

MANIFOLDS

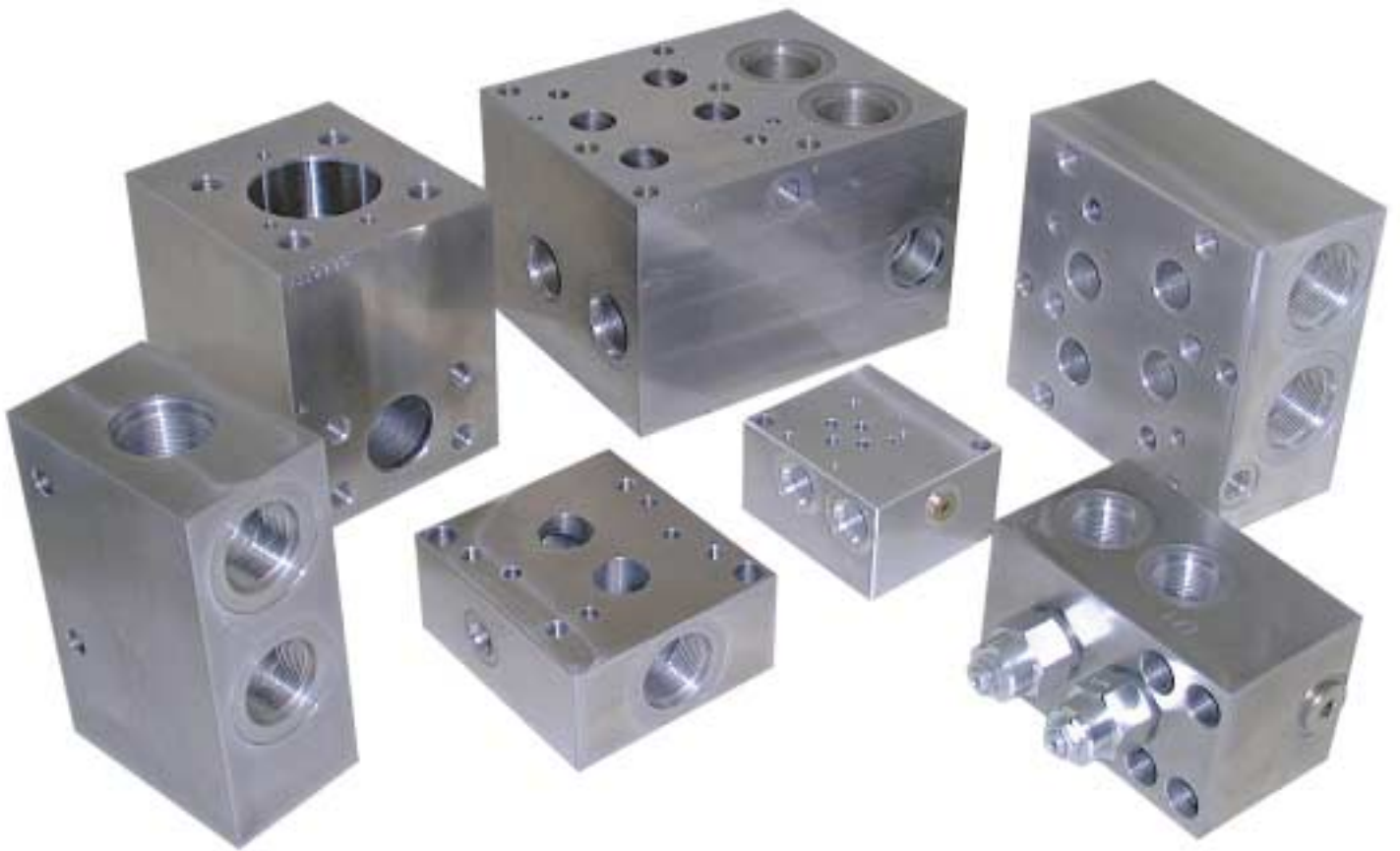


Table of Contents

| | Page |
|---|-------------|
| Introduction and General Information | 21-2 |
| Valve Specifications | 21-5 |
| Subplate – Surface Mounted Valves | 22-1 |
| Bar Manifold – Parallel and Series | 23-1 |
| Cover and Transition Plates | 24-1 |
| Single Cartridge | 25-1 |
| Multiple Valves | 26-1 |
| Single Flange, Code 61 & Code 62 | 27-1 |
| Multiple Flange, Motor | 28-1 |
| Sandwich Manifolds | 29-1 |
| Stacking Manifolds | 30-1 |
| Accessories | 31-1 |
| Part Number Index | 40-1 |

Introduction

Sealum Industries has designed and manufactured hydraulic manifolds for over twenty years. Our CNC mills and lathes are tooled up for all common cavity ports, and we have the expertise to produce manifolds as large as 60" x 48" x 40" and as small as ½" x 1" x 2".

Stock Manifolds

Most of the manifolds shown on the following pages are stock items. They are inventoried in steel and aluminum and are available with special coatings (zinc, anodized, and black oxide coatings) if requested. Coatings will add approximately one week to the delivery.

Custom Manifolds

Sealum Industries can design and manufacture custom manifolds to your specifications when you supply us with a circuit with a list of valves, port sizes, type of material, and any special features. A quotation will then be sent to you, and if this results in a purchase order, a part number will be issued. Our engineering department will work with you on the details of the layout and can also supply you with a layout drawing if requested. Sealum Industries does not supply manufacturing drawings and custom manifolds will not be sold to others without the consent of the customer. As a general rule, surface mounted valves will be on the top, inlet ports on one side with outlet ports opposite, and cartridges can go anywhere suitable. Mounting holes are also provided and can be either tapped or through holes. Custom manifolds take approximately two to three weeks to produce, will not be accepted back for credit and are subject to a cancellation fee once manufacturing has begun.

Material Selection

Unless otherwise specified, the following materials will be used:

Steel – G40.21-44W or C1018

Aluminum – 6061-T6

Stainless Steel – 316L

It is the responsibility of the customer to select the appropriate material. When doing so, the following factors should be taken into consideration.

- **Pressure:** Normally, aluminum is rated for 3,000 PSI while steel is rated for 6,000 PSI. The pressure rating of the valves itself should also be taken into consideration.
- **Heat:** Steel should be used when the valves generate high heat such as pressure relieving and pressure reducing valves. The coefficient of linear expansion for aluminum is twice that of steel cartridges and plugs. Therefore they will expand at a different rate and may loosen.
- **Erosion:** If the oil velocity is very high as the oil leaves the cartridge, there is a danger of erosion on the walls of the cavity. In this case steel would be a better choice.
- **Corrosion:** If corrosion is a factor, a special coating may be required. We can supply you with regular or hard anodizing on our aluminum manifolds, and zinc plating or black oxide on our steel manifolds.
- **Weight:** Weight is normally not a factor since the manifold itself is considerably smaller than the rest of the equipment. However, if weight is a concern, a steel manifold will weigh about three times as much as the same manifold in aluminum.