

Valves and solenoid valves poppet system Series 700

Valves and solenoid valves poppet system for vacuum applications with high flow rates.




These are manufactured only in 3/2 and 2/2 versions, either normally closed or normally open. Selection of the right type and connection to the pump requires some knowledge and skill.

For electrical actuation a normal M2 microsolenoid is used in the case of control via air and a special M2/V microsolenoid is used when control is via vacuum.

Construction characteristics

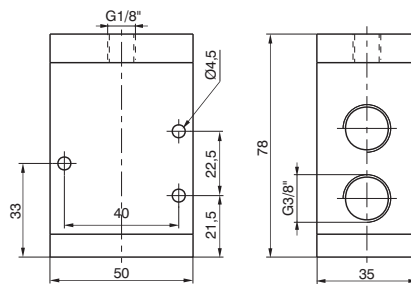
	G3/8"	G1/2"- G3/4"	G1"	G1 1/2"
Body	Aluminium	Zinc alloy	Aluminium	Aluminium
Actuators rod	Stainless steel			
Bottom plates	Aluminium			
Piston seals	NBR			
Springs	Stainless steel			
Poppets	NBR			
Pistons	Aluminium			

Use and maintenance

These valves and solenoid valves have an average service life of approximately 10 - 15 million cycles under optimum conditions of usage. They do not need to be lubricated to operate well, but good filtration is recommended to prevent dirt accumulation inside. Ensure that the conditions of use are consistent with the indicated limits, pressure, temperature, etc. Take care to protect the discharge outlets of the valves in the presence of dirt and powder. When the self feeding version is used in the solenoid valves, check that the supply flow rate is greater than or equal to that of use, otherwise switch to the version with external pilot. The ordering codes refer to solenoid valves with "M2" or "M2/V" mechanicals mounted. The solenoid coils are not included and have to be ordered separately (see summary page for solenoid coils). Certified solenoid coils are also available 

Series 700

Pneumatic-Spring



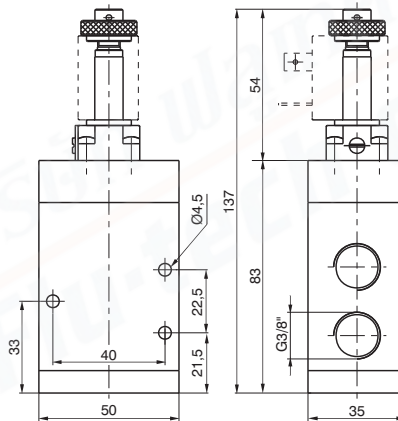
Weight 360 gr.

Ordering code	
779/V.32.11.F	
FUNCTION	
F	1C=Normally Closed 1A=Normally Open
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-10 ... +70
Orifice size (mm)	10
Working port size	G3/8"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 12 - 1A = 13
Response time according to ISO 12238 de-energised (ms)	1C = 46 - 1A = 48

Solenoid-Spring-Self feeding



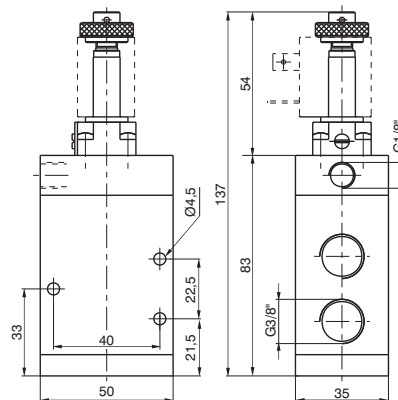
Weight 420 gr.

Ordering code	
779/V.32.0.F.M2/V	
FUNCTION	
F	1AA=Normally Open 1AC=Normally Closed
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics

Fluid	Vacuum
Temperature °C	-10 ... +50
Orifice size (mm)	10
Working port size	G3/8"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 26 - 1AA = 16
Response time according to ISO 12238 de-energised (ms)	1AC = 9 - 1AA = 11

Solenoid-Spring-External feeding



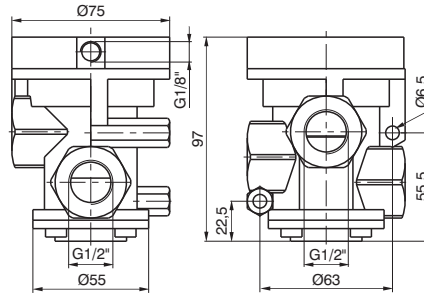
Weight 420 gr.

Ordering code	
779/V.32.0.F.M2	
FUNCTION	
F	1A=Normally Open 1C=Normally Closed
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-10 ... +50
Orifice size (mm)	10
Working port size	G3/8"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 10 - 1A = 11
Response time according to ISO 12238 de-energised (ms)	1C = 35 - 1A = 36

Pneumatic-Spring

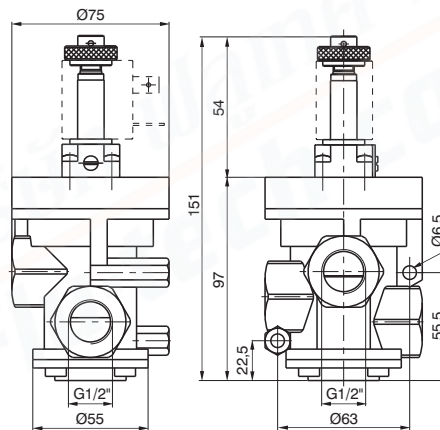


Ordering code	772/V.32.11.F
FUNCTION	F 1C=Normally Closed 1A=Normally Open
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Weight 1100 gr.

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-10 ... +70
Orifice size (mm)	15
Working port size	G1/2"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 30 - 1A = 17
Response time according to ISO 12238 de-energised (ms)	1C = 105 - 1A = 150

Solenoid-Spring-Self feeding

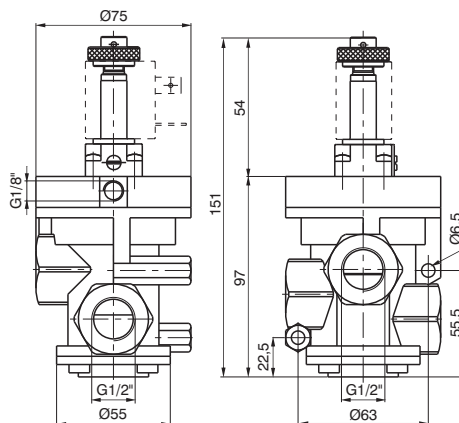


Ordering code	772/V.32.0.F.M2/V
FUNCTION	F 1AA=Normally Open 1AC=Normally Closed
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Weight 1160 gr.

Operational characteristics	
Fluid	Vacuum
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G1/2"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 80 - 1AA = 25
Response time according to ISO 12238 de-energised (ms)	1AC = 20 - 1AA = 20

Solenoid-Spring-External feeding

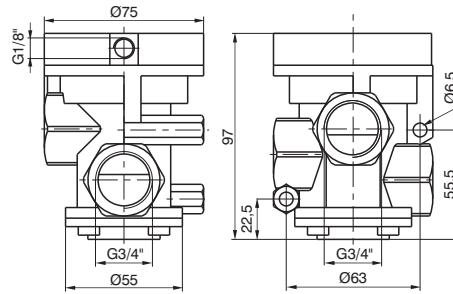


Ordering code	772/V.32.0.F.M2
FUNCTION	F 1A=Normally Open 1C=Normally Closed
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Weight 1160 gr.

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G1/2"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 25 - 1A = 15
Response time according to ISO 12238 de-energised (ms)	1C = 95 - 1A = 140

Pneumatic-Spring

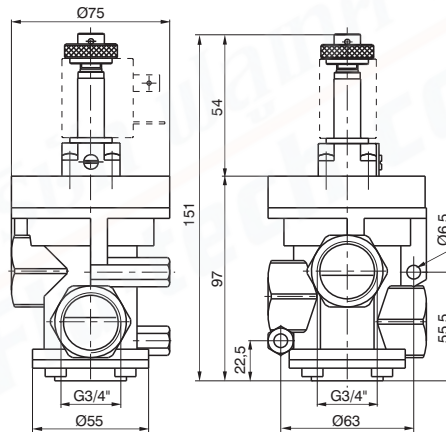


Weight 990 gr.

Ordering code	
773/V.32.11.F	
FUNCTION	
F	1C=Normally Closed 1A=Normally Open
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +70
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 30 - 1A = 17
Response time according to ISO 12238 de-energised (ms)	1C = 105 - 1A = 145

Solenoid-Spring-Self feeding

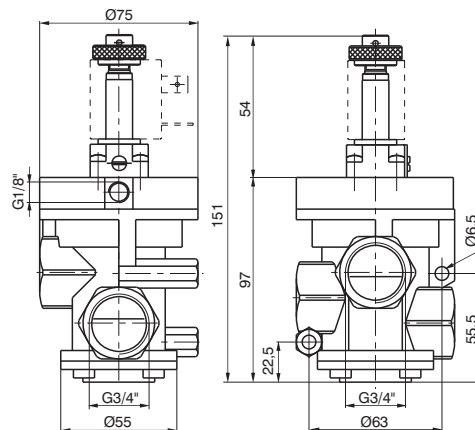


Weight 1050 gr.

Ordering code	
773/V.32.0.F.M2/V	
FUNCTION	
F	1AA=Normally Open 1AC=Normally Closed
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics	
Fluid	Vacuum
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 75 - 1AA = 33
Response time according to ISO 12238 de-energised (ms)	1AC = 13 - 1AA = 22

Solenoid-Spring-External feeding

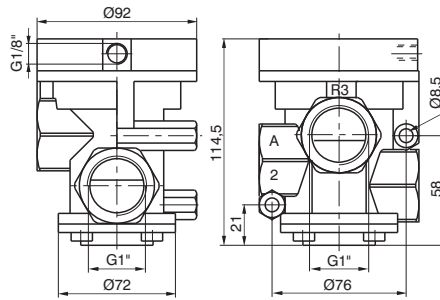


Weight 1050 gr.

Ordering code	
773/V.32.0.F.M2	
FUNCTION	
F	1A=Normally Open 1C=Normally Closed
For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 25 - 1A = 13
Response time according to ISO 12238 de-energised (ms)	1C = 95 - 1A = 140

Pneumatic-Spring

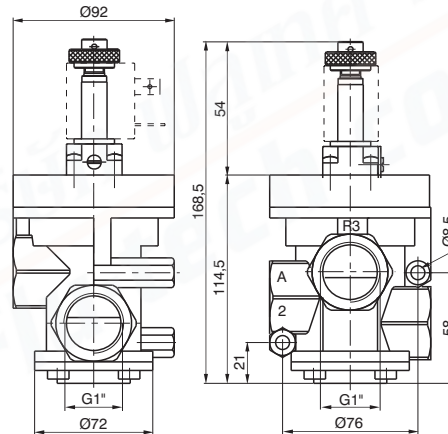


Weight 1060 gr.

Ordering code	771/V.32.11.F
FUNCTION	F 1C=Normally Closed 1A=Normally Open
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +70
Orifice size (mm)	25
Working port size	G1"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 45 - 1A = 18
Response time according to ISO 12238 de-energised (ms)	1C = 250 - 1A = 260

Solenoid-Spring-Self feeding

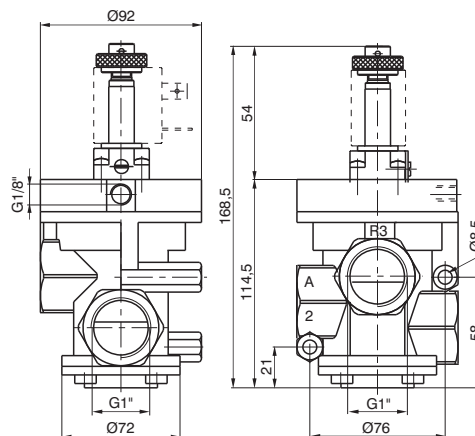


Weight 1120 gr.

Ordering code	771/V.32.0.F.M2/V
FUNCTION	F 1AA=Normally Open 1AC=Normally Closed
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Operational characteristics	
Fluid	Vacuum
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G1"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 120 - 1AA = 35
Response time according to ISO 12238 de-energised (ms)	1AC = 20 - 1AA = 40

Solenoid-Spring-External feeding

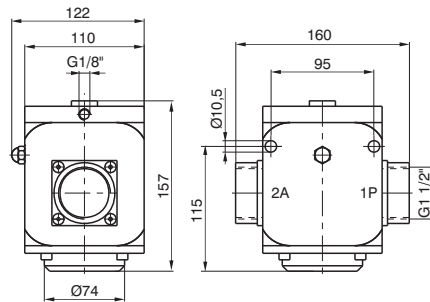


Weight 1120 gr.

Ordering code	771/V.32.0.F.M2
FUNCTION	F 1A=Normally Open 1C=Normally Closed
For vacuum - N.O.	Exhaust: Port 1 Outlet: Port 2 Pump: Port 3
For vacuum - N.C.	Exhaust: Port 3 Outlet: Port 2 Pump: Port 1

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G1"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1C = 45 - 1A = 17
Response time according to ISO 12238 de-energised (ms)	1C = 250 - 1A = 325

Pneumatic-Spring



Weight 3950 gr.
Normally Closed

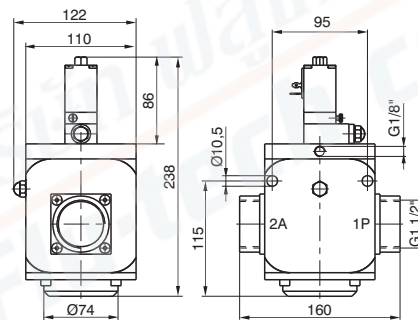
Ordering code
776/V.22.11.1C

For vacuum - N.C.
Outlet: Port 2
Pump: Port 1

Operational characteristics

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

Solenoid-Spring



Weight 4450 gr.
External feeding Normally closed

Ordering code
776/V.22.0.1C.S

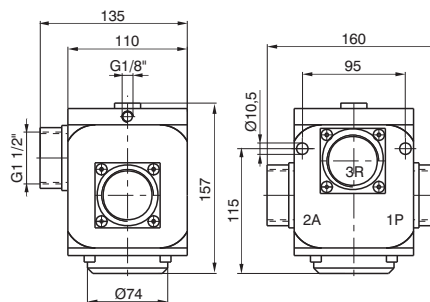
S SOLENOID CODE
See S.V. pag.109

For vacuum - N.C.
Outlet: Port 2
Pump: Port 1

Operational characteristics

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

Pneumatic-Spring



Weight 3900 gr.

Ordering code
776/V.32.11.F

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

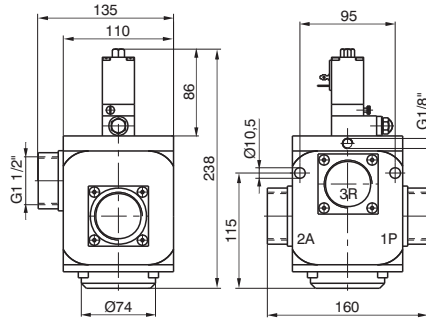
For vacuum - N.O.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

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

Operational characteristics

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

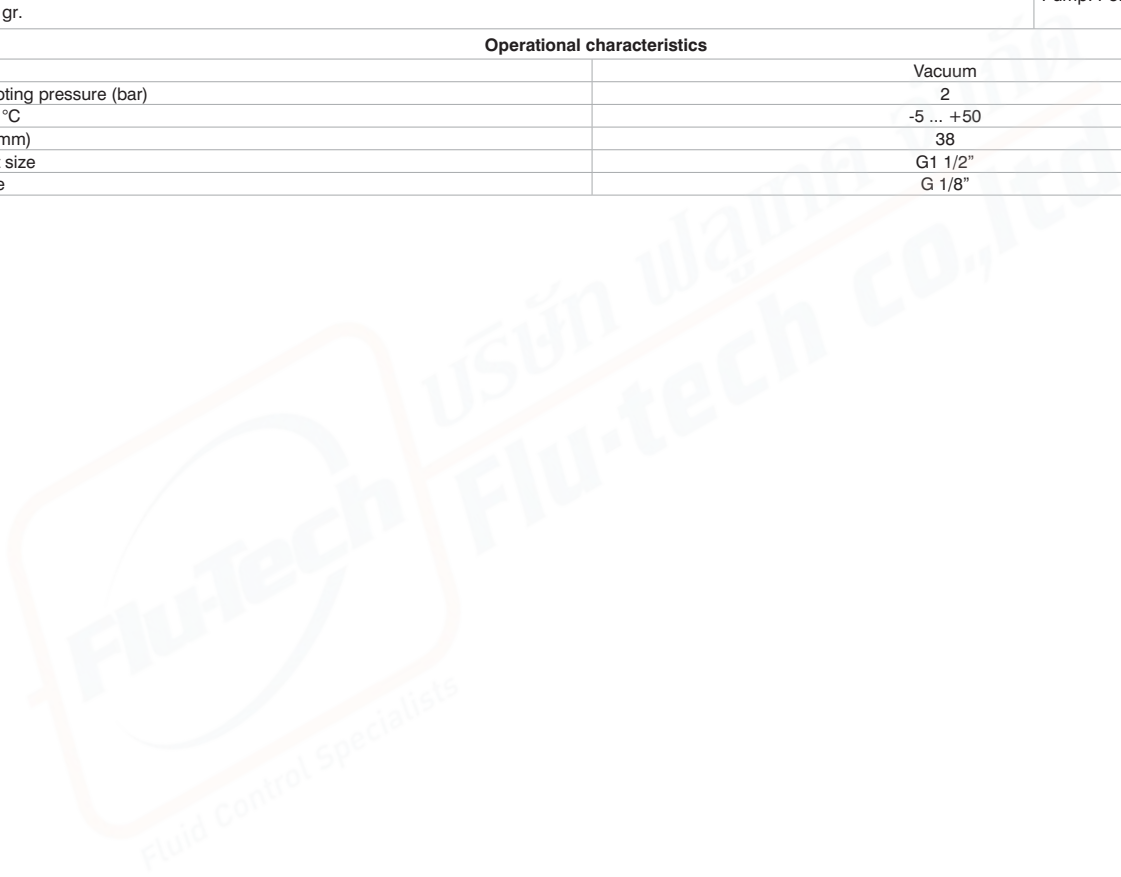
Solenoid-Spring



Ordering code	
776/V.32.0.F.S	
FUNCTION	
F	1C= External feeding Normally closed
	1A= External feeding Normally open
SOLENOID CODE	
S	See S.V. pag.109
<p>For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3</p>	
<p>For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1</p>	

Weight 4500 gr.

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



VALVES AND SOLENOID VALVES

Valves and solenoid valves poppet system Series T700

Valves and solenoid valves poppet system G1/2" and G3/4" made of high resistance thermoplastic material.



The use of thermoplastic materials has made possible to obtain significantly reduced weights respect to the zamak version and, most importantly, a cost optimization.

The use of a rolling diaphragm in place of the traditional piston, allowed to eliminate friction and wear on the seal. Except for the versions with an external vacuum supply and normally open self feeding vacuum. There is an additional seal provided on the piston which isolates the diaphragm connection 3 this makes it possible to improve the functionality of the valve.

For versions with microsolenoid internal or external supply, there is a fast discharge system incorporated in the operator, which reduces the response time for repositioning the valve by 60%.


The MP version of the solenoid actuator requires an external air or vacuum supply. The MV version uses a self feeding vacuum.

Construction characteristics

Body, operator and end cover	High resistance technopolymer
Seals and poppets	Oil resistant rubber (NBR)
Piston and shaft	Acetal resin
Springs	AISI 302 stainless steel
Diaphragm	Oil resistant rubber (NBR)



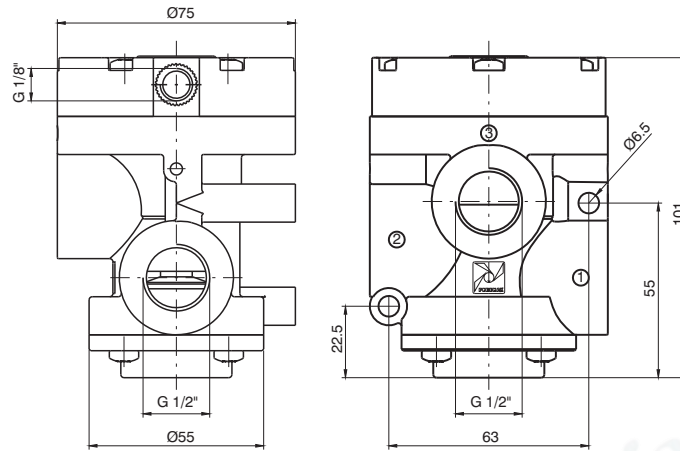
Use and maintenance

These valves and solenoid valves have an average service life of approximately 10 - 15 million cycles under optimum conditions of usage. They do not need to be lubricated to operate well, but good filtration is recommended to prevent dirt accumulation inside. Ensure that the conditions of use are consistent with the indicated limits, pressure, temperature, etc. Take care to protect the discharge outlets of the valves in the presence of dirt and powder. When the self feeding version is used in the solenoid valves, check that the supply flow rate is greater than or equal to that of use, otherwise switch to the version with external pilot. The ordering codes refer to solenoid valves with "MP" or "MV" mechanicals mounted. The solenoid coils are not included and have to be ordered separately (see General Catalogue, Series 300, Section 1) with the exception of the bistable versions which already have solenoid coils 24V DC (N331.0A). Certified solenoid coils are also available  (see Series 300).



Series T700

Pneumatic-Spring



Ordering code
T772/V.32.11.1

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

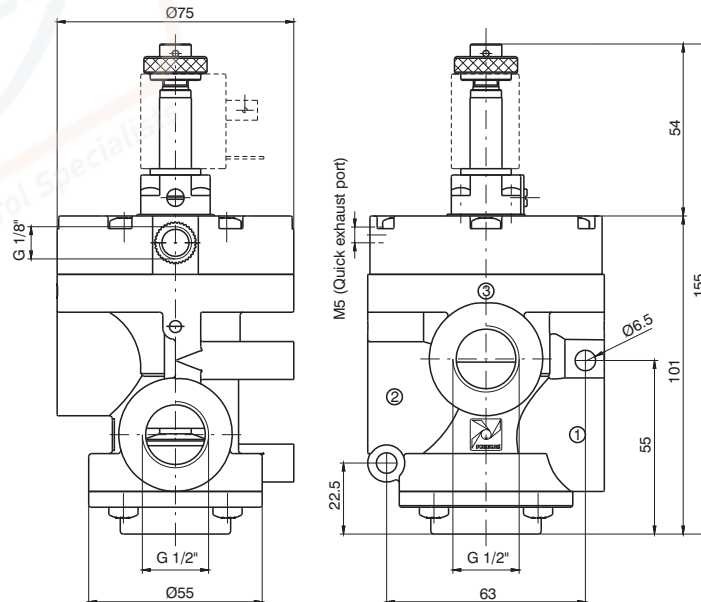
For vacuum - N.C.
Exhaust: Port 3
Outlet: Port 2
Pump: Port 1

Weight 350 gr.

Operational characteristics

	Vacuum
Fluid	
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G1/2"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 50 - N.O. = 27
Response time according to ISO 12238 de-energised (ms)	N.C. = 150 - N.O. = 195

Solenoid-Spring-Self feeding



Ordering code
T779/V.32.0.M2/V

FUNCTION
 1AA=Normally Open
 1AC=Normally Closed

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

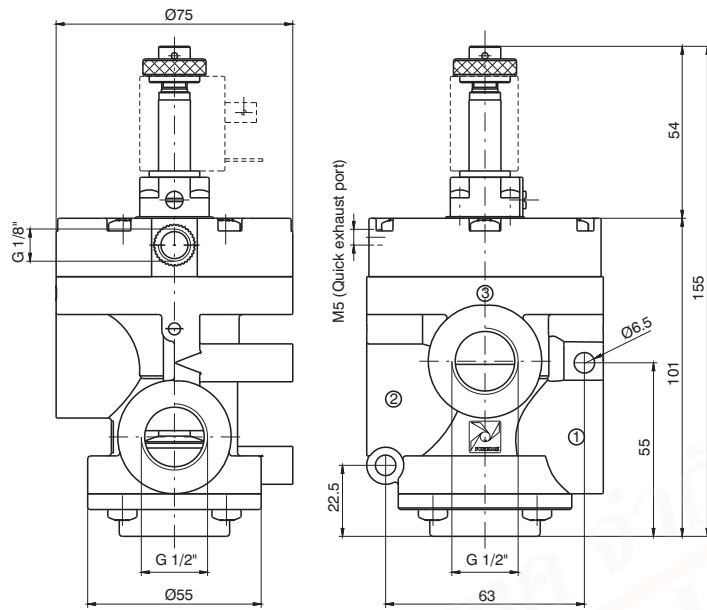
For vacuum - N.C.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

Weight 390 gr.

Operational characteristics

	Vacuum
Fluid	
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G1/2"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 55 - 1AA = 33
Response time according to ISO 12238 de-energised (ms)	1AC = 30 - 1AA = 38

Solenoid-Spring-External feeding

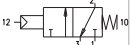


Ordering code

T772/V.32.0.1.MP

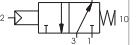
For vacuum - N.O.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3



For vacuum - N.C.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1

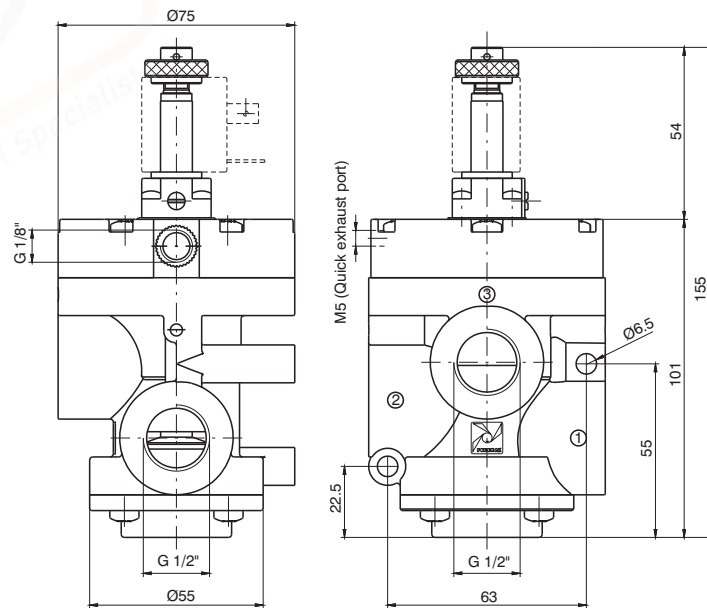


Weight 390 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G 1/2"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 42 - N.O. = 22
Response time according to ISO 12238 de-energised (ms)	N.C. = 135 - N.O. = 175

Solenoid-Spring-Self feeding

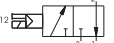


Ordering code

T772/VS.32.0.1.MP

For vacuum - N.O.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1



For vacuum - N.C.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

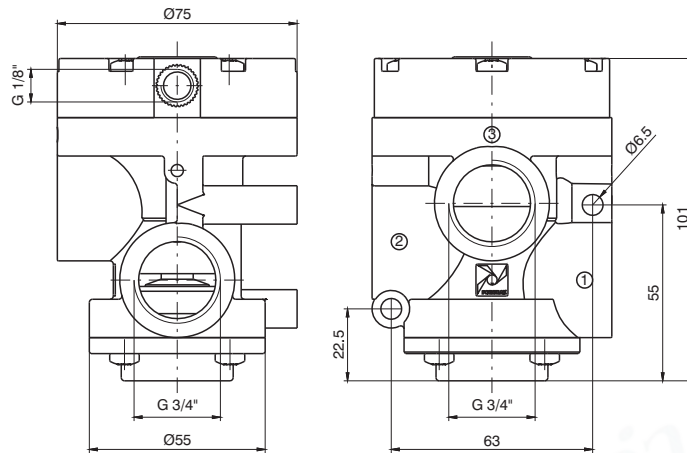


Weight 390 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G 1/2"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 43 - N.O. = 25
Response time according to ISO 12238 de-energised (ms)	N.C. = 37 - N.O. = 42

Pneumatic-Spring



Ordering code
T773/V.32.11.1

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

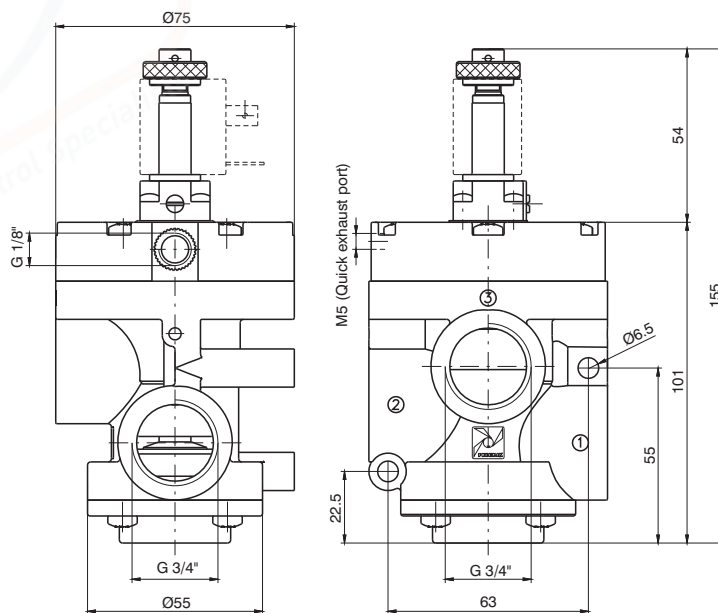
For vacuum - N.O.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

Weight 330 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 28 - N.O. = 50
Response time according to ISO 12238 de-energised (ms)	N.C. = 190 - N.O. = 150

Solenoid-Spring-Self feeding



Ordering code
T773/V.32.0.F.MV

FUNCTION
 1AA=Normally Open
 1AC=Normally Closed

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

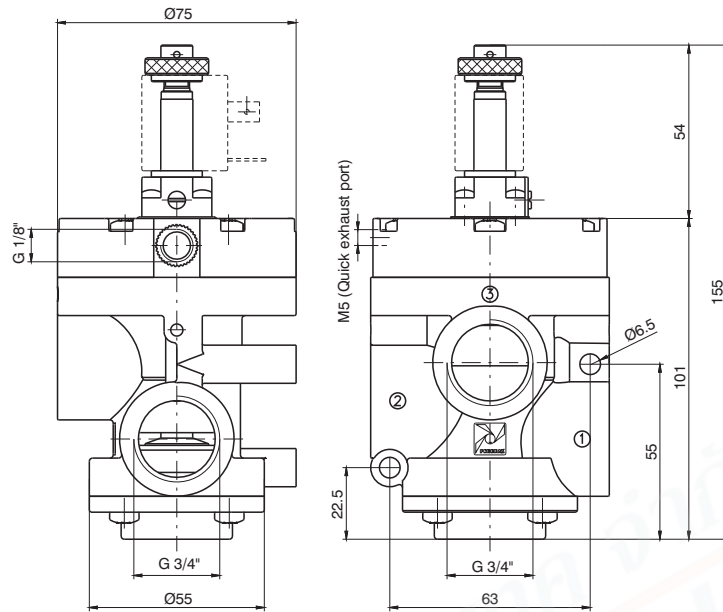
For vacuum - N.C.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

Weight 370 gr.

Operational characteristics

Fluid	Vacuum
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	1AC = 35 - 1AA = 32
Response time according to ISO 12238 de-energised (ms)	1AC = 30 - 1AA = 80

Solenoid-Spring-External feeding

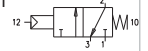


Ordering code

T773/V.32.0.1.MP

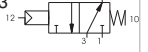
For vacuum - N.O.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3



For vacuum - N.C.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1

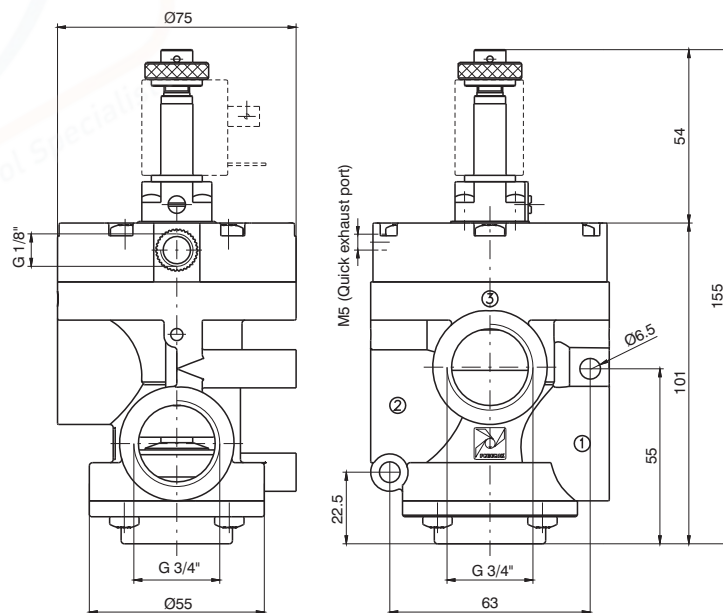


Weight 350 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 25 - N.O. = 40
Response time according to ISO 12238 de-energised (ms)	N.C. = 175 - N.O. = 145

Solenoid-Spring-External feeding with quick exhaust

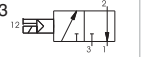


Ordering code

T773/VS.32.0.1.MP

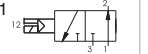
For vacuum - N.O.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1



For vacuum - N.C.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

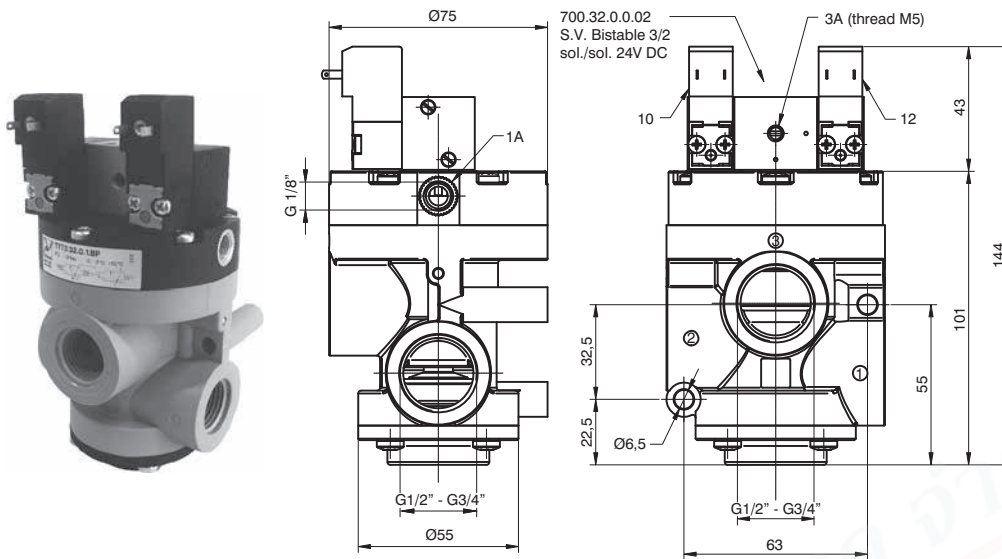


Weight 390 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	20
Working port size	G3/4"
Pilot port size	G1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 25 - N.O. = 42
Response time according to ISO 12238 de-energised (ms)	N.C. = 40 - N.O. = 38

Bistable version for vacuum G1/2"



Ordering code
T772/V.32.0.1.BP

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

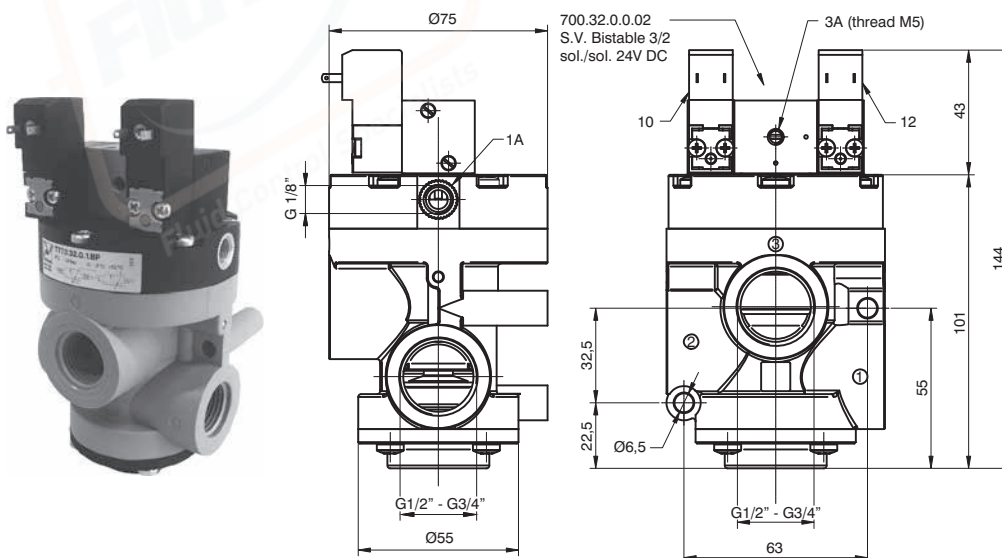
For vacuum - N.C.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

Weight 550 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G 1/2"
Pilot port size	G 1/8"

Bistable version for vacuum G3/4"



Ordering code
T773/V.32.0.1.BP

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

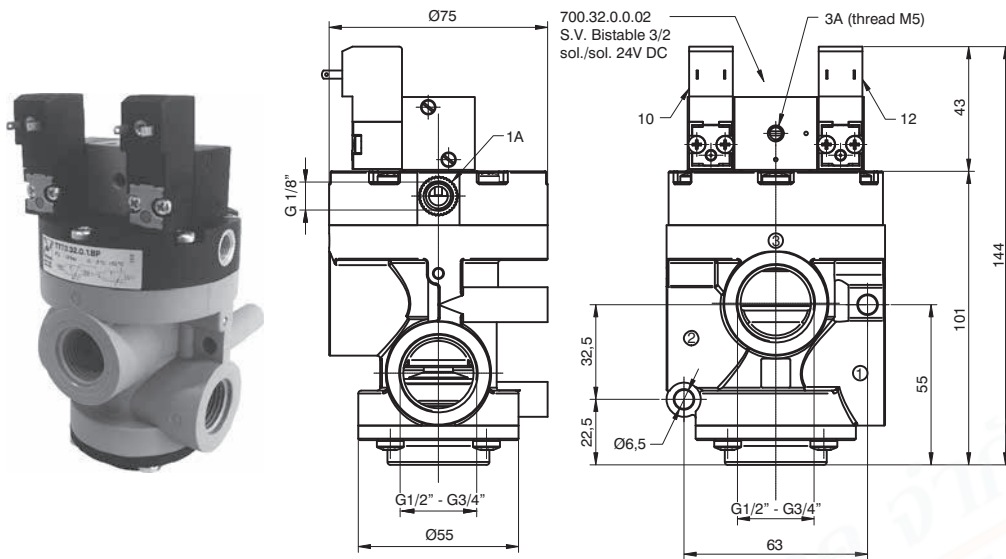
For vacuum - N.C.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

Weight 550 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G 3/4"
Pilot port size	G 1/8"

► Bistable version for vacuum G1/2" with quick exhaust



Ordering code
T772/VS.32.0.1.BP

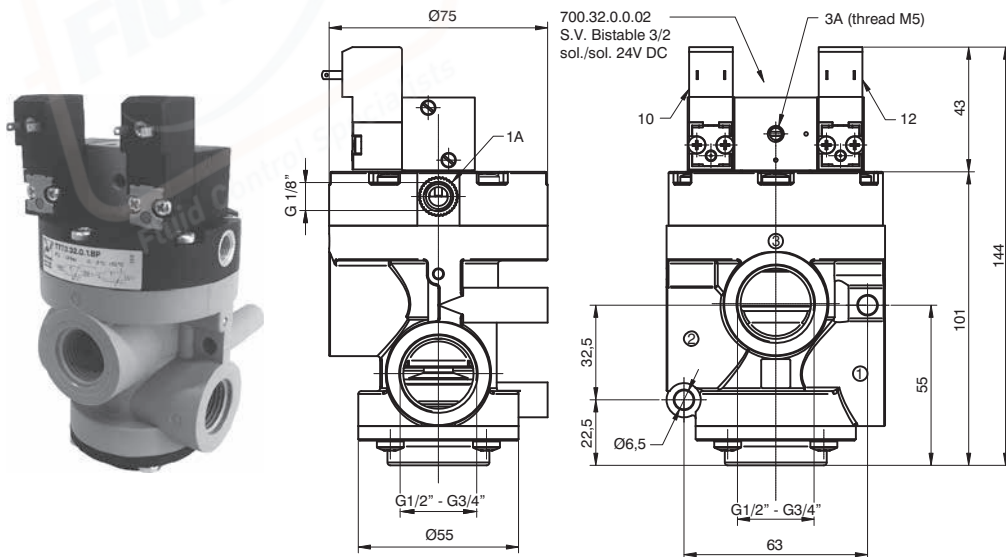
For vacuum - N.C.
Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

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

Weight 550 gr.

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G 1/2"
Pilot port size	G 1/8"

► Bistable version for vacuum G3/4" with quick exhaust



Ordering code
T773/VS.32.0.1.BP

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

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

Weight 550 gr.

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2,5
Temperature °C	-5 ... +50
Orifice size (mm)	15
Working port size	G3/4"
Pilot port size	G1/8"

Valves and solenoid valves poppet system Series T771

The series of valves and solenoid valves poppet system G1" complete the range of technopolymer valves T700 series.



Even for this version, the main feature is the high-resistance thermoplastic material from which the components are moulded. This made it possible to obtain an aesthetically pleasing product with a considerably reduced weight compared to the standard version, and, most importantly, a cost optimization.

As for the versions of 1/2" and 3/4" there were also technical and functional changes made, starting with the use of a rolling diaphragm in place of the traditional piston, thus eliminating friction and wear on the seal.

With the exception of the normally open (N.O.) self feeding vacuum version. In this case an additional seal is provided on the piston which isolates the diaphragm connection 3, which improves the functionality of the valve.


For the versions with microsolenoids that are internally or externally supplied, a quick discharge system is available, incorporated in the operator, which reduces the valve's repositioning response times by a further 80%. The MP version of the solenoid actuator requires an external vacuum supply. The MV version uses a self feeding vacuum. Double versions are also available, equipped with a solenoid valve 3/2 Solenoid-Solenoid complete with 15mm 24V DC microactuators (code N331.0A).

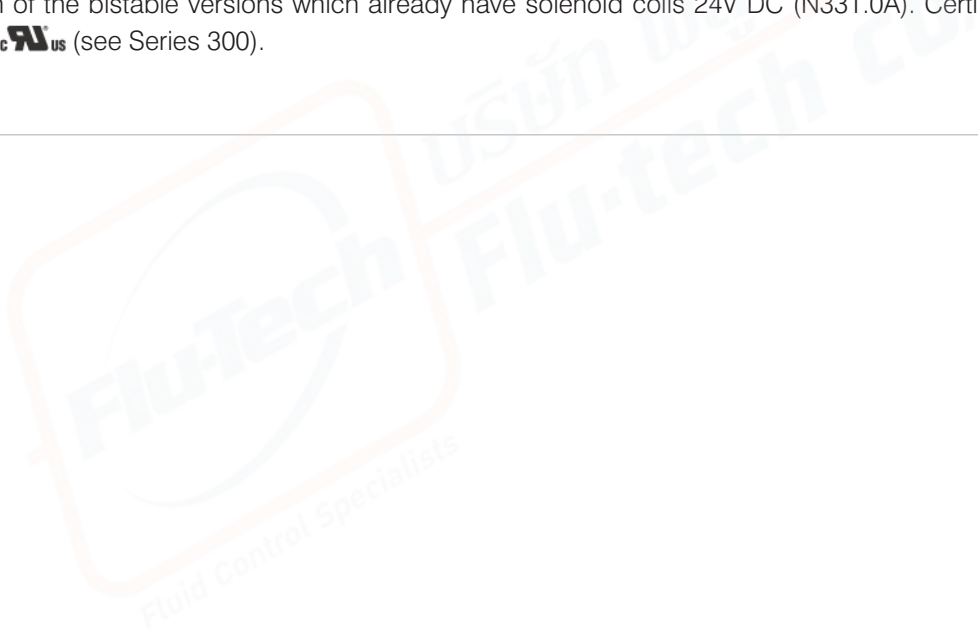


Construction characteristics

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

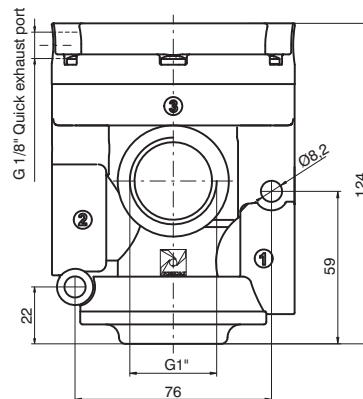
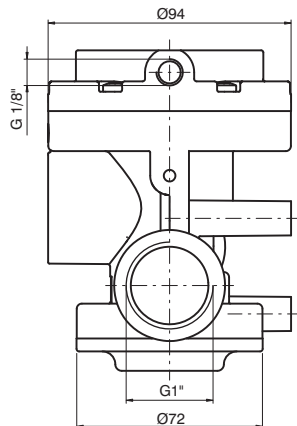
Use and maintenance

These valves and solenoid valves have an average service life of approximately 10 - 15 million cycles under optimum conditions of usage. They do not need to be lubricated to operate well, but good filtration is recommended to prevent dirt accumulation inside. Ensure that the conditions of use are consistent with the indicated limits, pressure, temperature, etc. Take care to protect the discharge outlets of the valves in the presence of dirt and powder. When the self feeding version is used in the solenoid valves, check that the supply flow rate is greater than or equal to that of use, otherwise switch to the version with external pilot. The ordering codes refer to solenoid valves with "MP" or "MV" mechanicals mounted. The solenoid coils are not included and have to be ordered separately (see General Catalogue, Series 300, Section 1) with the exception of the bistable versions which already have solenoid coils 24V DC (N331.0A). Certified solenoid coils are also available  (see Series 300).



Series T771

Pneumatic-Spring



Weight 480 gr.

Operational characteristics

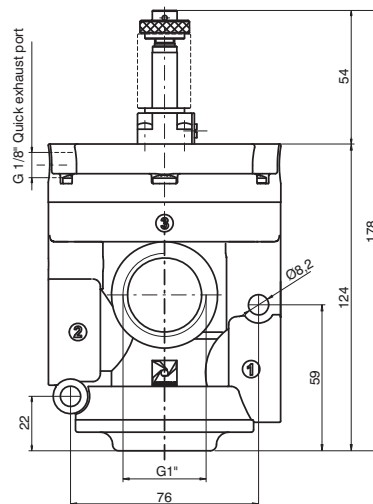
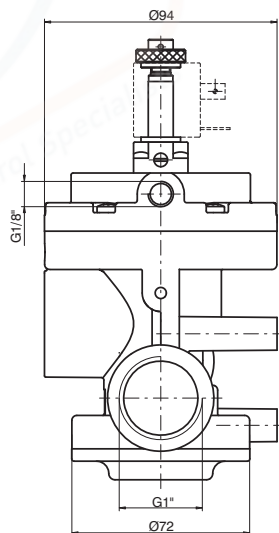
Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G 1"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 55 - N.O. = 19
Response time according to ISO 12238 de-energised (ms)	N.C. = 320 - N.O. = 450

Ordering code
T771/V.32.11.1

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

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

Solenoid-Spring-Self feeding



Weight 520 gr.

Operational characteristics

Fluid	Vacuum
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G 1"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	1AC = 100 - 1AA = 80
Response time according to ISO 12238 de-energised (ms)	1AC = 60 - 1AA = 60

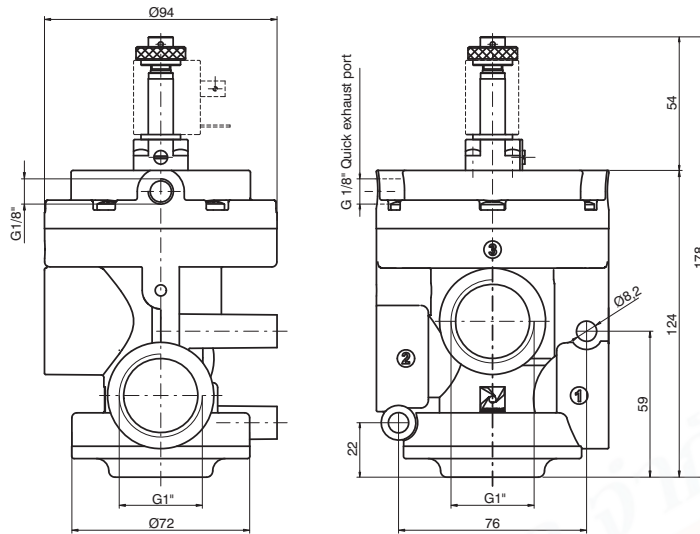
Ordering code
T771/V.32.0.Ⓡ.MV

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

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

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

Solenoid-Spring-External feeding

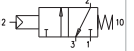


Ordering code

T771/V.32.0.1.MP

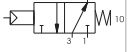
For vacuum - N.O.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3



For vacuum - N.C.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1

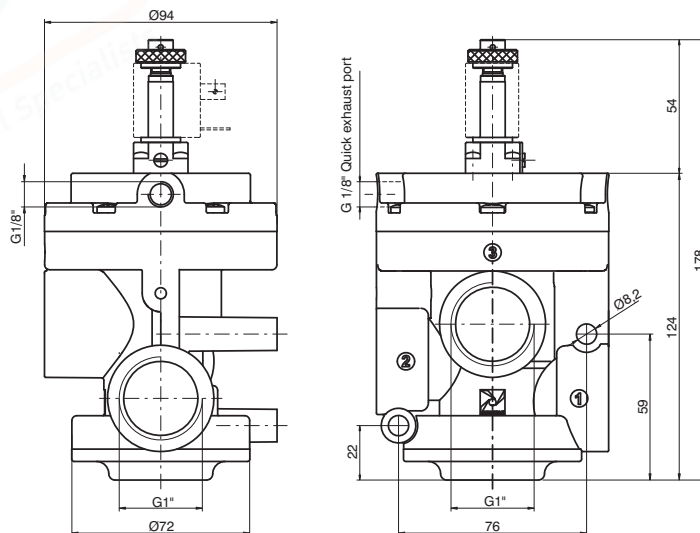


Weight 520 gr.

Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G 1"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 50 - N.O. = 19
Response time according to ISO 12238 de-energised (ms)	N.C. = 315 - N.O. = 450

Solenoid-Spring-External feeding with quick exhaust



Ordering code

T771/VS.32.0.1.MP

For vacuum - N.O.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1



For vacuum - N.C.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3

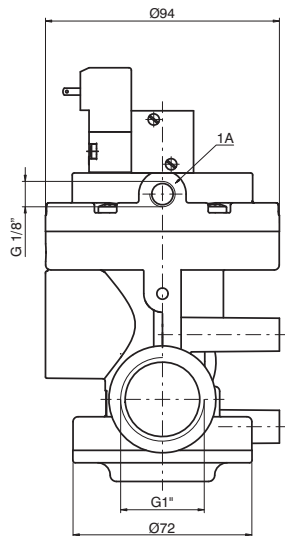


Weight 520 gr.

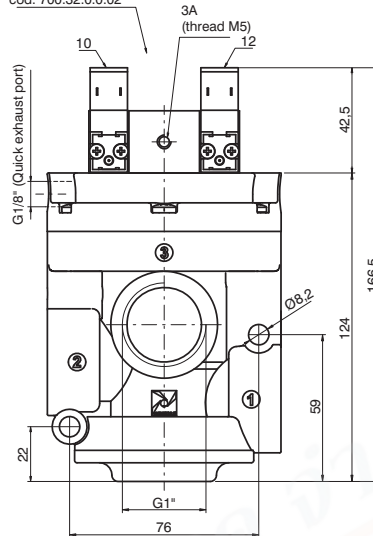
Operational characteristics

Fluid	Vacuum
Minimum piloting pressure (bar)	2
Temperature °C	-5 ... +50
Orifice size (mm)	25
Working port size	G 1"
Pilot port size	G 1/8"
Response time according to ISO 12238 energised (ms)	N.C. = 50 - N.O. = 19
Response time according to ISO 12238 de-energised (ms)	N.C. = 50 - N.O. = 70

► Bistable version for vacuum G1"



S.V. Bistable 3/2 sol./sol. 24 V DC
cod. 700.32.0.0.02

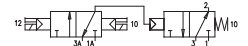


Ordering code

T771/V.32.0.1.BP

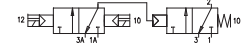
For vacuum - N.C.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3



For vacuum - N.O.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1

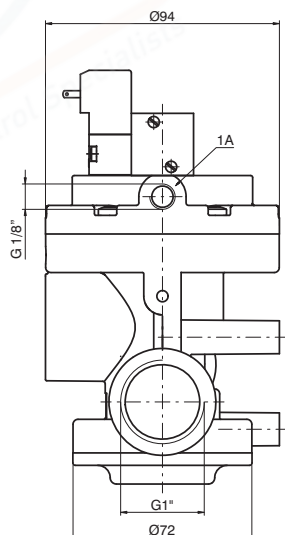


Weight 680 gr.

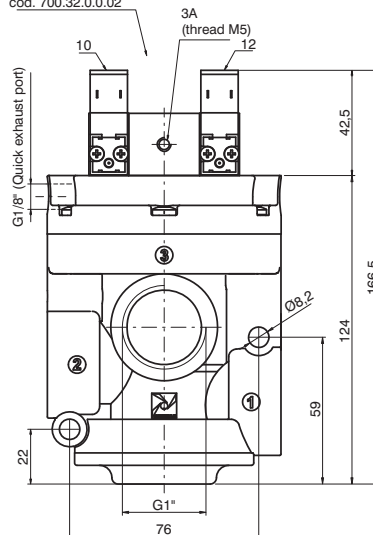
Operational characteristics

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

► Bistable version for vacuum G1" with exhaust



S.V. Bistable 3/2 sol./sol. 24 V DC
cod. 700.32.0.0.02

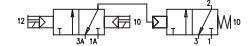


Ordering code

T771/VS.32.0.1.BP

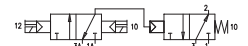
For vacuum - N.O.

Exhaust: Port 3
Outlet: Port 2
Pump: Port 1



For vacuum - N.C.

Exhaust: Port 1
Outlet: Port 2
Pump: Port 3



Weight 680 gr.

Operational characteristics

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

Valves and solenoid valves poppet system Series N776

Aluminium body, available with
G1 1/2" connections, 3/2 and 2/2
N.C. and N.O. versions.




N776 valves mount rolling diaphragm in place of the traditional pistons, thus eliminating friction and wear on the seals.

There is an additional seal on the piston that insulates connection 3, making it possible to have normally open versions and self feeding versions with vacuum.

Construction characteristics

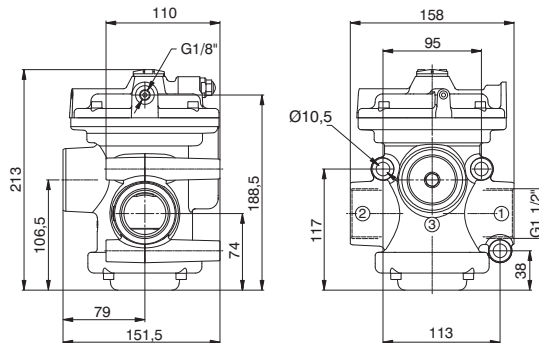
Body, operator and end cover	Die casting aluminium
Seals and poppets	Oil resistant rubber (NBR)
Piston	Acetal resin
Pin guide	Stainless steel
Springs	Stainless steel
Diaphragm	Oil resistant rubber (NBR)

Use and maintenance

These valves and solenoid valves have an average service life of approximately 10 - 15 million cycles under optimum conditions of usage. They do not need to be lubricated to operate well, but good filtration is recommended to prevent dirt accumulation inside. Ensure that the conditions of use are consistent with the indicated limits, pressure, temperature, etc. Take care to protect the discharge outlets of the valves in the presence of dirt and powder. When the self feeding version is used in the solenoid valves, check that the supply flow rate is greater than or equal to that of use, otherwise switch to the version with external pilot. The actuation mechanicals are the M3R (Mechanics CNOMO) with two position manual control. The solenoid coils are not included and have to be ordered separately (see series 300 solenoid coils MB 22mm and solenoid coils CNOMO MC 30mm). Certified solenoid coils are also available  (see Series 300).

Series N776

Pneumatic-Spring



Weight 3178 gr.
Normally Closed

Ordering code

N776/V.22.11.1C

For vacuum - N.C.

Outlet: Port 2

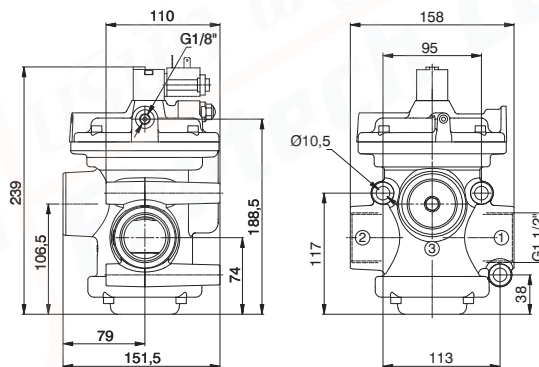
Pump: Port 1



Operational characteristics

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

Solenoid-Spring



Weight 3238 gr.

Ordering code

N776/V.22.0.F.M3R

FUNCTION

F 1AC=Self feeding
Normally Closed

1C=External feeding
Normally Closed

Self feeding

For vacuum - N.C.

Outlet: Port 2

Pump: Port 1

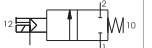


External feeding

For vacuum - N.C.

Outlet: Port 2

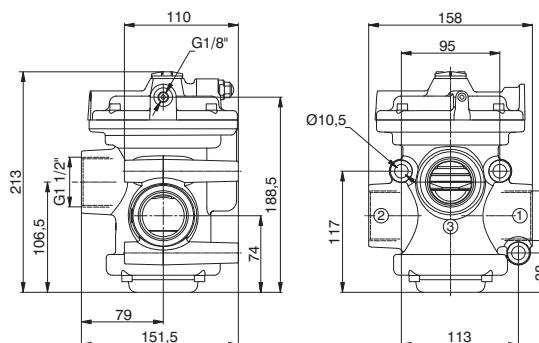
Pump: Port 1



Operational characteristics

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

Pneumatic-Spring



Weight 3168 gr.
Normally Closed / Normally Open

Ordering code

N776/V.32.11.1

For vacuum - N.O.

Exhaust: Port 1

Outlet: Port 2

Pump: Port 3



For vacuum - N.C.

Exhaust: Port 3

Outlet: Port 2

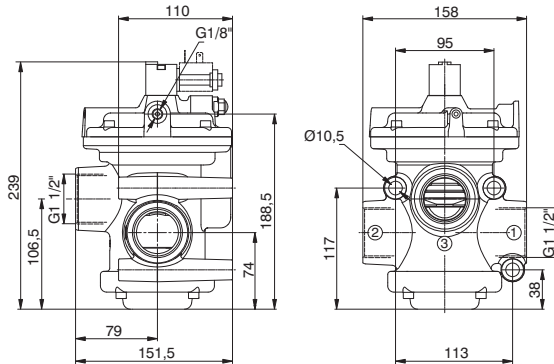
Pump: Port 1



Operational characteristics

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

Solenoid-Spring



Ordering code	
N776/V.32.0.F.M3R	
FUNCTION	
1AC=Self feeding Normally Closed	
F 1AA=Self feeding Normally Open	
1=External feeding Normally Closed Normally Open	
Self feeding For vacuum - N.C. Exhaust: Port 3 Outlet: Port 2 Pump: Port 1	
Self feeding For vacuum - N.O. Exhaust: Port 1 Outlet: Port 2 Pump: Port 3	
External feeding For vacuum - N.C. - N.O. Exhaust: Port 3 (N.C.) or 1 (N.O.) Outlet: Port 2 (N.C. and N.O.) Pump: Port 1 (N.C.) or 3 (N.O.)	

Weight 3228 gr.

Operational characteristics	
Fluid	Vacuum
Minimum piloting pressure (bar)	2 (external feeding version)
Temperature °C	-5 ... +50
Orifice size (mm)	38
Working port size	G1 1/2"
Pilot port size	G 1/8"

