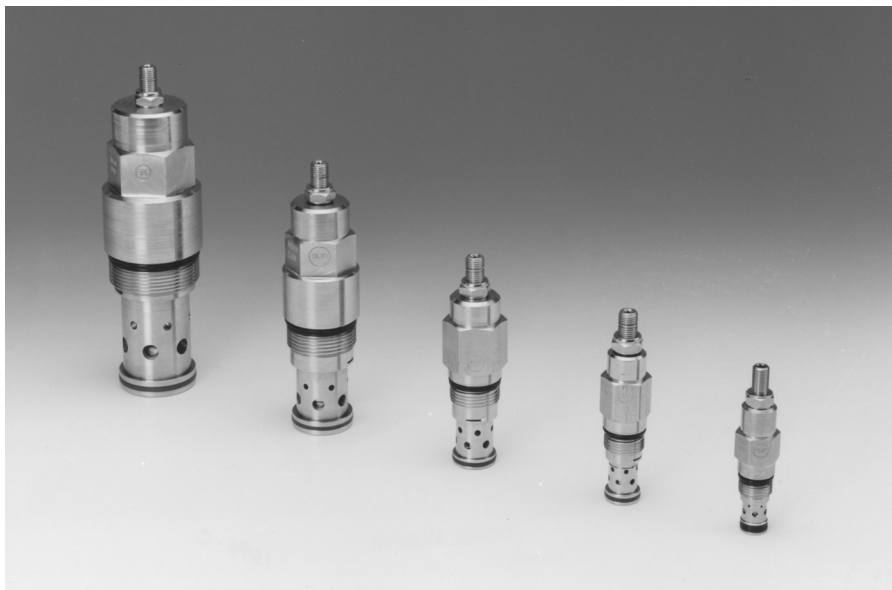


# Overview

## THE SUN PRODUCT



*Sun screw-in cartridges, available in five sizes, are suitable for both mobile and industrial applications.*



*A wide range of standard bodies are available to simplify the installation of Sun cartridges in new and existing circuits.*

### **Five Cartridge Sizes**

*Flows to 200 GPM*

*(400 GPM for some applications).*

Sun screw-in cartridge type hydraulic valves for industrial and mobile applications are basic building blocks. Each cartridge contains the active elements needed for hydraulic control functions in a convenient and reliable lightweight envelope. Cartridges are available in standard pressure ranges up to 5000 psi (6000 psi in some models). Every cartridge receives a complete functional test prior to shipment.

The use of cartridge valves in hydraulic systems will:

- Improve system reliability
- Simplify circuits
- Reduce leakage points
- Reduce piping costs
- Save space and weight
- Simplify service
- Reduce assembly time
- Reduce spare parts inventory

A significant advantage in the design of Sun cartridges is that the working parts “float” in the body, so they are not susceptible to binding caused by overtightening, during installation in the cavity. (See illustration on inside front cover.)

Sun utilizes relatively few cartridge cavities throughout its entire range of cartridge products. Many valve functions and ranges can be interchanged in the same cavity. The result is greatly increased flexibility, and the capability to modify circuits without disturbing any piping, breaking unions or unplumbing any valves.

### **Line Mounted Bodies**

Sun manufactures a wide range of standard bodies to simplify the installation of cartridges in new and existing circuits. SAE O-ring straight thread, NPTF, BSPP, SAE Code 61 and 62 split flange, and other ports are available. Two hydraulic functions are frequently combined in a single body to simplify piping. All bodies are available in aluminum or ductile iron.

# THE SUN PRODUCT

### *Sandwich Bodies and Subplates*

Sun's sandwich valves and subplates are complete circuit elements which mount directly under the solenoid valve. Most hydraulic functions are available in sandwich bodies and subplates. They are available in aluminum or ductile iron and provide a simple method of incorporating circuit controlling components right at the solenoid valve. Sandwich valves and subplates can be easily assembled with studrods and studnuts. The result is a clean, neat assembly with a minimum of external piping that is easily accessible for modification.

### *Pre-packaged Valve Assemblies*

A wide variety of pre-packaged valve assemblies are available to perform many of the more common hydraulic circuit functions. These assemblies incorporate two or more different cartridges in a manifold body with a choice of porting options and are available in aluminum or ductile iron.

### *Direct Motor Mount Bodies*

Mounting configurations offered by Sun match the mounting patterns of selected Char-Lynn, Danfoss, Staffa, HPI, Parker Ross, and White motors. These valve assemblies provide relief, counterbalance, and flow control functions for mounting directly to a motor, and are available in aluminum or ductile iron.

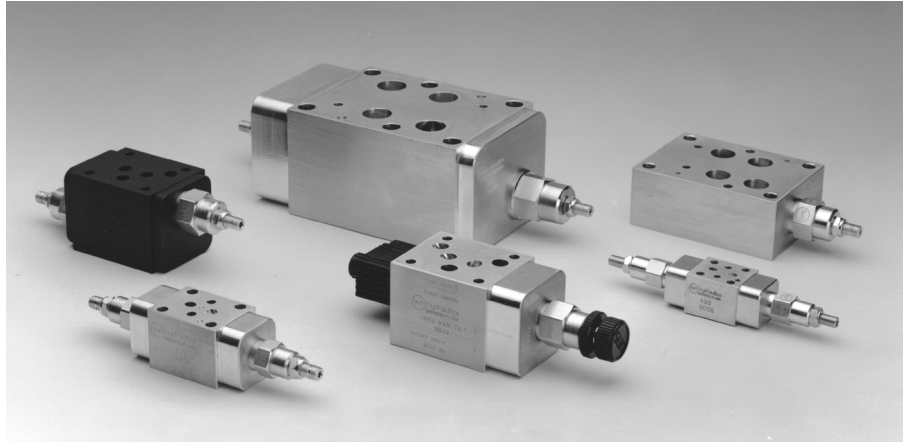
### *Integration into Hydraulic Components*

Directly integrating cartridge valves into the housing of other components is a very cost effective and compact method of packaging multiple hydraulic functions. Cavity form tools for machining the cartridge cavity are readily available from Sun.

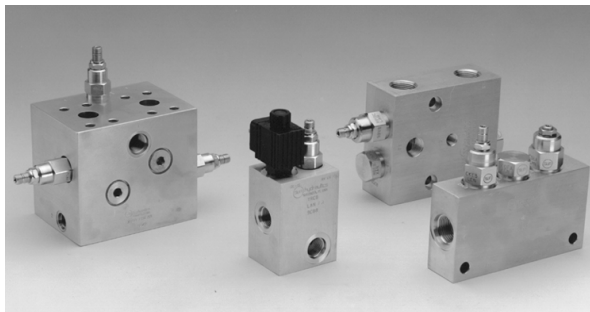
### *Custom Valve Packages*

It is often desirable and economical to incorporate several cartridges into a special, application specific manifold body to simplify a circuit, reduce piping costs, fit into a confined space, or solve a mounting problem.

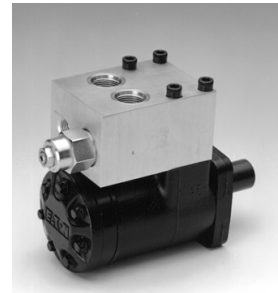
Sun Hydraulics and its network of Authorized Distributors (see inside back cover) will work with you to develop customized solutions to your particular application problems.



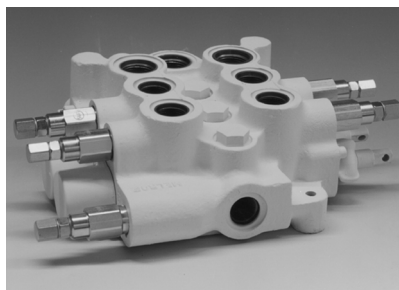
*Sandwich bodies and subplates provide a simple method of incorporating controlling components right at the solenoid valve.*



*Pre-packaged valve assemblies for common hydraulic circuit functions.*



*Direct Motor Mount bodies for commercial hydraulic motors.*



*Direct integration is cost-effective and compact.*



*Custom valve packages for specific applications.*