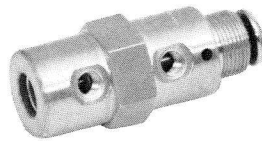


# Humphrey TAC-TAC<sup>2</sup>-TAC<sup>3</sup> Air Valves

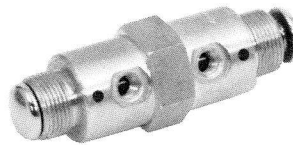
Model TAC, TAC<sup>2</sup>, and TAC<sup>3</sup> air valves may be operated by pilot or mechanical operators or manually operated by their push-buttons. Each push-button's shoulder bottoms-out on the valve body to prevent overstroke and valve damage. Operators adapt directly to the threaded button end. The push-button itself is constructed of work-hardening stainless steel. Appropriate locknuts and lockwashers are furnished. Port sizes are as follows: TAC, #10-32; TAC<sup>2</sup>, 1/8"; TAC<sup>3</sup>, 1/4".



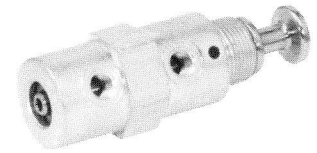
**2P**  
Model 2P is a 2-way, normally closed, spring-return valve that can trap downstream pressure if the supply pressure is maintained and not exceeded. Weight: 1.25 oz. (35.4 gms.).



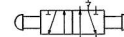
**4P**  
Model 4P is a 4-way, normally closed/normally open valve with spring-return. IN and CYL port threads are #10-32 female. EXH ports are not threaded. Weight: 2.8 oz. (79.4 gms.).



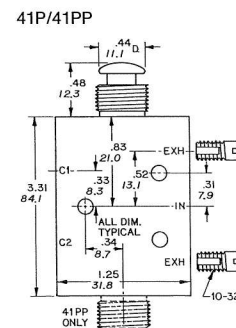
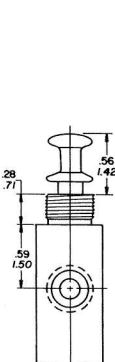
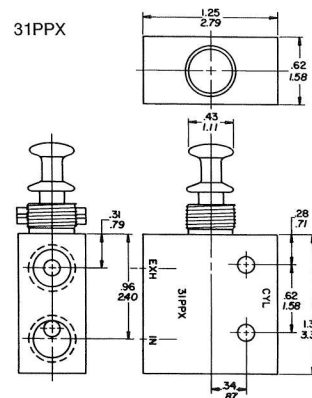
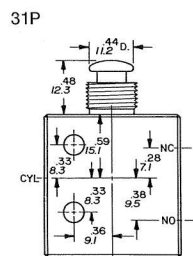
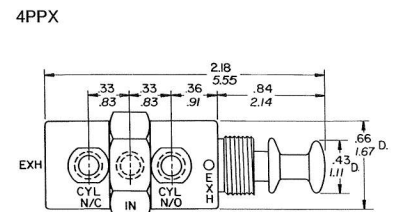
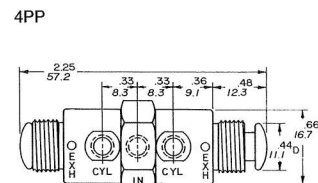
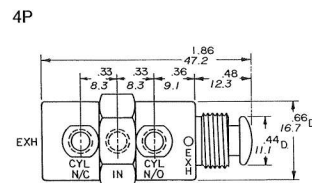
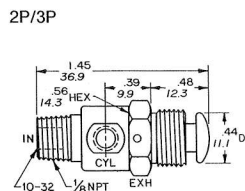
**4PP**  
Model 4PP is a detented 4-way, normally closed/normally open valve with two push-buttons. IN and CYL port threads are #10-32 female. EXH ports are not threaded. Weight: 2.75 oz. (78 gms.).

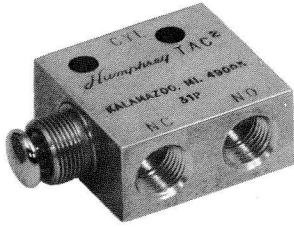


**4PPX**  
Model 4PPX is a detented version of 4P. It features a push-pull actuator with positive stop. Actuator has a short stroke of 0.093 inch. Weight: 2.8 oz. (67.3 gms.).

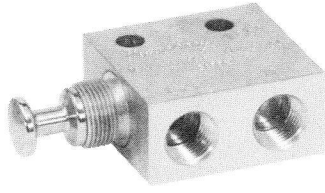


**3P**  
Model 3P is a 3-way, normally closed, spring-return valve. IN and CYL port threads are #10-32 female. EXH port is not threaded. Alternate IN port is 1/8" NPT male. Weight: 1.25 oz. (35.4 gm.).

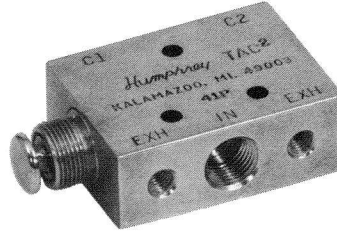




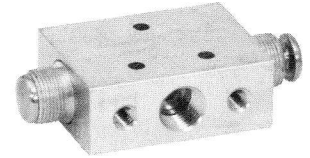
**31P**  
 Model 31P is a multi-purpose valve with spring-return. Pressure may be applied at any port. The 31P can be used as a 3-way, normally closed/normally open valve, as a diverter or dual-pressure valve, or as a 2-way valve with the unused NC or NO port plugged. The 31P can be mounted with two #10 screws or panel mounted with body threads. Dimensions: 1.31"H x 1.25"W x 0.63"D. Weight: 4.25 oz. (120.5 gms.).



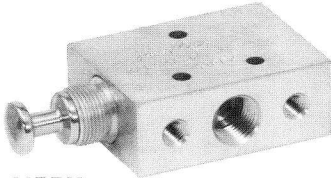
**31PPX**  
 Model 31PPX is a detented version of 31P. It features a push-pull actuator with positive stop. Actuator has a short stroke of 0.093 inch. Weight: 4.25 oz. (120.5 gms.)



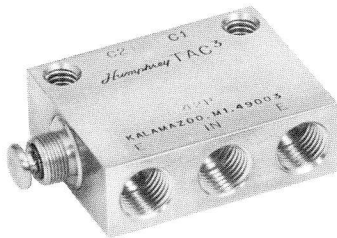
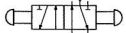
**41P**  
 Model 41P is a 4-way, normally closed/normally open valve with spring-return. IN and CYL port threads are 1/8" NPT. Exhaust ports are #10-32 female. The 41P is supplied with two #97-21 metering screws for exhaust port flow controls. The 41P can be mounted with three #6 screws or with body threads for bracket or panel mounting. Dimensions: 1.65"H x 1.25"W x 0.63"D. Weight: 5.25 oz. (148.8 gms.).



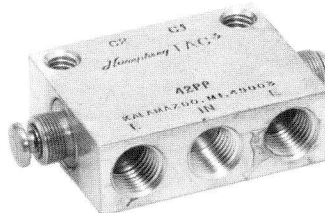
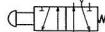
**41PP**  
 Model 41PP is a detented 4-way, normally closed/normally open valve with two push-buttons. IN and CYL port threads are 1/8" NPT. Exhaust ports are #10-32 female. The 41PP valve is supplied with two #97-21 metering screws for exhaust port flow controls. It can be mounted with three #6 screws or with body threads for bracket or panel mounting. Dimensions: 1.65"H x 1.25"W x 0.63"D. Weight: 5.63 oz. (159.5 gms.).



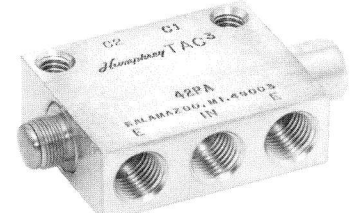
**41PPX**  
 Model 41PPX is a detented version of 41P. It features a push-pull actuator with positive stop. Actuator has a short stroke at 0.093 inch. Weight: 5.40 oz. (153.1 gms.)



**42P**  
 Model 42P is a 4-way, 5 port, normally closed/normally open, single push-button, spring-return valve. All ports are 1/4" pipe. This valve can be mounted with two 1/4" screws or with body threads for bracket or panel mounting. Dimensions: 2.25"H x 1.75"W x 0.75"D. Weight: 11 oz. (311.9 gms.)



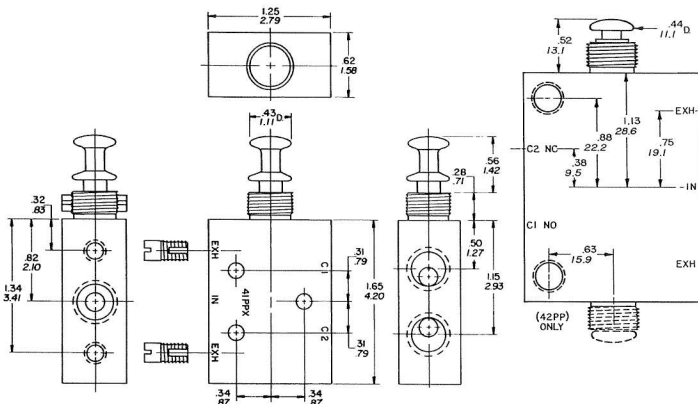
**42PP**  
 Model 42PP is a 4-way, 5 port, normally closed/normally open, double push-button, detented valve. All ports are 1/4" pipe. This valve can be mounted with two 1/4" screws or with body threads for bracket or panel mounting. Dimensions: 2.25"H x 1.75"W x 0.75"D. Weight: 11 oz. (311.9 gms.)



**42PA**  
 Model 42PA is a 4-way, 5 port, normally closed/normally open, detented valve. One side has push-button; other side has 1/8" air-pilot port. Body ports are 1/4" pipe. This valve can be mounted with two 1/4" screws or with body threads for bracket or panel mounting. Dimensions: 2.25"H x 1.75"W x 0.75"D. Weight: 11 oz. (311.9 gms.) Dimensions of air pilot shown in the TAC<sup>3</sup> Air-Piloted Valves section.

41PPX

42P/42PP



## Specifications

**MEDIA:**  
 Compressed Air (Consult factory for others)

**PRESSURE RANGE:**  
 0 to 125 psig (0 to 8.6 bars)

**TEMPERATURE RANGE:**  
 -20 to 180°F (-28.9 to 82.2°C)

**OPERATING SPEEDS:**  
**TAC & TAC<sup>2</sup>:** to 900 CPM  
**TAC<sup>3</sup>:** to 600 CPM

**MATERIALS:**  
 Brass, Stainless Steel, Delrin, Buna N

**LUBRICATION** ..... Recommended

**FILTRATION** ..... Recommended,  
 40 Microns Minimum

## Air Flow to Atmosphere

MODEL	25 PSIG CFM	(1.7 BARS) LPM	125 PSIG CFM	(8.6 BARS) LPM
2P, 3P	1.5	6.8	7.0	198.1
4P, 4PP, 4PPX	1.8	16.9	9.0	254.7
31P, 41P, 41PP, 41PPX	4.0	113.2	20.0	566.0
42P, 42PP, M42P, M42PA, M42PP	10.0	283.0	39.0	1103.7