





# E050 Series Hydromechanical Rotary Power Steering Valve

### **Features**

- § Closed-centre hydraulic operation (Low energy consumption)
- § Operates from constant pressure supply (up to 210 Bar)
- § Compact size and light weight
- § Low leakage flows
- § High accuracy and repeatability of flow Vs displacement characteristic
- § Functions with very small angular inputs giving high steering stiffness
- § Low friction radially pressure balanced design

# **Description**

Moog have developed a precision rotary power steering valve ideally suited to Motorsport applications. It utilises two concentric sleeves (see photo) connected by a torsion bar in the load path of the steering column. Torque applied by the driver causes polative displacements of the inner and outer sleeves. This in turn opens flow metering ports to allow high pressure oil to be directed to one side of the assist actuator. (See overleaf)

(N.B. Essential to the satisfactory operation of such a design are the ultra-fine manufacturing clearances and tolerances which are incorporated in Moog's conventional servovalves.)

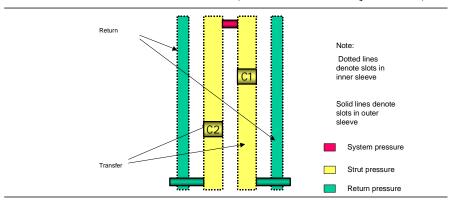
Although this product is race proven, it is not envisaged that Moog will produce a general purpose unit because of specific requirements of size, flow, angular rotation, and mechanical interface to the steering column. Therefore, Moog can custom design this unit to conform to a detailed customer specification.

Please consult Martin Jones or Mike Baker at Moog UK.



## Rotary Power Steering Valve

Null Condition (inner & outer sleeves synchronised)



### Rotary Power Steering Valve

Flow Condition (inner sleeve displaced relative to outer sleeve)

