

DESCRIPTION

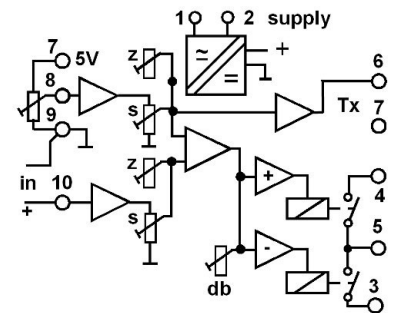
The BPSC170 is a 3-point positioning control block designed as a final drive element for motorised actuators. The analogue input signal is typically 4 - 20mA or 1 - 5Vdc but can be configured for any signal from 100mV up to 10Vdc or 0.5mA up to 1Adc. For final field calibration or recalibration SPAN and ZERO multi turn adjustments are available on the front of module. The input signal is compared with the signal from a potentiometer or slide-wire representing the actual position of the actuator. Resistance values of 100Ω up to 10kΩ can be used for the feed-back potentiometer. There are also SPAN and ZERO multi-turn trim potentiometers provided at module front to enable accurate setting of actuator stroke limits. These adjustments cover a wide range so that the actuator stroke can be limited or offset if required. The actuator position is available as a load independent 0 - 1mA signal for remote indication or set-up of actuator stroke (0 - 1mA typically, other outputs are available). Any difference between the feedback signal and the input process signal will operate the "decrease" or "increase" output contact. Both contacts are open when input equals feedback. The operation of either relay is indicated by a red LED on the front. A dead-band adjustment (DB) of 0.5 up to 5% of input is provided to match the BPSC170 to the actuator run speed. With increase of "DB" the non-operation zone will increase and erratic operation, overshoot or oscillation is prevented. RF and power transient protection are standard with all BASI modules. Various power supply choices are available varying from 240Vac down to 8Vdc, all provide power isolation.



General Specifications

Size:	52 W x 70 H x 110 D (mm).
Mounting:	DIN-Rail, gear plate.
Termination:	Screw terminals on front.
Protection class:	IP40.
Weight:	0.320 kg.
Housing material:	ABS.
Calibration accuracy:	0.1% of span.
Combined repeatability and drift error:	0.5% of span.
Temperature effect:	0.01% per °C.
Power supply voltage fluctuation effect:	For ±10% fluctuation 0.5% of range.
Input trim adjustments:	ZERO ±30%, SPAN ± 30%.
Feed-back trim adjustments:	ZERO ±40%, SPAN -60% +40%.
Dead band adjustment:	0.5...5% of span.
Position retransmit output:	0 - 1mA into 3kΩ. 0 - 5mA into 600Ω.
Output load change effect:	less than 0.2% up to max. load.
Power requirement	3W.
Power supply isolation:	2kV rms.
Electromagnetic compatibility:	CE, EN 50081-1, EN 50082-2, EN 61010-1, AS/NZS 4251.1

Block Diagram



For input / output combinations refer to TYPE NO. DESIGNATION overleaf.

TYPE NO. DESIGNATION
Power Supply: _____

- | | |
|------------------------------------|-----------------------|
| 1 = 90-280Vac 50/60Hz (65-280Vdc). | *) 4 = 8 - 60Vdc. |
| *) 3 = 16-48Vac 50/60Hz (10-60Vdc) | *) 9 = Other specify. |

Input: _____

- | | |
|---------------------------------|---------------------------------|
| 01 = 4 - 20mA, 0 - 20mA (100Ω). | 05 = 0 - 5Vdc 1 - 5Vdc (200kΩ). |
| 02 = 10 - 50mA, 0 - 50mA (47Ω). | 06 = 0 - 10Vdc (470kΩ). |
| 03 = 0 - 1mA (1kΩ). | 07 = 0 - 10mA (100Ω). |
| 04 = 0 - 1Vdc (200kΩ). | *) 09 = Other specify. |

Position Retransmit Output: _____

- 1 = 0 - 1mA.
 2 = 0 - 5mA.
 3 = 0 - 1V.
 *) 9 = Other specify.
 Note: 4 - 20mA not available.

Contact Rating: _____

- 1 = 16A/250Vac resistive.
 *) 9 = Other specify.

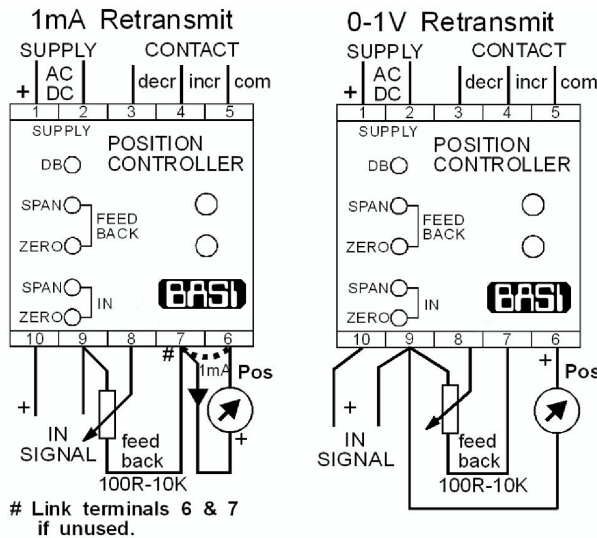
Brake Operation: _____

- 0 = None.
 *) 1 = Optional contact wiring for brake operation.

Options: _____

- 0 = None.
 *) 9 = Other specify.

*) = Price Extra

Standard Wiring


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