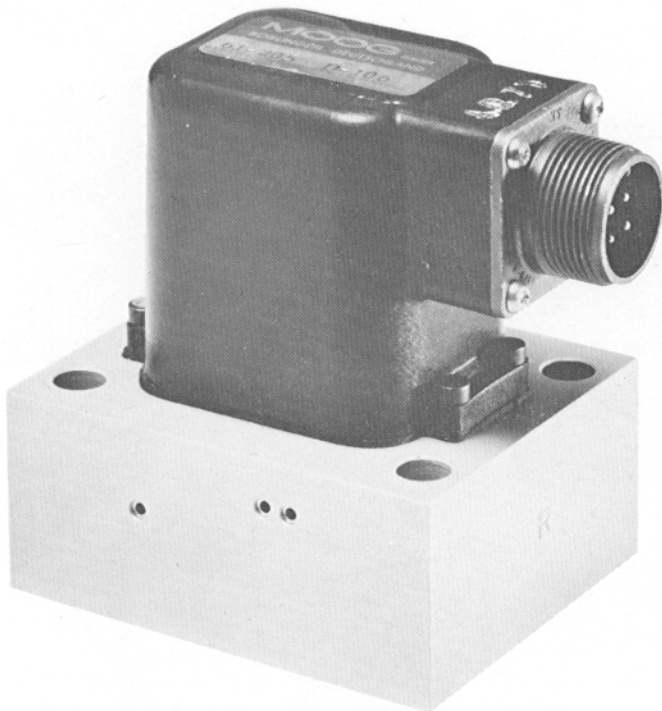


MOOG®

Single-stage "bifurcated" Servovalve Model D061-205



Single-stage flapper-type servovalves provide excellent performance at low cost for low power control systems. A normal four-way single-stage valve having one flapper is limited to two variable nozzle orifices. The other two orifices of the four-way orifice bridge are fixed. Thus, maximum control flow to the load is limited to one-half of the leakage flow.

The Moog "bifurcated" single-stage servovalve uses two flappers driven by a common armature. Each flapper controls the opening of two opposed nozzles. The nozzle chambers are hydraulically separated and two flexure tubes are used. The nozzles are connected in a four-active-arm orifice bridge. This arrangement increases the useful control flow available from the valve with no increase in null leakage flow.*

* Design patents No. 3,455,330 and No. 3,228,423

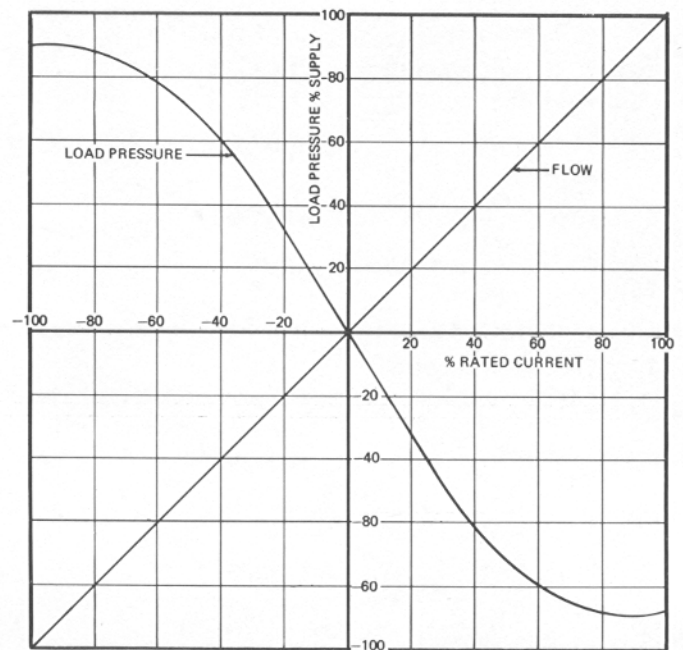


Fig. 1. Typical Flow and Pressure Gain

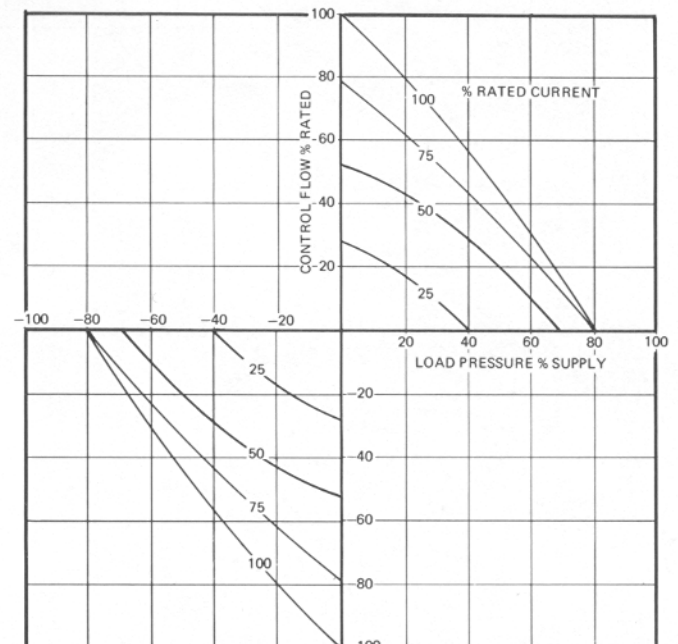


Fig. 2. Typical Flow-Load Curves

Design Features

- frictionless, flexure-tube design
- rugged construction suitable for industrial applications
- excellent dynamic response with negligible threshold
- dry torque motor
- integral 35 μ nominal filter in pressure port
- integral 125 μ nominal screens in cylinder ports

