

Metal Diaphragm Pressure Switches

D1T/D2T

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

Features

- ▶ Metal diaphragm pressure switch
- ▶ Wetted parts welded
- ▶ Direct acting, no friction, high accuracy
- ▶ Approvals: Ex ia, UL, CSA, marine, SIL2/3 (IEC 61508)

Adjustment ranges

0.005 ... 10.3 bar and
-0.006 ... -1 bar (Vacuum)

Applications

Machine and tool engineering,
Autoclaves, pump control,
Refrigerant monitoring, chemical industry
Ship building applications



Technical Data

Wetted parts:	Stainless steel 17 - 7PH / SS304
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 anodized
Process connection:	1/4" NPT female thread Optional: 1/2" NPT female thread (P2)
Electrical connection:	WAGO terminal and cable gland M20 x 1.5; clamping range $\varnothing$ 5 ... 11 mm
Electrical load capacity and hysteresis:	Many micro switch versions with different switching powers and hysteresis are available and make it possible to make customized changes.
Weight:	D1T-...: approx. 1.0 kg D2T-...: approx. 1.1 kg
Set point adjustment:	Turn the adjustment screw clockwise to decrease the set point

Intrinsically safe:	The switches are also available for intrinsically safe applications. In this case we recommend gold contacts. Add "Exi" in case of ordering. Maximum rating according to ATEX: U _{max} = 28 V I _{max} = 50 mA
Approval:	Cert. No.: TÜV 20 ATEX 248753X, IECEx TUN 21.0002X D1T, D2T: (Ex) II 1 G Ex ia IIC T6 Ga or II 1 D Ex ia IIIC T200 100°C Da -40 °C < Ta < +75 °C Ui = 28 V li = 50 mA Pi = 0.84 W Ci, Li = negligibly small D1T with connector ST1, D2T with connector ST3: (Ex) II 1 G Ex ia IIB T6 Ga or II 1 D Ex ia IIIC T200 100°C Da -40 °C < Ta < +75 °C Ui = 28 V li = 50 mA Pi = 0.84 W Ci, Li = negligibly small

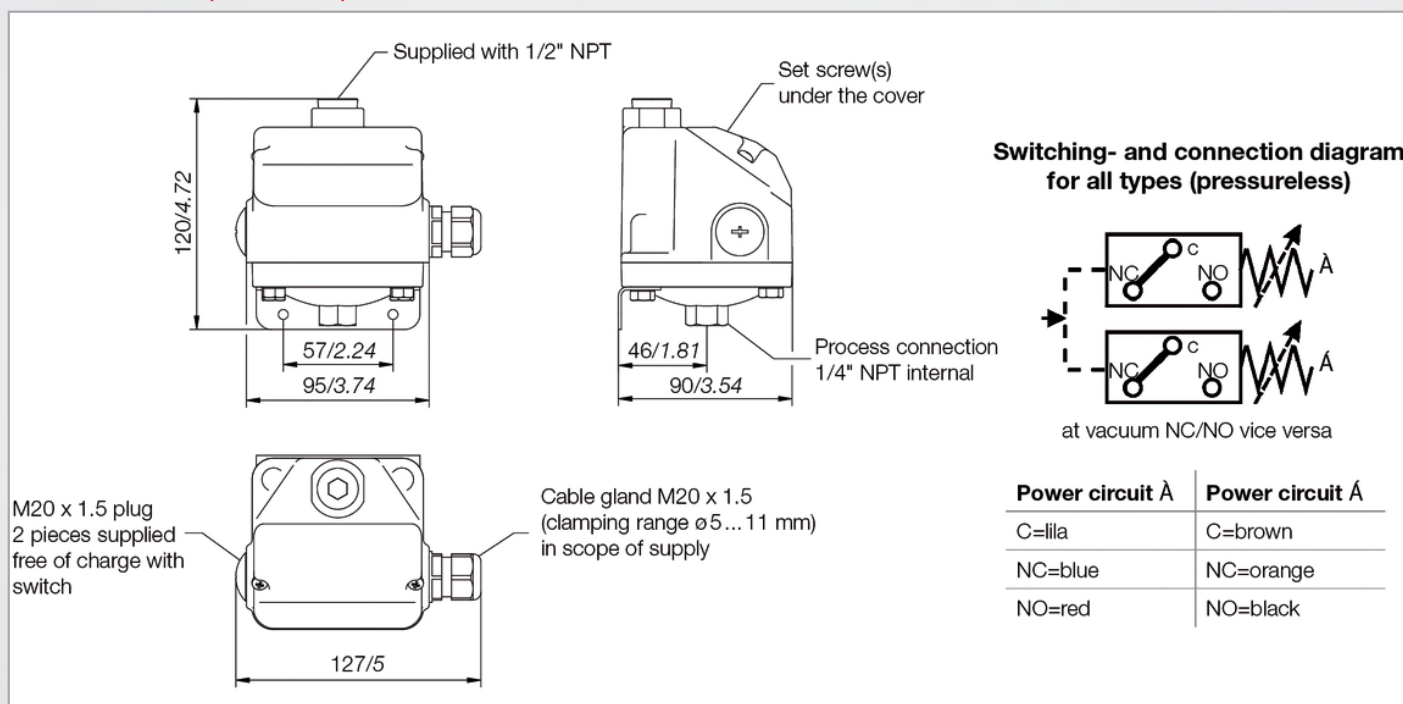
Pressure Ranges

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						
2SS	0.005 ... 0.11	0.001 ... 0.11	0.13	0.2	0.004	0.006
3SS	0.012 ... 0.20	0.002 ... 0.196	0.47	0.7	0.005	0.010
18SS	0.050 ... 1.20	0.030 ... 1.20	2.7	4.0	0.018	0.040
80SS	0.300 ... 5.50	0.030 ... 5.30	7.1	10.7	0.110	0.240
150SS	0.500 ... 10.30	0.100 ... 9.90	13.3	20.0	0.190	0.420
Vacuum						
3SS	-0.006 ... -0.20	-0.002 ... -0.196	0.13	0.2	0.004	0.009
18SS	-0.040 ... -1.00	-0.020 ... -0.970	0.67	1.0	0.030	0.060

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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

D1T-...	D2T-...
ST1 Plug, 3-pin + E, DIN EN 175 301-801 (prev. DIN 43650)	ST3 Plug, 6-pin + E, DIN 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
D1T or D2T - GH	3SS	ST1	EXI	

Your order number

Type	Micro switch	Pressure range code	Options	Approval