Pressure and temperature compensating block for BHH/BHHF actuators

PTC-Block



Hydraulic symbol: Pilot valve side/CETOP-3 connection



Indicator side/VPI connection

General description:

Pressure and Temperature Compensating Block for VPI indication. The PTC-Block can be used with fullest advantage together with the VPI-C (continuous indicator). The PTC-Block is especially used where an exact indication of the intermediate and end position of the valve is desired. Where the volume ratio is extremely large between pipe and actutor, the PTC-Block

Functional description:

The function of the PTC-Block is: **a) Pressure compensation:** to ensure that the VPI indicator is always measuring in the return line from the actuator where the failure indication is small, as the possible oil compression in the return line is fixed (approx. 3 bar). By always measuring on the return line, irrespective of the actuator being activated through can be used with advantage together with the VPI-E (end position indicator). The PTC-Block can only be used for double-acting actuators with an equally large stroke capacity (for instance BHHand BL). Note: The PTC-Block is always to be used together with a 4/3-way control valve with A and B lines connected to the tank in intermediate position.

the A or B line, there will be no variation in compression from measuring to measuring. (Measuring on the return line gives a signal indicating the movement of the actuator)

b) Temperature compensation: to allow an undesired oil flow to bypass the VPI indicator when the actuator is not activated.

Main data:

Max. working pressure Max. test pressure Max. flow rate at 105 bar (1958 PSi) (through any line) Weight Hydraulic media Viscosity Filtration requirements Temperature range Connection face

Materials:

Housing Stop screws Screws Seals Sign plate $\begin{array}{l} 135 \mbox{ bar (1958 PSi)} \\ 205 \mbox{ bar (2973 PSi)} \\ 6 \mbox{ l/min.} \\ 1.3 \mbox{ kg. (2.87 lb)} \\ Acid-free \mbox{ hydraulic oil} \\ 15-200 \mbox{ cSt} \\ 25 \mbox{ } \mbox{ m absolute or finer} \\ -20^\circ \mbox{ C to } 80^\circ \mbox{ C (-4^\circ \mbox{ F to 176^\circ \mbox{ F})} \\ CETOP \mbox{ R 35H size 3, DIN} \\ 24340 \mbox{ VPI connection} \end{array}$

MS 58 (B ras s) MS 58 CuZn39Pb3 AIS I 304 NB R AIS I 304



Bettis

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Main dimensions: (Inches in parenthesis)





Hydraulic diagram:



Bettis System diagram:



Note: Not Certified dimensional drawings. Such drawings are available on request. Contact factory with correct model designation and serial number. Important: Due to Emerson's continuing commitment to engineered product advancement, data presented herin is subject to change.

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