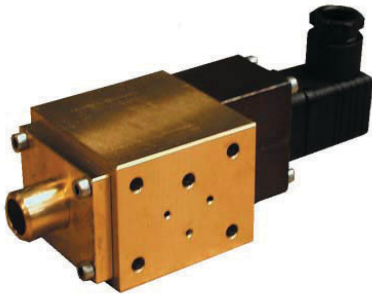


Direct hydraulic open/closed position indicating system for BHH/BHHF actuators



Advantages:

- Direct return message from the actuator.
- Hydraulic system allowing continuous submerged duty or safe operation in a hazardous area.
- No installation costs when used with double acting actuators.

Description:

The system uses the flow of oil in the actuator control line to give an indication of valve position. The oil flow is controlled by the bypass valve that is operated by an internal cam. While the actuator is in its middle position, the bypass valve will be open for flow in either direction. When the actuator reaches its end position, a non-return valve in the bypass prevents further oil flow. The direction of flow is registered in the flow indicator. Even if the actuator does not move, oil will continue to flow through the bypass non-return valve and will be registered by the flow indicator spool. It will remain in this position until the actuator reaches end position and the bypass valve is closed to prevent further oil flow. This will be registered by the indicator moving to its neutral middle position.

Components:

The system consists of two main components:

- the bypass valve and the flow indicator.

The bypass valve is fitted direct on the actuator and is operated by a cam on the actuator stem. The bypass valve is built into a block, which also acts as a supply manifold for the actuator. The spool type flow indicator is supplied as a separate unit mounted in the solenoid valve rack.

Electric hydraulic control:

The flow indicator is built into the control valve rack and will give local visual indication. An electronic switch unit is fitted direct on the back of the flow indicator to give impulses to initiate lamp diodes fitted in the control panel, or give secondary signals for computer input. The indication lamps can be arranged to burn continuously when the control command has been fulfilled and will flash while the valve under control remains in a middle position.

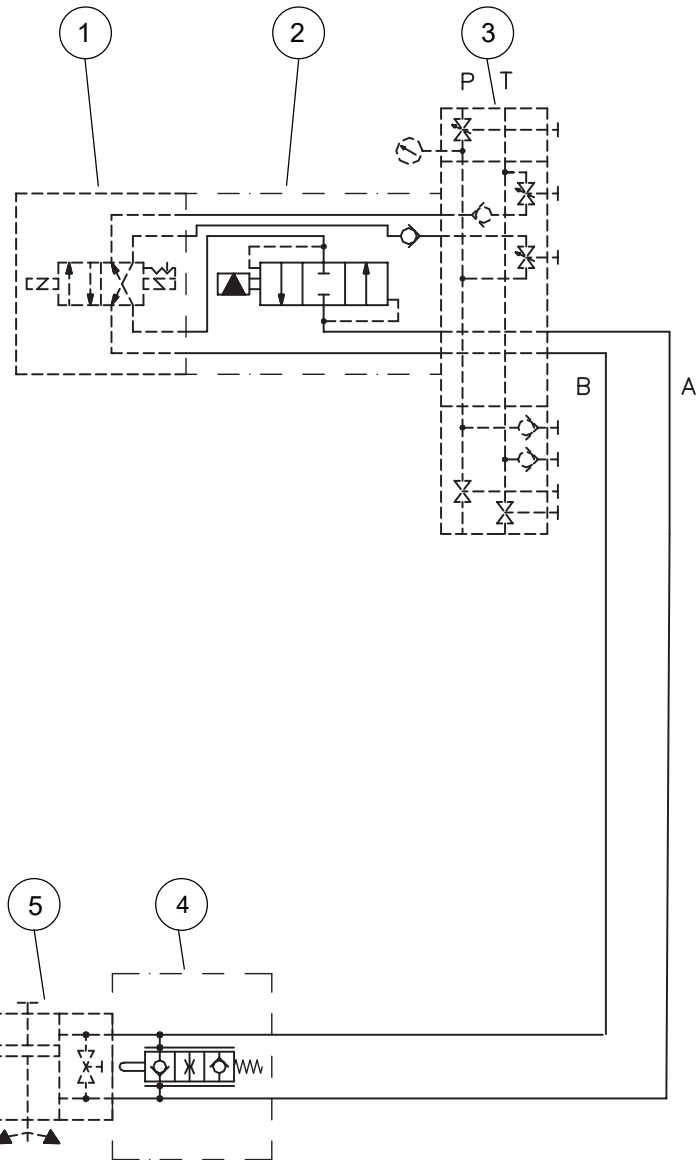
Data Sheet

Sheet No.: DPI-02.02 Rev. A

Date: October 2010

DPI-02

Hydraulic diagram:



1. Solenoid valve
2. Bypass indicator
3. Manifold
4. By-pass Cartridge
Drop tight in end positions
5. BHH actuator

When the solenoid valve is operated, the flow switch will break, and the direction switch will shift. When the valve reaches its end position, the flow switch will close.

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 herein is subject to change.

The contents of the publication are presented for information purposes only, and while effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or services described herein or their use or applicability. All sales are governed by our terms and conditions, which are available on request.

We reserve the right to modify or improve the designs or specifications of our products at any time without notice.

BETTIS

EMERSON

Copyright © Emerson. The information in this document is subject to change without notice. Updated data sheets can be obtained from our website www.emerson.com/bettis or from your Emerson Automation Solutions - Actuation Technologies Center:

America's: +1 281 477 4100 Europe: +36 22 53 0950 Asia/Pacific: +65 67 77 8211 Middle East: +971 4 811 810