

# Bourdon Tube Pressure Switches

## B1T/B2T

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

### Features

- ▶ Bourdon tube pressure switch
- ▶ All welded parts wetted
- ▶ Direct acting, no friction, high accuracy
- ▶ Approvals: Ex ia, UL, CSA, , DNV-GL, SIL2/3 (IEC 61508)

### Adjustment ranges

4.8 ... 950 bar

### Applications

Pump control,  
Die-casting machines,  
Press control,  
Power plants,  
Alarm functions



### Technical Data

<b>Wetted parts:</b>	
Process connection:	Stainless steel 1.4401
Bourdon tube:	Stainless steel 1.4401
<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>	Aluminium, anodized
<b>Process connection:</b>	1/4" NPT female thread except ranges marked with *). These switches have proof pressures above 500 bar and are provided with high pressure thread with adapter "G1/4 female".
<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

<b>Electrical ratings and hysteresis:</b>	A large variety of micro switches offers different electrical ratings and hysteresis for many applications.
<b>Weight:</b>	B1T-...: approx. 1.1 kg B2T-...: approx. 1.2 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>	Ex ia, UL, CSA, DNV-GL

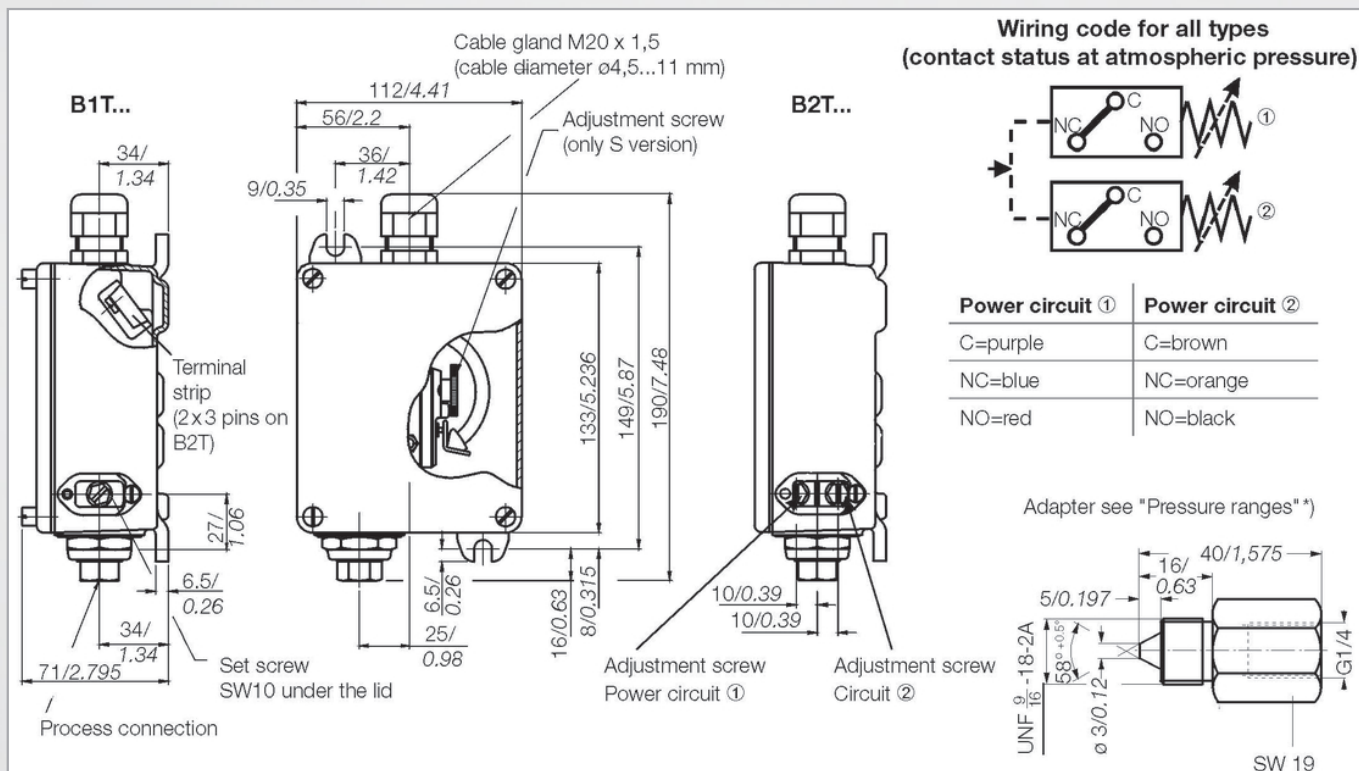
### Pressure Ranges

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]
12SS	4.8 ... 82	3.4 ... 81	100	120	0.96	1.86
32SS	13.7 ... 220	11.0 ... 217	250	330	2.68	5.44
48SS	22.4 ... 330	16.5 ... 325	400	500	2.75	5.90
65SS*	30.3 ... 448	22.5 ... 440	550	670	3.58	7.92
120SS*	79.3 ... 827	41.4 ... 790	900	1200	16.90	37.90
180SS	79.3 ... 950	41.4 ... 950	999	1600	16.90	37.90

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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	125 250 480*	10 10 3	10 10 3	6 to 24	0.50	0.5	Small hysteresis; High AC-/ low DC-load
M	Micro switch with silver contacts	125 250 480*	10 10 3	10 10 3	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	125	1	1	24	1.00	1.00	Small hysteresis
GM	(e. g. "Exi")	30	0.1	0.1	30	0.10	0.1	Medium hysteresis

\* on request

### Options

	B1T...		B2T...
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
B1T or B2T	GH	48SS	EXI

Your order number

Type	Micro switch	Pressure range code	Options