

Metal Diaphragm Diff. Press. Switches

DPD1T/DPD2T

Index: J / 923-1491

Mechanical single/dual pressure switch
Repeatability ± 1.0 % at constant temperature

Features

- ▶ Metal diaphragm pressure switches
- ▶ Wetted parts welded
- ▶ Direct action, no friction, high accuracy
- ▶ Approvals: Ex ia, marine, SIL2/3 (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

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

Electrical ratings and hysteresis:	A large variety of micro switches offers different electrical ratings and hysteresis for many applications.
Weight:	DPD1T-...: approx. 1.6 kg DPD2T-...: approx. 1.7 kg
Set point adjustment:	Turn the adjustment screw clockwise to decrease the set point
Intrinsically safe:	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 _{max} = 28 V; I _{max} = 50 mA
Approval:	DNV-GL, Ex ia, SIL2/3

Pressure Ranges

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

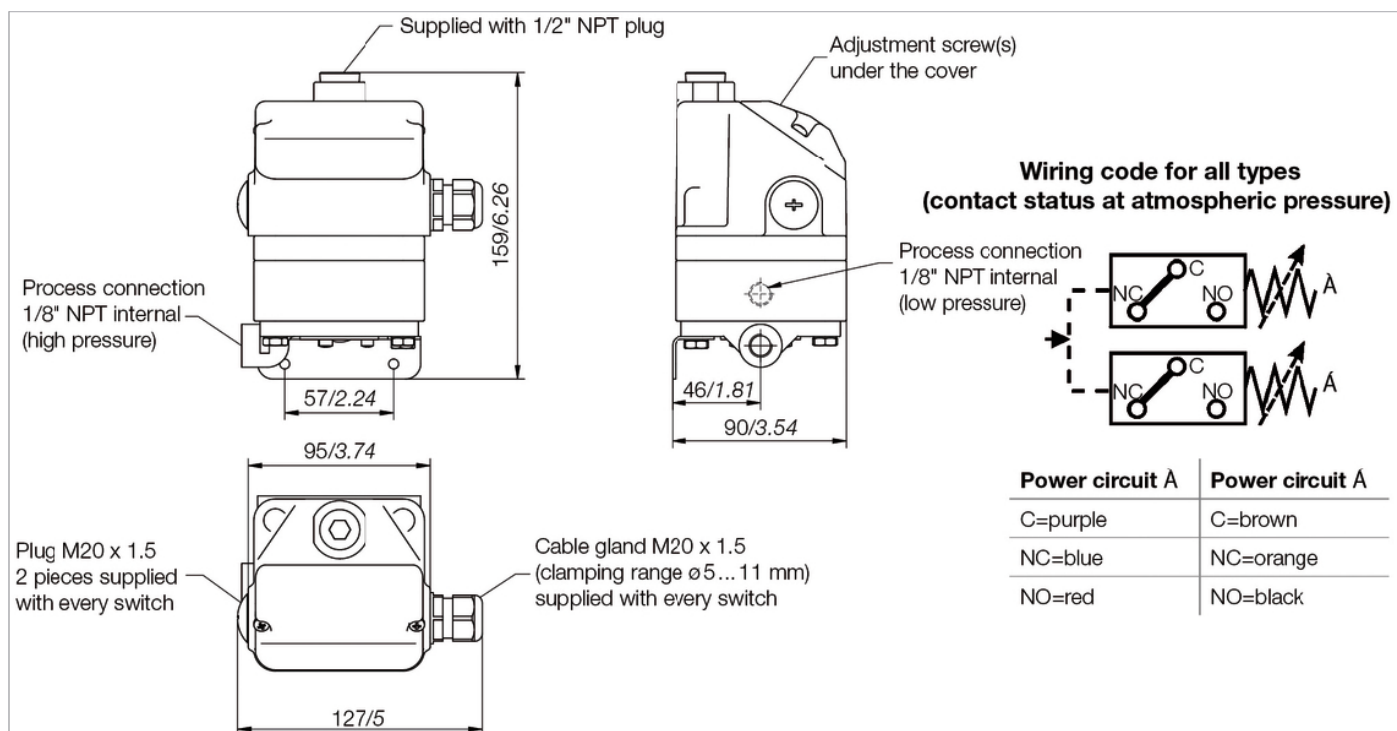
Pressure range code	Adjustment range [bar] *		Max. operating pressure [bar]	Proof pressure [bar]	The resulting hysteresis is approx. ... bar at the end of range	
	Increasing press.	Decreasing press.		(short term)	H, GH [bar]	M, GM [bar]
Overpressure						
3SS	0.02 ... 0.2	0.002 ... 0.2	0.47	0.7	0.01	0.02
18SS	0.05 ... 1.2	0.030 ... 1.2	2.7	4.0	0.02	0.05
80SS	0.40 ... 5.4	0.030 ... 5.2	7.1	10.7	0.14	0.32
150SS	0.70 ... 10.2	0.100 ... 9.7	13.3	20.0	0.26	0.60

Metal Diaphragm Diff. Press. Switches

DPD1T/DPD2T

Index: J / 923-1491

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			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
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	- ST1	- EXI

Your order number

Type	Micro switch	Pressure range code	Options	Approval
or				