



Series 700 - For compressed air and vacuum

General

The large flow valves and solenoid poppet valves for compressed air and vacuum.
Are manufactured for 3/2 and 2/2 versions only, either normally close and normally open.
For the compressed air operation, the application is similar to the equivalent spool valves while for the vacuum operation a particular attention should be paid to the valve selected and its connection to the pump.
For the electric pilot it is used a normal miniature solenoid M2 with pneumatic actuator and the special miniature solenoid M2/V with vacuum.
The ordering code are referring to the solenoid valves with mechanics "M2" or "M2/V" assembled.
Coil are not included and have to be ordered separately (see Series 300).
Coil c 71 US homologated are available (see 300 Series).

Construction characteristics

	G 3/8"	G 1/2" - G 3/4"	G 1"	G 1 1/2"
Body	Aluminium	Zinc alloy	Aluminium	Aluminium
Actuators	NBR			
Bottom plates	Aluminium			
Springs	Stainless steel			
Actuators rod	Stainless steel			
Pistons	Aluminium			
Piston seals	NBR			

Use and maintenance

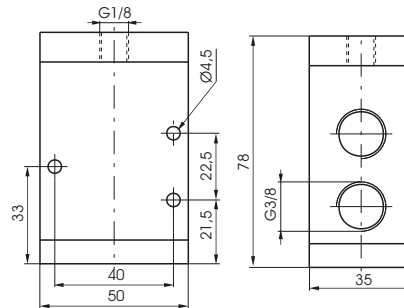
These valves have a mean life of 10 to 15 million cycles under normal operating conditions.
Lubrication is not required for good operation but we recommend good filtration to avoid dirty deposit causing malfunction.
Please ensure that the valve is being used according with the manufacturers specification, 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.

Pneumatic - Spring

Coding: 779.32.11.F

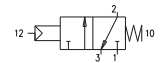
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-10 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1800
Orifice size (mm)	10
Working ports size	G3/8"
Pilot ports size	G1/8"

FUNCTION	
F	1C = Normally Closed
	1A = Normally Open



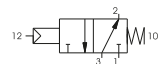
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1



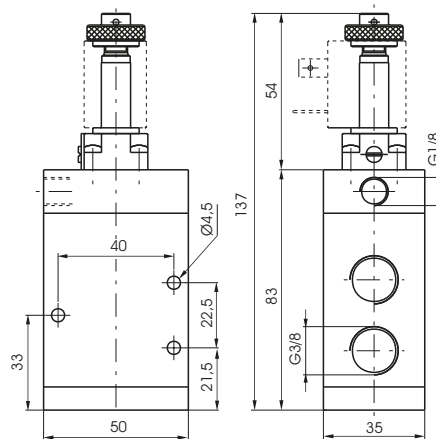
Weight 360 g
Attention: for the Normally open version, connect the inlet port to the exhaust port No "3".

Solenoid - Spring

Coding: 779.32.0.F.M2

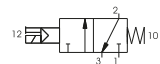
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5 (External pilot version) 3 (Internal pilot version)
Temperature °C	-10 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	1800
Orifice size (mm)	10
Working ports size	G3/8"
Pilot ports size	G1/8"

FUNCTION	
1AC	Internal pilot normally closed
F 1C	External pilot normally closed
1AA	Internal pilot normally open
1A	External pilot normally open



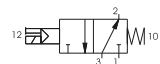
Internal pilot - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



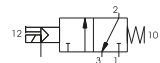
Internal pilot - N.O.

Inlet port 3
Outlet port 2
Outlet port 1



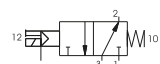
External pilot - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



External pilot - N.O.

Inlet port 3
Outlet port 2
Outlet port 1



Weight 420 g

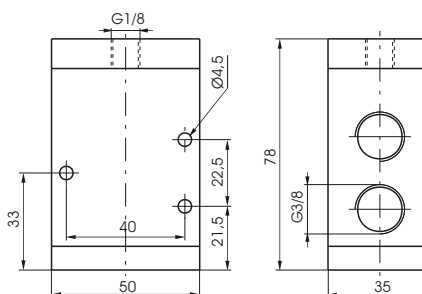
Pneumatic - Spring

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-10 ÷ +70
Orifice size (mm)	10
Working ports size	G3/8"
Pilot ports size	G1/8"

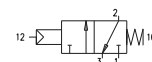
F	FUNCTION
	1C = Normally Closed
	1A = Normally Open



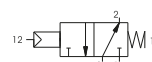
Weight 360 g



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



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



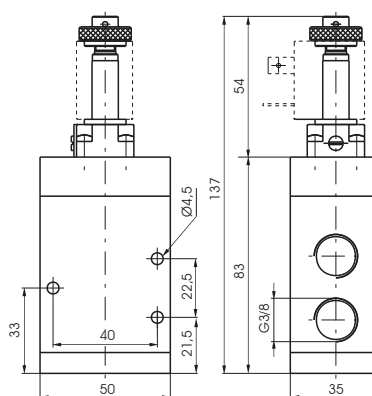
Solenoid-Spring - Internal pilot

Operational characteristics	
Fluid	Vacuum
Temperature °C	-10 ÷ +50
Orifice size (mm)	10
Working ports size	G3/8"
Pilot ports size	G1/8"

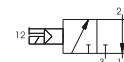
F	FUNCTION	
	1AA =	Normally Open
	1AC =	Normally Closed



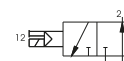
Weight 420 g



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



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



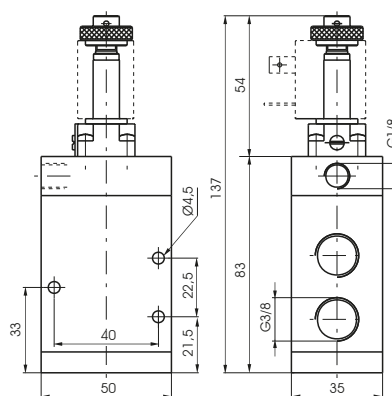
Solenoid-Spring - External pilot

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-10 ÷ +50
Orifice size (mm)	10
Working ports size	G3/8"
Pilot ports size	G1/8"

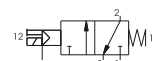
F	FUNCTION
	1A = Normally Open
	1C = Normally Closed



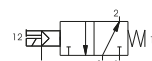
Weight 420 g



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



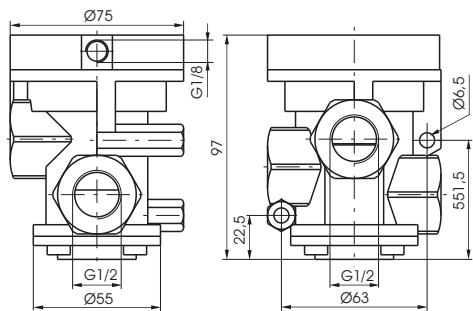
For vacuum - N.C.
Exhaust port 3
Outlet port 2
Pump 1



Pneumatic - Spring

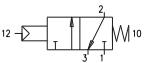
Coding: 772.32.11.1C

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 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	4800
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"



Weight 1100 g
Normally Closed

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

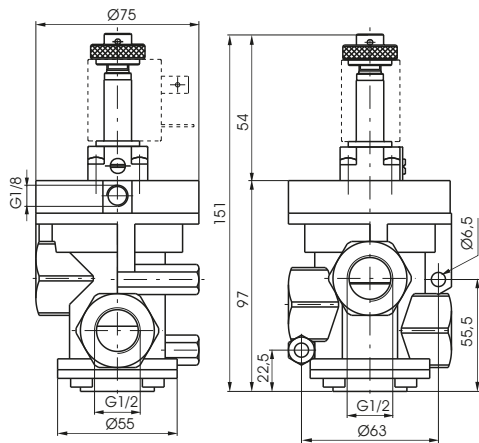


Solenoid - Spring

Coding: 772.32.0.Ⓜ.M2

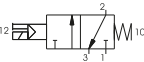
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5 (External pilot version) 3 (Internal pilot version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	4800
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

FUNCTION	
Ⓜ	1AC = Internal pilot normally closed
	1C = External pilot normally closed

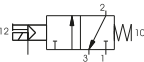


Weight 1160 g

Internal pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3

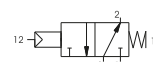


External pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



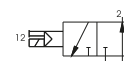
Coding: 772/V.32.11.ⓕ

	FUNCTION
F	1C = Normally Closed
	1A = Normally Open



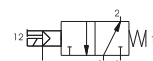
Coding: 772/V.32.0.ⓕ.M2/V

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



Coding: 772/V.32.0.F.M2

	FUNCTION
F	1A = Normally Open
	1C = Normally Closed

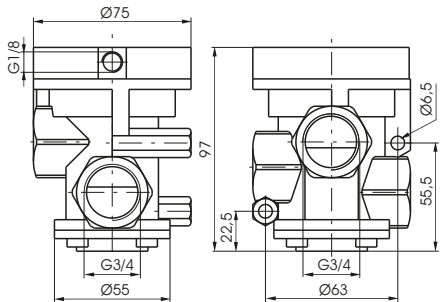


Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice.

Pneumatic - Spring

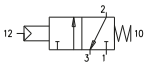
Coding: 773.32.11.1C

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 bar
Temperature °C	-5 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	7000
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"



Weight 990 g
Normally Closed

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

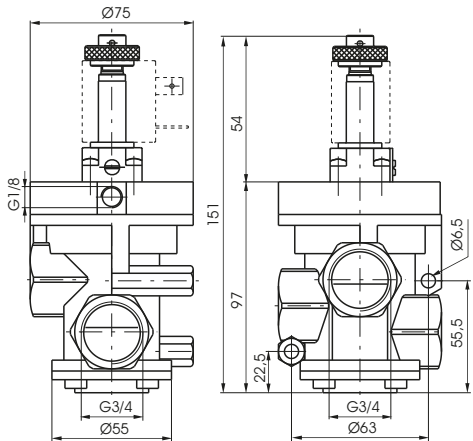


Solenoid - Spring

Coding: 773.32.0.Ⓜ.M2

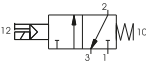
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5 (External pilot version) 3 (Internal pilo version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	7000
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"

FUNCTION	
Ⓜ	1AC = Internal pilot normally closed
	1C = External pilot normally closed

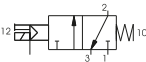


Weight 1050 g

Internal pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3

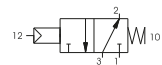


External pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



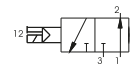
Coding: 773/V.32.11.F

F	FUNCTION
	1C = Normally Closed
	1A = Normally Open



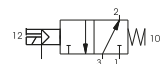
Coding: 773/V.32.0.F.M2/V

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



Coding: 773/V.32.0.F.M2

	FUNCTION
F	1A = Normally Open
	1C = Normally Closed

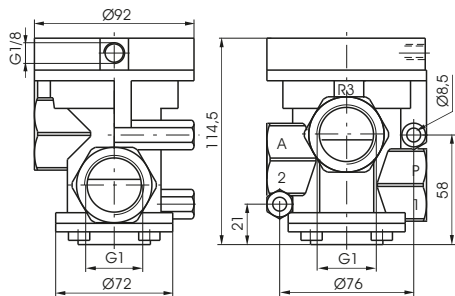


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Pneumatic - Spring

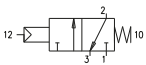
Coding: 771.32.11.1C

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 ÷ +70
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 1060 g
Normally Closed

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

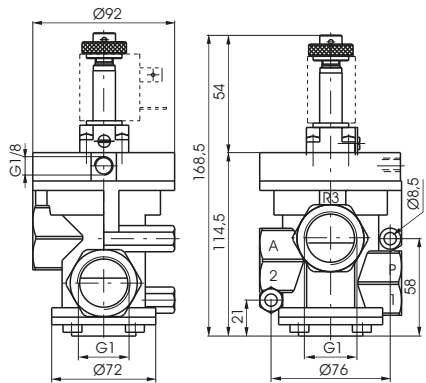


Solenoid - Spring

Coding: 771.32.0.Ⓜ.M2

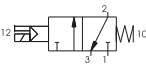
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5 (External pilot version) 3 (Internal pilot version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	12500
Orifice size (mm)	25
Working ports size	G1"
Pilot ports size	G1/8"

FUNCTION	
Ⓜ	1AC = Internal pilot normally closed
	1C = External pilot normally closed

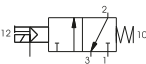


Weight 1120 g

Internal pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3

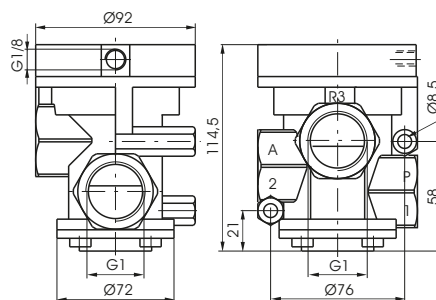


External pilot - N.C.
Inlet port 1
Outlet port 2
Exhaust port 3



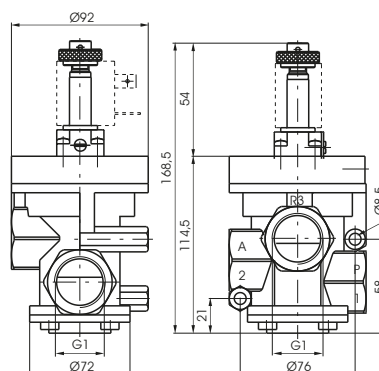
F	FUNCTION
	1C = Normally Closed
	1A = Normally Open

F	FUNCTION
	1C = Normally Closed
	1A = Normally Open



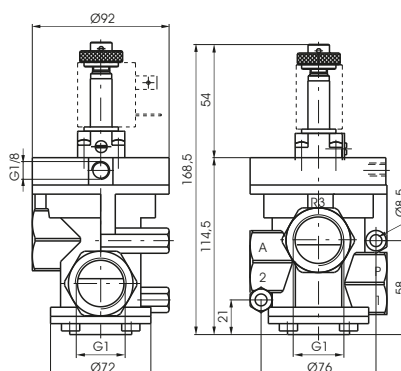
F	FUNCTION	
	1AA =	Normally Open
	1AC =	Normally Closed

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



F	FUNCTION
	1A = Normally Open
	1C = Normally Closed

F	FUNCTION
	1A = Normally Open
	1C = Normally Closed



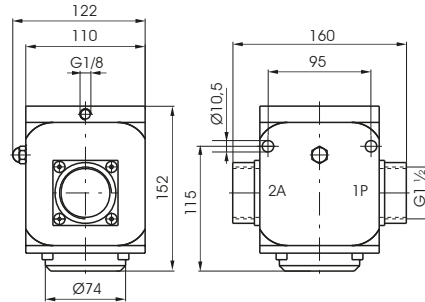
Pneumatic - Spring

Coding: 776.22.11.1C

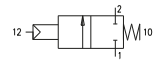
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"



Weight 3950 g
Normally Closed



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



Solenoid - Spring

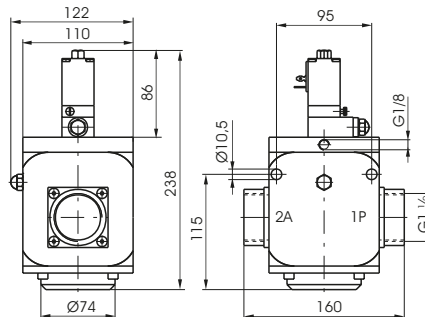
Coding: 776.22.0.F.S

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 (External pilot version) 3 (Internal pilot version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"

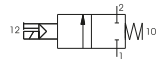
FUNCTION	
F	1AC = Internal pilot normally closed
	1C = External pilot normally closed
SOLENOID CODE	
S	SEE SOLENOID VALVES "S" TYPE, SERIES 300



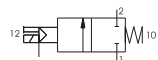
Weight 4450 g



Internal pilot - N.C.
Inlet port 1
Outlet port 2



External pilot - N.C.
Inlet port 1
Outlet port 2



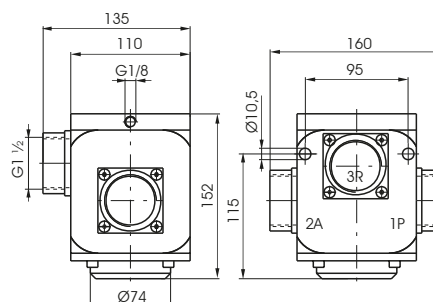
Pneumatic - Spring

Coding: 776.32.11.1C

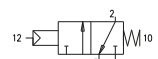
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"



Weight 3900 g
Normally Closed



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





Solenoid - Spring

Coding: 776.32.0.F.S

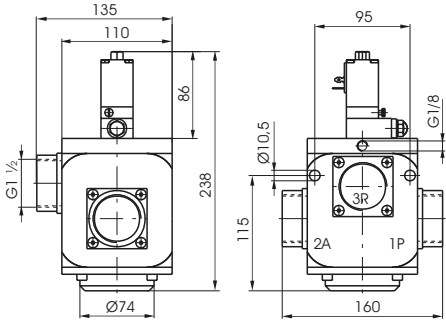
Operational characteristics

Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5 (External pilot version) 3 (Internal pilo version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	33500
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"

FUNCTION
F 1AC = Internal pilot normally closed
1C = External pilot normally closed
SOLENOID CODE
S SEE SOLENOID VALVES "S" TYPE, SERIES 300

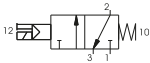


Weight 4450 g



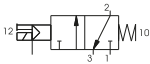
Internal pilot - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



External pilot - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



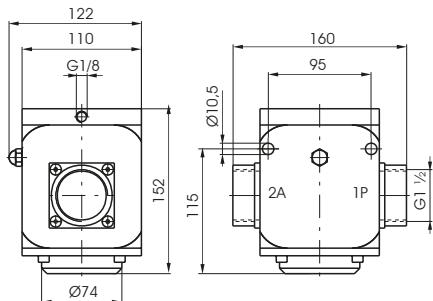
Pneumatic - Spring

Coding: 776/V.22.11.1C

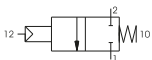
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +70
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"



Weight 3950 g
Normally Closed



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



Solenoid - Spring

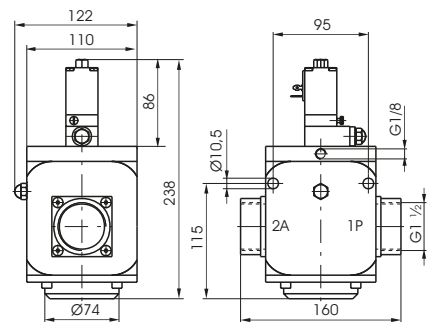
Coding: 776/V.22.0.1C.Ⓢ

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +50
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"

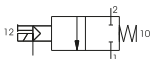
SOLENOID CODE
Ⓢ SEE SOLENOID VALVES "S" TYPE, SERIES 300



Weight 4450 g
External pilot normally closed



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



Pneumatic - Spring

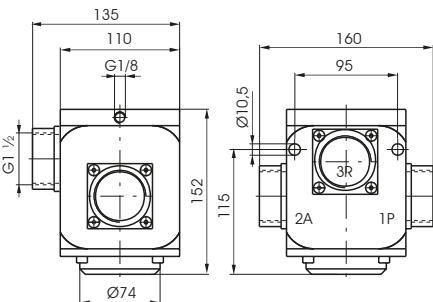
Coding: 776/V.32.11.ⓕ

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +70
Orifice size (mm)	38
Working ports size	G1 1/2"
Pilot ports size	G1/8"

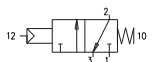
FUNCTION
ⓕ 1C = Normally Closed
1A = Normally Open



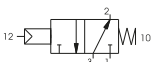
Weight 3900 g



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

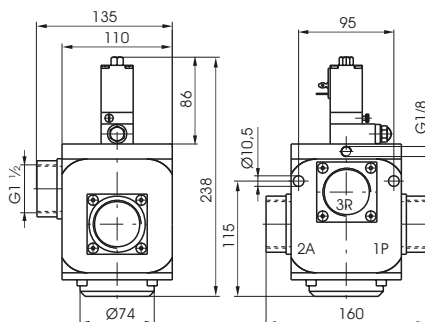


For vacuum - N.C.
Exhaust port 3
Outlet port 2
Pump 1



Coding: 776/V.32.0.F.S

	FUNCTION
F	1C = External pilot normally closed 1A = External pilot normally open
S	SOLENOID CODE SEE SOLENOID VALVES "S" TYPE, SERIES 300



Technical drawing of a mechanical part (Fig. 10) showing a cross-section with dimensions 12, 2, and 10.

Series N776 - For compressed air and vacuum - G1 1/2"

General

The N776 G1.1/2" series of valves and solenoid operated poppet valves is the result of the technical evolution of the 776 series. A rolling diaphragm construction has replaced the previously used piston design ensure lower frictions and longer life.

Connection 3 is isolated via a dedicated seal which allow to have the N.O. version as well as the self feed for vacuum which was not available on the 776 series.

The pilot valves are the M3R (CNOMO Stile) with bistable manual override.

Coils are not included and have to be ordered separately (see 300 series, 22mm MB coils and 30mm CNOMO MC coils).

Coils c  **US homologated are also available. (See series 300).**

Construction characteristics

Springs	Stainless steel
Pistons	Aluminium (for Air) - Acetylic resin (for Vacuum)
Pin guide	Stainless steel
Diaphragm	NBR oil resistant rubber
Body, operator and end cover	Die-cast aluminium
Seals and poppets	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.

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.

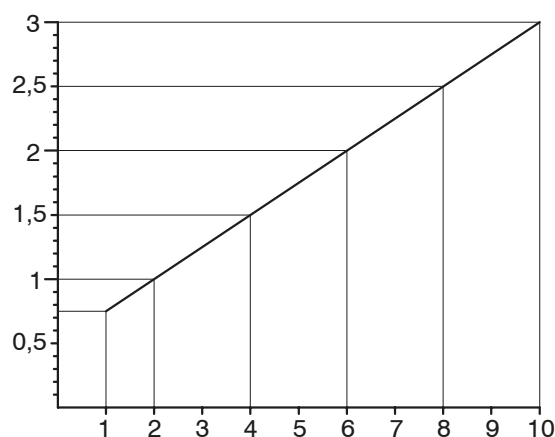
When necessary it is sufficient to clean the internal parts.

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.

Minumum working pressure diagram

for external pilot versions N.C. & N.O.



Pneumatic - Spring

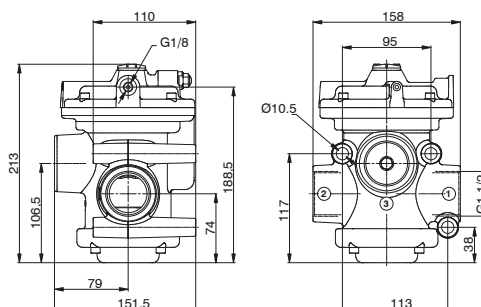
Coding: N776.22.11.1C

Operational characteristics

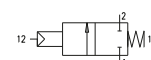
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



Weight 3560 g
Normally Closed



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



Solenoid - Spring

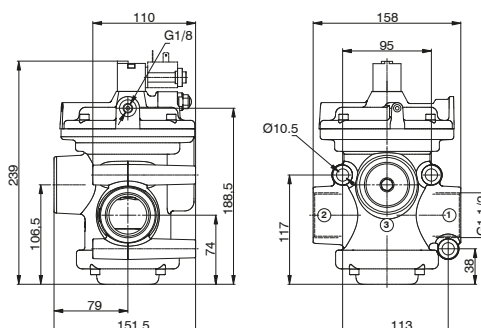
Coding: N776.22.0.F.M3R

Operational characteristics

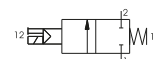
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page (External pilot version) 3,5 (Internal pilot version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



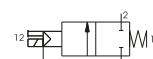
Weight 3620 g



Internal pilot - N.C.
Inlet port 1
Outlet port 2



External pilot - N.C.
Inlet port 1
Outlet port 2



Pneumatic - Spring

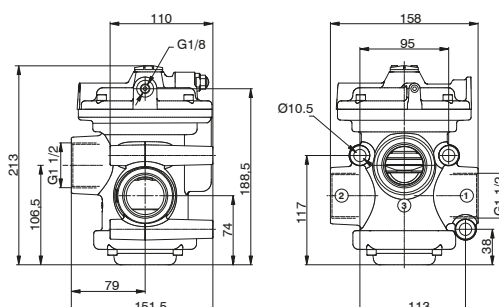
Coding: N776.32.11.1

Operational characteristics

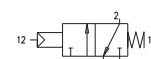
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +70
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	33500
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



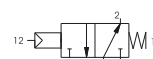
Weight 3550 g
Normally closed/Normally open



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



Solenoid - Spring

Coding: N776.32.0.Ⓢ.M3R

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 (External pilot version) 3,5 (Internal pilot version)
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (Nl/min)	33500
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"

FUNCTION

1AC	= Internal pilot normally closed
Ⓢ 1AA	= Internal pilot normally open
1	= External pilot Normally closed- Normally open

Internal pilot - N.C.

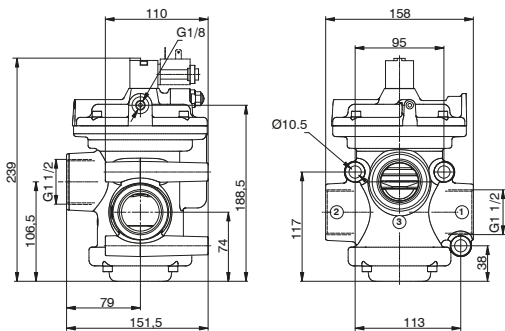
Inlet port 1
Outlet port 2
Exhaust port 3

Internal pilot - N.O.

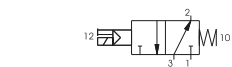
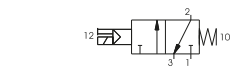
Inlet port 3
Outlet port 2
Outlet port 1

External pilot for compressed air - N.C.

- N.O.
Inlet port 1 (N.C.) or 3 (N.O.)
Outlet 2 (N.C. & N.O.)
Exhaust 3 (N.C.) or 1 (N.O.)



Weight 3610 g



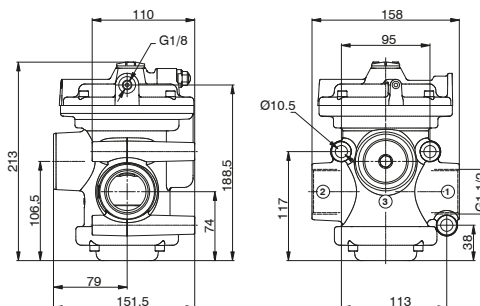
Pneumatic - Spring

Coding: N776/V.22.11.1C

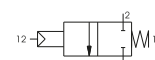
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +70
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



Weight 3178 g
Normally Closed



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



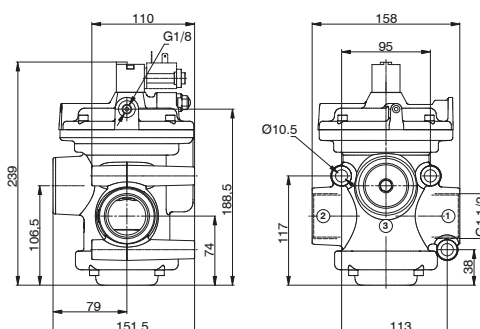
Solenoid - Spring

Coding: N776/V.22.0.F.M3R

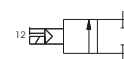
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (External pilot version)
Temperature °C	-5 ÷ +50
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



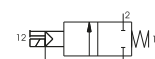
Weight 3238 g



Internal pilot for vacuum - N.C.
Outlet port 2
Pump 1



External pilot for vacuum - N.C.
Outlet port 2
Pump 1



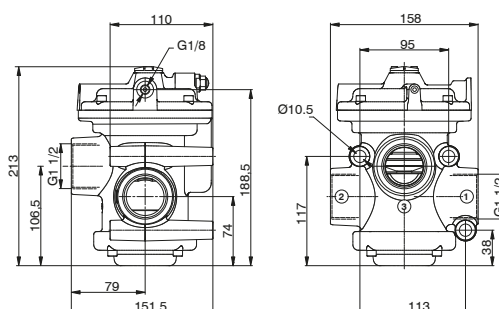
Pneumatic - Spring

Coding: N776/V.32.11.1

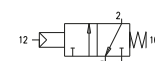
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ÷ +70
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"



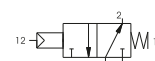
Weight 3168 g
Normally closed/Normally open



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



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

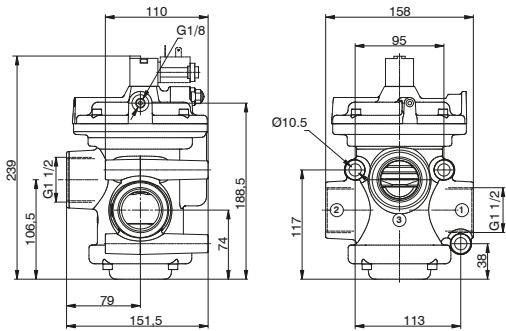


Solenoid - Spring

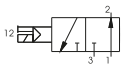
Coding: N776/V.32.0.Ⓢ.M3R

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (External pilot version)
Temperature °C	-5 ÷ +50
Orifice size (mm)	38
Working ports size	G 1 1/2"
Pilot ports size	G1/8"

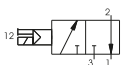
FUNCTION	
1AC =	Internal pilot normally closed
Ⓢ 1AA =	Internal pilot normally open
1 =	External pilot Normally closed- Normally open



Internal pilot for vacuum - N.C.
Exhaust port 3
Outlet port 2
Pump 1



Internal pilot for vacuum - N.O.
Outlet port 1
Outlet port 2
Pump 3



External pilot for vacuum - N.C. - N.O.
Exhaust 3 (N.C.) or (N.O.)
Outlet 2 (N.C. & N.O.)
Pump 1 (N.C.) & 3 (N.O.)



Weight 3228 g

1

AIR DISTRIBUTION



Series T772-773 - for compressed air and vacuum in technopolymer - G1/2" & G3/4"

General

The range of G1/2" and G3/4" pilot and solenoid operated poppet valves are manufactured with high impact resistant thermoplastic. The use of this material results in a versatile, lightweight and economical valve.

The traditional piston lip seal has been replaced with a rolling diaphragm, thereby eliminating frictional wear and tear to this seal. The valves (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.

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 CE marked are homologated are also available. (See series 300).

Construction characteristics

Springs	AISI 302 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.

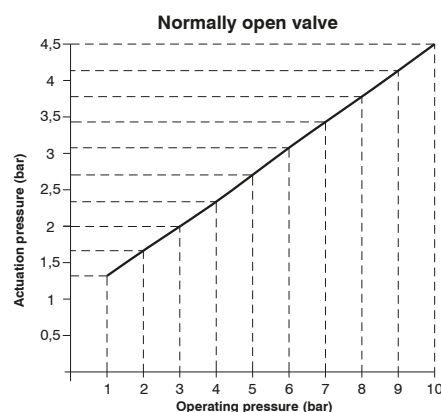
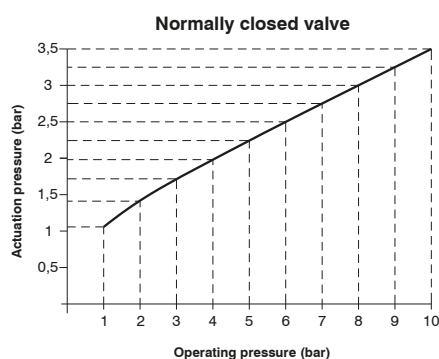
For these products, according to the construction technique and special application, is not required any maintenance with parts replacement.

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



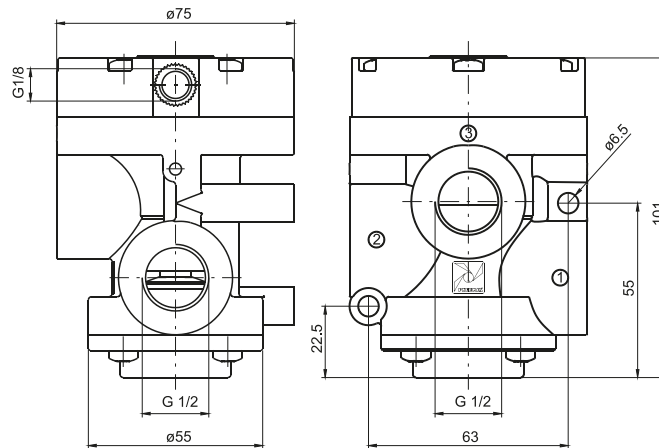
Pneumatic - Spring

Coding: T772.32.11.1

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 $\Delta p=1$ (NI/min)	4100
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

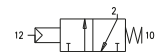


Weight 350 g



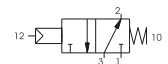
For compressed air - N.C.

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

Coding: T772.32.0.1.MP

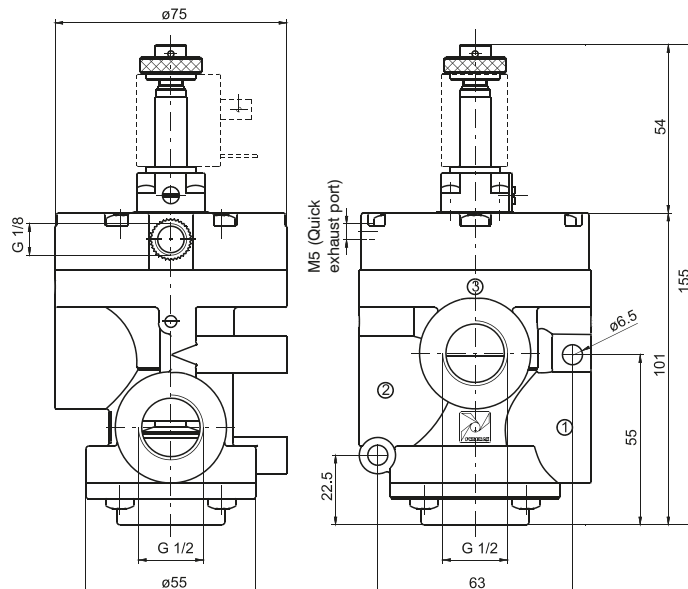
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with $\Delta p=1$ (NI/min)	4100
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

FUNCTION

F	1AA	=	Normally Open
	1AC	=	Normally Closed

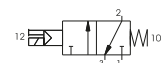


Weight 390 g



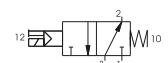
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1





1
AIR DISTRIBUTION

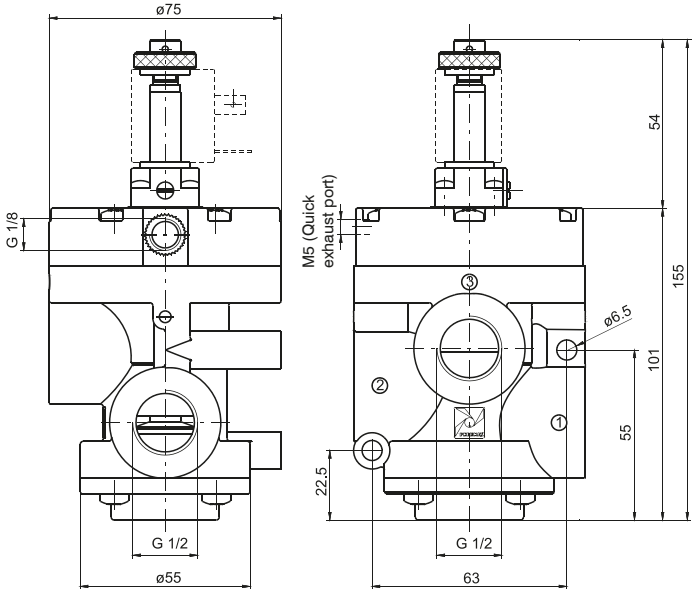
Solenoid-Spring - External pilot

Coding: T772.32.0.1.MP

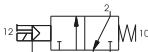
Operational characteristics	
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
Max working pressure (bar)	10
Minimum piloting pressure (bar)	See diagram at general page
Temperature °C	-5 ÷ +50
Flow rate at 6 bar with Δp=1 (NI/min)	4100
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"



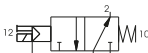
Weight 390 g



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

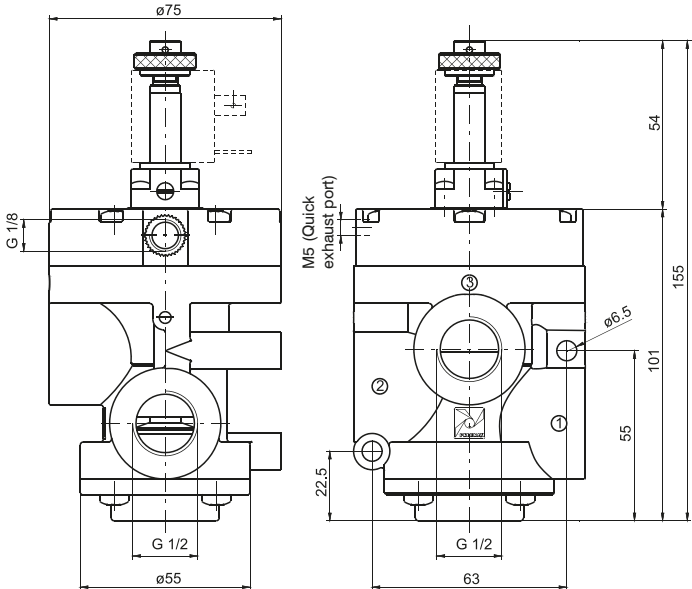
Coding: T772S.32.0.1.MP

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)	4100
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

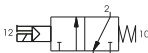
FUNCTION	
1AA	Normally Open
1AC	Normally Closed



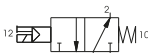
Weight 390 g



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



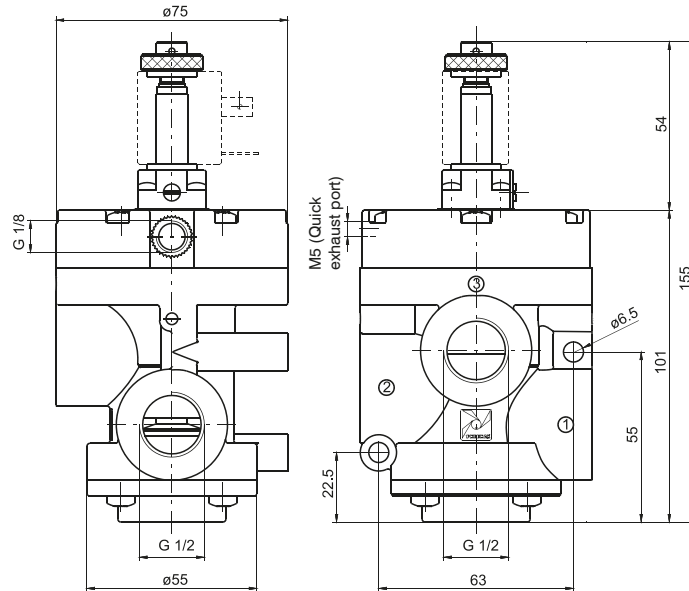
Solenoid - Spring - External pilot with quick exhaust

Coding: T772S.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 $\Delta p=1$ (NI/min)	4100
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

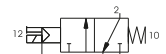


Weight 390 g



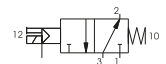
For compressed air - N.C.

Inlet port 1
Outlet port 2
Exhaust port 3



For compressed air - N.O.

Inlet port 3
Outlet port 2
Outlet port 1

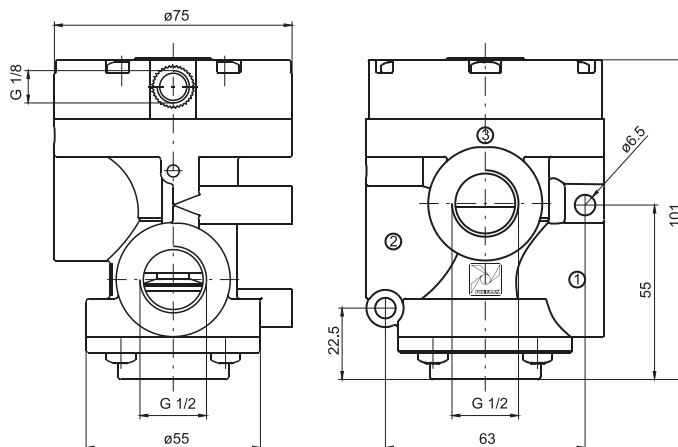


Pneumatic - Spring

Coding: T772/V.32.11.1

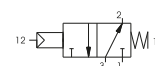
Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

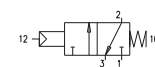


Weight 350 g

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



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



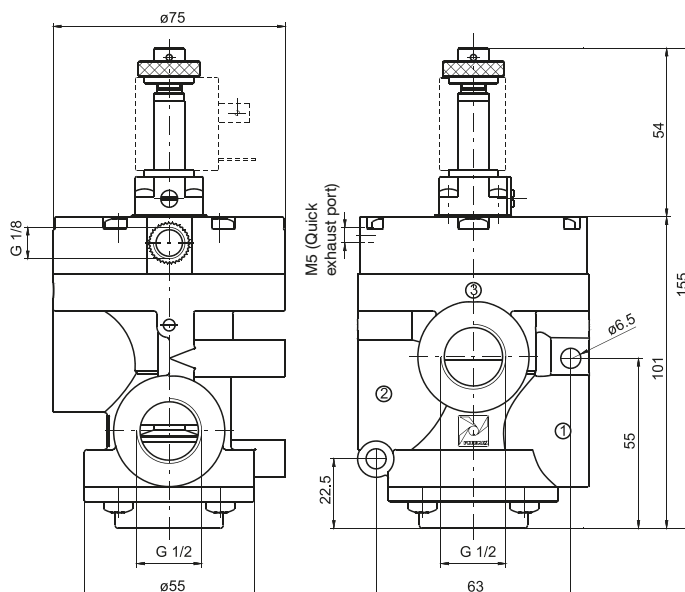
Solenoid-Spring - Internal pilot

Coding: T772/V.32.0.11.MV

Operational characteristics

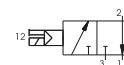
Fluid	Vacuum
Temperature °C	-5 ÷ +50
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"

FUNCTION
1AA = Normally Open
1AC = Normally Closed

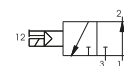


Weight 390 g

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



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



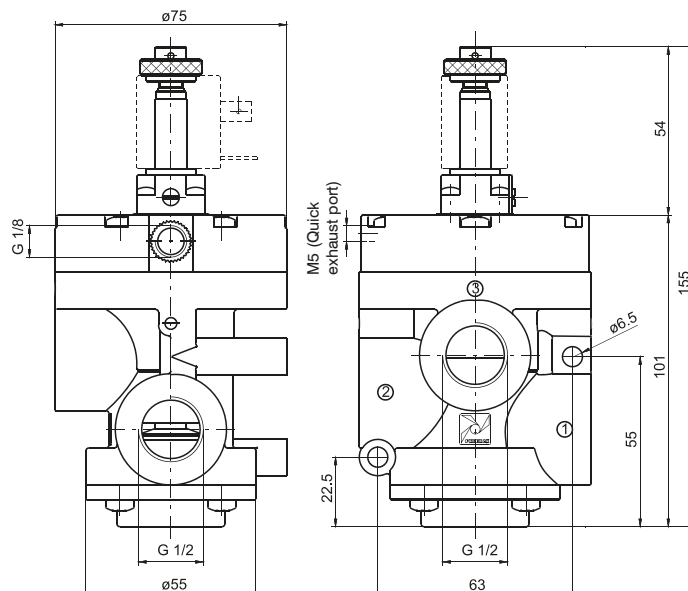
Solenoid-Spring - External pilot

Coding: T772/V.32.0.1.MP

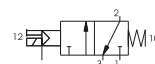
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"



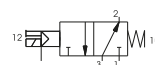
Weight 390 g



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



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



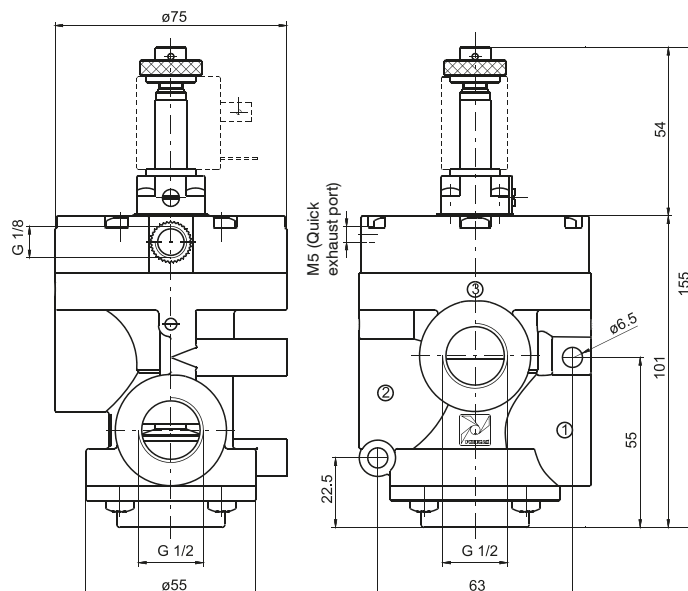
Solenoid - Spring - External pilot with quick exhaust

Coding: T772/VS.32.0.1.MP

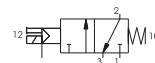
Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ÷ +50
Orifice size (mm)	15
Working ports size	G1/2"
Pilot ports size	G1/8"



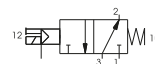
Weight 390 g



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



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



Pneumatic - Spring

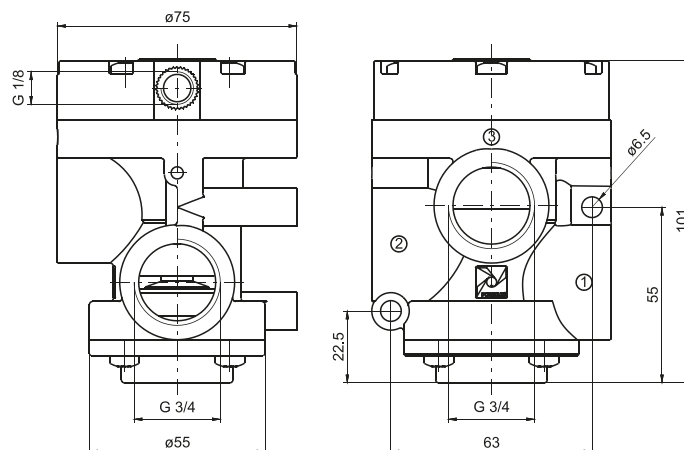
Coding: T773.32.11.1

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 $\Delta p=1$ (NI/min)	7500
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"

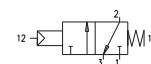


Weight 330 g



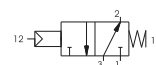
For compressed air - N.C.

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

Coding: T773.32.0.F.MP

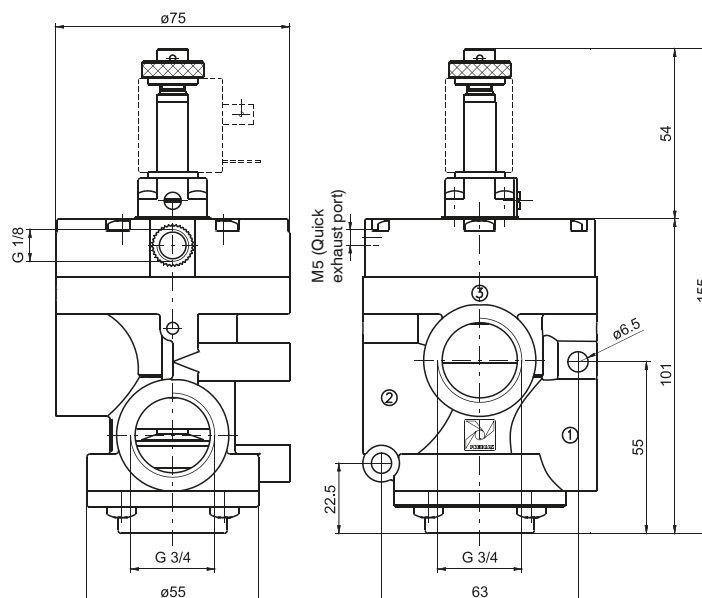
Operational characteristics

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 $\Delta p=1$ (NI/min)	7500
Orifice size (mm)	20
Working ports size	G3/4"
Pilot ports size	G1/8"

FUNCTION
1AA = Normally Open
1AC = Normally Closed

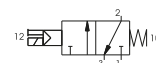


Weight 370 g



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

