Equal area relief module E505 Series

Description

This unit contains 2 pilot-operated, balanced spool relief valve cartridges. Relief valve RV1 opens when the pressure in J1 is equal to that in J2 plus its pressure setting. Oil then flows from J1, through RV1 to J2.

Relief valve RV2 acts in the opposite sense.

The relief valves may be adjusted by slackening the locknut and by rotating the adjuster.

To increase pressure: rotate adjuster clockwise.

To decrease pressure: rotate adjuster counterclockwise.

Note: The locknut includes a seal. When adjustments are being made, slight leakage may occur. Complete removal of the adjuster will result in a partially sealed passage from a control port to the environment. Therefore, dimension "L max." on the installation drawing should not be exceeded when the slice is pressurised.

Features

- Fits under 62 & 760 Series valves
- Protects equal area actuators or motors from over pressurisation
- Field adjustable
- Suitable for 4 or 5 port valves
- Port pattern to BS6494 Part 2, Type 4

Typical applications

With high inertia loads, the relief module prevents excessive differential pressure being generated under high deceleration conditions.

Where the differential pressure must be lower than the supply pressure, the relief module prevents excessive differential pressure being applied.

Specification

Maximum pressure, 315 bar.
Differential relief pressure range, 10 to 315 bar (minimum ranges are available).
Seal material, Buna N for petroleum based hydraulic oils, water-oil emulsions or water-glycol mixtures. Other seal materials available on request.

Typical leakage at 90% pressure setting, < 10 ml/min.
Performance

![Graph showing pressure drop vs. flow](chart)

Installation

![Diagram of installation setup](diagram)

Ports
- Ports P, R, J₁, and J₂
- O-rings 1.78mm section x 10.82mm I.D.
- Port P₅
- O-ring 1.78mm section x 9.25mm I.D.

Dimensions in mm

- RR
- 44
- 12.7
- 11.1 TYP
- 40 TYP
- 23.8
- 65.1
- 135
- Ø2.3
- 675
- 2.3
- 20
- L max
- 30

Moog Controls Limited, Ashchurch, Tewkesbury
Gloucestershire, England, GL20 8NA
Telephone (0684) 296600, Telex 43229, Telefax (0684) 296760