


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

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

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

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

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

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

### 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

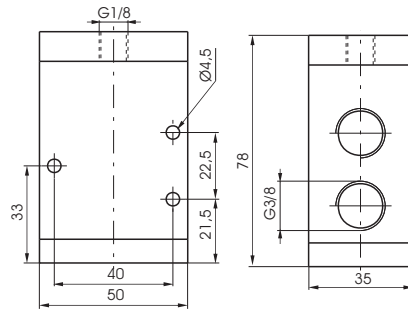
779/V.32.11.1A

773/V.32.11.1A

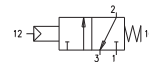
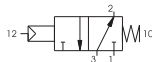
771/V.32.11.1A

**Pneumatic - Spring**

Ordering code
<b>779.32.11.F</b>
FUNCTION
<b>F</b> 1C=Normally Closed
1A=Normally Open



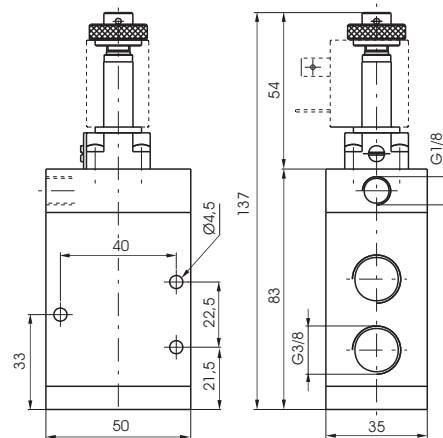
Weight gr. 360  
Attention : for the Normally open version, connect the inlet port to the exhaust port No "3".  
Minimum piloting pressure 2,5 bar



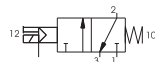
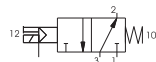
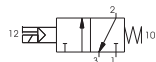
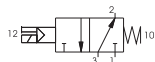
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-10 - +70	1800	10	G 3/8"

**Solenoid - Spring**

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



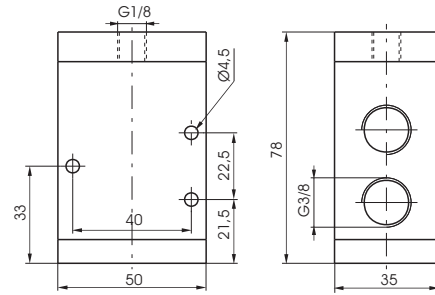
Weight gr. 420  
Minimum piloting pressure 2,5 bar (External Pilot) - 3 bar (Internal Pilot)



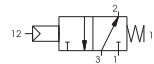
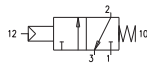
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-10 - +50	1800	10	G 3/8"

**Pneumatic - Spring**

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



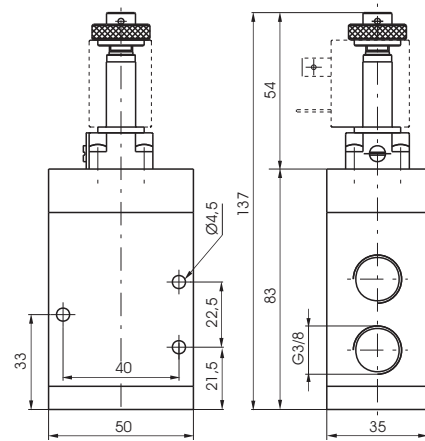
Weight gr. 360  
Minimum piloting pressure 2 bar



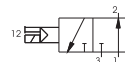
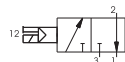
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-10 - + 70	10	G 3/8"

**Solenoid - Spring - Internal Pilot**

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



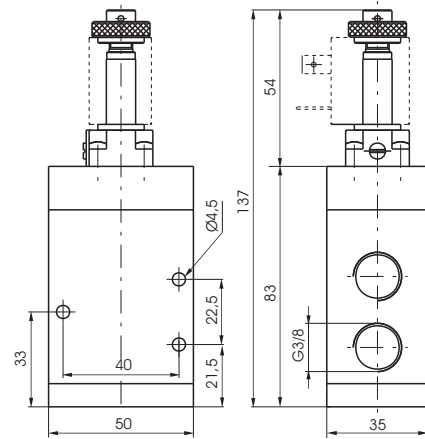
Weight gr. 420



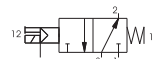
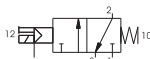
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-10 - + 50	10	G 3/8"

**Solenoid - Spring - External Pilot**

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



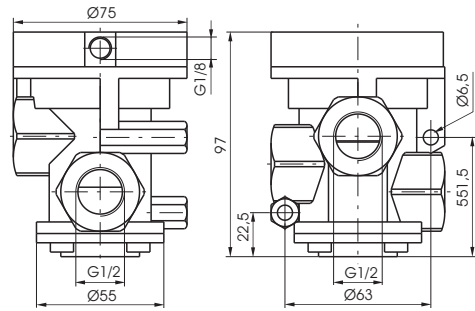
Weight gr. 420  
Minimum piloting pressure 2 bar (External Pilot)



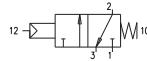
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-10 - + 50	10	G 3/8"

**Pneumatic - Spring**

Ordering code
<b>772.32.11.1C</b>



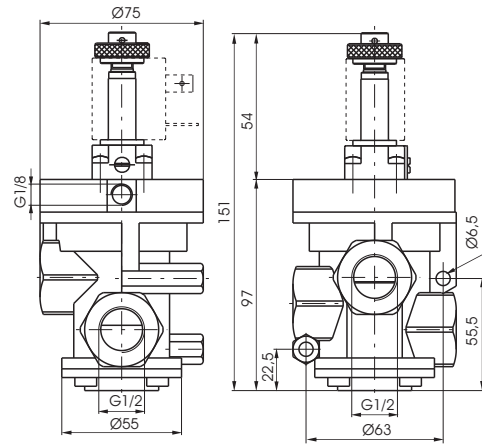
Weight gr. 1100  
Normally Closed  
Minimum piloting pressure 2,5 bar



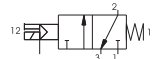
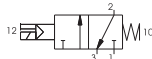
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	4800	15	G 1/2"

**Solenoid - Spring**

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



Weight gr. 1160  
Minimum piloting 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 $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	4800	15	G 1/2"

2

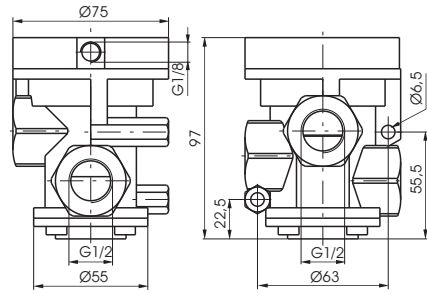
**Pneumatic - Spring**

Ordering code

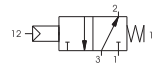
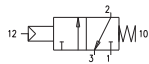
**772/V.32.11.F**

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"	G 1/8"

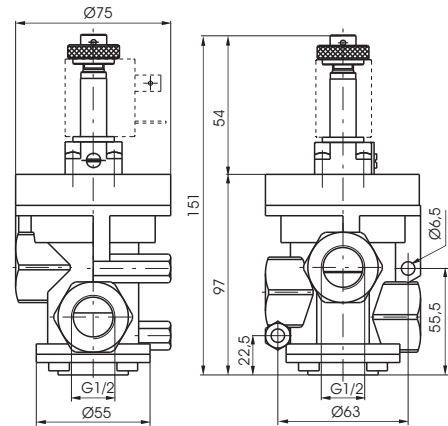
**Solenoid - Spring - Internal Pilot**

Ordering code

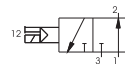
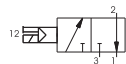
**772/V.32.0.F.M2/V**

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"	G 1/8"

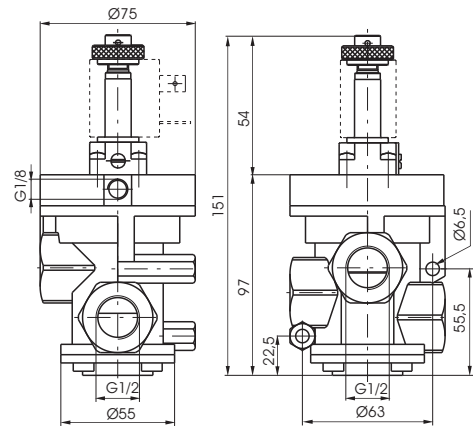
**Solenoid - Spring - External Pilot**

Ordering code

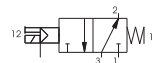
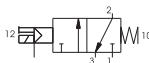
**772/V.32.0.F.M2**

FUNCTION

- F** 1A=Normally Open
- 1C=Normally Closed



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

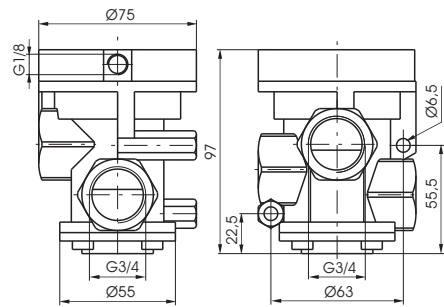


**Operational characteristic**

Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
Vacuum	-5 - + 50	15	G 1/2"	G 1/8"

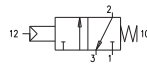
**Pneumatic - Spring**

Ordering code
<b>773.32.11.1C</b>



Weight gr. 990

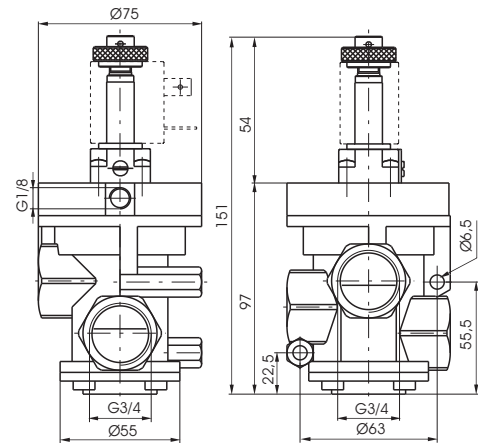
Normally Closed  
Minimum piloting pressure 2,5 bar



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

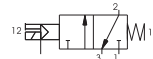
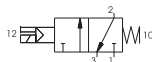
**Solenoid - Spring**

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



Weight gr. 1050

Minimum piloting 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 $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	6100	20	G 3/4"

2

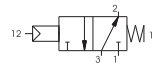
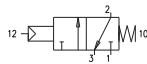
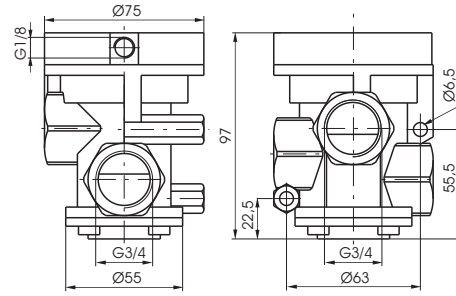
**Pneumatic - Spring**

Ordering code

**773/V.32.11.F**

FUNCTION

- 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"

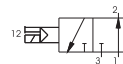
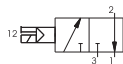
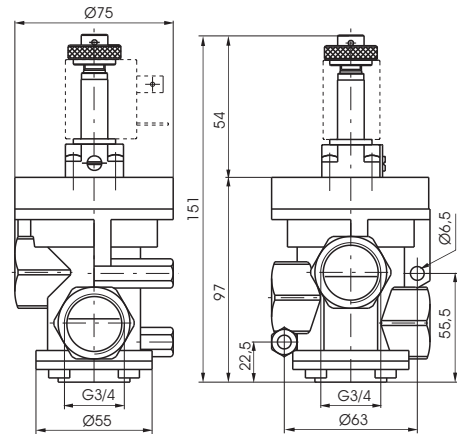
**Solenoid - Spring - Internal Pilot**

Ordering code

**773/V.32.0.F.M2/V**

FUNCTION

- 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"	G 1/8"

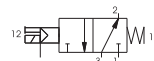
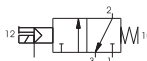
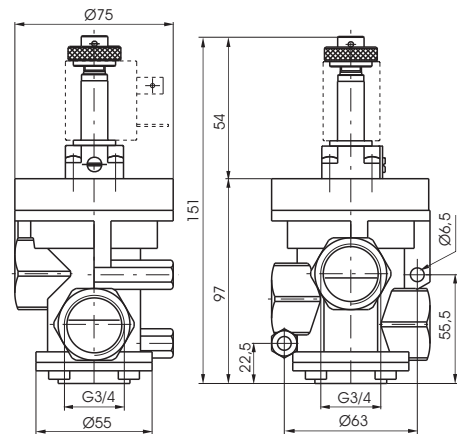
**Solenoid - Spring - External Pilot**

Ordering code

**773/V.32.0.F.M2**

FUNCTION

- 1A=Normally Open
- 1C=Normally Closed



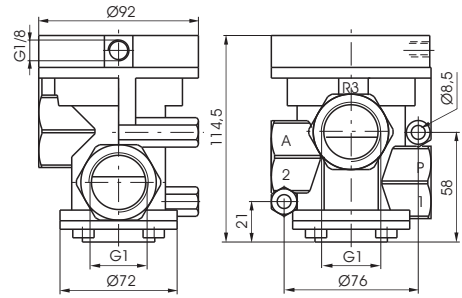
Weight gr. 1050  
Minimum piloting pressure 2 bar (External Pilot)

**Operational characteristic**

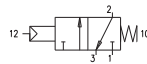
Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
Vacuum	-5 - +50	20	G 3/4"	G 1/8"

**Pneumatic - Spring**

Ordering code
<b>771.32.11.1C</b>



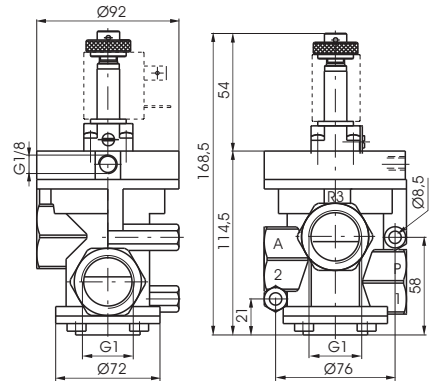
Weight gr. 1060  
Normally Closed  
Minimum piloting pressure 2,5 bar



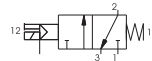
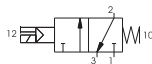
Operational characteristic	Fluid	Max working pressure (bar)	Temperature °C	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +70	12000	25	G 1"

**Solenoid - Spring**

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



Weight gr. 1120  
Minimum piloting 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 $\Delta p=1$ (NI/min)	Orifice size (mm)	Working ports size	Pilot ports size
		Filtered and lubricated air	10	-5 - +50	12000	25	G 1"

2



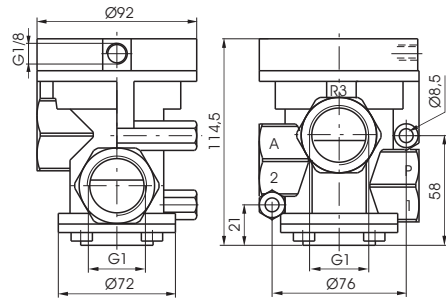
**Pneumatic - Spring**

Ordering code

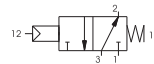
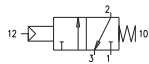
**771/V.32.11.F**

FUNCTION

- 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"	G 1/8"

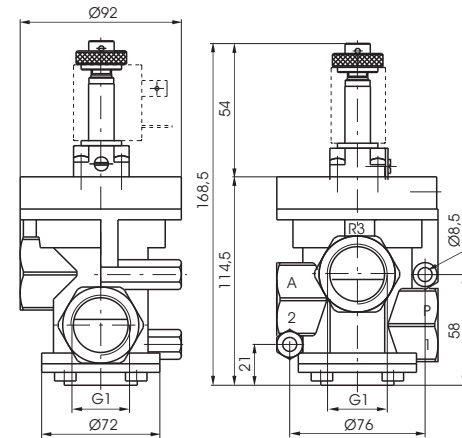
**Solenoid - Spring - Internal Pilot**

Ordering code

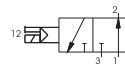
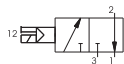
**771/V.32.0.F.M2/V**

FUNCTION

- 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"	G 1/8"

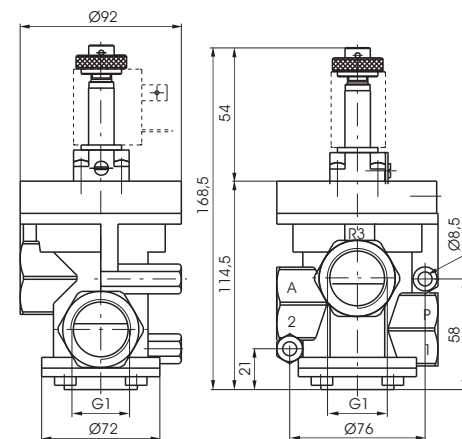
**Solenoid - Spring - External Pilot**

Ordering code

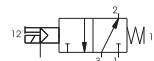
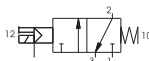
**771/V.32.0.F.M2**

FUNCTION

- 1A=Normally Open
- 1C=Normally Closed



Weight gr. 1120  
Minimum piloting pressure 2 bar (External Pilot)



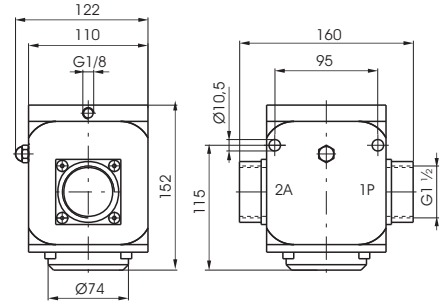
**Operational characteristic**

Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
Vacuum	-5 - +50	25	G 1"	G 1/8"

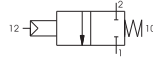


**Pneumatic - Spring**

Ordering code
<b>776/V.22.11.1C</b>



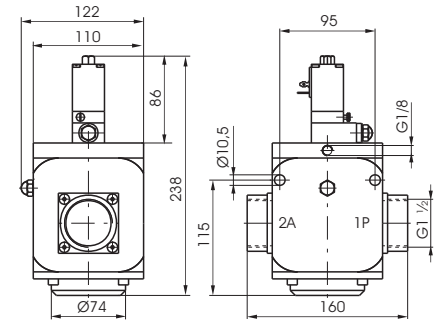
Weight gr. 3950  
Normally Closed  
Minimum piloting pressure 2 bar



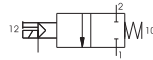
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +70	38	G1 1/2"

**Solenoid - Spring**

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



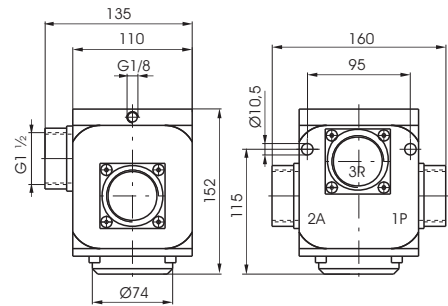
Weight gr. 4450  
External Pilot Normally Closed  
Minimum piloting pressure 2 bar



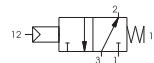
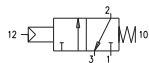
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +50	38	G1 1/2"

**Pneumatic - Spring**

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



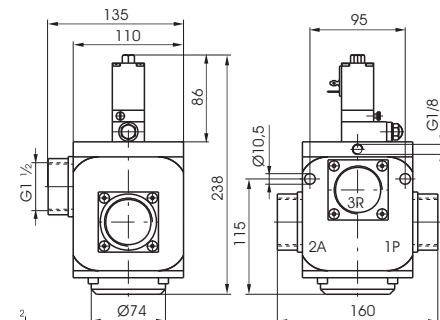
Weight gr. 3900  
Minimum piloting pressure 2 bar



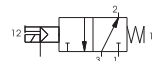
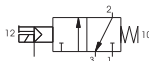
Operational characteristic	Fluid	Temperature °C	Orifice size (mm)	Working ports size	Pilot ports size
	Vacuum		-5 - +70	38	G1 1/2"

**Solenoid - Spring**

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



Weight gr. 4500  
Minimum piloting pressure 2 bar



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