Lock-up module E501 Series

Description

This unit contains 2 pilot-operated check valves sited in the control port lines. When pressure is applied to the pilot line, flow is allowed to and from the actuator. When this pressure is removed, the check valves seat and prevent flow from the actuator. Note that flow is allowed to the actuator if this is unacceptable, the Moog E502 Isolation Module should be used.

The pilot line may be pressurised either internally or externally.

Internal.
By removing plug A, the pilot line is connected to the pressure port. Removal of supply pressure will therefore lock the actuator. The module is supplied with this plug fitted.

External.
With plug A fitted, access to the pilot line is via port E or via a 1/4" BSP tapping in the side of the block. Port E is designed to interface with the Moog E503 Solenoid Module, which enables an electrical signal to operate the check valves.

Features

- Fits under 67 & 760 Series valves
- Prevents flow from actuator
- Internal or external pilot supply
- Soft seat check valves for zero leakage
- Port pattern to BS6494 Part 2, Type 4

Typical applications

As a safety device, the module will lock an actuator upon loss of supply pressure.

In applications such as process control valve actuation where movement is infrequent, the module will enable significant energy savings to be made. When movement is not required, the supply pressure may be turned-off and the module will prevent actuator movement.

In applications that employ system monitoring the external port can be used to lock the actuator upon system malfunction.

Specification

Maximum pressure, 210 bar with soft check valve seats.

Optional maximum pressure, 315 bar with hard seats.

Seal material, Buna N for petroleum based hydraulic oils, water-oil emulsions or water-glycol mixtures. Other seal materials available on request.

Pilot ratio, 3:1 (70 bar pilot pressure will unlock the valve against 210 bar load).