General

This new range of G1/2" and G3/4" pilot and solenoid operated poppet valves represents an evolution of the current popular Zama series. The main feature of this new series is the high impact resistant thermoplastic used to mould the valve components.
The use of this materiel 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 60%. 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.

Coils c UL us homologated are also available. (series 300).

2

Construction characteristics

body, operator and end cover	High resistance technopolymer
seals and poppets	oil resistant rubber (NBR)
piston and shaft	acetylic resin
springs	AISI 302 stainless steel
diaphragm	oil resistant rubber coated (NBR)

Use and mainutenance

Under correct working conditions the average life of this series of valves is 10 15 million cycles. Lubrication is not required but correct air filtration is recommended.
It is also important to ensure that the application parameters are in line with those indicated in the technical specification of this product: pressure, temperature….
The valves, thanks to their construction design, do not require maintenance involving replacement of parts; when necessary it is possible to carefully clean and remove any dirt that might have accumulated internally.

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:

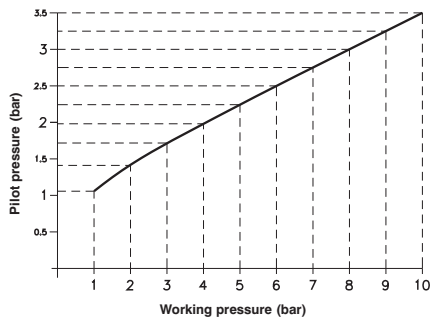
Normally closed internal pilot
Normally open (servoassisted) external pilot
1 = EXHAUST
2 = CONSUMPTION
3 = PUMP

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

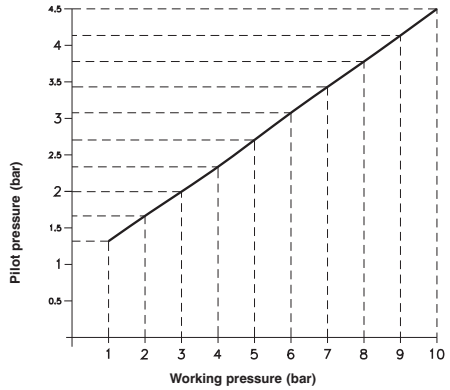
MINIMUM WORKING PRESSURE DIAGRAM

PNEUMATIC/SPRING AND EXTERNAL SOLENOID PILOT VERSION

NORMALLY CLOSED VALVE



NORMALLY OPEN VALVE



2

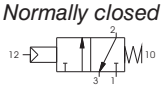
Valve
Pneumatic spring

3/2

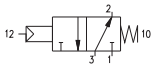
Ordering code

T772.32.11.1

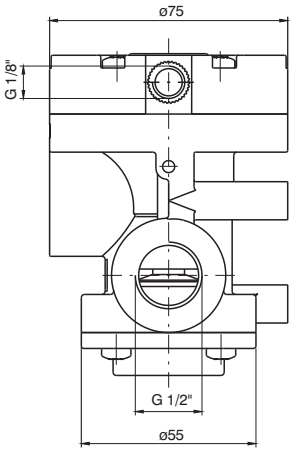
Normally closed

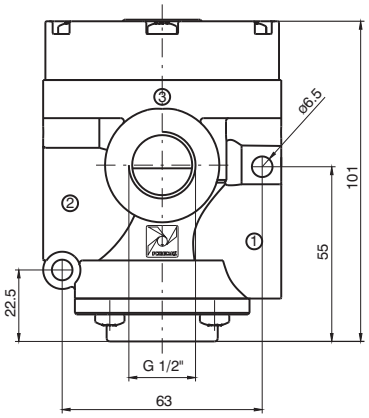


Normally open



Weight gr. 350



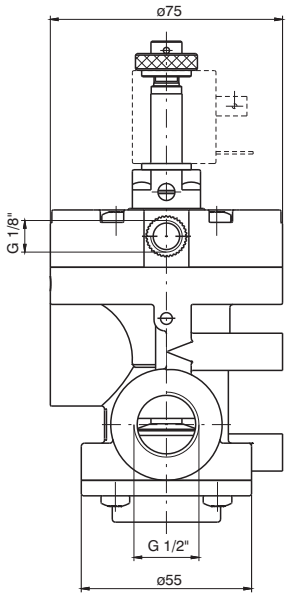


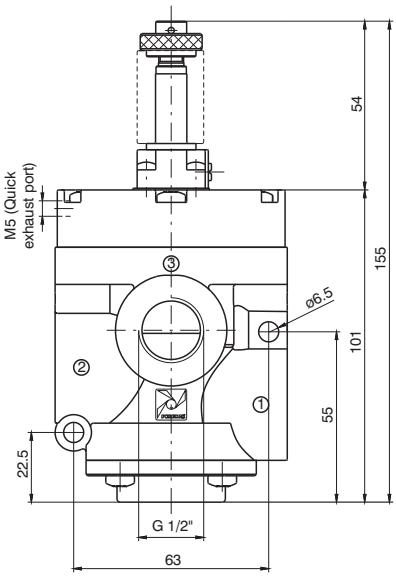
Minimum working pressure: see diagram at General page

Solenoid valve
Solenoid spring

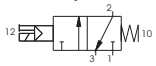
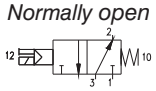
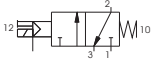
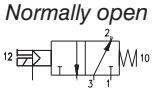
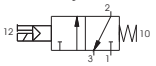
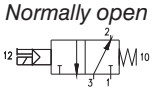
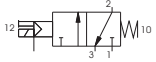
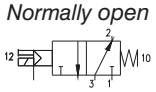
3/2

Weight gr. 390





Ordering code

Internal pilot	*Servoassisted external pilot*	*Internal pilot with quick exhaust*	*Servoassisted external pilot with quick exhaust*
T772.32.0.1AC.MP *Normally closed*  **T772.32.0.1AA.MP** *Normally open*  Minimum working pressure: 2.5 bar	**T772.32.0.1.MP** *Normally closed*  *Normally open*  Minimum working pressure: see diagram at General page	**T772S.32.0.1AC.MP** *Normally closed*  **T772S.32.0.1AA.MP** *Normally open*  Minimum working pressure: 2.5 bar	**T772S.32.0.1.MP** *Normally closed*  *Normally open*  Minimum working pressure: see diagram at General page

Operational characteristics	Fluid	Max working pressure	Operating temperature min.	Operating temperature max.	Flow rate at 6 bar with Δp = 1 bar	Orifice size	Working port size	Pilot ports size
	Filtered and lubricated or non lubricated air	10 bar	-5° C	+50°C	4100 Nl/min	mm 15	G 1/2"	G 1/8"

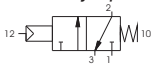
Valve
Pneumatic spring

3/2

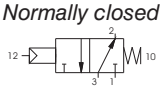
Ordering code

T772/V.32.11.1

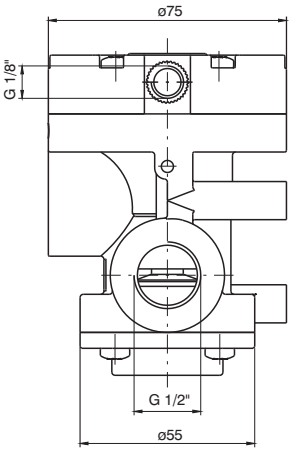
Normally open

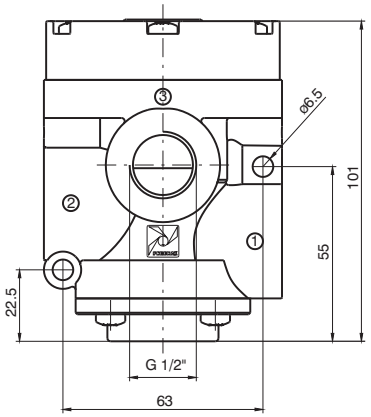


Normally closed



Weight gr. 350



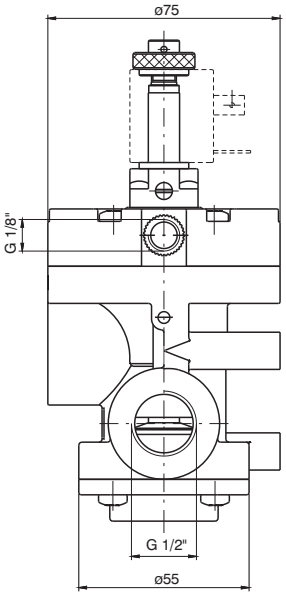


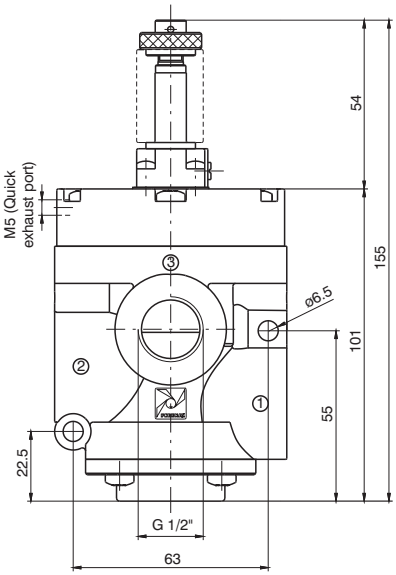
Minimum working pressure: 2,5 bar

Solenoid valve
Solenoid spring

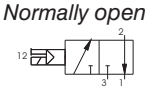
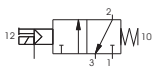
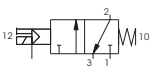
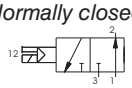
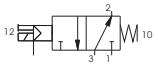
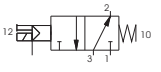
3/2

Weight gr. 390





Ordering code

Internal pilot	*Servoassisted external pilot*	*Servoassisted external pilot with quick exhaust*
T772/V.32.0.1AA.MV *Normally open* 	**T772/V.32.0.1.MP** *Normally open* 	**T772/VS.32.0.1.MP** *Normally open* 
T772/V.32.0.1AC.MV *Normally closed* 	*Normally closed* 	*Normally closed* 

Minimum working pressure: 2.5 bar

Operational characteristics	Fluid	Operating temperature min.	Operating temperature max.	Orifice Size	Working port size	Pilot ports size
	Vacuum	-5°C	+50°C	mm 15	G 1/2"	G 1/8"

2

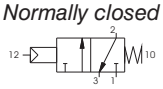
Valve
Pneumatic spring

3/2

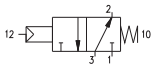
Ordering code

T773.32.11.1

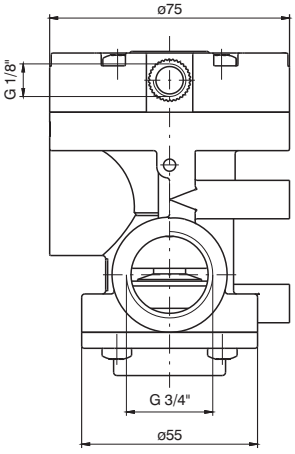
Normally closed

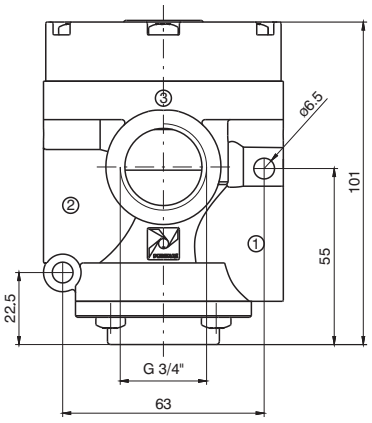


Normally open



Weight gr. 330



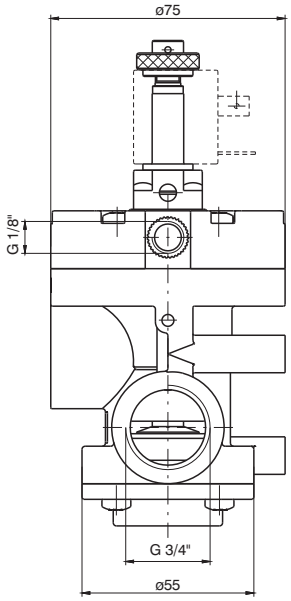


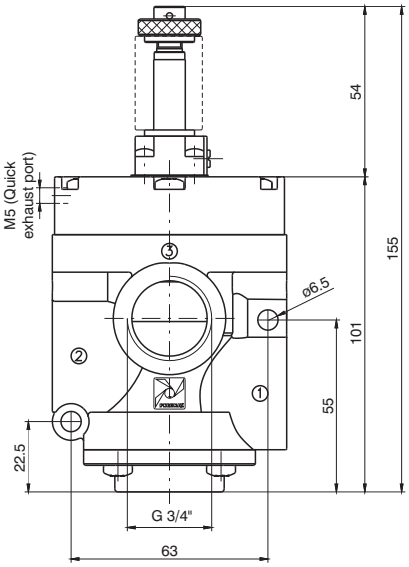
Minimum working pressure: see diagram at General page

Solenoid valve
Solenoid spring

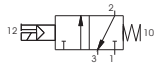
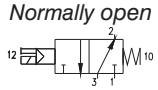
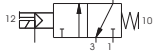
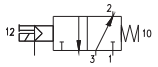
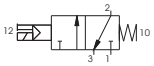
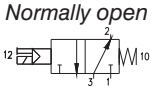
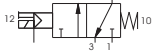
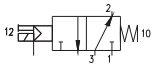
3/2

Weight gr. 370





Ordering code

Internal pilot	*Servoassisted external pilot*	*Internal pilot with quick exhaust*	*Servoassisted external pilot with quick exhaust*
T773.32.0.1AC.MP *Normally closed*  **T773.32.0.1AA.MP** *Normally open*  Minimum working pressure: 2.5 bar	**T773.32.0.1.MP** *Normally closed*  *Normally open*  Minimum working pressure: see diagram at General page	**T773S.32.0.1AC.MP** *Normally closed*  **T773S.32.0.1AA.MP** *Normally open*  Minimum working pressure: 2.5 bar	**T773S.32.0.1.MP** *Normally closed*  *Normally open*  Minimum working pressure: see diagram at General page

Operational characteristics	Fluid	Max working pressure	Operating temperature min.	Operating temperature max.	Flow rate at 6 bar with Δp = 1 bar	Orifice size	Working port size	Pilot ports size
	Filtered and lubricated or non lubricated air	10 bar	-5° C	+50°C	6400 Nl/min	mm 20	G 3/4"	G 1/8"

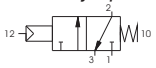
Valve
Pneumatic spring

3/2

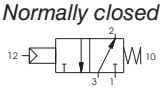
Ordering code

T773/V.32.11.1

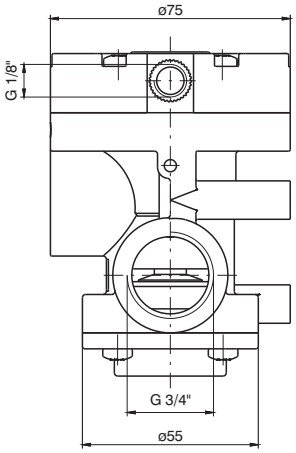
Normally open

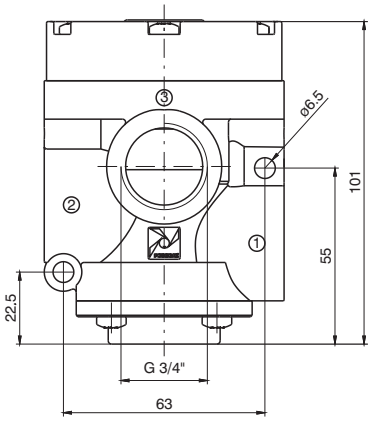


Normally closed



Weight gr. 330



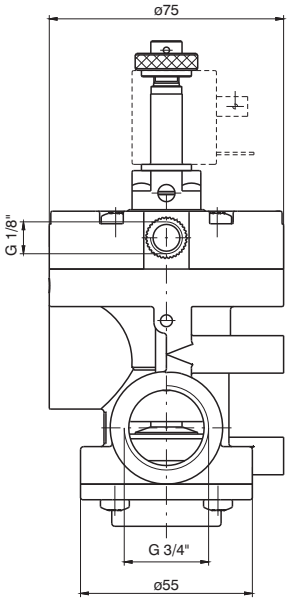


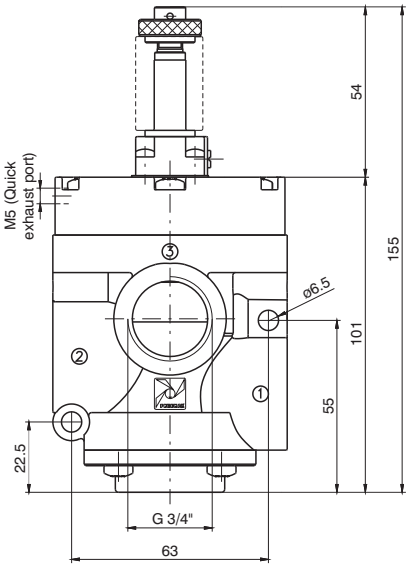
Minimum working pressure: 2,5 bar

Solenoid valve
Solenoid spring

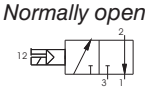
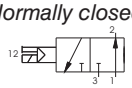
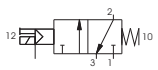
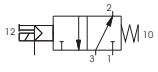
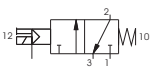
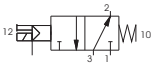
3/2

Weight gr. 370





Ordering code

Internal pilot	*Servoassisted external pilot*	*Servoassisted external pilot with quick exhaust*
T773/V.32.0.1AA.MV *Normally open*  **T773/V.32.0.1AC.MV** *Normally closed* 	**T773/V.32.0.1.MP** *Normally open*  *Normally closed* 	**T773/VS.32.0.1.MP** *Normally open*  *Normally closed* 

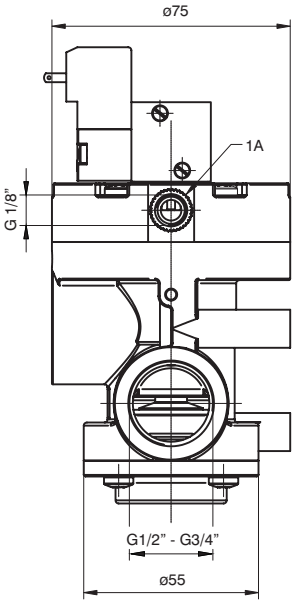
Minimum working pressure: 2.5 bar

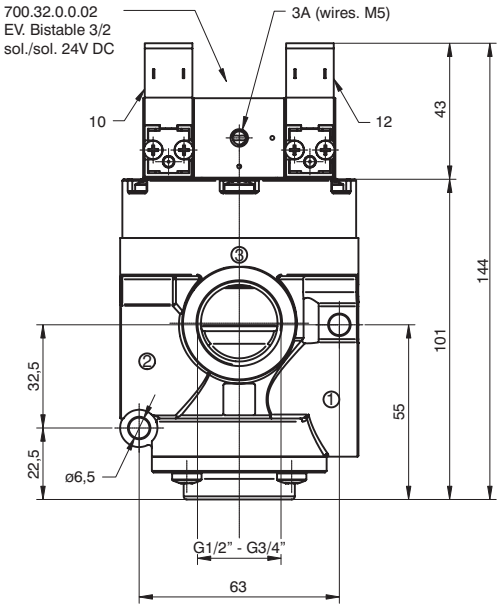
Operational characteristics	Fluid	Operating temperature min.	Operating temperature max.	Orifice Size	Working port size	Pilot ports size
	Vacuum	-5°C	+50°C	mm 20	G 3/4"	G 1/8"

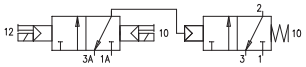
2

Bistable version for Compressed air

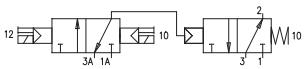
3/2







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



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

Weight gr. 550

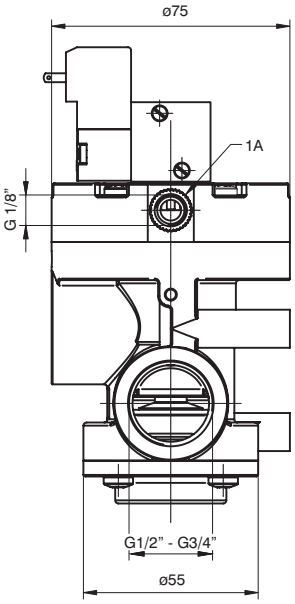
Ordering code

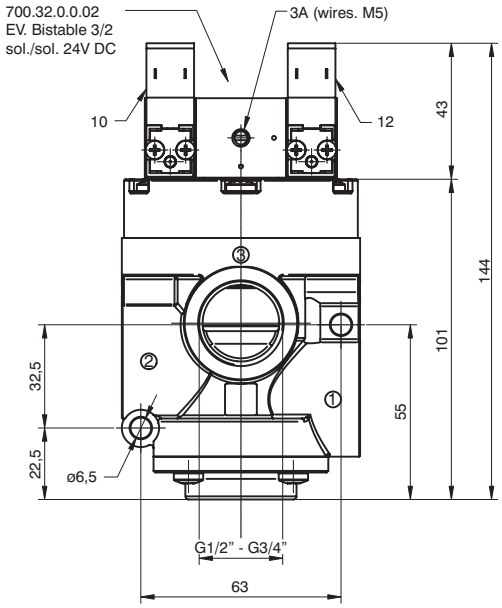
G 1/2”	*G 3/4”*	*G1/2” with quick exhaust*	*G 3/4” with quick exhaust*
T772.32.0.1BP *Normally closed* *Normally open*	**T773.32.0.1.BP** *Normally closed* *Normally open*	**T772S.32.0.1.BP** *Normally closed* *Normally open*	**T773S.32.0.1.BP** *Normally closed* *Normally open*

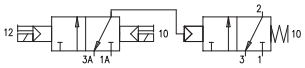
	Fluid	Max working pressure	Min. Pilot pressure	Temperature min.	Temperature max.	Flow rate at 6 bar with Δp = 1 bar	Orifice Size	Working port size	Pilot ports size
Operational characteristics	Filtered and lubricated or non lubricated air	10 bar	2 bar	-5° C	+50°C	G1/2”: 4100 Nl/min G3/4”: 6400 Nl/min	mm 15	G 1/2" G 3/4”	G 1/8"

Bistable version for Vacuum

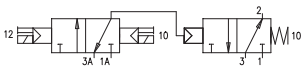
3/2







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



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

Weight gr. 550

Ordering code			
G 1/2”	*G 3/4”*	*G 1/2” with quick exhaust*	*G 3/4” with quick exhaust*
T772/V.32.0.1BP *Normally closed Normally open*	**T773/V.32.0.1.BP** *Normally closed Normally open*	**T772/VS.32.0.1.BP** *Normally closed Normally open*	**T773/VS.32.0.1.BP** *Normally closed Normally open*

Operational characteristics	Fluid	Min. Pilot pressure	Temperature min.	Temperature max.	Orifice Size	Working port size	Pilot ports size
	Vacuum	2,5 bar	-5° C	+50°C	mm 15	G 1/2" G 3/4”	G 1/8"