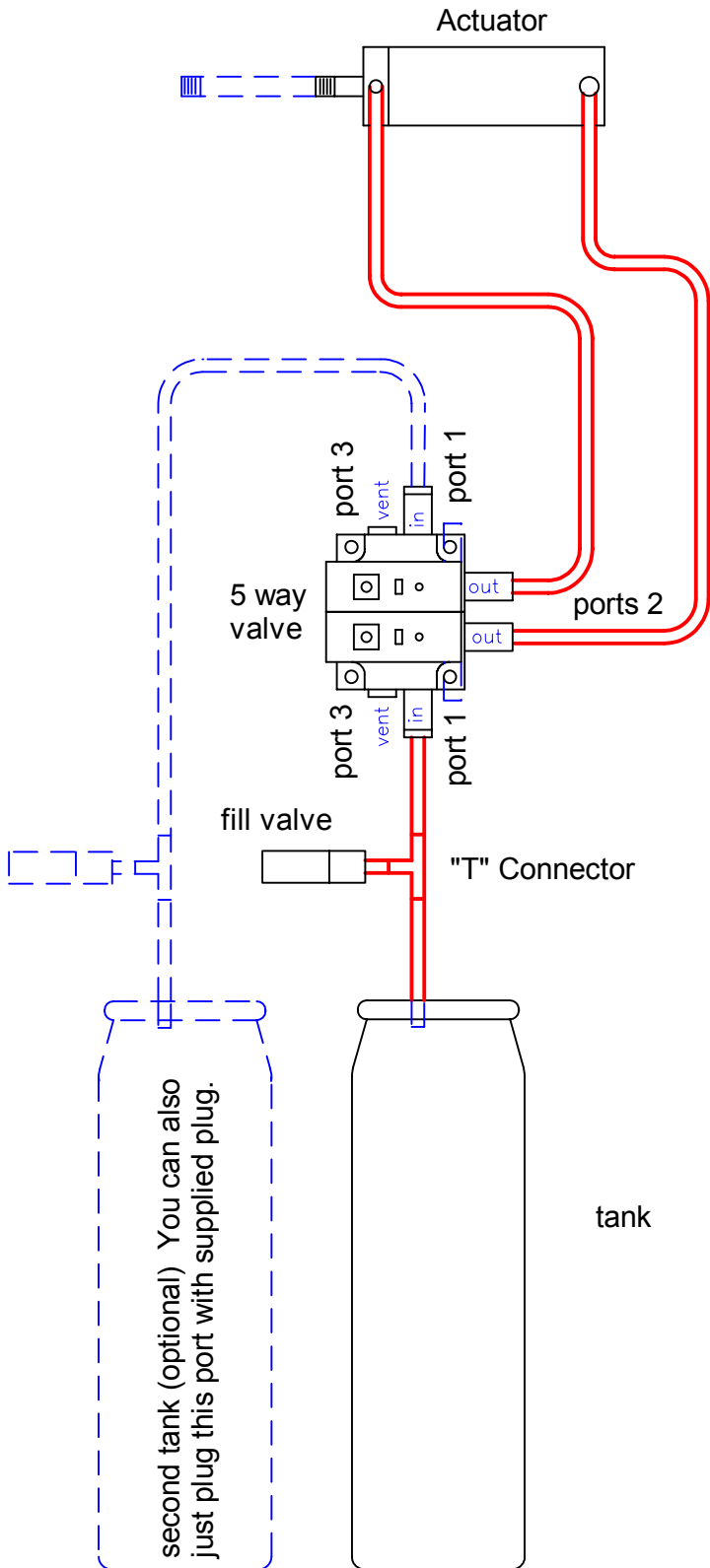
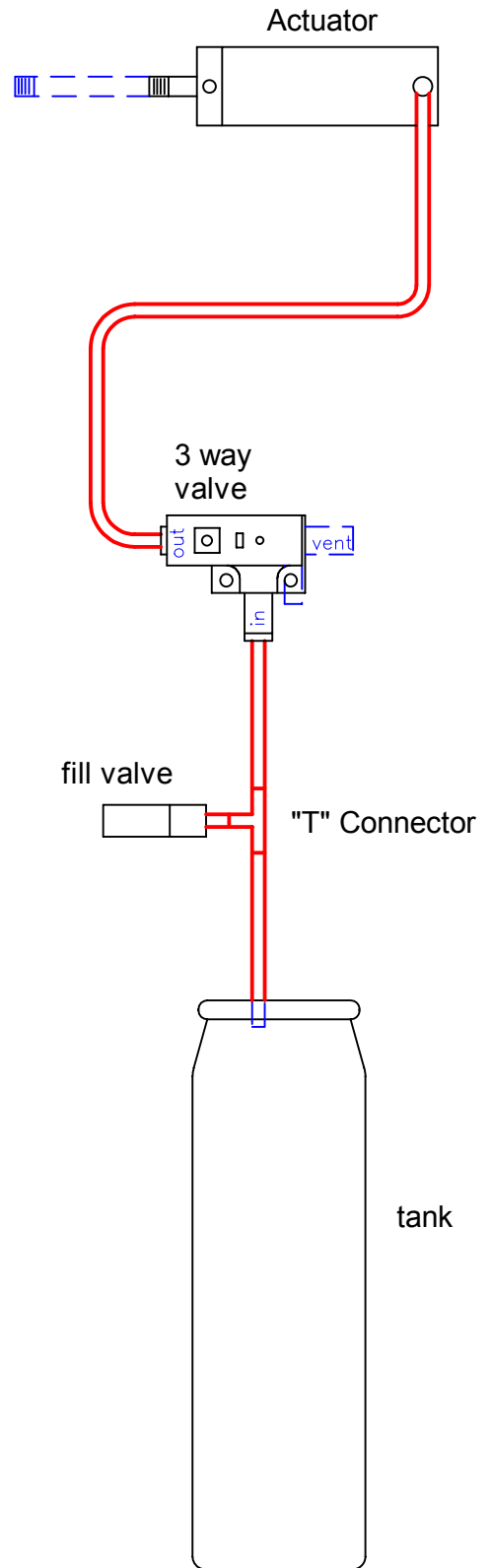


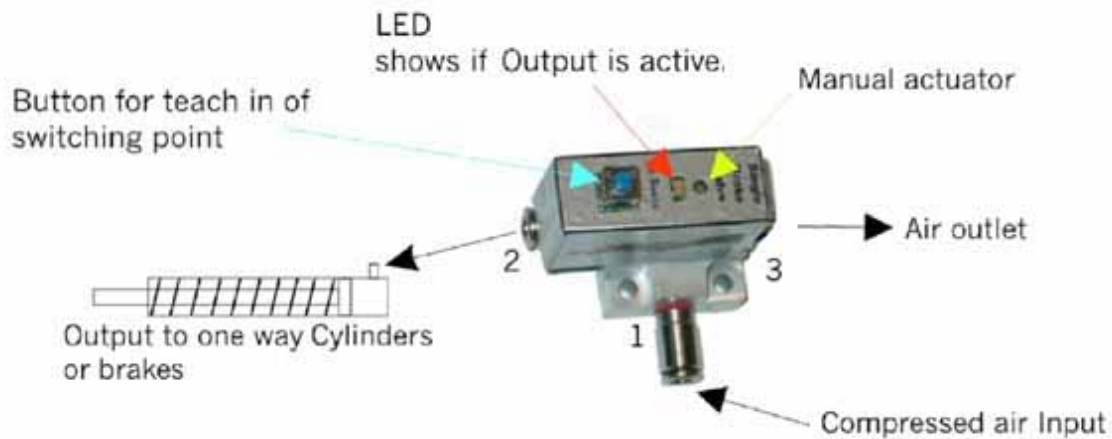
Set up for double acting cylinders. (Cylinder powered in both directions)



Set up for single acting cylinders. (Cylinder powered in one direction only using gravity or spring return.)



## 3 Way (Single Acting) Pneumatic Valve



3 way valves are for faster actuation powered in a single direction using a spring, elastic, or gravity powered return. This valves only electrical connection is directly to the receiver via Futaba J connector. It replaces the servo, linkage and slow mechanical valve in most R/C pneumatic systems.

- The size and weight are far less than the mechanical version it replaces. In addition it is faster, programmable with new options, and has no external moving parts.
- The connections are high-quality metal “fast connections” for 3mm tubing. Two connectors are supplied, one for input the other for output. You do not require a 3<sup>rd</sup> for exhaust (it would only add size and weight). Make sure all connectors are screwed in tight.
- The speed of delivering in and out can be throttled at the outlet (port 3) with a restrictor if desired.
- The open position is indicated by a red LED.
- The remember function prevents the default position from being lost and remembers the position of the last transmitter power down or loss of signal.
- Very low current: 100 mA at 5 volts (50% lower than at the usual 1 watt valves)
- Viton seals are impervious to most oils and last a long time.
- The air throughput is around 40% higher than mechanical valves and the actuation is much faster.
- In the brake (variable pulsing) function, the minimum brake point can be adjusted to the 10% point of the travel of the transmitters function. A second brake point can be adjusted to the 90% point of the travel of the transmitters function. This is full brake. This is so the pulse modulated brake function starts working at 10% and ends by 90% of the travel of the transmitter function. From 0 – 10% the valve is closed, from 90 – 100% travel the valve is fully open, which prevents air loss on full brake.

### **Technical data:**

Supply voltage	3,5V..7.5V
Current	100mA at 5V during activation
Pressure Rating	0 – 145 psi
Measurements	1.102L x .630W x 1.102H (28x16x28mm)
Weight	.81oz (55g)
Connection:	3mm fast connectors

## **Adjustment Instructions for 3 way Valve**

Your valve should arrive programmed for “on/off” mode. To toggle mode of operation from “on/off” to “pulsing” or visa versa:

- Hold button pressed.
- Turn receiver on.
- Release button.

### **Adjusting switching point or travel of braking range:**

- Switch on transmitter/receiver.
- Transmitter stick or switch to actuator "OUT" or brake “OPEN”.
- Push Teach Button and wait 2 seconds.
- Transmitter stick or switch to actuator "IN" or brake “CLOSED”.
- Push Teach Button Twice and wait 2 seconds.
- Check function.

**The following steps are for the pulsing brake function only.** You should have the air system charged with a small amount of pressure and be sure there are no leaks.

### **Adjusting minimal brake point:**

- Move transmitter stick until the brake just starts working.
- Push button three times and wait 2 seconds.
- Check function.

### **Adjusting maximal brake point:**

- Move transmitter stick until the brakes are nearly at the 100% braking point.
- Push button four times and wait 2 seconds.
- Check function.

### **To change any taught point, a deletion must be carried out:**

- Push button five times and wait 2 seconds.
- Repeat all steps above.

The taught points remain saved even after turning the receiver power supply off.