


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 (see Series 300). (Coil are not included and have to be ordered separately).

Coil  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
Bottom plates	Aluminium			
Actuators	NBR			
Pistons	Aluminium			
Actuators rod	Stainless steel			
Spring	Stainless steel			
Piston seals	NBR			

Use and maintenance

These valves are a mean life of 10 to 15 millions of cycles under normal operating conditions. Lubrication is not required for good operation but we recommend good filtration to avoid dirty deposit causing malfunction.

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

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

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

When it is used the solenoid valves with internal pilot, either for air or vacuum, pay attention that the exhaust flow is not same as inlet flow otherwise there will not be sufficient differential pressure for depression for the piston. This happen normally with poppet valves because they have no closed centres position and an insufficient pressure will put the valve in exhaust position through the port 3. In this case choose the external pilot version.

Vacuum valves connections

NORMALLY CLOSED INTERNAL PILOT

779/V.32.0.1AC

773/V.32.0.1AC P = 1 = EXHAUST

771/V.32.0.1AC A = 2 = OUTLET

R = 3 = PUMP

NORMALLY OPEN INTERNAL PILOT

779/V.32.0.1AA

773/V.32.0.1AA P = 1 = PUMP

771/V.32.0.1AA A = 2 = OUTLET

R = 3 = EXHAUST

NORMALLY CLOSED EXTERNAL PILOT

779/V.32.0.1C

773/V.32.0.1C

771/V.32.0.1C

P = 1 = PUMP

A = 2 = OUTLET

R = 3 = EXHAUST

779/V.32.11.1C

773/V.32.11.1C

771/V.32.11.1C

NORMALLY OPEN EXTERNAL PILOT

779/V.32.0.1A

773/V.32.0.1A

771/V.32.0.1A

P = 1 = EXHAUST

A = 2 = OUTLET

R = 3 = PUMP

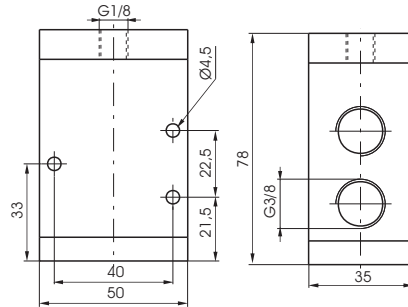
779/V.32.11.1A

773/V.32.11.1A

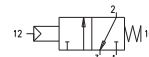
771/V.32.11.1A

Pneumatic - Spring / for compressed air

Ordering code
779.32.11.F
FUNCTION
1C = Normally Closed
1A = Normally Open



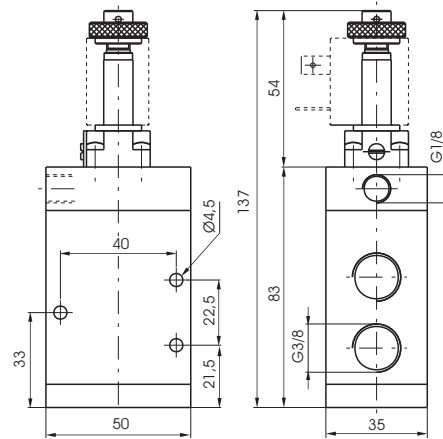
Weight gr. 360
Attention : for the Normally open version, connect the inlet port to the exhaust port No "3".
Minimum piloting pressure 2,5 bar



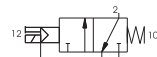
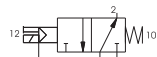
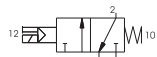
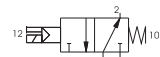
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	1800	10	G 3/8"

Solenoid - Spring / for compressed air

Ordering code
779.32.0.F.M2
FUNCTION
1AC = Internal Pilot N.C.
1C = External Pilot Normally Closed
1AA = Internal Pilot N.A.
1A = External Pilot Normally Open



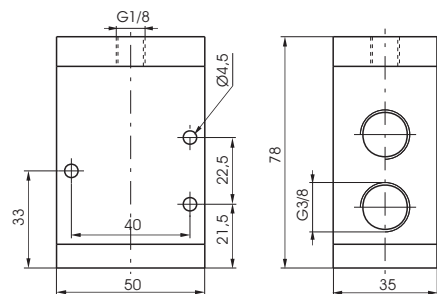
Weight gr. 420
Minimum working pressure 2,5 bar (External Pilot)
- 3 bar (Internal Pilot)



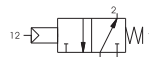
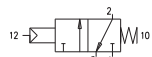
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (Nl/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	1800	10	G 3/8"

Pneumatic - Spring / for Vacuum

Ordering code
779/V.32.11.F
FUNCTION
1C = Normally Closed
1A = Normally Open



Weight gr. 360
Minimum piloting pressure 2 bar

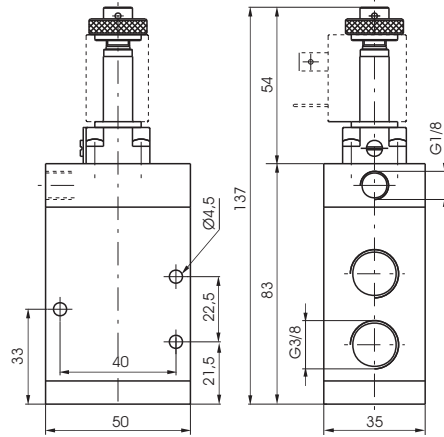


Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - +70	10	G 3/8"

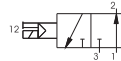
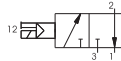


Solenoid - Spring - Internal Pilot / for Vacuum

Ordering code
779/V.32.0.F.M2/V
FUNCTION
F 1AA = Normally Open
1AC = Normally Closed



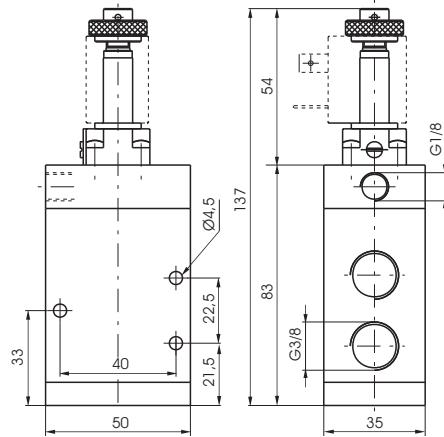
Weight gr. 420



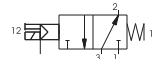
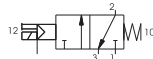
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - +50	10	G 3/8"

Solenoid - Spring - External Pilot / for Vacuum

Ordering code
779/V.32.0.F.M2
FUNCTION
F 1A = Normally Open
1C = Normally Closed



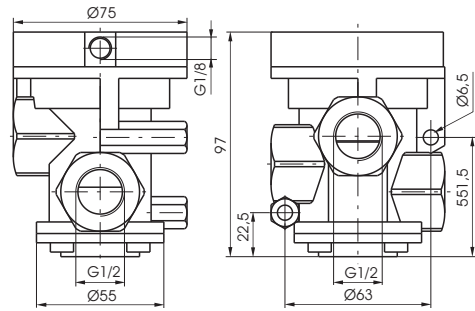
Weight gr. 420
Minimum working pressure 2 bar (External Pilot)



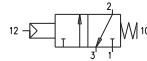
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - +50	10	G 3/8"

Pneumatic - Spring / for compressed air

Ordering code
772.32.11.1C



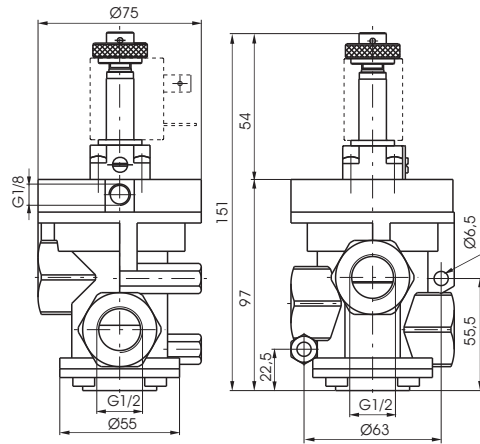
Weight gr. 1100
Normally Closed
Minimum piloting pressure 2,5 bar



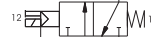
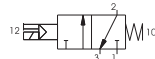
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	4800	15	G 1/2"

Solenoid - Spring / for compressed air

Ordering code
772.32.0.F.M2
FUNCTION
F 1AC = Internal Pilot Normally Closed
1C = External Pilot Normally Closed



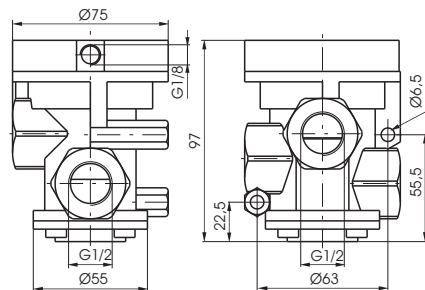
Weight gr. 1160
Minimum working pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)



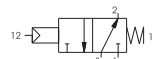
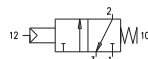
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	4800	15	G 1/2"

Pneumatic - Spring / for Vacuum

Ordering code
772/V.32.11.F
FUNCTION
F 1C = Normally Closed
1A = Normally Open



Weight gr. 1100
Minimum piloting pressure 2 bar



Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - +70	15	G 1/2"

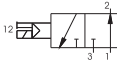
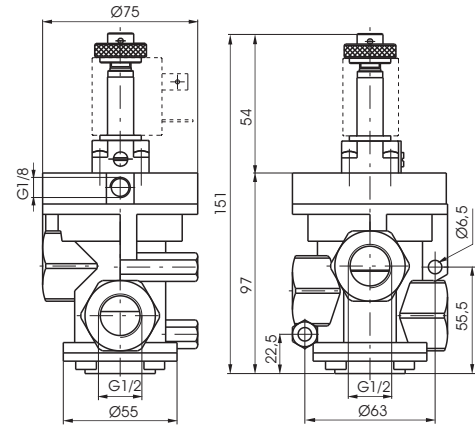
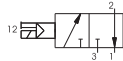


Solenoid - Spring - Internal Pilot / for Vacuum

Ordering code
772/V.32.0.F.M2/V
FUNCTION
F 1AA = Normally Open
1AC = Normally Closed



Weight gr. 1160



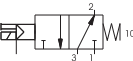
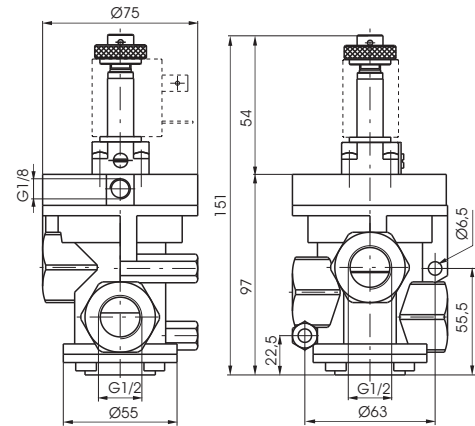
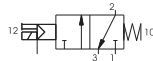
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +50	15	G 1/2"

Solenoid - Spring - External Pilot / for Vacuum

Ordering code
772/V.32.0.F.M2
FUNCTION
F 1A = Normally Open
TC = Normally Closed



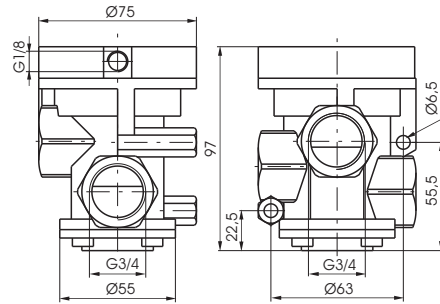
Weight gr. 1160
Minimum working pressure 2 bar (External Pilot)



Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +50	15	G 1/2"

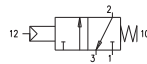
Pneumatic - Spring / for compressed air

Ordering code
773.32.11.1C



Weight gr. 990

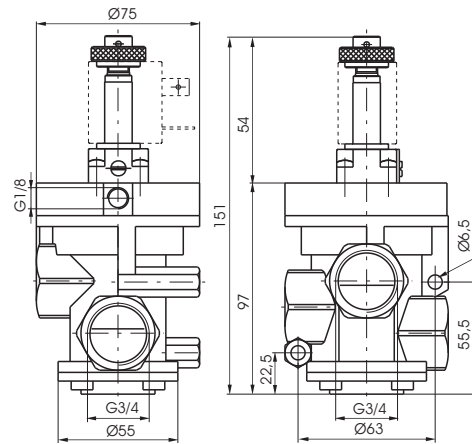
Normally Closed
Minimum piloting pressure 2,5 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
	Filtered and lubricated air	10	-5 - +70	6100	20	G 3/4"	G 1/8"

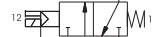
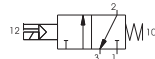
Solenoid - Spring / for compressed air

Ordering code
773.32.0.F.M2
FUNCTION
F 1AC = Internal Pilot Normally Closed
1C = External Pilot Normally Closed



Weight gr. 1050

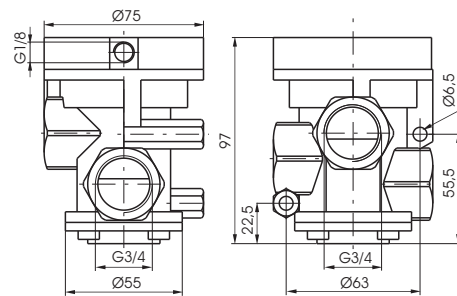
Minimum working pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
	Filtered and lubricated air	10	-5 - +50	6100	20	G 3/4"	G 1/8"

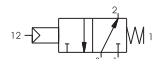
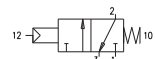
Pneumatic - Spring / for Vacuum

Ordering code
773/V.32.11.F
FUNCTION
F 1C = Normally Closed
1A = Normally Open



Weight gr. 990

Minimum piloting pressure 2 bar



Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum	-5 - +70	20	G 3/4"	G 1/8"

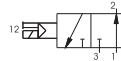
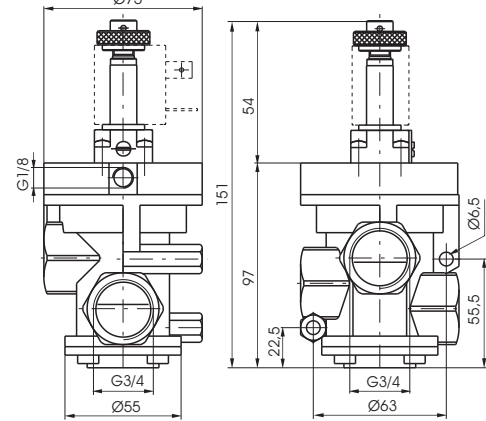
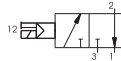
2

Solenoid - Spring - Internal Pilot / for Vacuum

Ordering code
773/V.32.0.F.M2/V
FUNCTION
F 1AA = Normally Open
1AC = Normally Closed



Weight gr. 1050



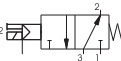
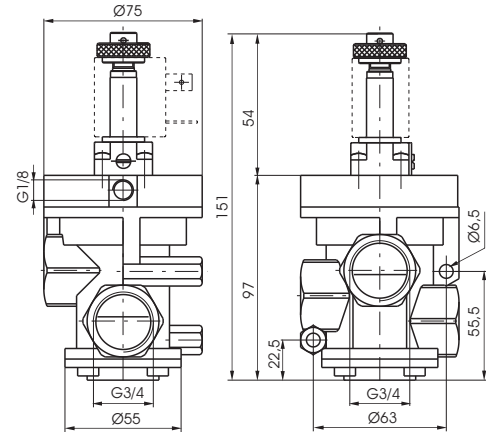
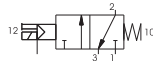
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +50	20	G 3/4"

Solenoid - Spring - External Pilot / for Vacuum

Ordering code
773/V.32.0.F.M2
FUNCTION
F 1A = Normally Open
1C = Normally Closed



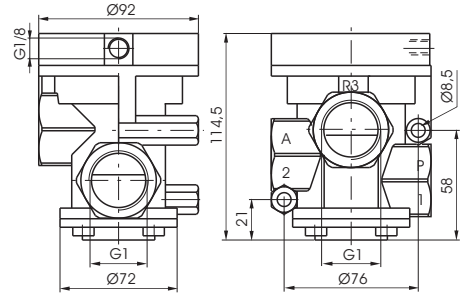
Weight gr. 1050
Minimum working pressure 2 bar (External Pilot)



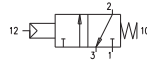
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +50	20	G 3/4"

Pneumatic - Spring / for compressed air

Ordering code
771.32.11.1C



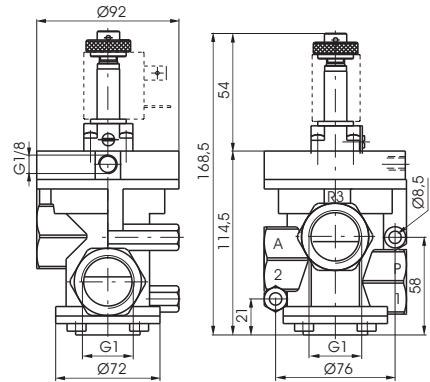
Weight gr. 1060
Normally Closed
Minimum piloting pressure 2,5 bar



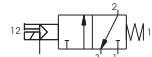
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	12000	25	G 1"

Solenoid - Spring / for compressed air

Ordering code
771.32.0.F.M2
FUNCTION
F 1AC = Internal Pilot Normally Closed
1C = External Pilot Normally Closed



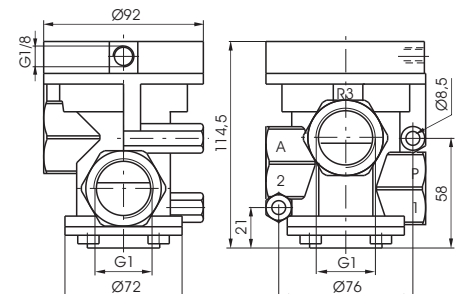
Weight gr. 1120
Minimum working pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)



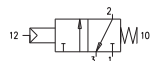
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	12000	25	G 1"

Pneumatic - Spring / for Vacuum

Ordering code
771/V.32.11.F
FUNCTION
F 1C = Normally Closed
1A = Normally Open



Weight gr. 1060
Minimum piloting pressure 2 bar

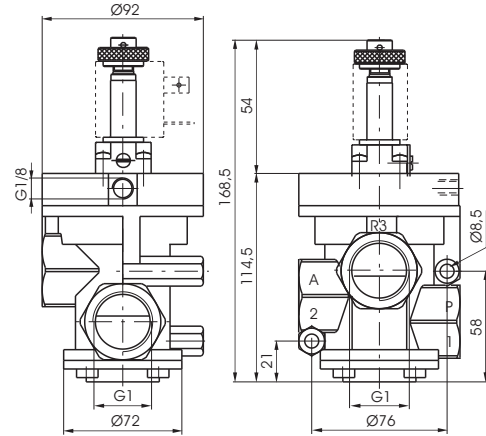


Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - +70	25	G 1"

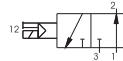
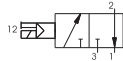
2

Solenoid - Spring - Internal Pilot / for Vacuum

Ordering code
771/V.32.0.F.M2/V
FUNCTION
F 1AA = Normally Open
1AC = Normally Closed



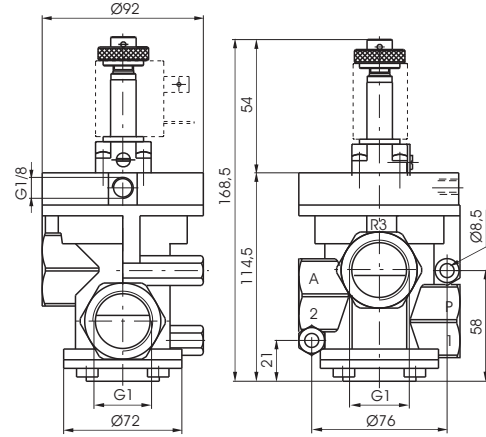
Weight gr. 1120



Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - + 50	25	G 1"

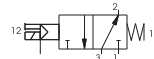
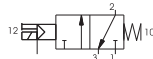
Solenoid - Spring - External Pilot / for Vacuum

Ordering code
771/V.32.0.F.M2
FUNCTION
F 1A = Normally Open
1C = Normally Closed



Weight gr. 1120

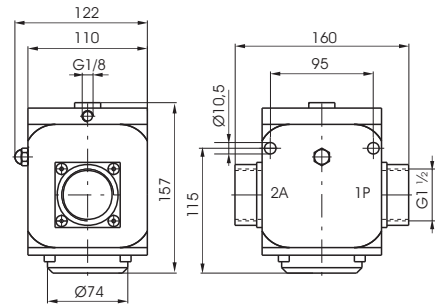
Minimum working pressure 2 bar (External Pilot)



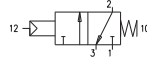
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
		Vacuum	-5 - + 50	25	G 1"

Pneumatic - Spring / for compressed air

Ordering code
776.22.11.1C



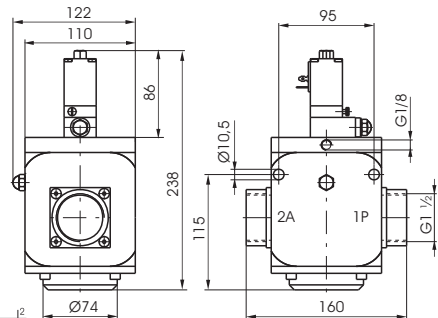
Weight gr. 3950
Normally Closed
Minimum piloting pressure 2,5 bar



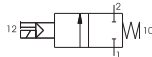
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	33500	38	G1 1/2"

Solenoid - Spring / for compressed air

Ordering code
776.22.0.F.S
FUNCTION
F 1AC = Internal Pilot Normally Closed
1C = External Pilot Normally Closed
S SOLENOID CODE
See Valves Series 300 Type "S"



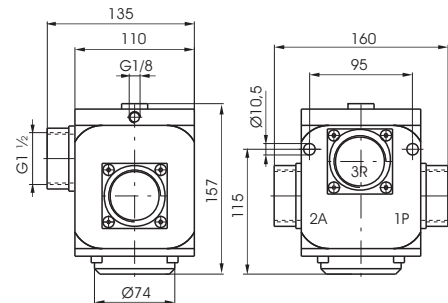
Weight gr. 4450
Minimum working pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)



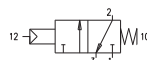
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	33500	38	G1 1/2"

Pneumatic - Spring / for compressed air

Ordering code
776.32.11.1C



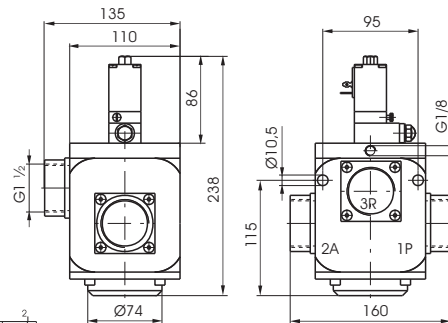
Weight gr. 3900
Normally Closed
Minimum piloting pressure 2,5 bar



Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	33500	38	G1 1/2"

Solenoid - Spring / for compressed air

Ordering code
776.32.0.F.S
FUNCTION
F 1AC = Internal Pilot Normally Closed
1C = External Pilot Normally Closed
S SOLENOID CODE
See Valves Series 300 Type "S"



Weight gr. 4450
Minimum working pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)

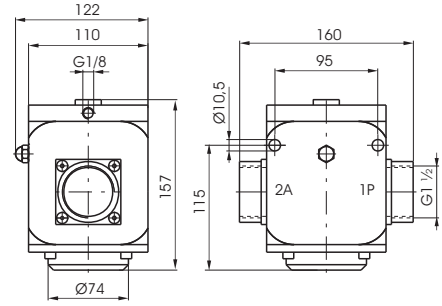


Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with Δp=1 (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	33500	38	G1 1/2"

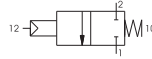
2

Pneumatic - Spring / for Vacuum

Ordering code
776/V.22.11.1C



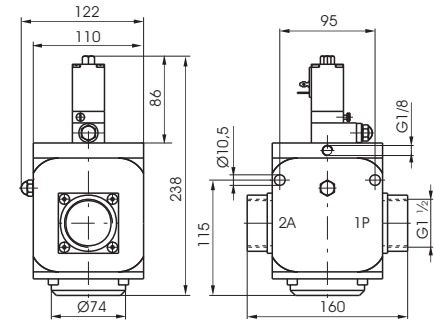
Weight gr. 3950
Normally Closed
Minimum piloting pressure 2 bar



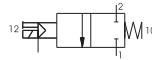
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - + 70	38	G1 1/2"

Solenoid - Spring / for Vacuum

Ordering code
776/V.22.0.1C.S
S SOLENOID CODE
See Valves Series 300 Type "S"



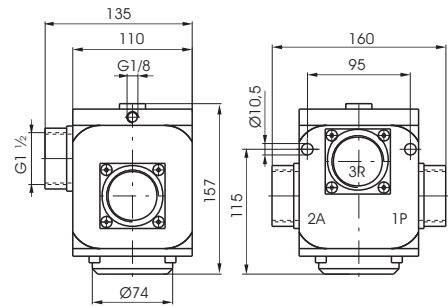
Weight gr. 4450
External Pilot Normally Closed
Minimum working pressure 2 bar



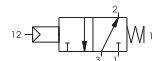
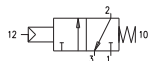
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - + 50	38	G1 1/2"

Pneumatic - Spring / for Vacuum

Ordering code
776/V.32.11.F
F FUNCTION
1C = Normally Closed
1A = Normally Open



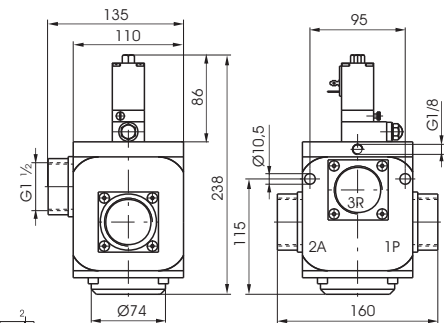
Weight gr. 3900
Minimum piloting pressure 2 bar



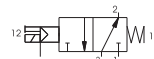
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - + 70	38	G1 1/2"

Solenoid - Spring / for Vacuum

Ordering code
776/V.32.0.F.S
F FUNCTION
1C = External Pilot Normally Closed
1A = External Pilot Normally Open
S SOLENOID CODE
See Valves Series 300 Type "S"



Weight gr. 4500
Minimum working pressure 2 bar



Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - + 50	38	G1 1/2"