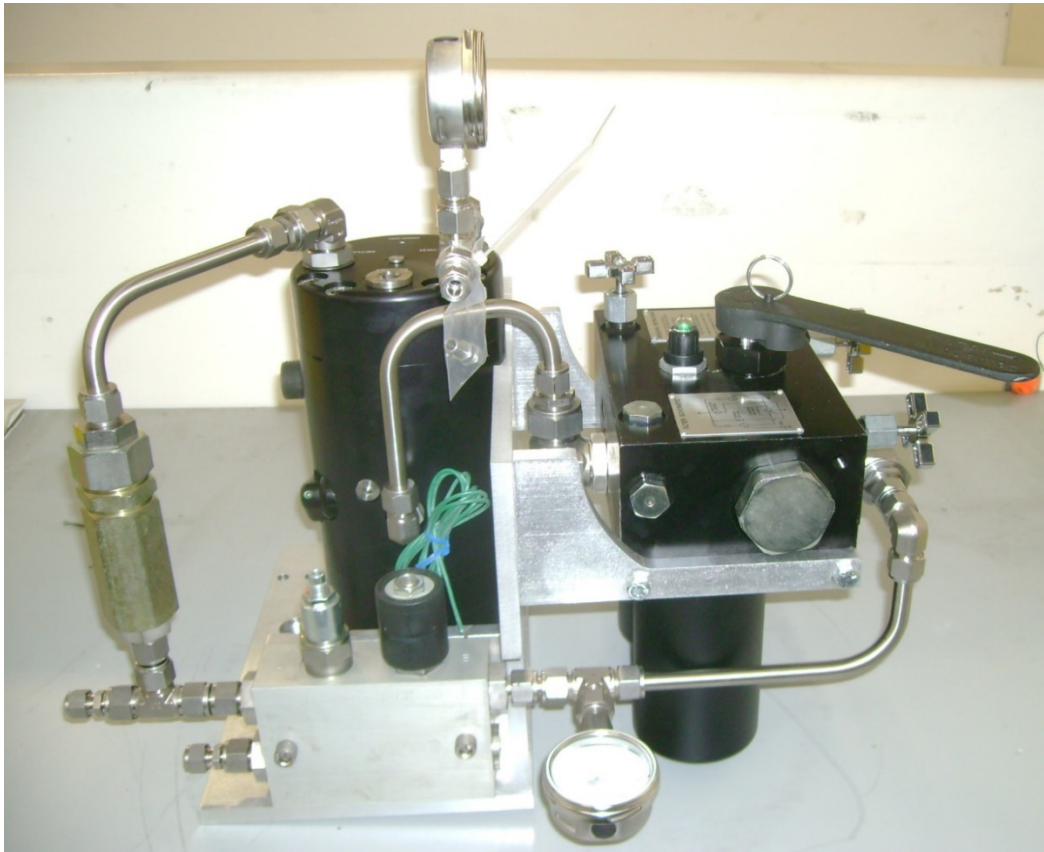




**Continental
Controls
Corporation**



ADVANCED LIQUID VALVE ALV10 DUPLEX FILTER KIT

SPECIFICATION SHEET

The ALV10 Duplex Filter Kit are designed to offer continuous operation during element change. This utilizes a duplex design with integrated balancing valve and vent ports. A changeover valve operates on the Upstream side of the filter, ensuring a contamination free system.

Features:

- Tamper-resistant
- High performance filters for modern hydraulic systems
- Modular system
- Compact design
- Minimal pressure drops through optimal flow design
- Visual/electrical/electronic maintenance indicator
- Threaded connections
- Change over valve on upstream side
- Ergonomic switch-over handle with safety lock and pressure compensation
- User-optimized one-hand-operation
- Equipped with highly efficient filter elements

30P Series Element Features

Quality elements make the difference.

The important item in a filter assembly is the element. It must capture and retain contaminants that can damage system components. At the same time, it must allow flow to pass as freely as possible to perform its function.

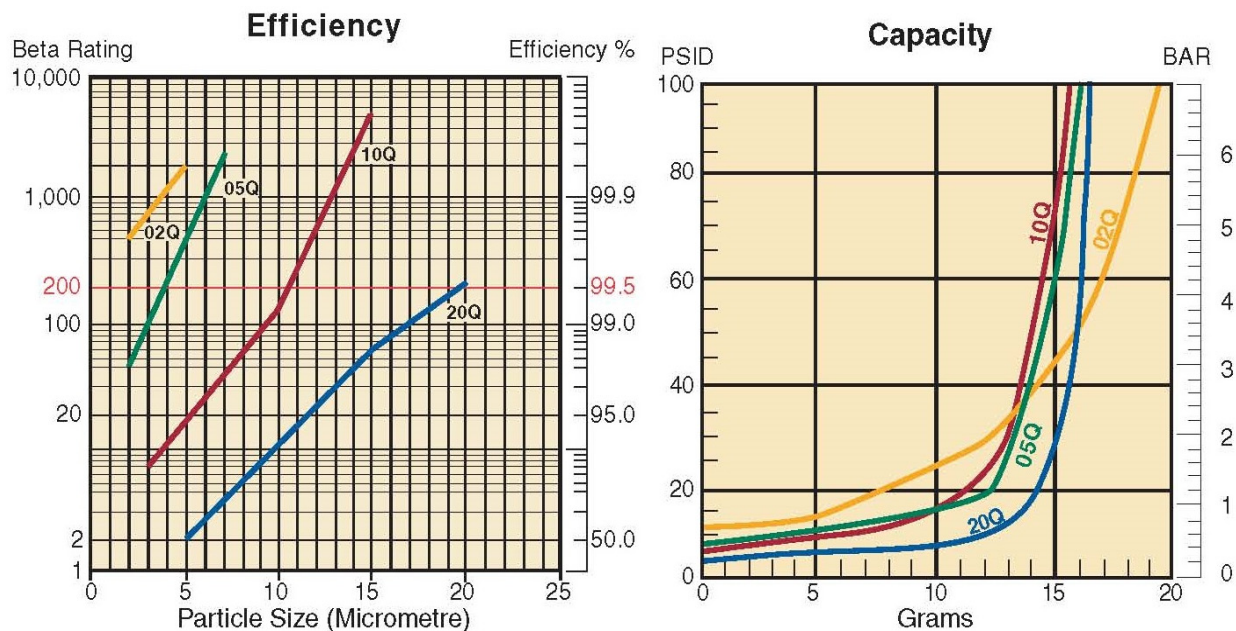
There are many ways to design and build an element, and it's easy to produce a low-cost element. However, cost is not the only selection criteria, especially when the risk is loss of critical machine performance.

For instance, wire mesh reinforcement. Not all filter elements have it. It's used in elements to keep the pleats from bunching or collapsing. If pleats bunch, the effective surface area of the element is reduced, excessive pressure drop develops, and the filter assembly may go into premature bypass mode. There are many other features that are included standard with every quality element.

Features	Advantage	Benefit
Wire reinforced Microglass III elements	Rugged construction, stands up to abuse of cyclic flows without performance loss Wire support reduces pleat bunching, keeps pressure drops consistent	The reliable filtration provided assures equipment protection, reduces downtime, maximizes element life, and allows the hydraulic system to operate properly
Multipass tested elements (per ANSI/NFPA T3.10.8.8 R1-1990)	Filter performance backed by recognized and accepted laboratory test standards	Filters you select have known performance levels
Complete element performance data disclosure	All pertinent information is provided in an easy-to-compare format	Provides an easy guide to proper filter selection
Duplex design	Element service possible during operation	Allows to keep machine running with full contamination protection
Integrated balancing valve	No external piping required	Safety and reliability
Vent ports	Purges all trapper air in filter	Get the maximum performance from the elements. Prevents a "flabby" system

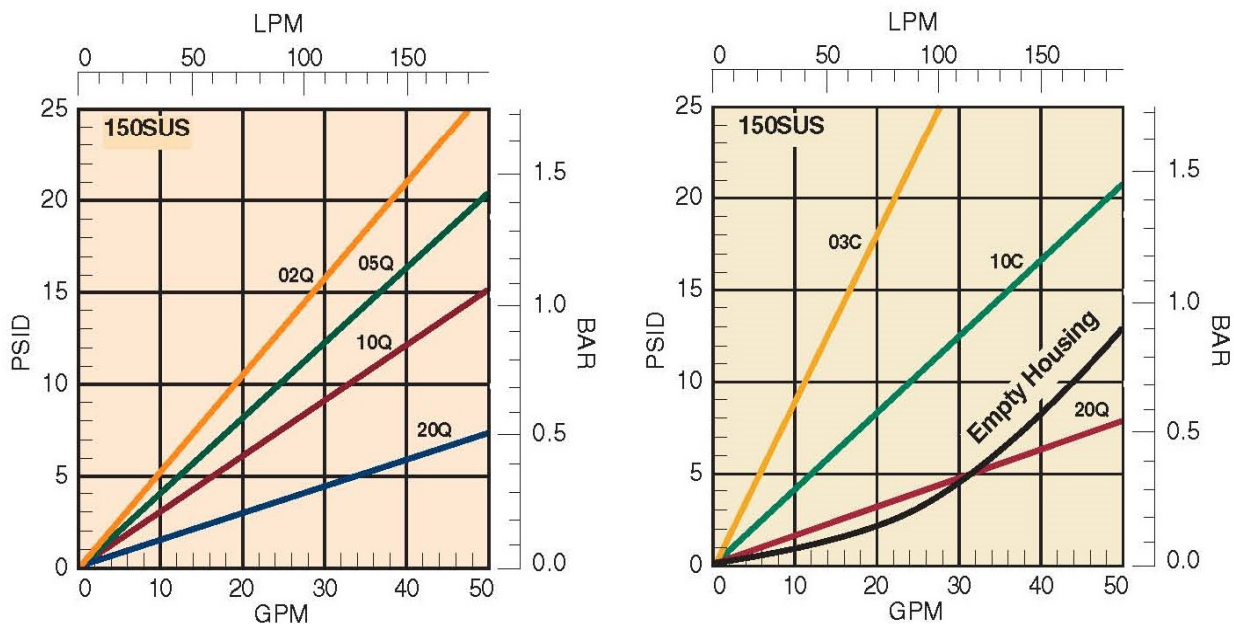


30P Series Performance: 30P-1 Element Performance



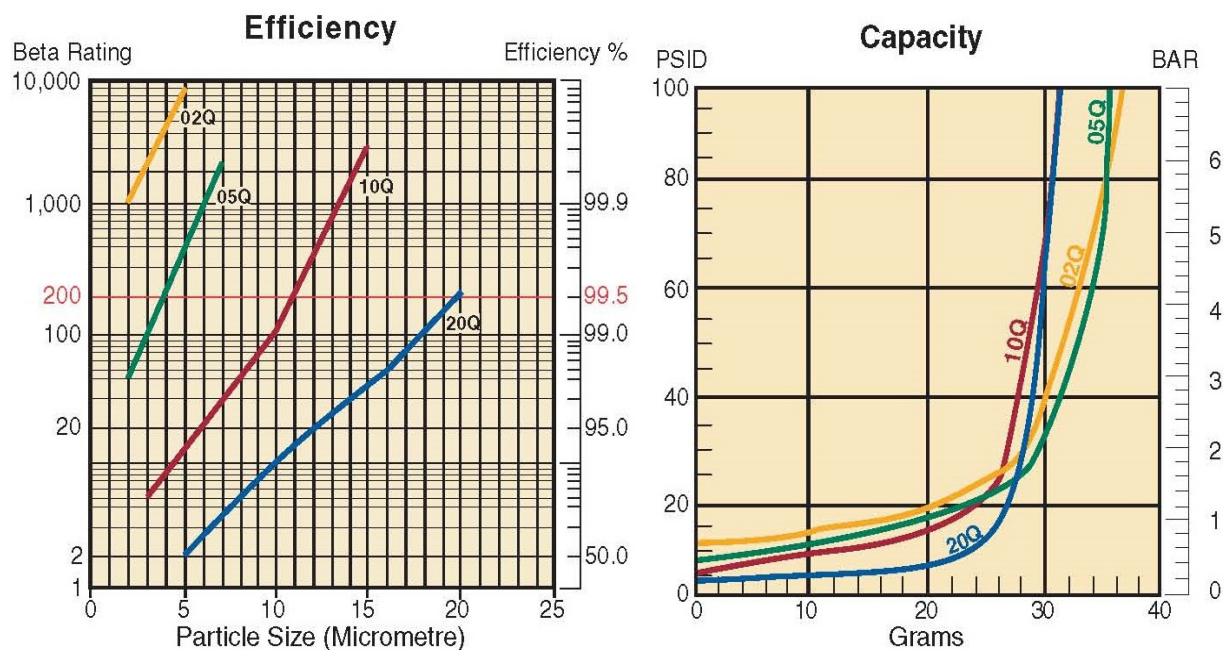
Multipass tests run @ 20 gpm to 100 psid terminal - 5mg/L BUGL

Flow vs. Pressure Loss



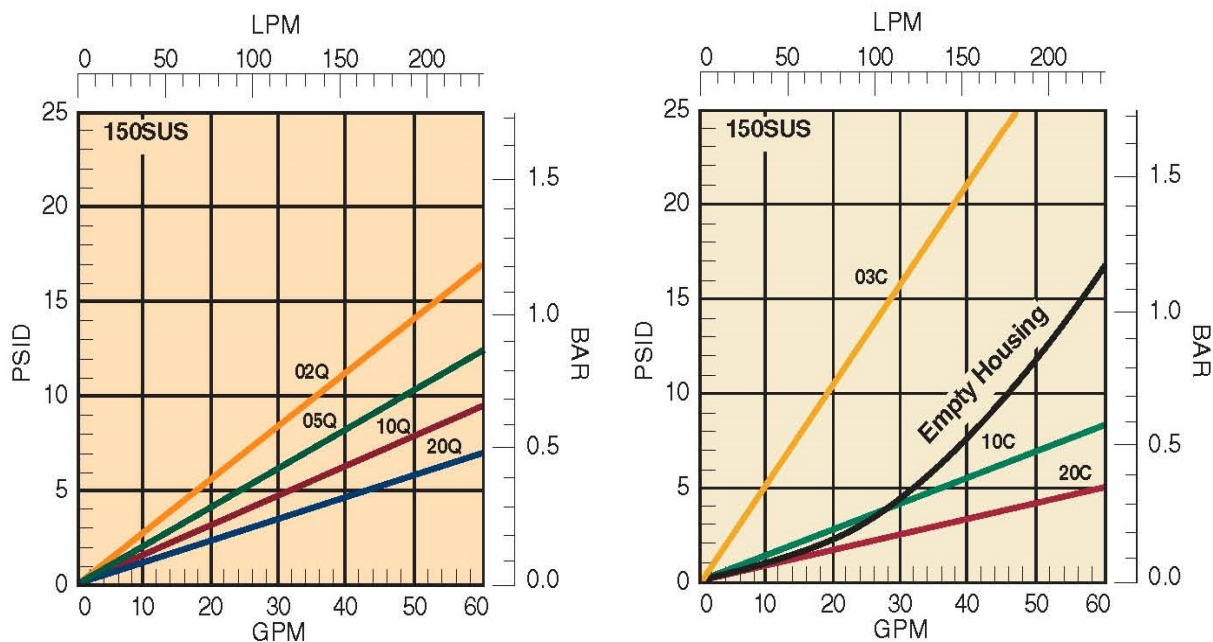


30P Series Performance: 30P-2 Element Performance



Multipass tests run @ 30 gpm to 100 psid terminal - 5mg/L BUGL

Flow vs. Pressure Loss





30P Series Specifications: 30P / 30PD

Specifications: 30P/30PD

Pressure Ratings:

Maximum Allowable Operating Pressure
(MAOP): 3000 psi (206.9 bar)
Rated Fatigue Pressure: 2000 psi (138 bar)
Design Safety Factor: 3:1

Operating Temperatures:

Buna: -40°F (-40°C) to 225°F (107°C)
Fluorocarbon: -15°F (-26°C) to 275°F (135°C)

Element Collapse Rating:

Standard- 350 psid (24.1 bar)
"H" Option- 2000 psid (138 bar)
"X" Option- 3000 psid (206.9 bar)

Materials:

Bowl: impacted aluminum (anodized 6061-T6)
Head: extruded aluminum (anodized 6061-T6)
Bypass: Nylon

Element Condition Indicators:

Visual (optional) 360° green/ red
Electrical/ Visual (optional)
5A @ 240VAC, 3A @ 28VDC
Electrical-heavy duty (optional)
.25A (resistive) MAX 5 watts
12 to 28 VDC & 110 to 175 VAC

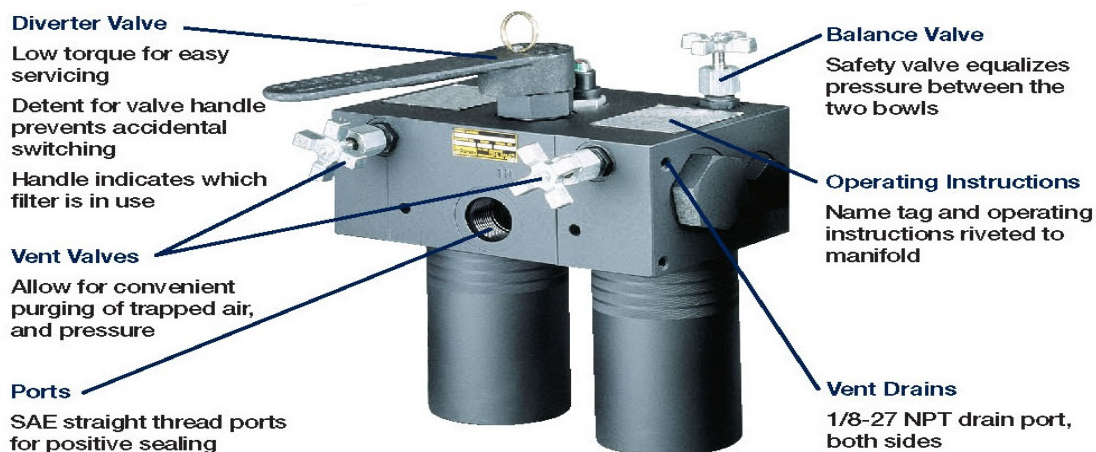
Color Coding:

White (common)
Black (normally open)
Blue (normally closed)

Weights (approximate):

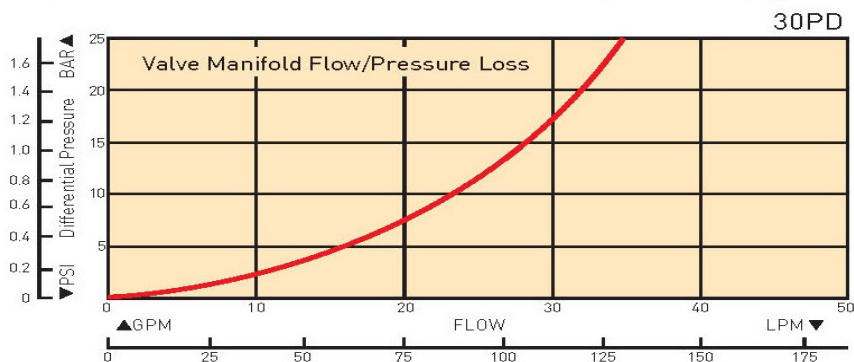
30P-1	6.4 lb. (2.9 kg.)
30PD-1	36 lb. (16.3 kg.)
30P-2	8.7 lb. (3.9 kg.)
30PD-2	40 lb. (18.1 kg.)

30P Series Installation Dimensions: 30P / 30PD



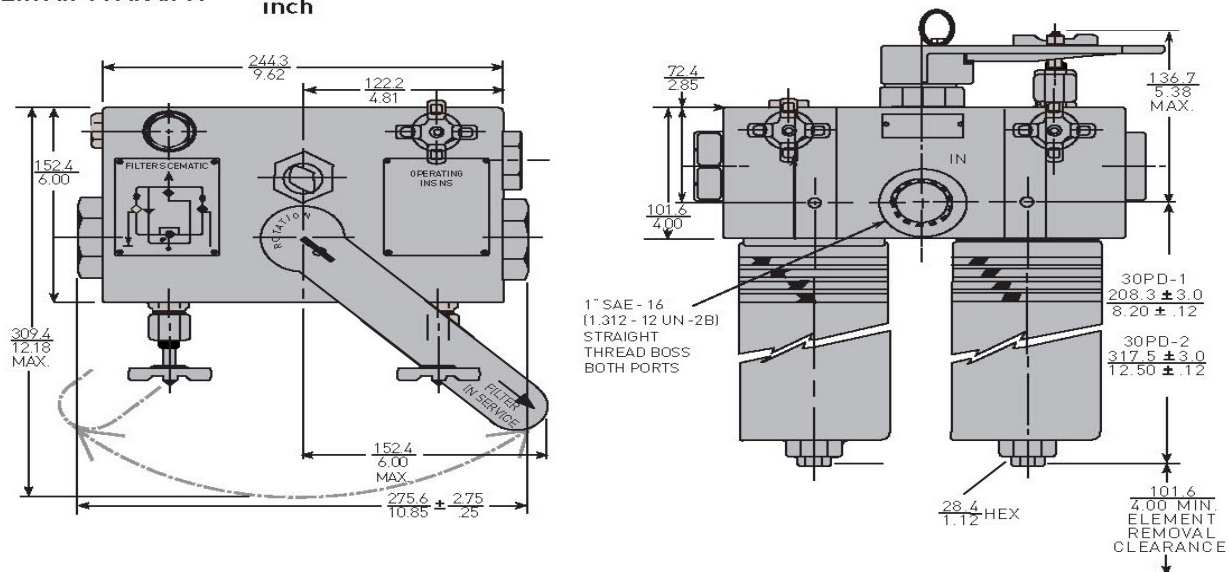
30PD Empty Housing Flow vs Pressure Loss

To obtain total filter assembly pressure loss, add empty housing loss to the pressure loss of selected element on 30P element performance pages.

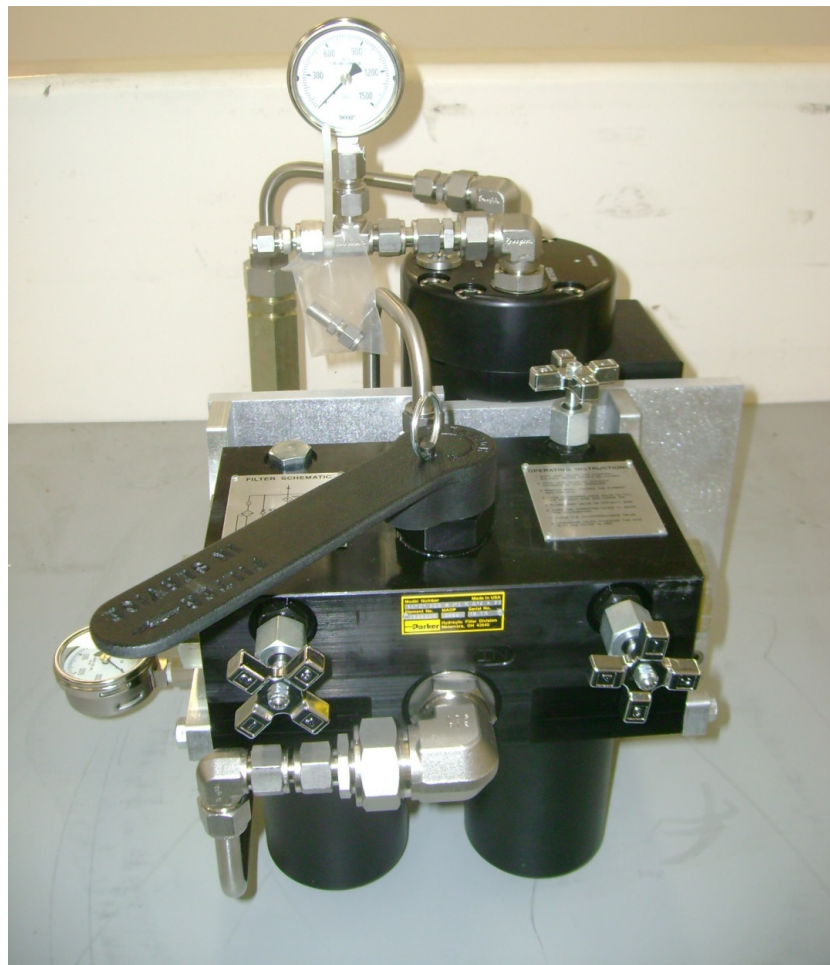
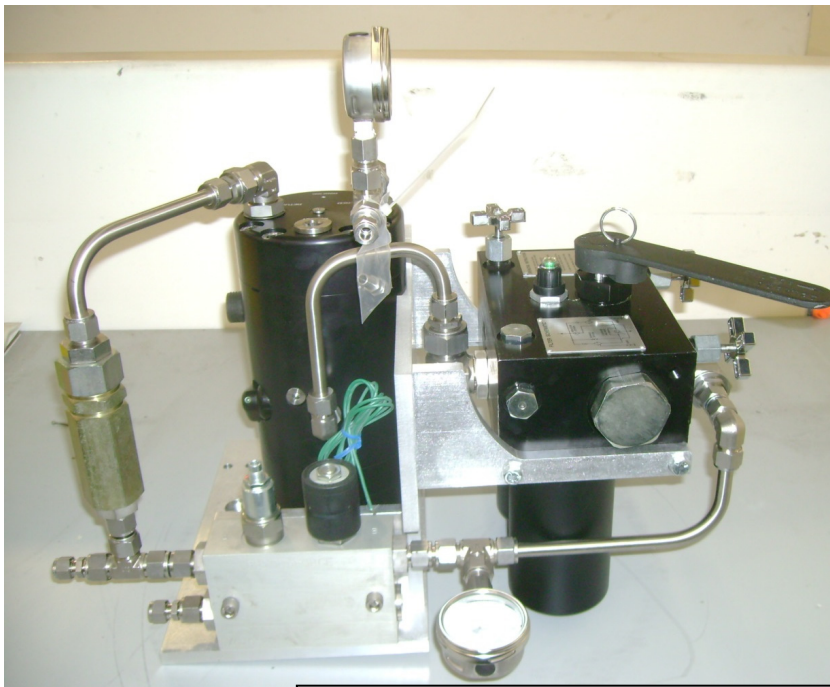


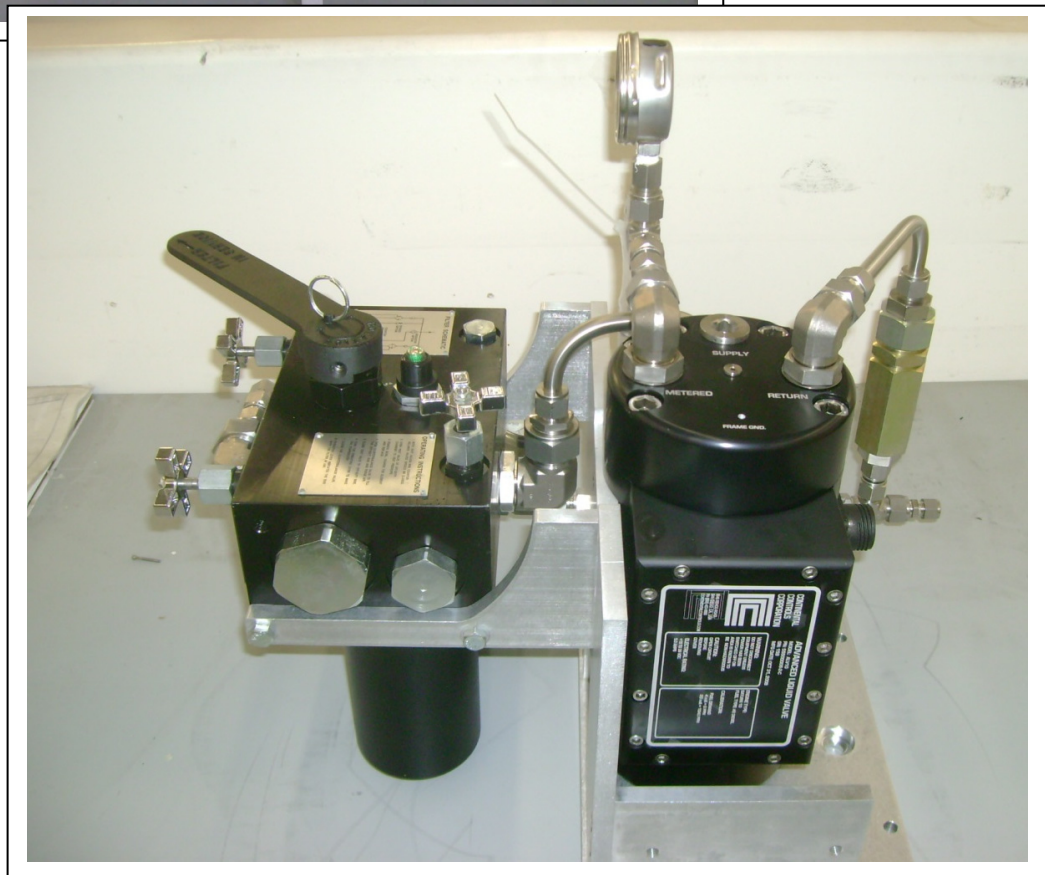
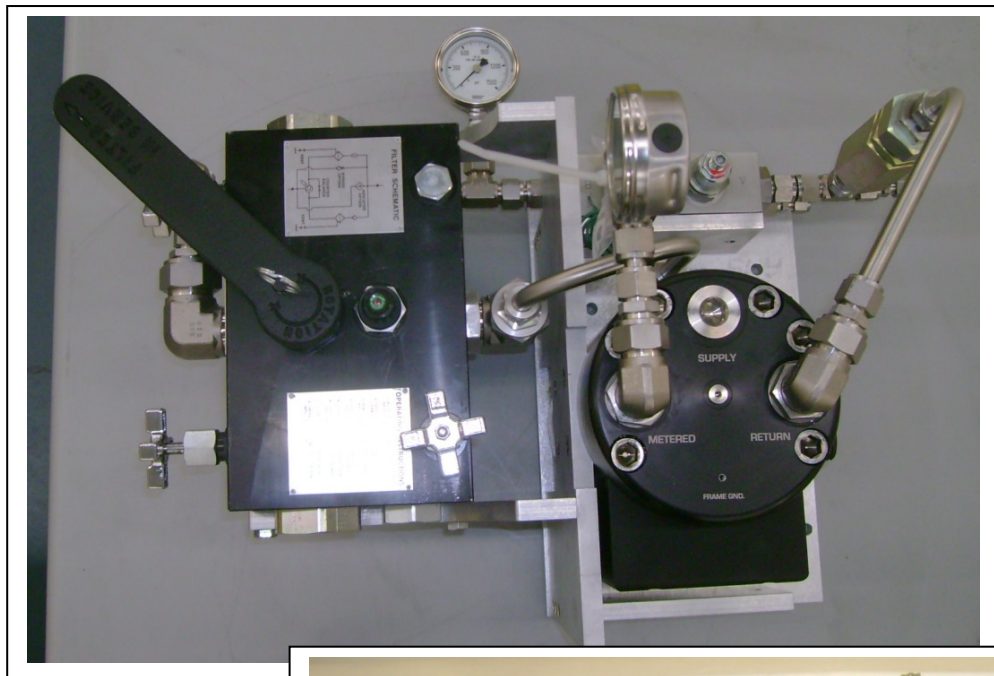
Installation Dimensions

Linear Measure: millimeter
inch





30P Series Installation Bracket:





Advanced Liquid Valve Model ALV10 Specifications

Flow Capacity:	22,000 lbs/hr (52.33 gpm)
Fuel	Diesel #2, Jet A, BioDiesel, NAPTA
Maximum Operation Pressure:	1600 psig
Minimum Filtration Requirement:	2-3 Micron Absolute
Operating Temperature:	-40° C (-40° F) to +85° C (+185° F) -20° C (-40° F) to +85° C (+185° F) [ATEX]
Response Time:	45 milliseconds 10% - 90% Stroke
Flow Accuracy:	±3.0% of reading or 0.5 % of full scale
Fuel Demand Signal [to Fuel Control Valve]:	4-20 mA (Standard) 0-50 mA (Optional), 0-200 mA (Optional)
Compressor Discharge Pressure (Pcd) Fuel Demand Signal [to Fuel Control Valve]:	4-20 mA (Standard for Imbedded Acceleration Schedule)
Fuel Feedback Signal [from Fuel Control Valve]:	4-20 mA Fuel Flow Feedback, 4-20 mA Position Feedback
Power Input:	18-30VDC, 5 Amp Max
Electrical Interface:	MS Connector (D3899/20FE99PN) or 3/4" Ridged Conduit, 84" Pigtail Wires
Communication Interface:	RS232 Modbus RTU
Valve Materials:	-Body: 6061-T6 Anodized Aluminum -Wetted Components: 300 Series Stainless Steel, 6061-T6 & 7075-T6 Anodized Aluminum, - Seals: Nitrile
Fuel Ports:	-12 SAE O-ring Ports
Dimensions:	20.1" L x 16.7"H x 9.3" W
Approximate Weight:	45 pounds
Certifications:	 Class I, Division 1 & 2, Group D: T4  II 2 G Ex d IIA, T4 Gb



The Design dimensions

