

Valve position indicator total program for BHH/ BHHF actuators



Valve position indicator — type VPI

The Bettis Volumetric Position Indicator type VPI is designed to locally or remotely indicate the position of hydraulically operated Actuators with determined displacement. The VPI can be placed assembled with the directional valve on a common manifold remote from the Actuator, thus avoiding cables and direct mounted installations in the field and the costs involved. In this way the problems are overcome as to detecting the valve position, when the Actuator is submerged and/or installed in Hazardous Areas. The VPI continuously indicates the position

of the valve by measuring the actual quantity of oil flowing to or from its Actuator. The VPI is preset by Bettis to match the specific Actuator displacement.

The rendered indication is proportional to the displaced oil and thus to the actual Actuator position.

The total VPI program includes possibilities of pressure and temperature compensation, and the program is designed for solving indication purposes in any environment.

The VPI program is designed for mounting of standard CETOP-3 components.

Hydraulic data:

Max. working pressure:	135 bar (1958 PSi)	Filtration requirement:	25 µm nominal
Test pressure:	205 bar (2973 PSi)	Hydraulic medium:	Acid-free hydraulic oil
Burst pressure:	> 525 bar (7615 PSi)	Max. flow:	100 cm ³ /sec (6 l/min)
Temperature range:	-20°C to 80°C (-4°F to +176°F)	Min. flow:	3 cm ³ /sec (0.2 l/min)
Viscosity range:	15-200cSt	Connection face:	DIN 24340 Cetop-3/ VPI connection

VPI-02

Total program:

TC-block:

PTC-block



VPI Indicator:

The Valve Position Indicator is available in 3 versions:

- VPI-V: Visual indication
- VPI-E: Visual + electrical open/closed indication (switches)
- VPI-C: Visual + electrical analog (potentiometer) indication



Temperature compensating block for indication of end positions (VPI-V and -E). The TC-Block allows the compression/decompression of the oil in the system caused by major temperature and pressure variations, without influencing the indicator and ensures fixed el. on/off remote indication signal. The TC-Block is provided with CETOP-3 connection for mounting of pilot valve.



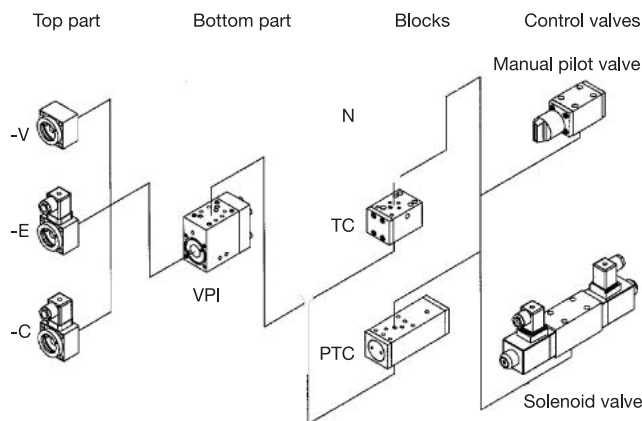
Pressure and temperature compensating block primarily for analog indication (VPI-C). The PTC-Block allows the compression/decompression of the oil in the system caused by major temperature and pressure variations, without influencing the indicator, and ensures precise intermediate positions, as the positioning is always made at constant pressure (5 bar). The PTC-Block is provided with CETOP-3 connection for mounting of solenoid pilot valve.

Survey of combinations:

The VPI always consists of a VPI indicator and a VPI block (TC or PTC).

General combinations:

1. VPI-V-TC: Visual indication
2. VPI-E-TC: Electrical/visual on/off indication
3. VPI-C-PTC: Electrical/visual analog indication



Note: Not Certified dimensional drawings. Such drawings are available on request. Contact factory with correct model designation and serial number.

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