



General

This new range of G1” pilot and solenoid operated poppet valves represents an evolution of the current popular Zama series and of the series T772-T773 (G1/2" - 3/4").


Also for this series the main feature is the technopolimer material used to mould most of its components. The use of this material results in a versatile, lightweight and economical valve.

The new series also has other technical and functional enhancements over the existing range. Firstly, the traditional piston lip seal has been replaced with a rolling diaphragm, thereby eliminating frictional wear and tear to this seal. The new series (with the exception of certain vacuum models) also features a seal, which separates port 3 from the piston head. The inclusion of this seal has enhanced the valve’s performance and allows the valve to be used as normally open (a configuration not possible in the Zama series).

Solenoid operated valves (both internal and external pilot versions) are fitted with a quick exhaust unit, which reduces the return stroke operating time by 80%. The bulk of the valves in this series use the MP type operator, the exception being internally piloted vacuum models, which use the MV operator. These operators differ from the M2 type in that they have self-tapping mounting screws for use in plastics.

Bistable versions are also available, both for air or for vacuum. These valves are fitted with a 3/2 sol-sol valve (instead of the standard pilot valve) fitted with two 15mm 24V Dc microvalves (N331.0A). Ordering codes refer to solenoid valves with MP or MV assembled on them.

Coils are not included and have to be ordered separately (series 300, Section 1, General Catalogue), with the exception of the bistable versions which already include 24V Dc Coils (N331.0A).

Coils  US homologated are also available (see series 300).

Construction characteristics

Body, operator and end cover	High resistance technopolymer
Seals and poppets	NBR
Piston and shaft	Acetal resin
Springs	AISI 302 stainless steel
Diaphragm	NBR

Use and maintenance

These valves have a mean life of 10 to 15 million cycles under normal operating conditions.

Lubrication is not required for good operation but we recommend good filtration to avoid dirty deposit causing malfunction.

Check that the operating conditions: pressure, temperature and so on are as suggested.

The exhaust port of the distributor has to be protected in a dusty and dirty environment.

For these products, according to the construction technique and special application, is not required any maintenance with parts replacement. When necessary it is sufficient to clean the internal parts.

When it is used the solenoid valves with internal pilot, either for air or vacuum, inlet flow rate must be equal or higher that the required consumption flow rate, otherwise is better choose the external pilot version.

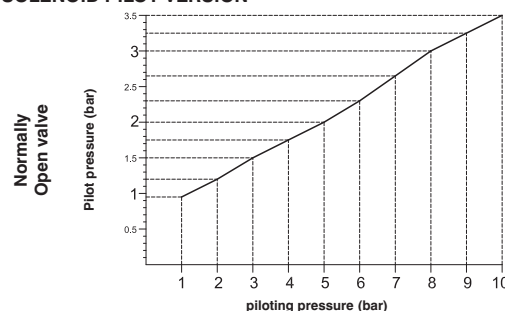
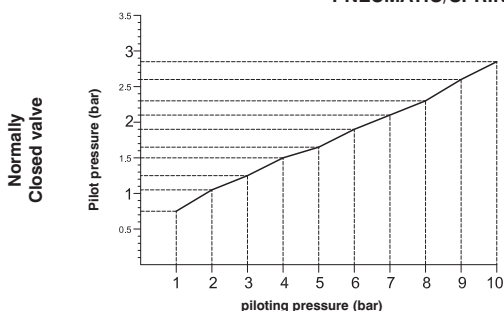
Air valve port layout:

- Normally closed: 1 = LINE IN
2 = CONSUMPTION
3 = EXHAUST
- Normally open: 1 = EXHAUST
2 = CONSUMPTION
3 = LINE IN

Vacuum valve port layout:

- Normally closed internal pilot 1 = EXHAUST
- Normally open (servoassisted) external pilot 2 = CONSUMPTION
3 = PUMP
- Normally open internal pilot 1 = PUMP
- Normally closed (servoassisted) external pilot 2 = CONSUMPTION
3 = EXHAUST

**MINIMUM piloting PRESSURE DIAGRAM (Valves for compressed air)
PNEUMATIC/SRING AND EXTERNAL SOLENOID PILOT VERSION**



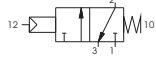
3/2

**Valve
Pneumatic spring**

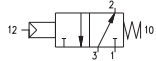
Ordering code

T771.32.11.1

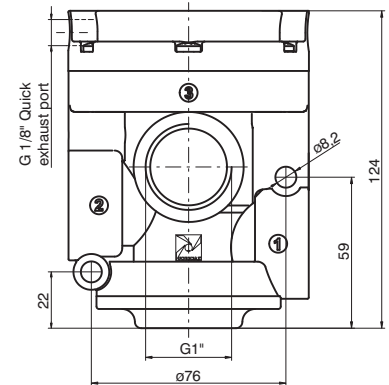
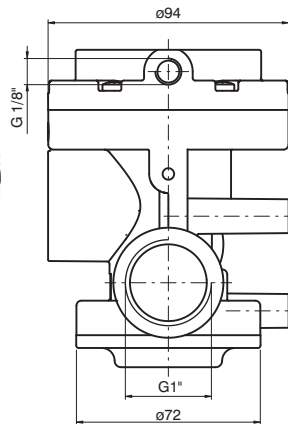
Normally closed



Normally open



Weight gr. 480



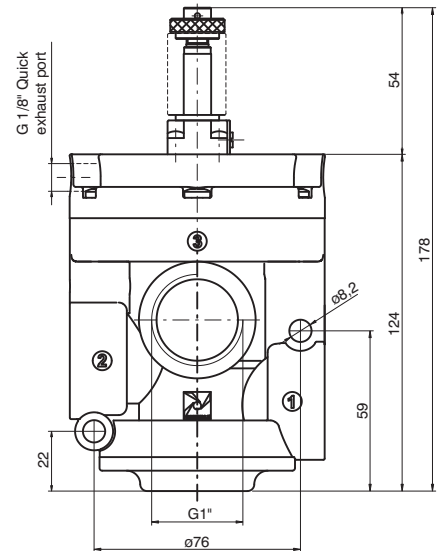
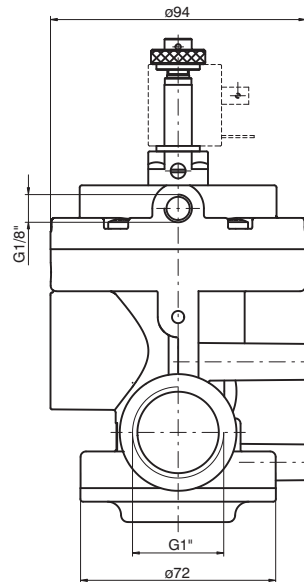
Minimum piloting pressure: see diagram at General page

**Solenoid valve
Solenoid spring**

3/2



Weight gr. 520



Ordering code

<i>Internal pilot</i>	<i>Servoassisted external pilot</i>	<i>Internal pilot with quick exhaust</i>	<i>Servoassisted external pilot with quick exhaust</i>
<p>T771.32.0.1AC.MP <i>Normally closed</i></p>	<p>T771.32.0.1.MP <i>Normally closed</i></p>	<p>T771S.32.0.1AC.MP <i>Normally closed</i></p>	<p>T771S.32.0.1.MP <i>Normally closed</i></p>
<p>T771.32.0.1AA.MP <i>Normally open</i></p>	<p><i>Normally open</i></p>	<p>T771S.32.0.1AA.MP <i>Normally open</i></p>	<p><i>Normally open</i></p>
<p>Minimum piloting pressure: 2,5 bar</p>	<p>Minimum piloting pressure: see diagram at General page</p>	<p>Minimum piloting pressure: 2,5 bar</p>	<p>Minimum piloting pressure: see diagram at General page</p>

Operational characteristics	Fluid	Max piloting pressure	Operating temperature		Flow rate at 6 bar with $\Delta p = 1$ bar	Orifice size	Inlet port size	Pilot ports size
	Filtered and lubricated or non lubricated air	10 bar	min.	max.				
			-5° C	+50° C	12.000 NI/min	mm 25	G 1"	G 1/8"

Valve
Pneumatic spring

3/2

Ordering code

T771/V.32.11.1

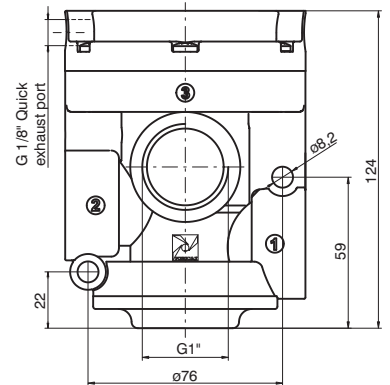
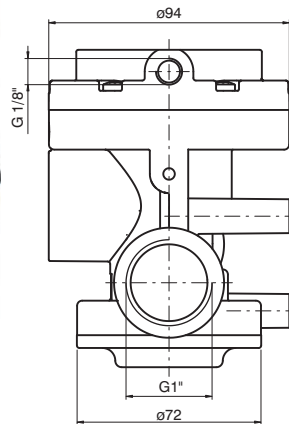
Normally open



Normally closed



Weight gr. 480



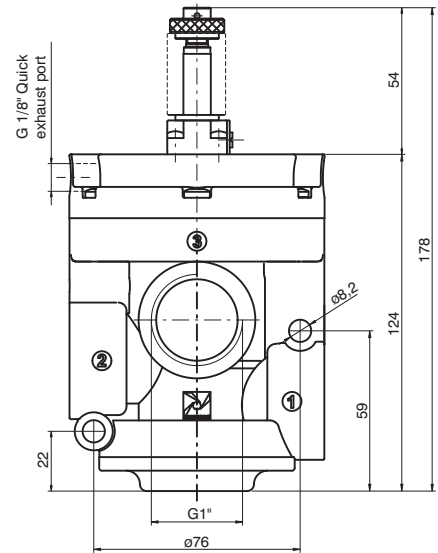
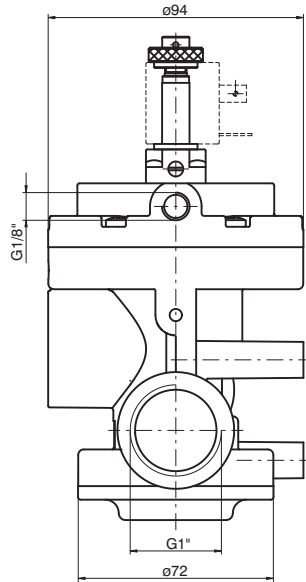
Minimum piloting pressure: 2 bar

Solenoid valve
Solenoid spring

3/2



Weight gr. 520



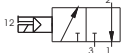
Ordering code

Internal pilot

Servoassisted external pilot

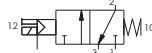
*Servoassisted external pilot
with quick exhaust*

T771/V.32.0.1AA.MV
Normally open



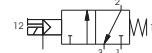
T771/V.32.0.1.MP

Normally open

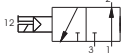


T771/VS.32.0.1.MP

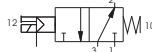
Normally open



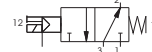
T771/V.32.0.1AC.MV
Normally closed



Normally closed



Normally closed



Minimum piloting pressure: 2 bar

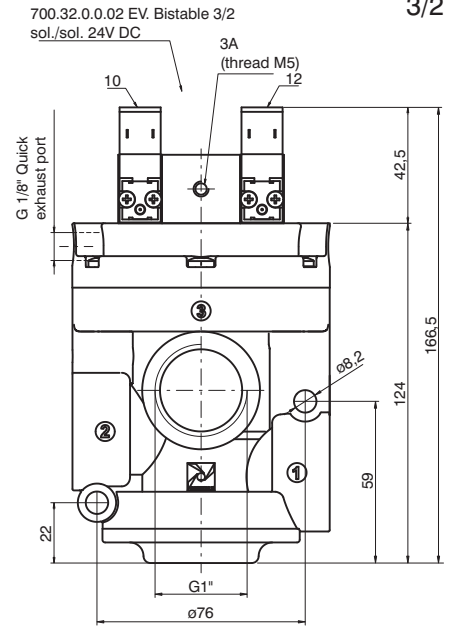
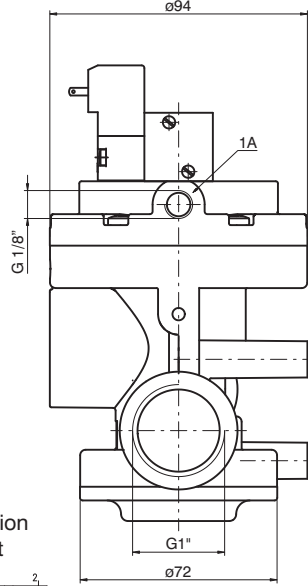
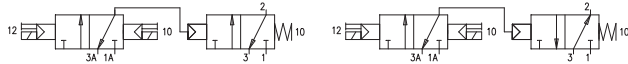
Operational characteristics	Fluid	Temperature		Orifice size	Inlet port size	Pilot ports size
	Vacuum	min.	max.			
		-5°C	+50°C	mm 25	G 1"	G 1/8"

Bistable version for Compressed air



Air - N.C.
 1 = line in
 2 = consumption
 3 = exhaust

Air - N.O.
 3 = line in
 2 = consumption
 1 = exhaust



Weight gr. 680

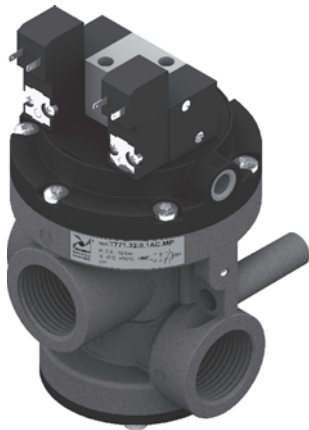
Ordering code

T771.32.0.1BP
Normally closed / Normally open

with quick exhaust
T771S.32.0.1.BP
Normally closed / Normally open

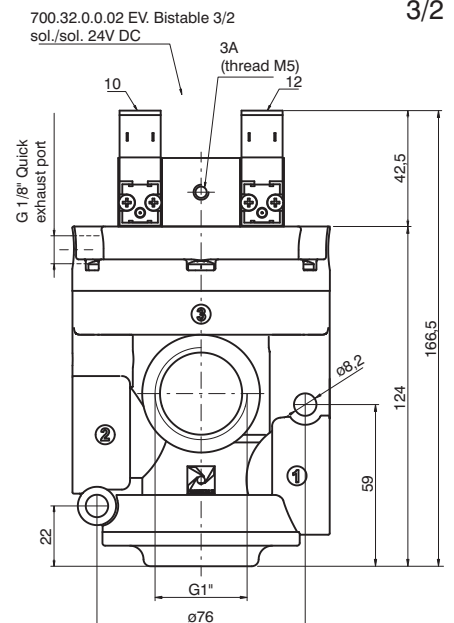
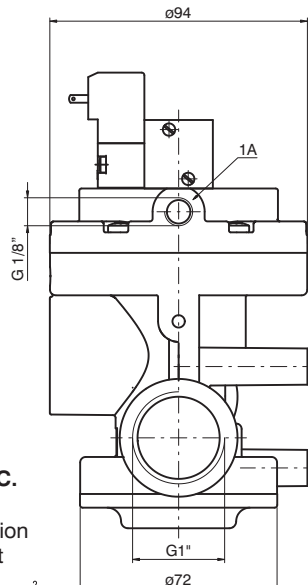
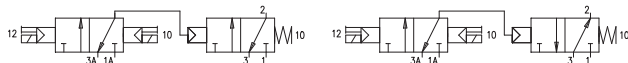
Operational characteristics	Fluid	Max piloting pressure	Minumum piloting pressure	Operating temperature		Flow rate at 6 bar with $\Delta p = 1$ bar	Orifice size	inlet port size	Pilot ports size
	Filtered and lubricated air	10 bar	2,5 bar	min.	max.				
				-5° C	+50° C	12.000 NI/min	mm 25	G 1"	G 1/8"

Bistable version for Vacuum



Vacuum - N.O.
 3 = pump
 2 = consumption
 1 = exhaust

Vacuum - N.C.
 1 = pump
 2 = consumption
 3 = exhaust



Weight gr. 680

Ordering code

T771/V.32.0.1BP
Normally closed / Normally open

with quick exhaust
T771/VS.32.0.1.BP
Normally closed / Normally open

Operational characteristics	Fluid	Minumum piloting pressure	Temperature		Orifice size	Inlet port size	Pilot ports size
	Vacuum	2,5 bar	min.	max.			
			-5° C	+50° C	mm 25	G 1"	G 1/8"