



Hydraulic System Preparation

To prolong servovalve life and to reduce hydraulic system maintenance, it is recommended that a ServoCon full flow, non-bypass type filter of ten (10) micrometer absolute rating (75 Beta Ratio) or better be installed immediately upstream of each servovalve where possible.

It is also recommended that a ServoCon return line filter be installed having a three (3) micrometer absolute rating to remove silt. The return line filter contains an integral bypass valve and typically can be supplied with an electrical dirt alarm for remote indication of the need for filter replacement. Ninety-five (95) percent of the particles in most hydraulic systems are below ten (10) micrometers. Proper silt control can increase hydraulic component life by more than one-hundred (100) fold.

Recommended practice is to operate a new hydraulic system for a minimum of four (4) hours with a flushing valve at the servovalve location prior to servovalve installation. However, the period of flushing prior to servovalve installation varies considerably with the complexity and condition of the system. The flushing is done under conditions of temperature, flow rates, etc. which reasonably simulate operating conditions.

New system filter elements are installed during the flushing process whenever pressure drop across the filter indicates that the element(s)

need changing. When a filter will operate for a period of two (2) hours with no perceptible increase in pressure drop, most of the harmful system contamination has been removed. To maintain a clean system filters must be replaced whenever the filter pressure drop indicates a need for changing. Pressure drop can be monitored with installation of hydraulic pressure gauges or with mechanical and electrical dirt alarms.

Size the filters for one-third (1/3) reservoir size or maximum flow rate, whichever is larger. Increased filter size results in long-term savings for the user.

