

Series T771 - for compressed air & vacuum in technopolymer - G1"

General

The 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 technopolymer material used to mould most of its components.

The use of this material results in a versatile, lightweight and economical valve.

This 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.

This 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).

The ordering code are referring to the solenoid valves with mechanics "MP" or "MV" assembled.

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 in US homologated are available (see 300 Series).

Construction characteristics

Springs	AISI 303 stainless steel
Diaphragm	Oil resistant rubber (NBR)
Body, operator and end cover	High impact resistant thermoplastic
Seals and poppets	NBR
Piston and shaft	Acetal resin

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.

Please ensure that the valve is being used according with the manufacturers specification, such as air pressure and temperature.

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

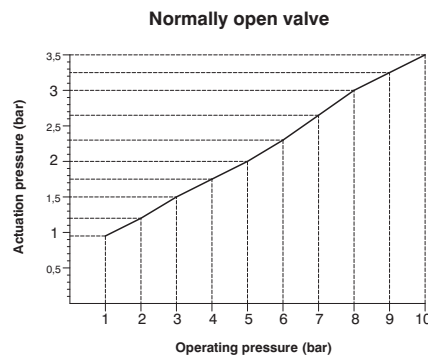
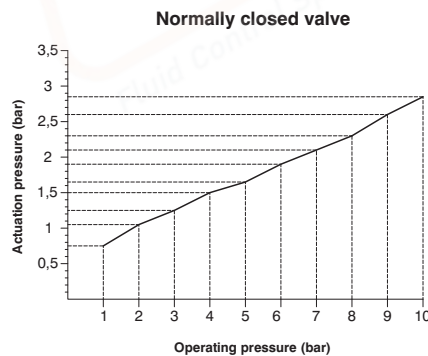
For these products, according to the construction technique and special application, is not required any maintenance with parts replacement.

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.

MINIMUM PILOTING PRESSURE DIAGRAM (Valves for compressed air) PNEUMATIC/SPRING AND EXTERNAL SOLENOID PILOT VERSION





Valves and solenoid valves poppet system Series T771 - for compressed air in technopolymer - G1"

Pneumatic - Spring

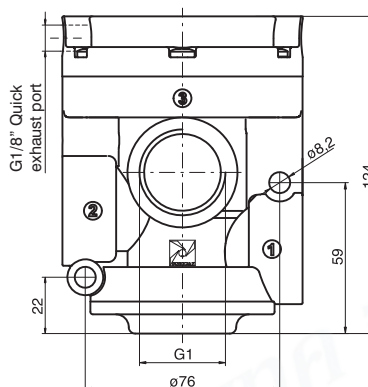
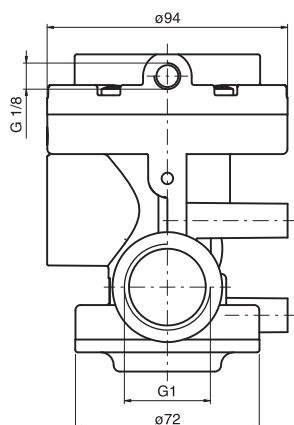
Coding: T771.32.11.1

Operational characteristics

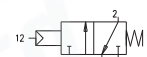
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

1

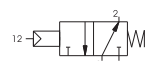
AIR DISTRIBUTION



For compressed air - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.
Inlet port 3
Outlet port 2
Outlet port 1



Weight 480 g

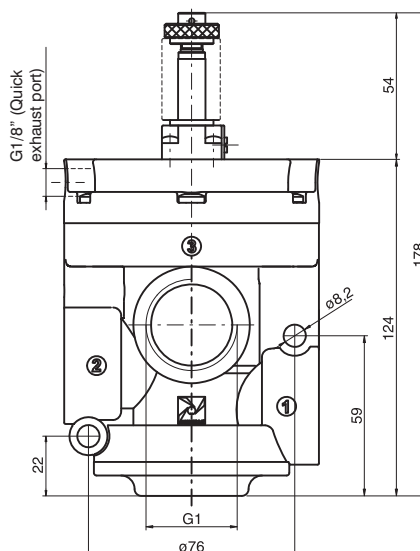
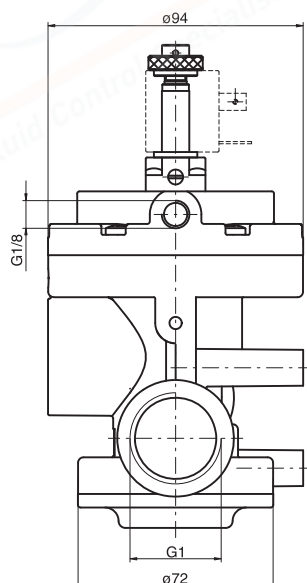
Solenoid-Spring - Internal pilot

Coding: T771.32.0.Ⓜ.MP

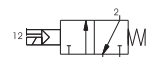
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

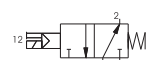
FUNCTION	
Ⓜ	1AC = Normally Closed
	1AA = Normally Open



For compressed air - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.
Inlet port 3
Outlet port 2
Outlet port 1



Weight 520 g

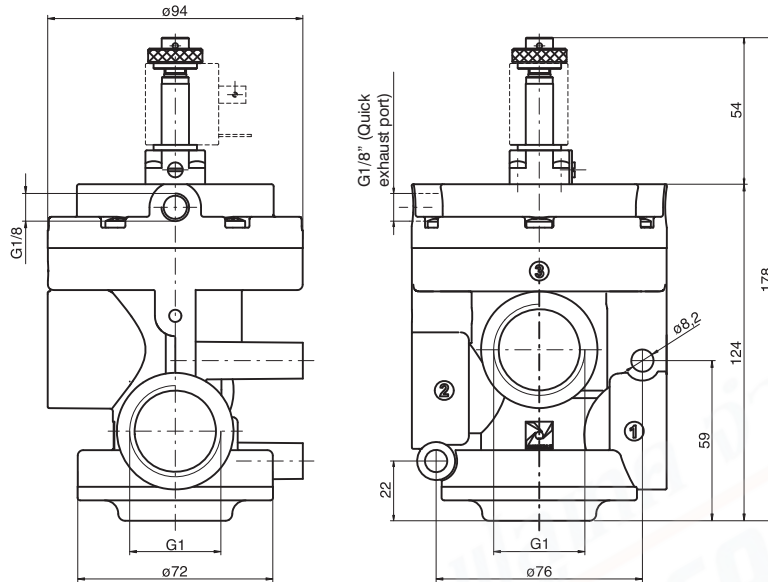
Solenoid-Spring - External pilot

Coding: T771.32.0.1.MP

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

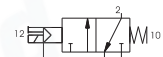


Weight 520 g



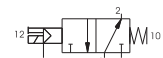
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1



Solenoid-Spring - Internal pilot with quick exhaust

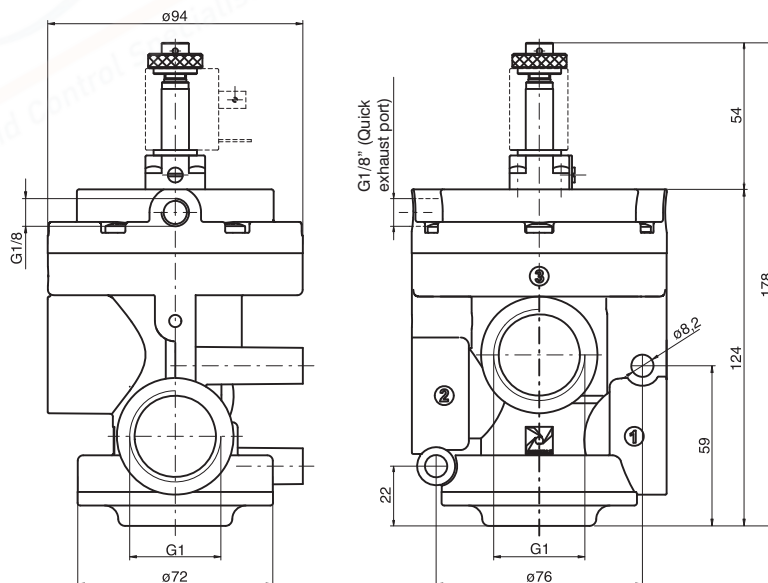
Coding: T771S.32.0.1.MP

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

FUNCTION	
F 1AC =	Normally Closed
1AA =	Normally Open

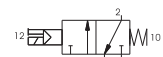


Weight 520 g



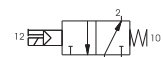
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1





Valves and solenoid valves poppet system
Series T771 - for compressed air in technopolymer - G1"

Solenoid - Spring - External pilot with quick exhaust

Coding: T771S.32.0.1.MP

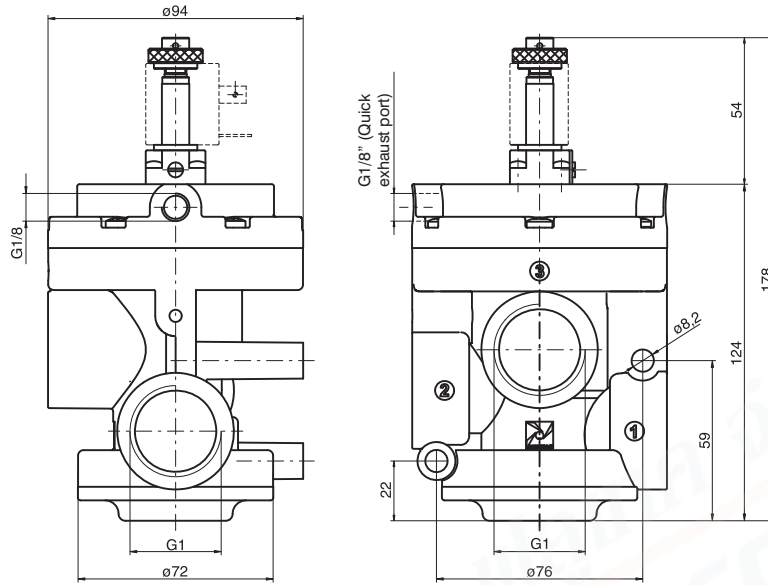
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

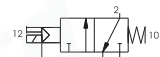
1
AIR DISTRIBUTION



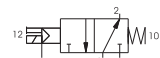
Weight 520 g



For compressed air - N.C.
 Inlet port 1
 Outlet port 2
 Exhaust port 3



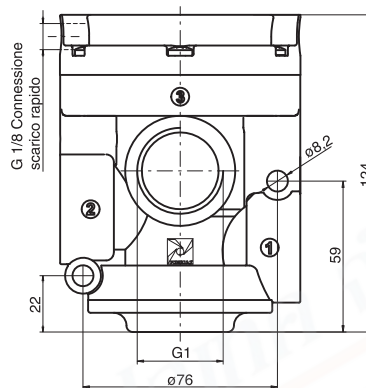
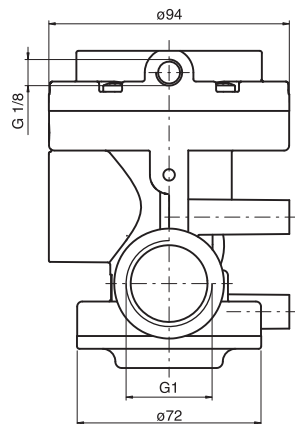
For compressed air - N.O.
 Inlet port 3
 Outlet port 2
 Outlet port 1



Pneumatic - Spring

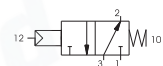
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Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

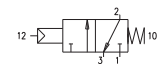


Weight 480 g

For vacuum - N.C.
Exhaust port 3
Outlet port 2
Pump 1



For vacuum - N.O.
Outlet port 1
Outlet port 2
Pump 3



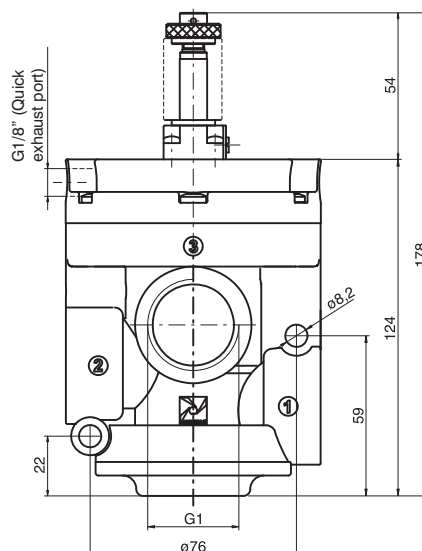
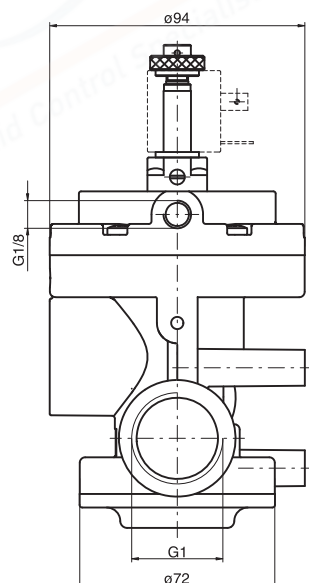
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AIR DISTRIBUTION

Solenoid-Spring - Internal pilot

Coding: T771/V.32.0.Ⓜ.MV

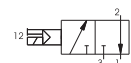
Operational characteristics	
Fluid	Vacuum
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

FUNCTION	
Ⓜ	1AC = Normally Closed
	1AA = Normally Open

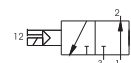


Weight 520 g

For vacuum - N.O.
Exhaust port 3
Outlet port 2
Pump 1



For vacuum - N.O.
Outlet port 1
Outlet port 2
Pump 3



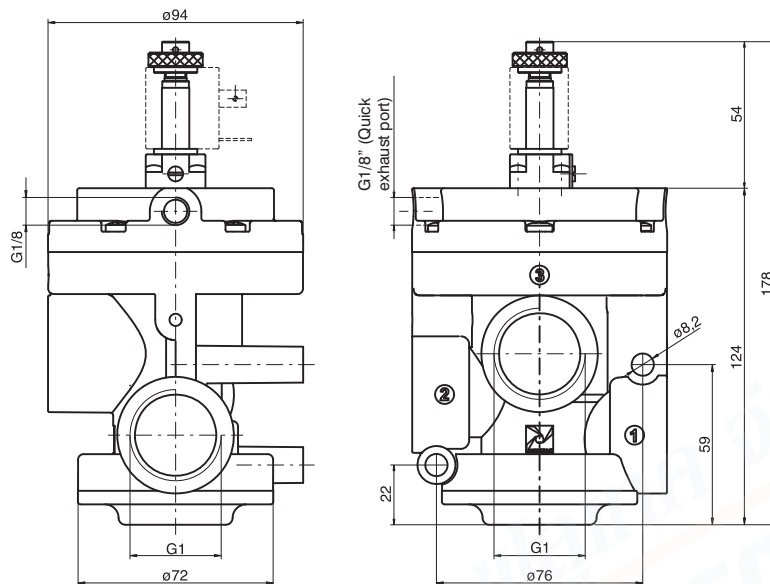


Solenoid-Spring - External pilot

Coding: T771/V.32.0.1.MP

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

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AIR DISTRIBUTION

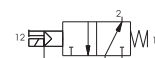


Weight 520 g

For vacuum - N.O.
Pump 3
Outlet port 2
Outlet port 1



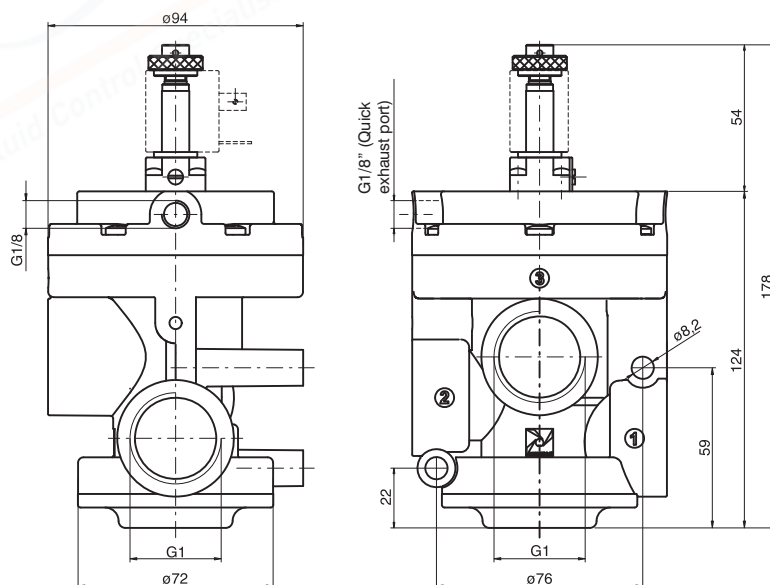
For compressed air - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



Solenoid - Spring - External pilot with quick exhaust

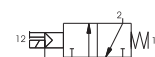
Coding: T771/VS.32.0.1.MP

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

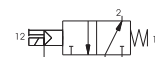


Weight 520 g

For vacuum - N.O.
Pump 3
Outlet port 2
Outlet port 1



For compressed air - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



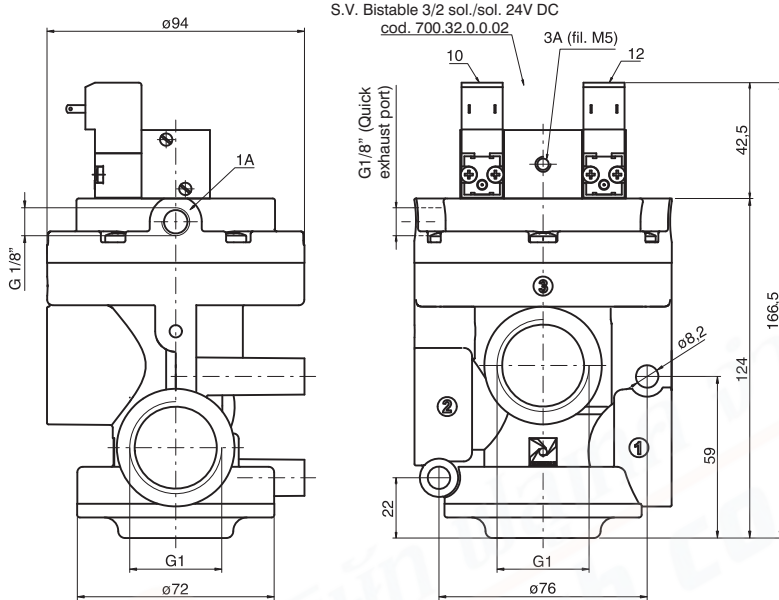
Bistable for compressed air - G1"

Coding: T771.32.0.1.BP

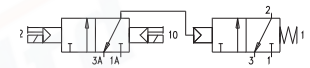
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"



Weight 680 g

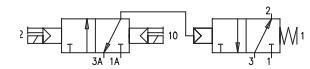


Minimum piloting pressure 2.5 bar



For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



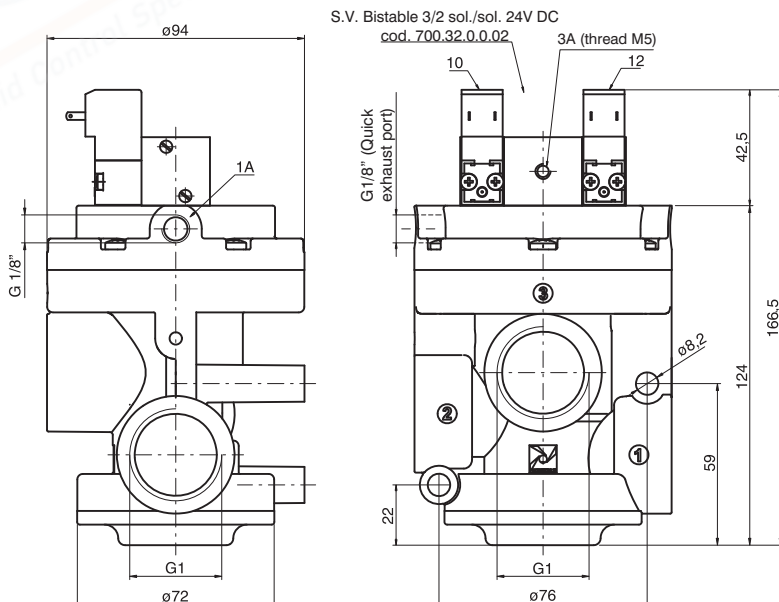
Coding: T771S.32.0.1.BP

Bistable for compressed air with quick exhaust - G1"

Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2.5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

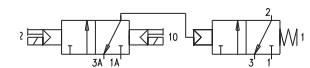


Weight 680 g



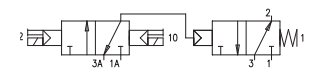
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1





Valves and solenoid valves poppet system
Series T771 - Bistable for vacuum in technopolymer - G1"

Bistable for vacuum - G1"

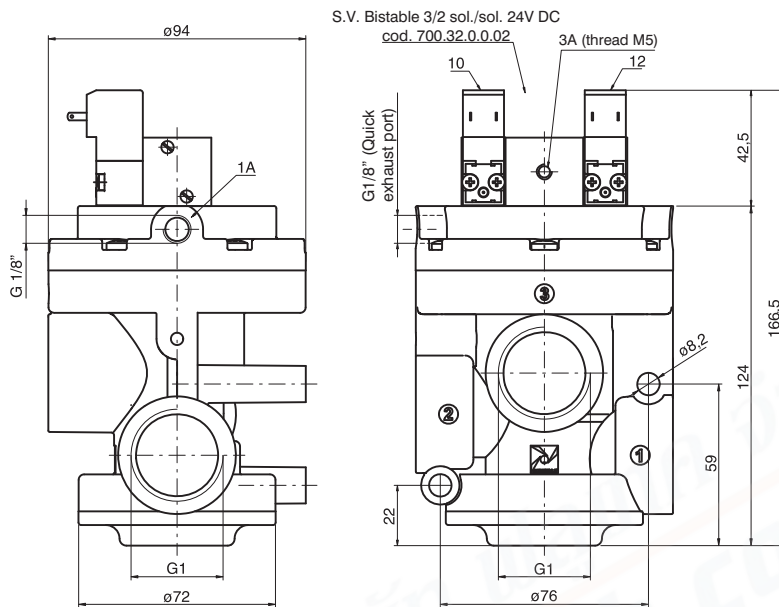
Coding: T771/V.32.0.1.BP

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

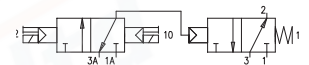
1
AIR DISTRIBUTION



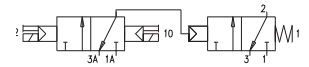
Weight 680 g



Minimum piloting pressure 2.5 bar



For vacuum - N.C.
 Pump 1
 Outlet port 2
 Exhaust port 3



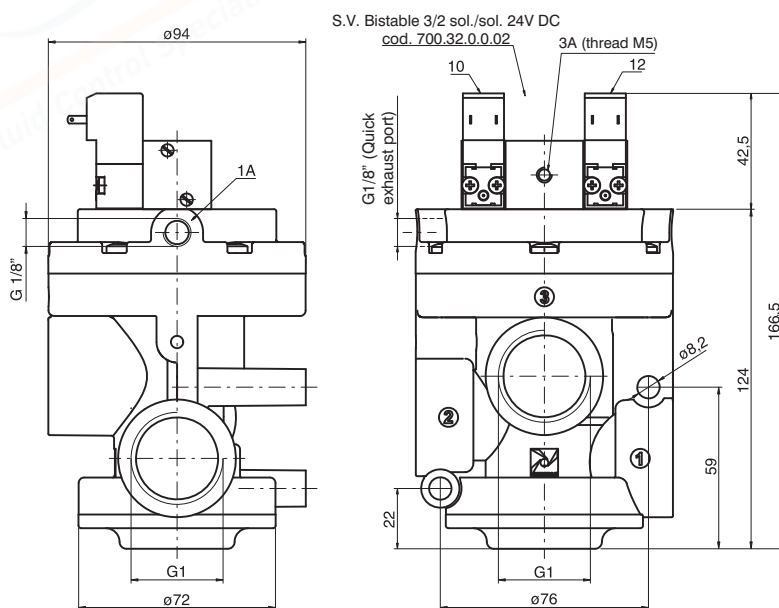
Coding: T771/VS.32.0.1.BP

Bistable for vacuum with quick exhaust - G1"

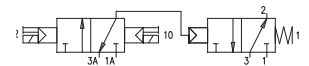
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"



Weight 680 g



For vacuum - N.O.
 Pump 3
 Outlet port 2
 Outlet port 1



For vacuum - N.C.
 Pump 1
 Outlet port 2
 Exhaust port 3

