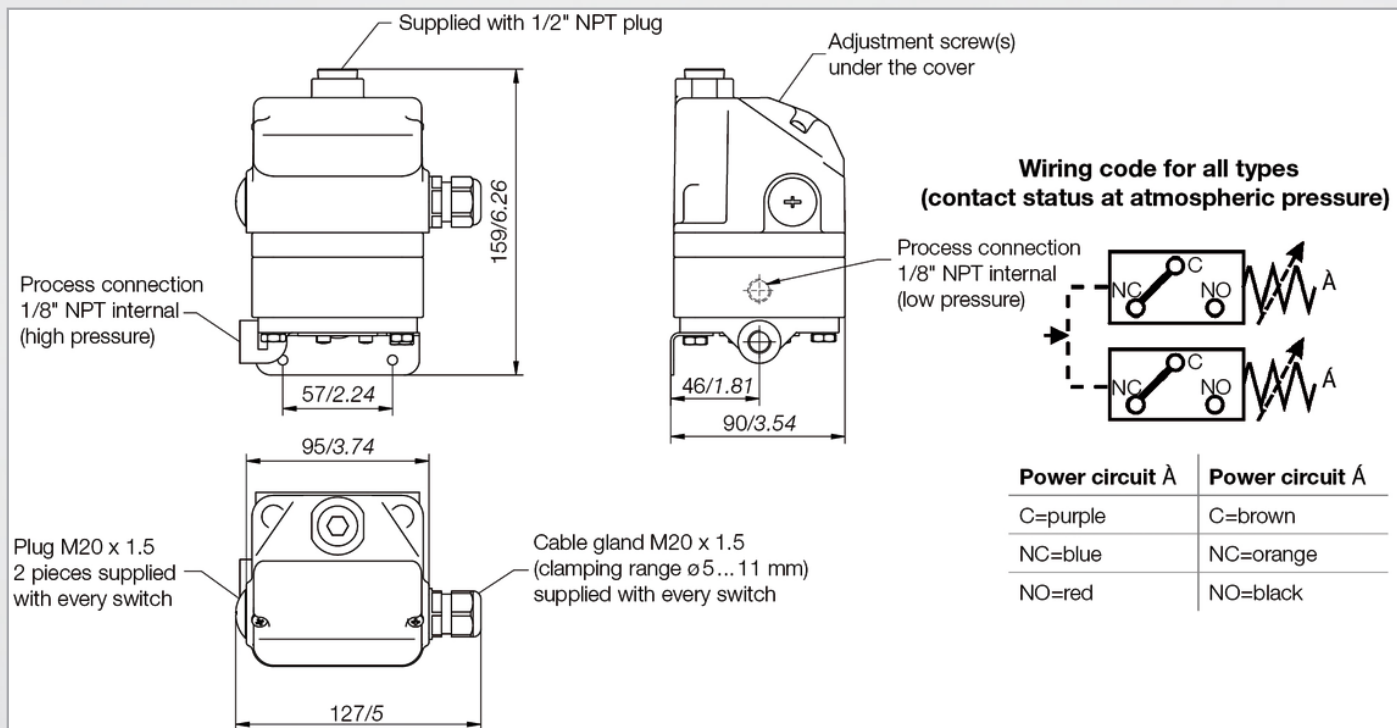
\* Static operating pressures up to 28 bar possible. Differential pressure of the adjustable range must not be exceeded.

Pressure range code	Adjustment range [bar] *		Max. operating pressure [bar]	Proof pressure [bar] (short term)	Max. hysteresis of switch types in bar (end of range)	
	Increasing press.	Decreasing press.			H, GH [bar]	M, GM [bar]
Overpressure						
3SS	0.02 ... 0.2	0.002 ... 0.2	0.5	0.7	0.01	0.02
18SS	0.05 ... 1.2	0.030 ... 1.2	3,0	4.0	0.02	0.05
80SS	0.40 ... 5.4	0.030 ... 5.2	8,0	10.7	0.14	0.32
150SS	0.70 ... 10.2	0.100 ... 9.7	15,0	20.0	0.26	0.60

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### Dimensions (mm / inch)



### Electrical Ratings

Micro switch	Special features	Volt AC 50/60 Hz	Ind. load A	Res. load A	Volt DC	Ind. load A	Res. load A	Comments
H	Micro switch with silver contacts	125 250	10 10	10 10	6 to 24	0.50	0.5	Small hysteresis; High AC-/ low DC-load
M	Micro switch with silver contacts	125 250	10 10	10 10	12 24 250	5.00 1.00 0.25	15.0 2.0 0.4	Medium hysteresis; High AC- and DC-loads
GH	Micro switch with gold contacts for low voltage and/or low current (e. g. "Exi")	125	1	1	24	1.00	1.00	Small hysteresis
GM		30	0.1	0.1	30	0.10	0.1	Medium hysteresis

### Options

	DPD1T-...		DPD2T-...
ST1	Plug, 3-pin + E, DIN EN 175 301-801-A (prev. DIN 43650)	ST3	Plug, 6-pin + E, DIN EN 43651
ST2	Amphenol plug 4-pin + E	EXI	for intrinsically safe application
EXI	for intrinsically safe application		

### Order Code

Example for order number

Type	Micro switch	Pressure range code	Options	Approval
DPD1T or DPD2T	GH	3SS	ST2	EXI

Your order number

Type	Micro switch	Pressure range code	Options	Approval