

# Bourdon Tube Press. Switches

## B1X/B2X

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

### Features

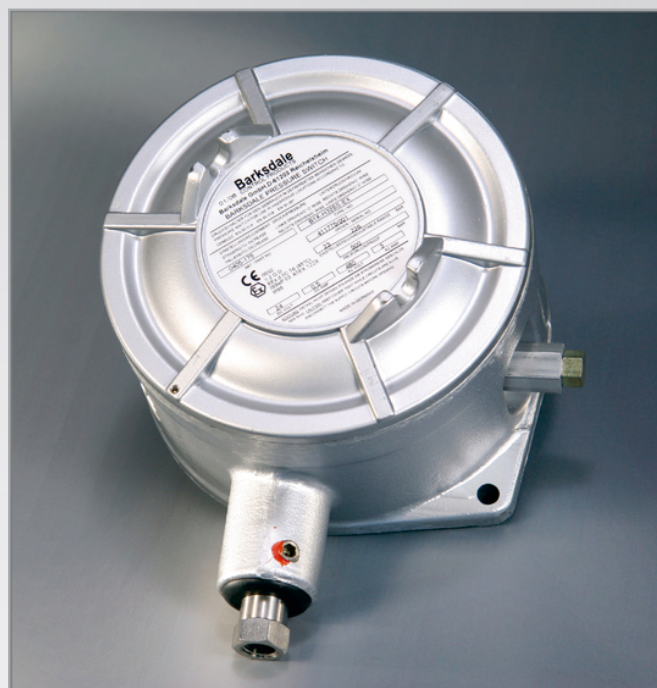
- ▶ Bourdon tube pressure switch
- ▶ All welded parts wetted
- ▶ Direct acting, no friction, high accuracy
- ▶ Approvals: Ex ia, Ex d, UL, CSA, SIL 2/3 (IEC 61508)

### Adjustment ranges

5.3 ... 496 bar

### Applications

Pump control,  
Injection moulding,  
Press control,  
Power plants,  
Alarm functions



### Technical Data

<b>Wetted parts:</b>	
Process connection:	Stainless steel 1.4401 and 1.4305
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>	Explosion proof housing, aluminum anodized and lacquered
<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" IG.
<b>Electrical connection:</b>	Internal terminal strip (0.5 - 2.5 mm <sup>2</sup> ), approved cable gland has to be provided by the customer
<b>Electrical rating and hysteresis:</b>	Many micro switch versions with different switching powers and hysteresis are applicable and make it possible to make customized changes.

<b>Weight:</b>	B1X-....: approx. 3.9 kg B2X-....: approx. 3.9 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>	<b>Ex:</b> Ex d II C T6 acc. to ATEX <b>cULus:</b> Class I, Groups B, C, D Class II, Groups E, F, G acc. to Underwriter Laboratories Inc. and Canadian Standard Assn.

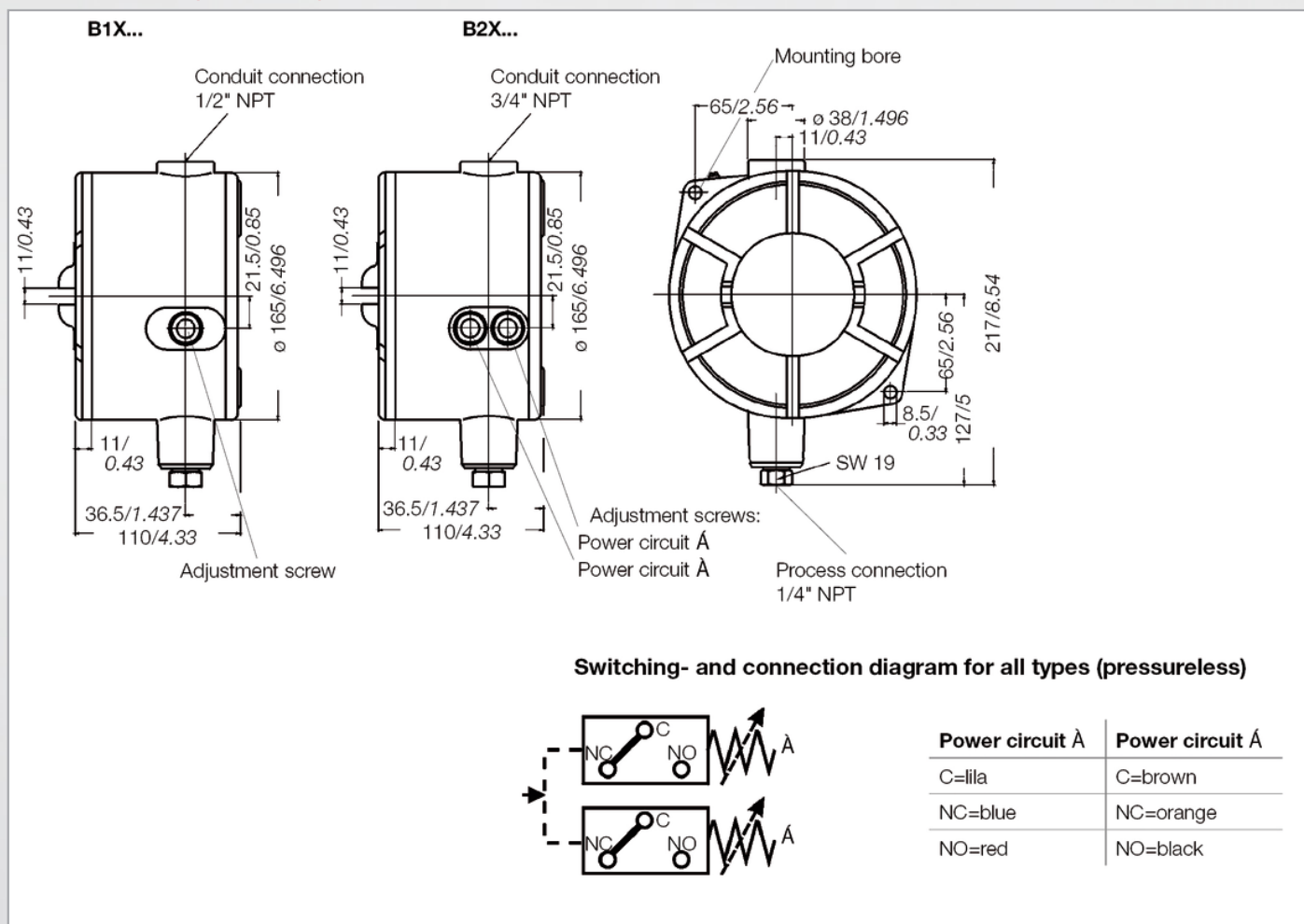
### Pressure Ranges

Pressure range code	Adjustment range [bar]		Max. operating pressure [bar]	Proof pressure [bar] (short term)	Max. hyst. of the different switches in bar (end of range)	
	Increasing press.	Decreasing press.			H, GH [bar]	M, GM [bar]
12SS	5.3... 83	3.4... 81	100	125	0.96	1.86
20SS	13.7... 137	11.0... 134	250	330	2.68	5.44
32SS	22.4... 220	16.5... 215	400	500	2.75	5.90
72SS*	79.3... 496	41.4... 459	600	950	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 (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

\* on request

### Order Code

Example for order number

Type

B1X

or

B2X

-

Micro switch

GH

Pressure range code

72SS

Approval

EXI

Your order number

Type

or

-

Micro switch

Pressure range code

Approval

### Approvals

EX	Ex d approval
UL	cULus approval
EXI	Ex i approval