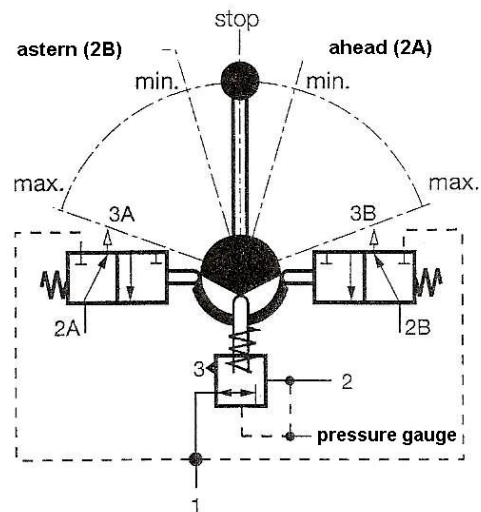


Lever operated pneumatic controller, type Servo B



Function

By turning a lever out of the neutral mid-position in 2 directions, a pressure regulating valve is infinitely adjusted and with that the output pressure. Once set, the output pressure will be maintained, independent of the air consumption. As soon as the lever has a certain angular displacement out of the mid-position, a separate 3/2-way valve is operated in both directions.

Applications

Remote control for marine engines with pneumatically operated speed regulator and reversing gear.

Construction

The controller consists of a construction suitable for panel mounting:

- With at one side, after building in visible, a rotatable lever and a cover with illuminated indication of the lever position.
- With at the other side, yet to build in, a pressure regulating valve, and two 3/2-way valves. With the lever, internal cams are rotated through which the pressure regulating valve and the 3/2-way valves are operated.

An adjustable brake is used to maintain the adjusted lever position after releasing.

Operation

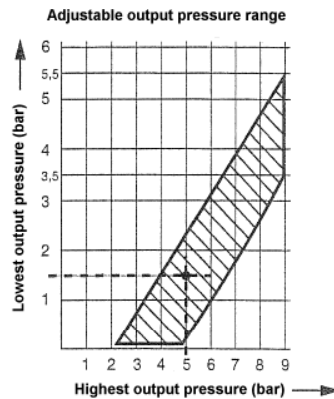
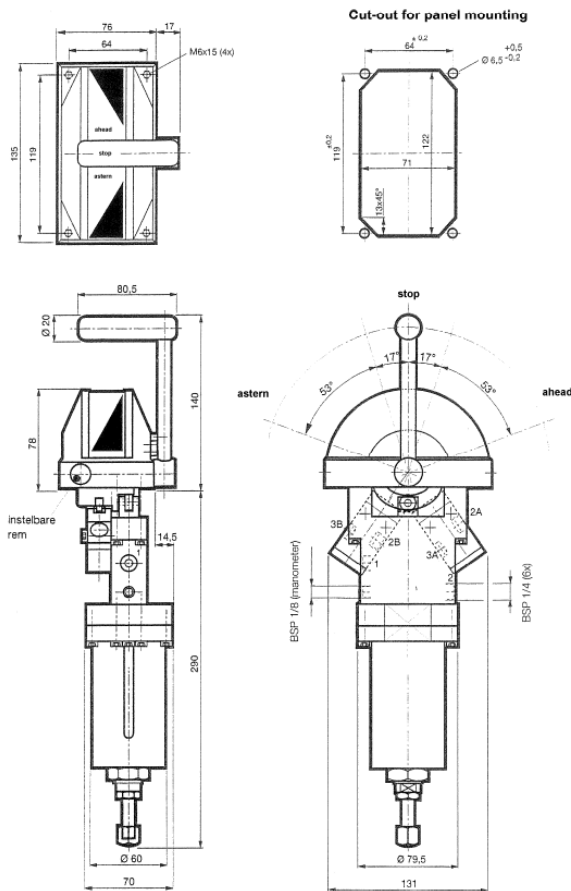
In both directions the lever of the controller can be freely turned out of the neutral mid-position over the whole range and remains in the adjusted position after releasing.

The mid-position of the lever is perceptible just as the 2 positions where the two 3/2-way valves start to be operated.

By turning the lever out of the mid-position, the pressure regulating valve is adjusted in the same measure in both directions.

The direction or rotation of the lever is derived from the operation of one of the two 3/2-way valves, and the measure of rotation is derived from the change of the output pressure of the regulating valve. This change of resistance is linearly to the angular displacement of the lever.

Technical data/dimensions (mm)



Example

required output pressures:

- Low : 1,5 bar
 - High: 5 bar
- point of intersection is within the hatched part:
the output pressure range is although to adjust !

Technical data

- Suitable for panel mounting
- Lever:
 - angular displacement out of the neutral mid-position:
 - in both directions max. 70° for adjusting the pressure regulator.
 - in both directions from 17° up to 70° for operating one of the two 3/2-way valves.
 - location: right - **R**, left - **L**
 - adjustable brake
- Pressure regulator:
 - operating medium : compressed air, filtered to min. 50µ, lubrication not necessary, dried air allowed
 - supply pressure : max. 10 bar
 - output pressure range : (see graph)

All combinations of the lowest and highest output Pressures of which the point of intersection is within the Hatched part of the graph, are to adjust.

 - hysteresis : max. 0,05 bar
 - orifice diameter : Ø 5 mm.
 - connections :
 - supply 1 and input 2: G1/4 (internal thread)
 - manometer: G1/8 (internal thread)

- 3/2-way valves spring return:
 - number : 2
 - operating medium : see pressure regulator
 - supply pressure : max. 10 bar
 - orifice diameter : Ø 5 mm.
 - connections :
 - outputs 2A and 2B and exhausts 3A and 3B: G1/4 (internal thread)
- Scale : with position indication
- Illumination : 2 bulbs 28V/2W
- Electrical connections : terminal block
- Protecting class : IP 50
- Temperature range : -10° up to +70° Celsius
- Special models : on request

Way of ordering:

Servo B - **output pressure range** - **lever location**

Example: Servo B - **R**