

# Pneumatic Pilot - Operated Valves Series 3 and 4

Series 3: 1/8" NPTF, 3/2-way and 5/2-way

Series 4: 1/8", 1/4" NPTF  
3/2, 5/2 and 5/3-way

The pneumatically operated, 3/2-way, 5/2-way and 5/3-way, Series 3 valves, 1/8", and Series 4 valves, 1/8" and 1/4" have been designed with three different methods of return: a pneumatic signal, mechanical spring or differential pneumatic return. This is possible due to the type of design consisting of a balanced spool, which means that it can be used for a very wide range of applications.

The 3/2-way valves are normally closed in the rest position when the pressure is supplied at P and are normally open when the pressure is supplied at R, the use of A remaining unchanged. Moreover, the 5/2-way valves can be supplied via the ports R and S with two different pressures if a cylinder must be operated using a delivery pressure different from the return pressure. On the valve series 3 and 4, 1/8" and 1/4", two additional holes permit assembly onto the manifold CNVL without the use of a banjo bolt.



## GENERAL DATA

Valve group	3/2, 5/2, 5/3 [way/positions]
Construction	Spool type
Mounting	Mounting holes in valve body
Materials	Aluminum body, Stainless steel spool, Buna-N seals
Threaded port sizes	1/8", 1/4" NPTF
Installation	Manifold, or single panel mount
Operating temperature	32° F - 176° F, [dry air at 68° F]
Fluid	Filtered air
Lubricant	Oil compatible with Buna-N, [3° - 10° E]

**PNEUMATIC DATA**

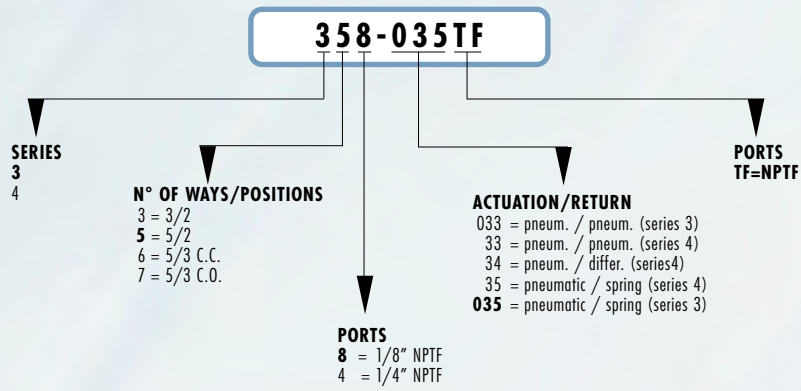
Operating pressure	0 - 10 bar, [0 - 145 psi]	
Nominal pressure	6 bar, [87 psi]	
Control pressure	Minimum pressure [see valve descriptions]	
Nominal flow	*Qn Series 3: 1/8" = 500 NL/min. [17.65 SCFM]	
	Series 4: 1/8" = 650 NL/min. [22.95 SCFM]	1/4" = 1250 NL/min. [44.14 SCFM]
Nominal diameter	1/8" = 5 mm	1/4" = 7.5 mm
Cv Rating	Series 3: 1/8" = 0.52	
	Series 4: 1/8" = 0.68	1/4" = 1.32

\*Qn flowrate [SCFM] determined with a supply pressure of 6 bar, [87 psi], and with a pressure drop of 1 bar, [14.5 psi].

\*\* Soft-seal repair kits are available on request.

\*\*\*Dimensions are in millimeters

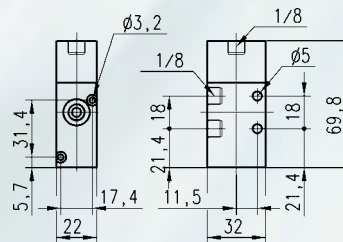
**CODING OF PNEUMATICALLY OPERATED VALVES**



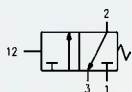
**3/2-way valve, 1/8" port, monostable**

Valve with pneumatic actuation and mechanical spring return.  
Minimum control pressure: 3 bar. (44 psi)

**Note:** Please specify model 338 for single application or 338L for manifold CNVL use.



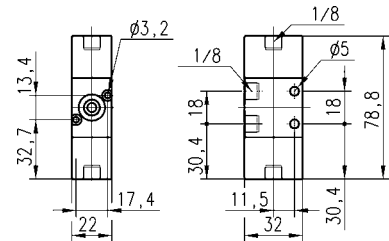
Mod.
<b>338-035TF</b>
<b>338L-035TF</b>



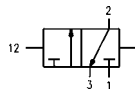
**3/2-way valve, 1/8" port, bistable**

Valve with pneumatic actuation and return.  
Minimum control pressure: 2.5 bar. (36 psi)

**Note:** Please specify model 338 for single application or 338L for manifold CNVL use.

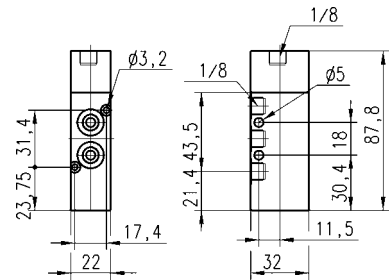


Mod.
<b>338-033TF</b>
<b>338L-033TF</b>

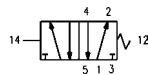


**5/2-way valve, 1/8" port, monostable**

Valve with pneumatic actuation and mechanical spring return.  
Minimum control pressure: 3 bar. (44 psi)

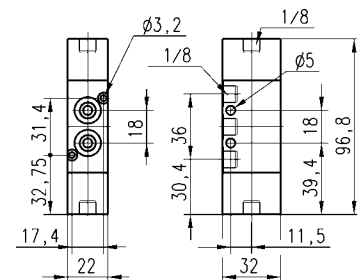


Mod.
<b>358-035TF</b>

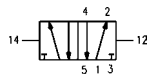


**5/2-way valve, 1/8" port, bistable**

Valve with pneumatic actuation and return.  
Minimum control pressure: 2.5 bar. (36 psi)



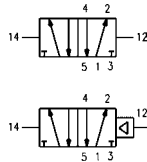
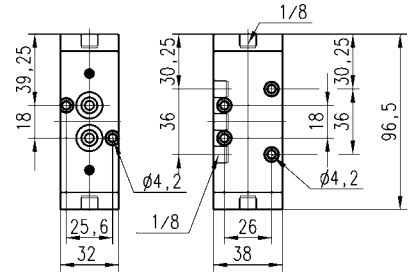
Mod.
<b>358-033TF</b>





**5/2-way valve, 1/8" port, bistable**

Valve with pneumatic actuation and differential return.  
Minimum control pressure: 2 bar. (29 psi)



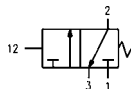
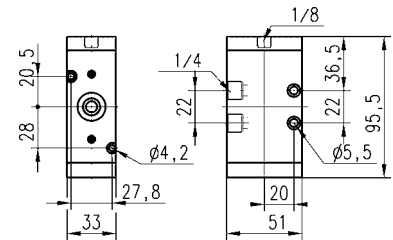
Mod.

**458-33TF**

**458-34TF**

**3/2-way valve, 1/4" port, monostable**

Valve with pneumatic actuation and mechanical spring return.  
Minimum control pressure: 2.5 bar. (36 psi)

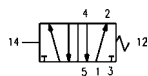
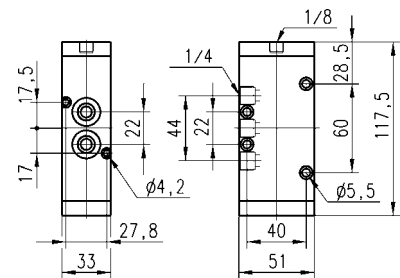


Mod.

**434-35TF**

**5/2-way valve, 1/4" port, monostable**

Valve with pneumatic actuation and mechanical spring return.  
Minimum control pressure: 2.5 bar. (36 psi)

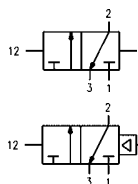
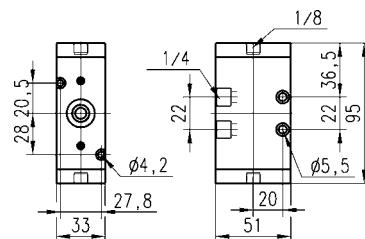


Mod.

**454-35TF**

**3/2-way valve, 1/4" port, bistable**

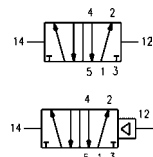
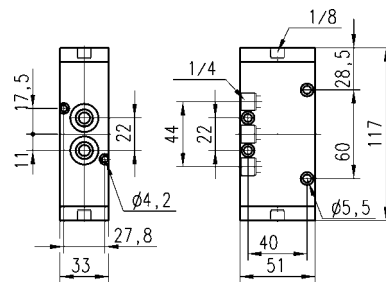
Valve with mechanical operation and mechanical spring return.  
Minimum control pressure: 2 bar. (29 psi)



Mod.
<b>434-33TF</b>
<b>434-34TF</b>

**5/2-way valve, 1/4" port, bistable**

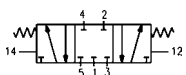
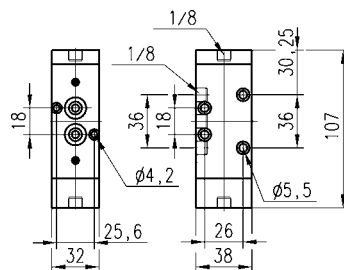
Valve with pneumatic actuation and air return.  
Minimum control pressure: 2 bar. (29 psi)



Mod.
<b>454-33TF</b>
<b>454-34TF</b>

**5/3-way closed-center valve, 1/8" port, monostable, with central stable position**

Valve with pneumatic actuation and central return by mechanical spring.  
Minimum control pressure: 2.5 bar. (36 psi)



Mod.
<b>468-33TF</b>

