

## **36EFC & 38EFC SECTIONAL DIRECTIONAL CONTROL VALVES WITH ELECTRONIC FLOW CONTROL INSTALLATION AND USER GUIDE**

### **SPECIFICATIONS:**

- Flow rating - 36EFC 0-12 gpm (0-45 lpm)  
- 38EFC 0-24 gpm (0-91 lpm)
- Pressure rating 3000 psi (207 bar).
- 10 Micron filtration recommended.
- Port Sizes - 36EFC work section #8(3/4-16) SAE o-ring ports  
- 38EFC work section #10(7/8-14) SAE o-ring ports  
- EFC inlet/tank ports are both #12(1-1/16-12) SAE o-ring ports.
- See Series 36-38 literature for more specifications on work sections.
- See EFC literature for more specifications and information on EFC.

### **MOUNTING & ADJUSTMENT INSTRUCTIONS:**

**Mounting** – Valve can be mounted in any orientation. Valve must be mounted on a flat surface. Special attention should be paid to not bend or twist the casting when mounting. Doing so may cause the valve to fail.

#### **Relief Adjustment** -

- **EFC Section Relief Adjustment** –The relief pressure will be preset to customer specifications. In order for the relief to work, the EX port must be plumbed back to tank. To adjust the relief, simply loosen the relief lock nut and then turn the relief adjustment fitting clockwise to increase the pressure setting. Both the relief lock nut and relief adjustment fitting accept a 1-3/8" wrench.
- **High Spool Sections with Port Relief** – Sections with "C" & "R" style relief are adjusted in the following manner. Loosen one inch black lock nut with a closed end wrench. Once the lock nut is loosened, the relief can be adjusted using a 5/16" hex wrench. The factory relief setting will be stamped on the set screw. The pressure range your valve will work best in will depend on which spring was installed, if your spring is:
  - White (p/n: P1279): 2400 - 3000psi [165.5-206.8bar]
  - Yellow (p/n: P1270): 1400 - 2500psi [96.5-172.4bar]  
(Spring will have ~7.5 coils, cross section dia. ~ 0.119 [3.02mm])
  - Orange (p/n: P1270-360): 700 - 1400psi [48.3-96.5bar]
  - Yellow (p/n: DC7594): 300 - 700psi [20.7-48.3bar]  
(Spring will have ~8.25 coils, cross section dia. ~ 0.090 [2.29mm])Clockwise rotation of the screw will increase the relief pressure.

### **FREQUENTLY ASKED QUESTIONS:**

#### **Q: Can I paint my valve?**

**A:** Yes, as long as all the ports are properly plugged. Failure to take the proper precautions prior to painting your valve may void your warranty.

#### **Q: What is the correct torque for the tie rod nuts?**

**A:** The correct torque spec on the tie rod nuts is 85 inch pounds [9.6Nm]. Using a 1/2" socket and wrench, both nuts on each rod should be tightened at the same time to prevent bind in the section.

### **SAFETY PRECAUTIONS:**

- It is the purchaser's responsibility to determine the suitability of any Brand Hydraulics Co. product for an intended application, and to ensure that it is installed in accordance with all federal, state, local, private safety and health regulations, codes and standards. Due to the unlimited variety of machines, vehicles and equipment on which our products can be used, it is impossible for Brand Hydraulics Co. to offer expert advice on the suitability of a product for a specific application. It is our customer's responsibility to undertake the appropriate precautions, testing and evaluation to prevent injury to the end-user.
- Overpressure may cause sudden and unexpected failure of a component in the hydraulic system, resulting in serious personal injury or death. Always use a gauge when adjusting a relief valve.

## DIMENSIONAL DATA: inches & [millimeters]

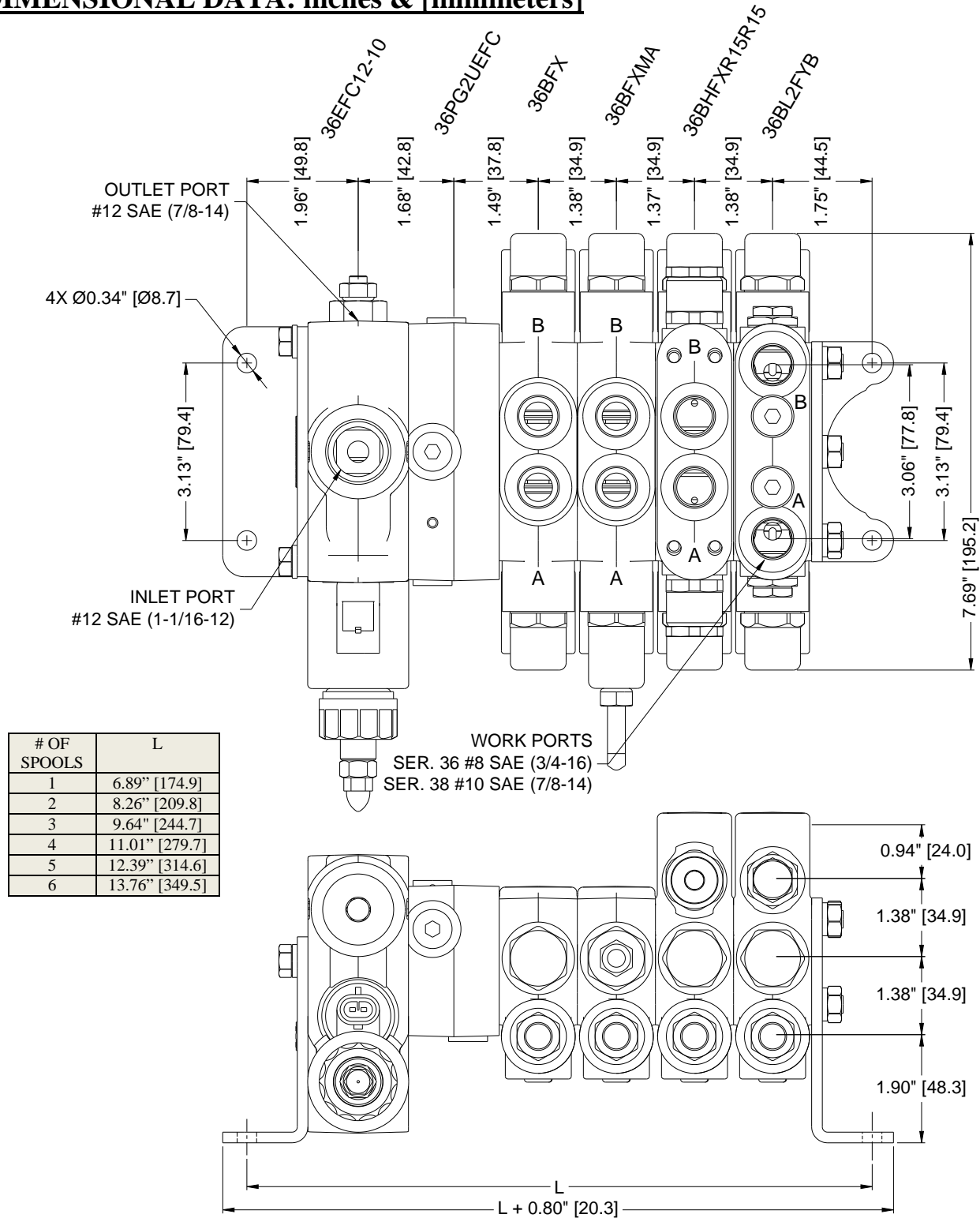


Figure 1: Dimensional data for various 36EFC valve sections in inches & [millimeters].